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BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Honorable
John D. Dingell
House Of Representatives

Released

Analysis Of Issues Concerning The Planned Modernization Or Relocation Of The Allen Park, Michigan, VA Medical Center

GAO examined the four construction design concepts and related cost estimates the Veterans Administration (VA) was considering as of February 1985 in relation to modernizing the Allen Park, Michigan, VA Medical Center or relocating it to downtown Detroit. VA was in the earliest planning and development component of its construction process for this major project; nevertheless, considerable data had been developed which indicated that VA was generally following its established procedures and was considering the pertinent issues needed for the VA Administrator to decide on the most appropriate construction concept.

For some issues relating to the relocation of the medical facility to downtown Detroit, VA had not made final decisions or developed complete data and will not do so until the Administrator decides which concept to adopt. When this decision is reached, additional data and more precise construction designs will be developed by VA officials.



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UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

HUMAN RESOURCES
DIVISION

B-217587

The Honorable John D. Dingell
House of Representatives

Dear Mr. Dingell:

In March 1984, you expressed concern about the Veterans Administration's (VA's) proposed project to either modernize its medical center in Allen Park, Michigan, or build a new medical center in downtown Detroit. Specifically, you asked us to address a number of issues concerning the proposed project and the actions planned or taken by VA.

These issues related primarily to areas that involved (1) the data VA developed on proposed construction design concepts and the estimated costs of each concept; (2) the ownership of property donated for the Allen Park Medical Center and potential problems associated with acquiring land in Detroit; (3) the reliability of inpatient and outpatient data developed by the Allen Park Medical Center; (4) whether enough nurses and volunteers will be available for a medical center in Detroit; (5) the extent to which non-VA medical resources, such as hospital services and medical equipment, will be used or acquired if the VA medical center is relocated to Detroit; (6) the effect that distance has on affiliation programs¹ between the Allen Park Medical Center and the Wayne State University Medical School in downtown Detroit; (7) the consideration given by VA to parking and security needs for a medical center in Detroit; and (8) the status of the project's Environmental Impact Statement.

¹An affiliation is a working agreement between a VA medical facility and a medical school or an educational institution that trains health care providers (physicians, nurses, etc.) under which the VA facility provides the setting in which the students receive clinical training experience and the students provide medical services/treatment, under supervision of faculty members, to veterans.

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When we did our fieldwork, four concepts for modernizing or relocating the medical center had been developed. Two of the three concepts involving the Allen Park facility specified limited new construction and required major renovations. The third concept was for construction of a new medical center at the current Allen Park site, with the original structure being renovated for administrative and research functions. The fourth concept involved constructing a new medical center in downtown Detroit.

After the completion of our fieldwork in March 1985, VA indicated that a fifth alternative, referred to as the "split facility" concept, would be considered. Under this concept, a medical facility would be constructed in downtown Detroit, and a separate facility for nursing home and psychiatric care would be operated at Allen Park. Because VA had not developed details on this concept when our review was completed, it is not discussed in this report.

At the time of our review, VA was in the conceptual design phase--the earliest planning and development component of VA's construction process. As a result, much of the data we obtained and analyzed were preliminary and, according to VA, would be updated and refined as more definitive design data become available. Furthermore, for some issues relating to the relocation of the facility to downtown Detroit, VA had not made decisions or developed complete data and will not do so until the VA Administrator decides which concept to adopt.

According to VA, because of the substantial effort required to develop specific data on the "split facility" concept and the need to update certain other information, the Administrator is not expected to decide on a specific concept until January 1986.

Although VA was in this early stage of planning, considerable information was accumulated at the VA central office and the Allen Park facility, which indicated that VA (1) was generally following its established guidelines and usual practices regarding this project and (2) was considering and developing data that the Administrator needed to decide on the most appropriate alternative.

Nevertheless, as part of the ongoing deliberations concerning which alternative to adopt, we believe the Administrator will need to develop a formal plan concerning the use or disposition of the Allen Park facility in case he decides to relocate all or part of the facility's functions to downtown Detroit.

In response to the specific concerns raised, we found that:

- VA generally followed its established procedures and used reasonable judgment in developing the initial construction designs and cost estimates for the four design concepts under consideration at the time of our review. (See pp. 6 to 8; 51 to 64.)
- The deed to the land on which the Allen Park Medical Center is located states that the land must be used for the construction, operation, and maintenance of a VA facility and, if it is not used for these purposes, it will revert back to the grantor. (See pp. 9 and 10.)
- VA has not prepared an estimate of the cost to acquire the property and prepare for the construction of a medical center at the planned Detroit site. In April 1983, however, the city of Detroit prepared a preliminary cost estimate. VA will not receive a formal proposal from city officials until the Administrator decides to relocate the facility to Detroit. (See pp. 12 to 14.)
- VA routinely gathers demographic data on the veterans treated at each of its medical centers. We reviewed the demographic data for the Allen Park Medical Center to verify the reliability of the inpatient and outpatient data developed by VA. Our analysis showed that the data developed on veterans treated at the Allen Park facility during fiscal year 1983 were reliable for determining demographic trends. (See pp. 15 to 29.)
- VA officials believe that enough nurses and volunteers will be available if the medical center is relocated to Detroit. Information we developed supports VA officials' belief that an adequate supply of registered nurses, licensed practical nurses, and nursing assistants are available in the metropolitan Detroit area and that the salaries paid to nurses by VA are competitive with those paid by other hospitals and medical facilities in the Detroit area. VA officials told us that most current volunteers represent veterans' organizations that are dedicated to serving veterans.

Information we developed supported the belief of VA officials that distance does not appear to be a constraint for the volunteers serving the Allen Park facility and that the medical facilities in the Detroit Medical Center

area all have successful volunteer programs, indicating that VA should be able to recruit volunteers in that area. (See pp. 29 to 34.)

- VA may enter into agreements with medical schools, hospitals, and research centers to expand the availability of unique, costly, or scarce medical resources. VA officials told us that the Allen Park facility does not rely on non-VA hospitals for any of its vital medical or surgical services. As a result, the facility has only two formal sharing agreements. When unforeseen or unique medical needs arise, the Allen Park facility may also acquire medical services or equipment from non-VA sources through purchase orders or contracts. Decisions on whether the use of non-VA medical resources will increase if the Allen Park facility is relocated to Detroit have not been made. VA's conceptual planning presumes, however, that if the facility is relocated, opportunities for sharing and contracting will exist. (See pp. 34 to 40.)

- According to officials from the Allen Park and Ann Arbor VA facilities and from the Wayne State University and University of Michigan Medical Schools, distance between facilities precludes affiliation programs from working as effectively as they could. The officials said that having a hospital located near an affiliated medical school fosters the establishment of informal relationships important to the exchange of information between the hospital and the medical school. The officials also stated that by being close, (1) medical specialists are more likely to come to the hospital to consult on only a few cases and (2) staff and students are not inconvenienced by lengthy travel. (See pp. 41 to 45.)

- VA recognizes that if the medical center is relocated to Detroit, adequate parking accommodations must be provided, and its conceptual design plans include a multi-level parking deck. A formal parking requirements study to determine the specific number of spaces needed, however, will be initiated only if the Administrator decides to relocate the facility in Detroit. (See p. 49.)

- As of March 1985, VA was extending the contract to update and revise the draft Environmental Impact Statement, which is required for all federal agencies' major construction projects, so that data could be developed concerning the "split-facility" concept. VA expects the revised draft statement to be available for public review

and comment in July 1985 and the final statement to be issued in late 1985. (See pp. 64 and 65.)

Appendix I contains detailed information on the concerns that you raised in your request letter or during the review.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our review was performed from June 1984 to mid-March 1985. The review objectives were to determine (1) if VA was considering all pertinent issues in deciding which of four construction design concepts to adopt and (2) the accuracy and completeness of the information that the Administrator will consider in reaching his decision.

The review was performed primarily at VA's central office in Washington, D.C., and its medical center in Allen Park, Michigan. We examined VA's policies and procedures pertaining to our areas of interest, applicable sections of the United States Code, VA's Five-Year Facility Plans, and studies performed by VA consultants on the proposed construction project.

We met with officials from (1) Detroit area hospitals, (2) several medical and nursing schools, (3) the city of Detroit, and (4) the Detroit Police Department. At these organizations, we obtained or reviewed records pertaining to the areas of interest expressed by you and your staff. Certain segments of the report include fiscal year 1983 data because (1) we were specifically asked to analyze/verify the data or (2) more recent data were not available during our fieldwork. A more complete description of the scope of our efforts is contained in appendix II. Our review was performed in accordance with generally accepted government auditing standards.

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The views of VA officials were obtained during the review and are included in the report as appropriate. As directed by your office, a copy of our draft report was not furnished to VA for its review and comments. As arranged with your office, unless you publicly announce its contents, we plan no further distribution of this report until 30 days from its issue date. At that time we will send copies to VA and other interested parties and make copies available to others on request.

Sincerely yours,



Richard L. Fogel
Director

C o n t e n t s

	<u>Page</u>
APPENDIX	
I ANALYSIS OF ISSUES CONCERNING THE PLANNED MODERNIZATION OR RELOCATION OF THE ALLEN PARK, MICHIGAN, VA MEDICAL CENTER	1
Background	1
Question No. 1: What design concepts are being considered for renovating/ reconstructing the Allen Park facility?	6
Question No. 2: Do the four Allen Park project design concepts call for the same medical services and distribution of beds?	8
Question No. 3: Who owns the property on which the Allen Park facility is located, and what would be the disposition of the property if the facility is relocated?	9
Question No. 4: What major improvements have been made to the Allen Park facility, and does VA have an estimate of the value of the land and buildings?	10
Question No. 5: Has VA prepared a proposal of estimated costs to acquire and ready the land for con- struction at the proposed Detroit site, and how will this property be acquired?	12
Question No. 6: Does the proposed downtown site contain buildings of possible historical significance that could complicate or delay the acquisition process?	14

- Question No. 7: Are population trends and demographic studies available that indicate where the veteran population resides, and what information is available on the veteran population for the Allen Park facility's primary service area? 15
- Question No. 8: Why is St. Clair County rather than Monroe County included in the PSA for the Allen Park facility? 16
- Question No. 9: What impact will the increase in the average age of Detroit area veterans have on the demand for services at the Allen Park facility through the end of this century? 17
- Question No. 10: Will the incidence of high unemployment and the expiration of employer-provided health insurance plans create a demand for medical services by eligible veterans who previously were unlikely to use VA facilities? 19
- Question No. 11: Is the process VA used to collect demographic information on fiscal year 1983 inpatients and outpatients at the Allen Park facility reliable? 19
- Question No. 12: Of the veterans treated at Allen Park, how many lived within 6 miles of the facility? How many lived within 6 miles of the proposed Detroit site? 20

	<u>Page</u>
Question No. 13: How many of the inpatient discharges and outpatient visits at the Allen Park facility involved veterans aged 65 and over?	23
Question No. 14: How many veterans received inpatient and outpatient treatment at the Allen Park facility in fiscal year 1983, and how many were treated more than once?	27
Question No. 15: How many veterans with diagnoses of service-connected disabilities were treated at the Allen Park facility and lived within 6 miles of the proposed Detroit site?	29
Question No. 16: If the Allen Park facility is relocated to the proposed Detroit site, will enough volunteer help be available?	29
Question No. 17: Is the Allen Park facility experiencing shortages of nurses, and will enough nurses be available if the facility is relocated to Detroit? Are nursing salaries at the facility comparable with salaries paid by DMC hospitals?	32
Question No. 18: Are nursing requirements of DMC hospitals being adequately met?	34
Question No. 19: Is the sharing of equipment and services between VA and non-VA hospitals permitted, and does Allen Park share equipment and services with, or acquire care from, non-VA hospitals?	34

	<u>Page</u>
Question No. 20: To what extent will the use of non-VA medical resources increase if the Allen Park facility is relocated to Detroit?	39
Question No. 21: What are the occupancy rates for hospitals in the DMC area of Detroit and for the Allen Park facility?	40
Question No. 22: What impact does distance have on the affiliation programs between the Allen Park facility and the Wayne State University Medical School?	41
Question No. 23: Were 1982 statistics collected by DMC officials on crime within the DMC area and 24 community areas reliable, and what were the sources of the data?	45
Question No. 24: What type of security measures are anticipated if the Allen Park facility is relocated to the DMC site in Detroit?	47
Question No. 25: Has VA adequately considered parking for a relocated hospital in Detroit?	49
Question No. 26: Have sufficient data been developed so that VA could make firm construction cost estimates for the Allen Park project?	50
Question No. 27: Have any funds been appropriated to VA for the Allen Park project?	51
Question No. 28: Did VA follow established guidelines and usual practices when it developed the original construction cost estimates for the Allen Park project?	51

	<u>Page</u>
Question No. 29: Why did VA decrease estimated unit costs and nursing home space requirements for concepts C and D in 1984, and what impact did these decisions have on the estimated cost for the Allen Park project?	55
Question No. 30: What other elements contributed to the base construction cost estimates for concepts C and D?	58
Question No. 31: Were escalation rates properly applied by VA in revising the construction cost estimates for concepts C and D?	60
Question No. 32: What additional factors contributed to the total estimated project costs for concepts C and D?	61
Question No. 33: What is the status of the Environmental Impact Statement for the Allen Park facility?	64
II OBJECTIVES, SCOPE, AND METHODOLOGY	66

TABLES

Planned medical services and distribution of beds for Allen Park project as of February 1985	8
Estimated replacement cost for Allen Park facility	10
Total cost for 59 renovation projects	12
CEDD-estimated costs of acquiring property at the proposed Detroit site	13
Estimated veteran population for the Allen Park facility PSA	18

	<u>Page</u>
Locations of veterans' residences for those treated at the Allen Park facility during fiscal year 1983 relative to the Allen Park and proposed Detroit sites	22
Inpatient discharges involving veterans over and under age 65 at Allen Park facility in fiscal year 1983 relative to distance from the Allen Park and proposed Detroit sites	24
Outpatient visits by veterans over and under age 65 at the Allen Park facility in fiscal year 1983 relative to distance from the Allen Park and proposed Detroit sites	26
Number of veterans who were discharged one or more times from the Allen Park facility in fiscal year 1983	27
Number of veterans who made one or more outpatient visits to the Allen Park facility in fiscal year 1983	28
Volunteer organizations serving Allen Park facility	30
Salary ranges for RNs at Allen Park facility and in DMC facilities	33
Fee-basis contract care program expenditures by program categories at Allen Park facility during fiscal year 1984	37
Calendar year 1983 occupancy rates for DMC facilities and the Allen Park facility	41
Types of crimes committed in DMC area and in DPD study area	47
Comparison of original and revised total project cost estimates for four concepts being considered for the Allen Park project	54
Comparison of original and revised new construction/alterations cost estimates for concepts C and D for the Allen Park project	57
Comparison of base construction cost estimates for concepts C and D for the Allen Park project	59

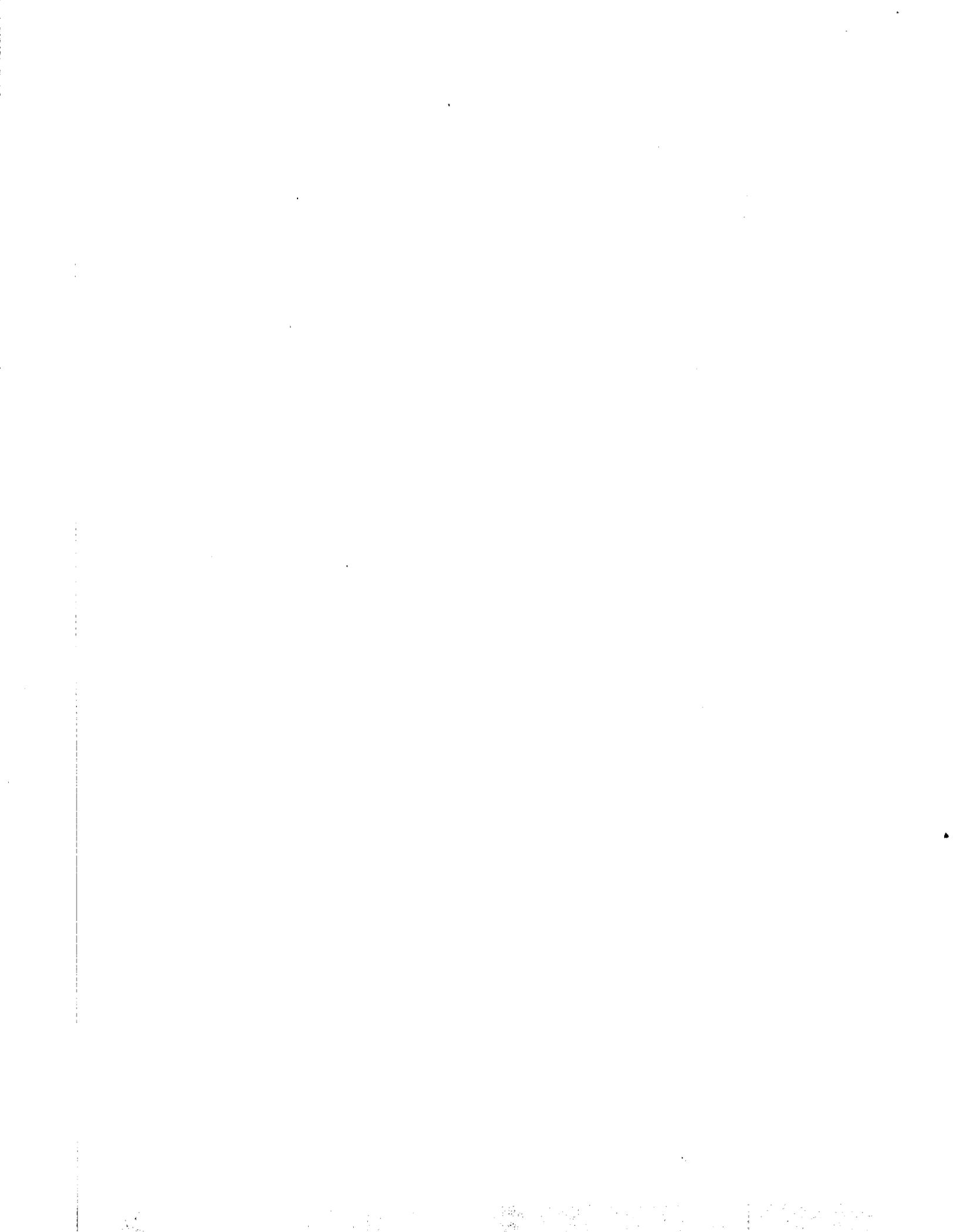
	<u>Page</u>
Comparison of base construction cost estimates plus escalation costs for concepts C and D projected to April 1987	60
Comparison of total project cost estimates for concepts C and D projected to April 1987	62

MAPS

Map showing counties included in primary service areas of each VA medical center included in VA Medical District 14	2
Map of buildings/facilities included in Detroit Medical Center and proposed site for VA medical center	5
Map depicting 6-mile radius from Allen Park VA Medical Center, 6-mile radius from proposed downtown Detroit location, and overlap area which is about the same distance from both sites	21
Map to show postal zip codes within 6 miles of Allen Park VA Medical Center and proposed downtown site	25

ABBREVIATIONS

CEDD	Community and Economic Development Department
DMC	Detroit Medical Center
DM&S	Department of Medicine and Surgery
DOD	Department of Defense
DPD	Detroit Police Department
EIS	Environmental Impact Statement
GAO	General Accounting Office
LPN	licensed practical nurse
OMB	Office of Management and Budget
PSA	primary service area
RN	registered nurse
SH&G	Smith, Hinchman, and Grylls Associates, Inc.
U of M	University of Michigan
VA	Veterans Administration
WSU	Wayne State University



ANALYSIS OF ISSUES CONCERNING THE PLANNED
MODERNIZATION OR RELOCATION OF THE
ALLEN PARK, MICHIGAN, VA MEDICAL CENTER

BACKGROUND

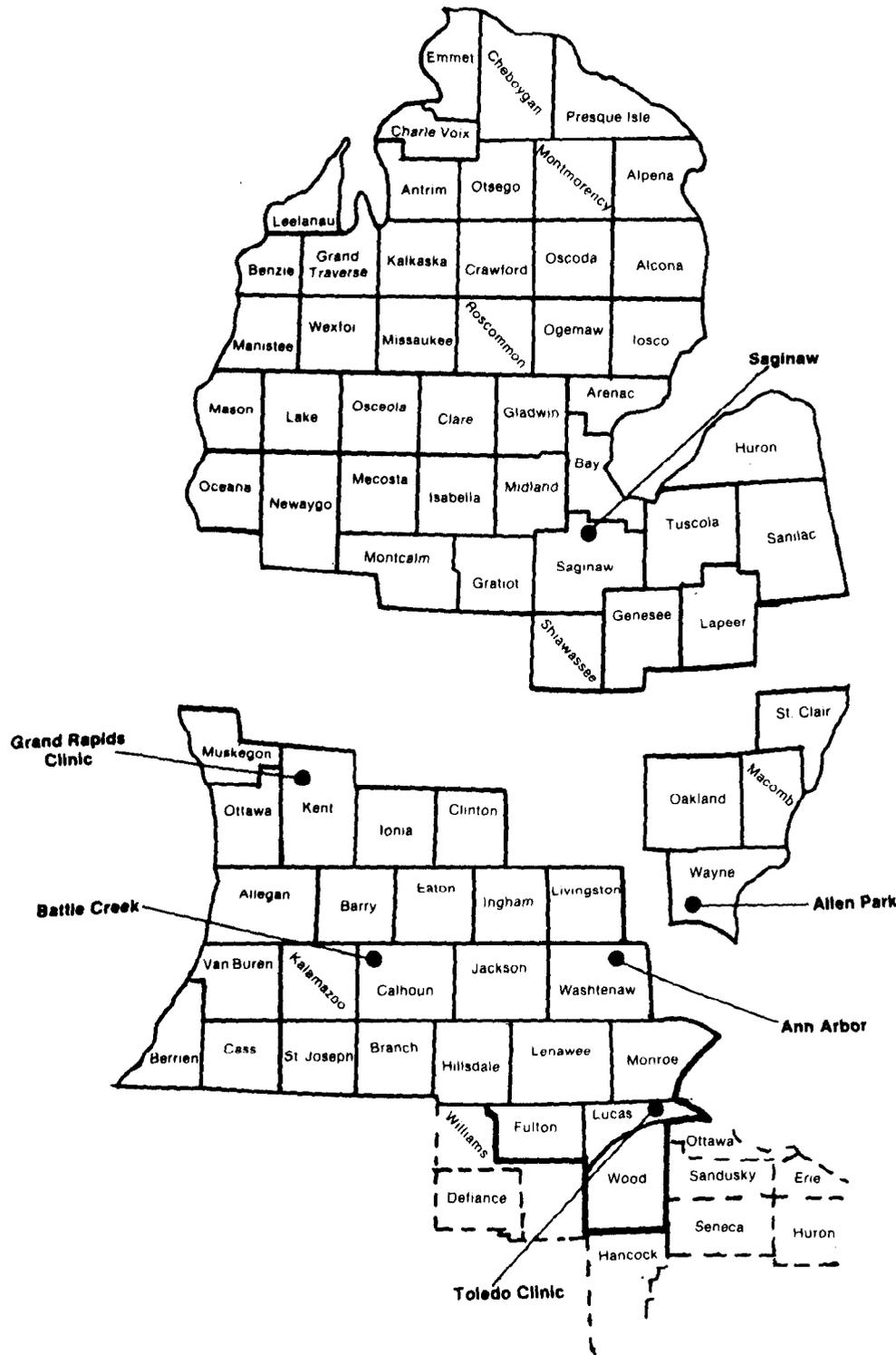
Since the Veterans Administration (VA) was established, the top priority of its health care system has remained the same, the treatment of service-connected disabilities--medical problems stemming directly from an individual's military service. The system has also been authorized to care for non-service-connected medical problems of veterans, but only after the top priority patients have been treated. The Chief Medical Director is responsible for operating VA's health care system and reports directly to the VA Administrator.

The system, operated by VA's Department of Medicine and Surgery (DM&S), is divided into six geographic regions containing 28 medical districts. VA's medical center at Allen Park, Michigan, is located in Medical District 14, along with three other medical centers located at Battle Creek, Ann Arbor, and Saginaw, Michigan. (See map on the following page.)

The Allen Park VA Medical Center (referred to as the Allen Park facility) provides health care primarily to veterans residing in the four-county Detroit metropolitan area. The counties--Macomb, Oakland, St. Clair, and Wayne--contain a veteran population of about 514,000. This represents about 46 percent of the veterans residing in Michigan. The Allen Park facility is located about 10 miles from downtown Detroit.

The Allen Park facility provides care to veterans through general medicine and general surgery clinics, as well as 36 specialty clinics, including an Agent Orange clinic and an out-patient drug clinic in downtown Detroit. There are about 1,700 employees at the Allen Park facility and its clinics, which constitute a complete team of physicians, dentists, nurses, and allied health professionals and a full range of ancillary staff. About 900 volunteers from service, civic, and fraternal organizations, along with other individuals from surrounding communities, supplement services to veterans.

**Map Showing Counties Included In Primary Service Areas
Of Each VA Medical Center Included In VA Medical District 14.**



The Allen Park facility is a campus-like complex consisting of a large multiwinged hospital with auxiliary patient, support, and maintenance buildings. It provided inpatient hospital care to 6,022 veterans and recorded over 25,000 visits by veterans seeking outpatient treatment during fiscal year 1983. Allen Park has 611 beds, of which 159 are medicine; 150, surgery; 120, psychiatry; 20, neurology; 90, intermediate care; and 72, nursing home care. In fiscal year 1984, the facility's operating budget was \$65.4 million.

In the mid-1930's, Henry and Clara Ford made available 38.9 acres to the federal government for constructing, operating, and maintaining a VA facility. Ground-breaking ceremonies were held on July 27, 1937, and the initial construction provided a six-story facility that housed 350 general medical-surgical beds. The first veteran was admitted on April 15, 1939.

Since then, two major structures have been added to the original facility. In November 1947, two 10-story wings were opened to handle the increased demand for medical care of World War II veterans. The second major addition, completed in October 1960, involved constructing two three-story wings to house an outpatient clinic and administration offices. The facility was known as the Dearborn VA facility until August 1967, when its name was changed to coincide with its Allen Park mailing address.

At the direction of the Chief Medical Director, a VA team conducted a site visit in January 1975 to evaluate the need for a replacement facility in the Detroit metropolitan area and concluded that a replacement hospital was needed. The team pointed out that, because of replacement facility priorities in the VA system, it would be at least 10 years before construction could begin.

In fiscal year 1976 VA received \$100,000 from the Congress to prepare a preliminary plan for constructing a new VA hospital. The planning was to include a demographic study to determine the location and type of hospital required to meet the needs of veterans in the Detroit metropolitan area.

DM&S completed a demographic study of demand for care in December 1976. In addition, VA contracted with Rossetti Associates to provide an expert analysis of the existing Allen Park facility and to recommend the most advantageous options for future action. The Rossetti study concluded that the Allen Park

facility warranted total replacement based on an analysis of the structures. For example, the study found that because of inadequate ventilation and cooling, laboratory work areas were subject to airborne contamination; operating rooms were too small to permit the full surgical team and their equipment convenient access to the patients; ventilation, plumbing, and electrical distribution systems have not kept pace with rising demands; and most buildings were not air-conditioned. Although the buildings were in relatively good physical condition, they did not meet the space and mechanical demands of current health care delivery.

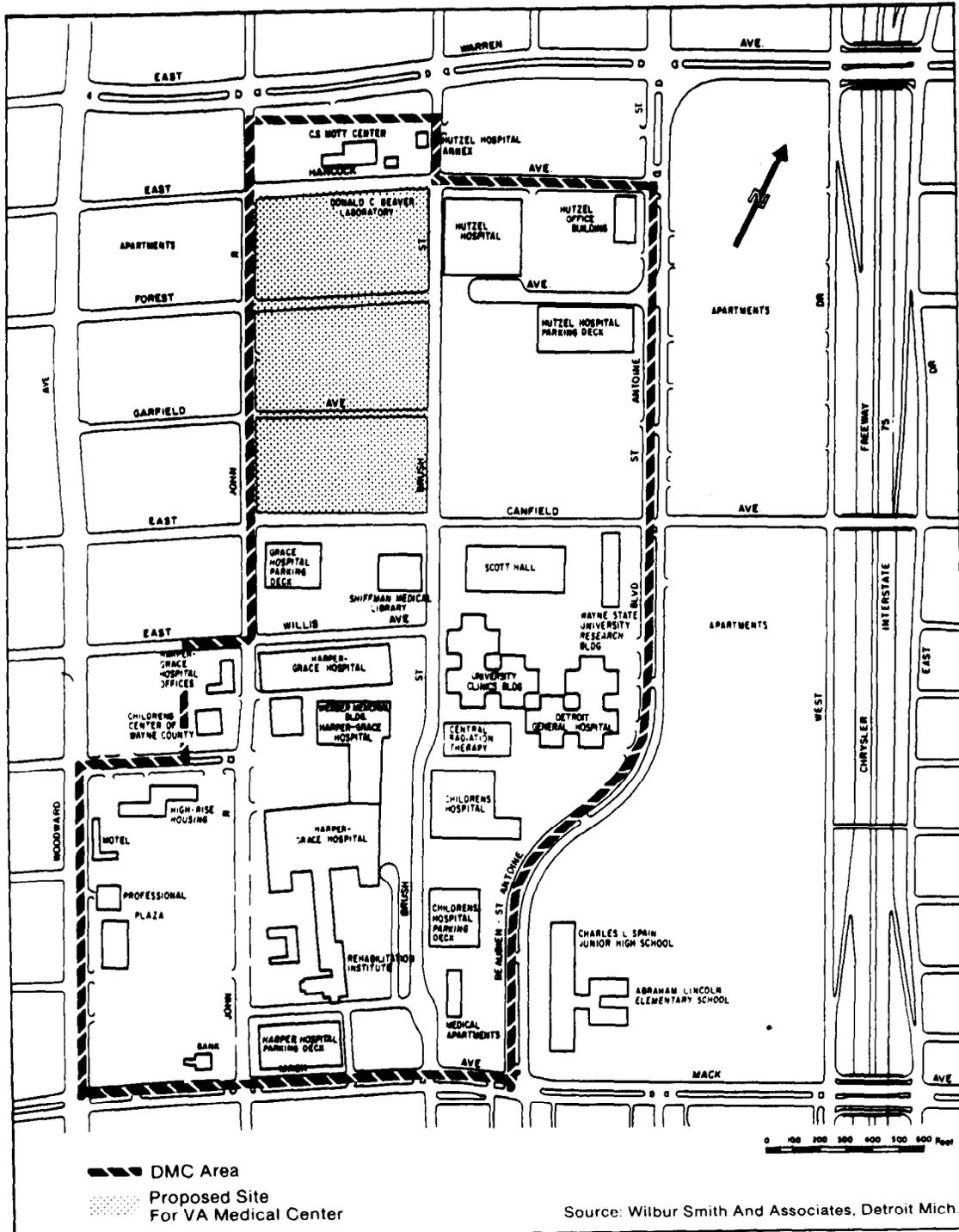
The Rossetti study focused primarily on whether a replacement hospital was needed and where it should be located. To obtain information on how the Allen Park facility could be modernized, through new construction and renovation, VA contracted in June 1982 with Smith, Hinchman, and Grylls Associates, Inc. (SH&G), for a technical and functional usability study of the facility. The study was completed in November 1982.

Four concepts for modernizing or relocating the medical center were developed. Three of the concepts involved varying degrees of renovation and new construction of the Allen Park facility. Two of these three concepts (concepts A and B) specified limited new construction and required major renovations of the current facility. The third (concept C) was for constructing a new hospital at the current Allen Park site, with the original hospital building being renovated for administrative and research functions. The fourth concept involved constructing a new hospital in downtown Detroit (concept D).

The proposed Detroit site comprises three square blocks (about 18.6 acres) in the Detroit Medical Center (DMC) area. The proposed site is bounded by Hancock Street on the north, Brush Street on the east, Canfield Street on the south, and John R Street on the west. (See map on the following page.) It is also bounded on the east and south by several private medical facilities known as the DMC Corporation, which includes the Children's Hospital, Detroit Receiving Hospital, Harper-Grace Hospital, Hutzel Hospital, and the Rehabilitation Institute. Also in the DMC area are the Wayne State University Medical School and the University Health Center.

Several VA documents discussing the Allen Park project showed that only concepts C and D were being seriously considered. The documents indicated that concepts A and B were not being seriously considered primarily because the renovated medical center would not meet current standards for patient care.

Map Of Buildings/Facilities Included In Detroit Medical Center And Proposed Site For VA Medical Center



In mid-March 1985, VA stated that a fifth alternative, concept E, referred to as the "split facility" concept, was being considered. Under this concept, a medical facility would be constructed in downtown Detroit, and a separate structure with nursing home care beds and psychiatric care beds would be operated at the existing Allen Park site. Details on this concept had not been developed by VA at the time our fieldwork was completed. As a result, it is not discussed in this report.

According to VA, because of the substantial effort required to develop specific data on the "split facility" concept and the need to update certain other information, the Administrator is not expected to decide on a specific concept until January 1986.

QUESTION NO. 1: **What design concepts are being considered for renovating/reconstructing the Allen Park facility?**

ANSWER: Smith, Hinchman, and Grylls Associates, Inc., developed for VA three strategies (concepts) for the long-term redevelopment or replacement of the medical center at the existing Allen Park site.

VA's DM&S developed a fourth concept involving relocating the medical center to downtown Detroit. (See above.)

DISCUSSION:

During the conceptual stage of planning for major construction projects, VA usually considers several design concepts before deciding on a specific design and beginning to develop detailed plans for construction. As of February 1985, VA was officially considering four conceptual designs for the Allen Park project. A brief discussion of each design follows.

Major Renovation and New Construction at the Allen Park VA Medical Center (Concept A)

Concept A provides that a major part of the existing facility would be retained. Forty-five percent of the planned medical departments and services would be accommodated in existing structures, which would be extensively renovated. A major new four-level structure would be added to the main building for ambulatory care and diagnostic, treatment, and logistics departments. Primary entrances would be redesigned, including those connecting a new freestanding nursing home care facility and an

expanded day treatment center. A new site system (parking lots, walks, roads, and utilities) was also planned. To provide adequate space for construction and expansion, 12 major structures would be removed. VA estimated this concept would take 9 years to complete.

Major Renovation and New Construction at the Allen Park VA Medical Center (Concept B)

Concept B provides that a major part of the existing facility would be retained. Forty percent of the planned medical departments and services would be accommodated in existing structures, which would be extensively renovated. In this concept, a two-level addition would be built on one side of the main building for new nursing home and ambulatory care facilities, and a four-level addition would be added to the other side for diagnostic and treatment and logistics departments. Along with these major additions to the main building, extensive renovation of the existing structure would occur, and part of the main building would be demolished. As with concept A, a new site system was planned. To provide adequate space for construction and expansion, 14 major structures would be removed. VA estimated this concept would take 8-1/2 years to complete.

Major New Construction and Some Renovation at the Allen Park VA Medical Center (Concept C)

Concept C provides for replacing most of the existing structures. Only the original historic part of the main building would be retained, which would accommodate 12 percent of the planned activities. This space would be used for administrative and research activities; no patient care would be provided. In this concept, a five-level replacement facility would be built for nursing home care, ambulatory care, and the logistics department. A complete new site system was planned. To provide adequate space for this construction, only the main building, the boiler house, and a garage would not be demolished. VA estimated this concept would take 5-1/2 years to complete.

Relocation of VA Medical Center to Site in Downtown Detroit (Concept D)

Concept D provides for relocating the Allen Park VA Medical Center to a site adjacent to DMC near Wayne State University in downtown Detroit. This concept provides for constructing three main structures: a six-story medical center housing all medical

services and beds, a multilevel parking structure, and a separate energy building. Under this concept VA estimated the construction period to be 3-1/4 years. This estimate for completion did not include time to acquire and clear the site, which would be accomplished while the project was being designed. VA estimated the acquisition and clearing activities would take about 2 years. The concept did not discuss what would be done with the existing structures at the Allen Park site.

QUESTION NO. 2: Do the four Allen Park project design concepts call for the same medical services and distribution of beds?

ANSWER: Each of the four concepts being considered by VA for the Allen Park project as of February 1985 provided for the same medical services and the same number and distribution of beds.

DISCUSSION: The following table shows the types of medical services and distribution of beds planned as of February 1985.

Planned Medical Services
and Distribution of Beds
for Allen Park Project
as of February 1985

<u>Medical services</u>	<u>Beds</u>
Medicine	180
Neurology	8
Surgery	122
Intermediate care	60
Psychiatry (including alcohol abuse)	120
Hemodialysis	10
Nursing home care	120
Medical intensive care	8
Surgical intensive care	8
Coronary intensive care	<u>5</u>
Total	<u>641</u>

QUESTION NO. 3: Who owns the property on which the Allen Park facility is located, and what would be the disposition of the property if the facility is relocated?

ANSWER: The deed that transferred property for the Allen Park facility to VA stated that the land was to be used solely for a VA facility. When the property is no longer used for this purpose, it will revert to the grantors or their heirs or assigns.

UNRESOLVED ISSUE:

Since one of the options being considered by VA involves relocating the Allen Park facility to downtown Detroit, we believe VA should develop, as part of that option, a plan concerning the disposition or use to be made of the Allen Park facility and the land upon which it is built because the land and buildings could revert to the Ford family if VA does not use them. This plan should be considered simultaneously with the other options.

DISCUSSION:

In 1937, Henry and Clara Ford donated to the federal government the land on which the Allen Park facility was built. However, the deed that transferred the 38.9 acres stated that the land was to be used solely for constructing, operating, and maintaining a "Veterans Administration facility." The deed stated that when the property is no longer used for these purposes, it will revert to the grantors or their heirs, executors, or assigns. The Congress, on March 24, 1937, authorized VA to accept title to the property, subject to the grantors', their heirs', or their assigns' reversionary interests.

Unless the grantors, their heirs, or their assigns could clearly demonstrate that the phrase "Veterans Administration facility," as used in the deed, contemplated a particular type of facility, VA would appear to be within the requirements of the deed as long as it maintained a facility of some kind on the site for medical, nursing, or other purposes. According to the deed and applicable law, if the land were to revert to the grantors, VA would not be required to clear the property of medical buildings and other structures, such as garages, warehouses, and the energy building, on it.

VA's District 14 counsel has stated that if VA should relocate the Allen Park facility without making provisions to use the site, the land--along with all buildings and structures on the site--would revert to the Ford family. The district counsel stated that in 1984 he asked the Ford family (through their attorney) to remove the restrictive language from the deed. He said that, although the attorney indicated he would consider the request, as of March 1985, no change had been made.

QUESTION NO. 4: What major improvements have been made to the Allen Park facility, and does VA have an estimate of the value of the land and buildings?

ANSWER: During fiscal years 1970-84, VA funded 59 projects, each costing \$100,000 or more, for maintaining or improving the Allen Park facility. The total cost of these projects was about \$17.8 million.

An assessment of the facility's current value by a certified appraiser has not been made. However, in January 1984 the facility's chief engineer estimated the replacement cost to be \$87 million.

DISCUSSION:

Although an assessment of the facility by a certified appraiser has not been made, and neither the General Services Administration nor VA knows its current value, an estimate of replacement cost was prepared by the facility's chief engineer in January 1984. He estimated the replacement cost was \$87,003,000, as shown below.

**Estimated Replacement Cost
for Allen Park Facility**

Estimated cost for land (\$50,000 an acre x 38.9 acres)	\$ 1,945,000
Estimated replacement cost for hospital (773,255 square feet x \$110 a square foot)	<u>85,058,000</u>
Total estimated cost	<u><u>\$87,003,000</u></u>

According to the chief engineer at Allen Park, the estimated value for the buildings was obtained by using 773,255 square feet, the amount of space required for a replacement facility comparable to Allen Park. The estimate includes the space provided in all 19 buildings at the facility. The \$110 cost a square foot is a DM&S estimate based on the construction cost of a recent VA medical facility.¹ The value of the land was based on per acre cost estimates obtained by the chief engineer from a local appraiser. The chief engineer and VA's chief of the real estate division at the VA central office emphasized to us that the replacement cost was only a rough estimate and that an assessment of the facility by a certified appraiser could be much higher or lower.

To determine the types of improvements made and other projects undertaken by VA at Allen Park, we reviewed construction projects for the past 15 years and Allen Park's 5-year construction plan and spoke with the facility's chief engineer. Since a replacement medical center at Allen Park has been under discussion for several years, the chief engineer told us that construction projects funded for the facility have been primarily to meet fire and safety requirements or accreditation committee standards and for normal building maintenance. During fiscal years 1970-84, VA funded 59 projects for Allen Park costing \$100,000 or more. The total cost of these 59 projects was about \$17.8 million, as shown below.

¹The number of square feet and the square foot cost were provided to the chief engineer by DM&S.

Total Cost for 59 Renovation Projects

<u>Category</u>	<u>Number of projects</u>	<u>Amount spent</u>	<u>Percent</u>
Fire-safety requirements or accreditation committee standards ^a	24	\$10,174,999	57.3
Normal maintenance ^b	12	2,036,388	11.5
Other construction ^b	<u>23</u>	<u>5,545,082</u>	<u>31.2</u>
Total	<u>59</u>	<u>\$17,756,469</u>	<u>100.0</u>

^aProjects to satisfy fire and safety requirements included installing a fire alarm system, smoke detectors, and sprinklers. An improved intensive care unit was an example of a project to meet accreditation standards.

^bProjects for normal maintenance included replacing water lines or painting the interior of the building. Projects classified as other construction included an audio/visual nurses' call station, renovation of inpatient and outpatient pharmacies, and construction of cardiopulmonary unit rooms.

The chief engineer also told us that a number of construction projects included in recent Allen Park 5-year construction plans may have been deferred because the medical center may be replaced. We reviewed the plans for fiscal years 1980-85 and identified eight construction projects estimated to cost \$1 million or more that were deferred. The eight projects were estimated to cost \$85.4 million.

QUESTION NO. 5: Has VA prepared a proposal of estimated costs to acquire and ready the land for construction at the proposed Detroit site, and how will this property be acquired?

ANSWER: VA has not prepared an estimated cost proposal to acquire and ready the land for construction at the proposed Detroit site. In April 1983 the city of Detroit prepared a preliminary estimate of what it would cost to acquire the needed property if VA decides to locate a hospital in Detroit. The city will acquire the land using the "Quick Take" Act--a state law that would permit the city to obtain title to the property before the value of the property

(and the resulting reimbursement to the owners) has been finally decided in the courts.

DISCUSSION:

The director and community development coordinator of Detroit's Community and Economic Development Department (CEDD) told us that the department and VA have discussed the availability of the land at the proposed Detroit site, how it would be transferred to VA, and how much it would cost VA. The coordinator said that CEDD would assist VA in all matters relating to the acquisition of the land. No formal cost proposal had been forwarded to VA as of March 1985. The coordinator said that a formal proposal stating the costs to acquire and ready the land for construction would not be prepared by CEDD until VA made a decision to build a medical center in Detroit.

The director said that property within the proposed Detroit site is privately owned, with the exception of a few vacant lots acquired by the city through the tax reversion process. He said the exact number of property owners cannot be determined until a title search is completed, and a title search will not be conducted until VA makes a relocation decision. The director also stated that in this situation, CEDD will act as an agent for VA, and all decisions pertaining to land acquisition and the relocation of residents will be subject to VA approval.

On April 18, 1983, CEDD gave VA a preliminary estimate of costs to acquire and ready the land for construction. CEDD estimated that it would take 18 to 24 months to complete this work.

CEDD-Estimated Costs of
Acquiring Property at
the Proposed Detroit Site

Acquisition of property	\$2,554,025
Cost to relocate residents	1,988,700
Demolition of buildings	421,079
Street improvements	1,100,000
Utility relocations	<u>1,469,000</u>
Subtotal	<u>7,532,804</u>
Contingencies	<u>467,196</u>
Total	<u><u>\$8,000,000</u></u>

CEDD's coordinator stated that the city will use Michigan's "Quick Take" Act (in effect since May 1, 1980) to expedite acquiring the land. He told us that the act permits Detroit to obtain title to the property before benefits to the owner have been finally decided in court. He stated that this act has been useful for the city in acquiring property needed for other construction projects. The coordinator also told us that relocation benefits paid to property owners and other residents forced to move will be those established by the Congress under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646).

The president of the Mid-City Concerned Citizens' District Council told us that he anticipates little community resistance to VA acquiring the privately owned properties at the proposed Detroit site. The council, chartered by the city, is a citizens' group that represents residents in nine square blocks in the DMC area.

QUESTION NO. 6: Does the proposed downtown site contain buildings of possible historical significance that could complicate or delay the acquisition process?

ANSWER: An official from VA's Historic Preservation Office inspected the buildings on the proposed downtown site and determined that none qualify for the National Register of Historic Places. Also, none are historically significant to the state or city.

DISCUSSION:

Federal agencies are required under the National Historic Preservation Act (16 U.S.C. 470) to consider the effect a proposed project may have on property eligible for or listed on the National Register of Historic Places. On December 10, 1984, an official from VA's Historic Preservation Office visited the proposed Detroit site and the surrounding area to determine if any buildings on the site were historically significant. Among the structures on the proposed site were two buildings with possible historical significance. One was an apartment building thought to be the current mayor's residence from 1964 to 1979. This building was also thought to be the home of the first black-owned radio station in the area. The second building was also an apartment building which was the home of Henry and Clara Ford from September 1891 through June 1892.

During a visit to the first apartment building, VA's Historic Preservation Office representative learned from the building's owner that the mayor had lived in the apartment but the condition of the building was such that any historical significance had been lost. The official also learned that the first black-owned radio station was located in Inkster, Michigan, not Detroit.

Concerning the apartment building where Henry and Clara Ford lived, the official observed that the building was rotting and did not reflect the days that the Fords lived there. Because of the building's dilapidated condition, the official believed that stabilization or renovation was not feasible.

The official concluded that none of the buildings on the proposed Detroit site and the immediate surrounding area qualified for the National Register.

QUESTION NO. 7: Are population trends and demographic studies available that indicate where the veteran population resides, and what information is available on the veteran population for the Allen Park facility's primary service area (PSA)?

ANSWER: VA routinely publishes reports on the estimated veteran population by state and county. From data in these reports, information is available on the veteran population for the Allen Park facility PSA.

DISCUSSION:

VA's Office of Information Management and Statistics is responsible for compiling statistical reports on veterans. These reports contain statistics on veterans at the state and county levels. These statistics estimate the number and distribution of veterans by state/county residence, age, sex, and period of military service. The chief of VA's Research Division said that VA publishes state veteran estimates twice a year and that county level data are published every 2 to 3 years. He also stated that VA medical district and PSA data can be derived from these reports.

The chief told us that VA has developed a demographic model on veteran population which uses data compiled by the Bureau of the Census, the National Center for Veterans Benefits, the Social Security Administration, and the Department of Defense

(DOD). He said that the Bureau of the Census provides VA with estimates on the veteran population by county and on the number of veterans who moved from one location to another; the National Center for Veterans Benefits provides data on the number of deceased veterans; and DOD provides data on the number of military personnel separated from the armed forces (number of new veterans). According to the VA State and County Report on Veteran Population, a state's estimated veteran population is increased through separations from the armed forces (new veterans), decreased by veterans' deaths, and increased or decreased on the basis of net interstate migration.

The most recent report showed that:

- The veteran population for the Allen Park PSA as of March 1984 was estimated to be 509,690 veterans. This represents a decline of 4,190 veterans from the March 1983 estimate.
- The estimated veteran population for the Allen Park PSA as of March 1983 included about 46 percent of the estimated veteran population in Michigan and about 2 percent of the veterans nationwide.
- The veterans estimated to live in Wayne County represented about 55 percent of the total estimated veteran population in the Allen Park PSA. The percentages of the veterans estimated to live in the other three counties were: Oakland--25 percent; Macomb--17 percent; and St. Clair--3 percent.

The chief stated that, in his opinion, the veteran population estimates for Medical District 14 are accurate.

QUESTION NO. 8: Why is St. Clair County rather than Monroe County included in the PSA for the Allen Park facility?

ANSWER: St. Clair County has been included in the Allen Park facility's PSA for about 10 years. When assigning PSAs, VA considers where veterans usually go to receive inpatient care. Monroe County veterans are not required to go to a specific facility for medical care; they may receive care at any VA medical center.

DISCUSSION:

A coordinator for planning for VA's Medical District 14 stated that the VA central office assigns PSAs to medical facilities and that the medical districts and medical facilities have little input into the process. He said that the counties included in the Allen Park PSA have not changed in 10 years and that St. Clair County has been part of the PSA during this time.

A health systems specialist at the VA central office told us that the Health Care Facilities Service in the Office of Construction is responsible for determining and assigning PSAs to VA medical facilities. The specialist stated that when PSA changes are made, they are based on 3 years of inpatient data for each VA medical facility. In assigning PSAs, VA considers the numbers of inpatients treated at each medical center by county and the medical facility veterans visit most often for inpatient care.

The specialist stated that PSAs are not used as a basis for admitting or refusing veterans for medical care. He provided information which indicated that PSA data are developed primarily for planning purposes; that is, to capture inpatient data and obtain a representative veteran population against which to calculate medical center discharge rates. He stated that veterans are not required to visit a particular facility to receive medical care; rather they may receive care at any VA facility.

QUESTION NO. 9: What impact will the increase in the average age of Detroit area veterans have on the demand for services at the Allen Park facility through the end of this century?

ANSWER: VA believes the needs of an increasingly older veteran population will significantly increase VA's service demand patterns; however, this will be offset by an overall decrease in the estimated veteran population for the Allen Park PSA.

DISCUSSION:

The 1984 estimated veteran population for the Allen Park facility PSA was 509,690 veterans; veterans aged 65 and over made up 13 percent of this total. By the year 2000, the estimated veteran population for the Allen Park facility PSA is projected to be 412,900, a decline of 19 percent. However, the percentage of veterans aged 65 and over is projected to increase

from 13 to 34 percent of the estimated veteran population for the PSA. The table below shows the projected increase--by 5-year intervals from 1980 through 2000--in the percentage of veterans aged 65 and over.

Estimated Veteran Population
for the Allen Park Facility PSA

<u>Year</u>	<u>Total population</u>	<u>Population aged 65 and over</u>	<u>Percent</u>
1980	522,860	42,910	8
1985	505,000	76,500	15
1990	476,040	115,660	24
1995	446,160	135,350	30
2000	412,900	140,840	34

According to a 1983 Greater Detroit Area Health Council report, hospital use, like the incidence of most illnesses, is related to age. The report showed that people in southeastern Michigan aged 65 and over had hospital use rates that were three to five times the use rate of the population as a whole. For example, the report showed that people 14 years and younger made up 22 percent of the population, but used only 5 percent of the total days of hospital care. Conversely, the report showed that people aged 65 and over constituted only 9 percent of the area's population, but accounted for 33 percent of the total days of hospital care.

We reviewed the Allen Park facility's inpatient and outpatient data to determine if the facility was treating an increasing number of veterans aged 65 and over. Our review of the data showed that, in 1977, 14 percent of all inpatient discharges were veterans aged 65 and over. By 1983, the percentage of veterans aged 65 and over had increased to 20 percent of all inpatient discharges. Similarly, we found that in 1980, outpatient visits made by veterans aged 65 and over accounted for about 11 percent of the total visits, whereas in 1983, outpatient visits by veterans aged 65 and over had increased to about 20 percent of all visits.

According to VA's 1983 Strategic Outlook Report, the shift in the age of the veteran population is expected to have a significant influence on the veterans' needs and on service demand patterns. The report stated that older veterans have a higher incidence of disease, neoplasms, and organic brain disorders as well as chronic and degenerative diseases. Because of the shift

in the average age of veterans, the report states that VA is considering the need for such items as increased nursing and domiciliary beds, geriatric evaluation units, and hospital-based home care.

QUESTION NO. 10: Will the incidence of high unemployment and the expiration of employer-provided health insurance plans create a demand for medical services by eligible veterans who previously were unlikely to use VA facilities?

ANSWER: We found no studies that address this question; however, the VA's 1983 Strategic Outlook Report stated that the veteran population is subject to the same economic factors as the general population, and an increase in unemployment could compel veterans to rely more on VA for health care.

DISCUSSION:

We did not identify any studies that addressed the effects of unemployment on veterans and their use of VA medical facilities while unemployed. However, we reviewed a 1983 study by the Greater Detroit Area Health Council, which indicated that the effects of the 1978-83 recession were still apparent, as unemployment remained high and the number of people receiving some form of public assistance continued to increase.

We also reviewed VA's 1983 Strategic Outlook Report, which stated that the effects of economic and technological unemployment were felt in the veteran population, in that many veterans not previously users were now seeking VA medical services because their insurance had expired. In addition, the report stated that poor and marginally employed veterans, as well as veterans over age 65 who have difficulty meeting the financial participation requirements of Medicare, are expected to turn to VA for medical services in the next few years.

QUESTION NO. 11: Is the process VA used to collect demographic information on fiscal year 1983 inpatients and outpatients at the Allen Park facility reliable?

ANSWER: Although we identified an internal control weakness in VA's process for collecting demographic information, we believe the process is reliable for determining demographic trends.

DISCUSSION:

To determine whether the process for collecting demographic information was reliable, we

- reviewed the process used by the Allen Park facility to collect and send inpatient and outpatient information to VA's Data Processing Center in Austin, Texas;
- asked VA to duplicate the information on its master tape files of inpatient and outpatient data for the Allen Park facility; and
- performed the analysis needed to determine whether the data developed were reliable.

We identified an internal control weakness in the Allen Park facility's process for entering outpatient data onto VA's master tape files. Our review of the process showed that some outpatient records returned to the Allen Park facility for correction of errors were not resubmitted to VA's computer system. We were unable to determine the impact that this weakness had on lost outpatient data because errors on the routing forms were not timely corrected and source documents were not available. The demographic data, however, are reliable and may be used as indicators of trends for the Allen Park veteran population.

QUESTION NO. 12: Of the veterans treated at Allen Park, how many lived within 6 miles of the facility? How many lived within 6 miles of the proposed Detroit site?

ANSWER: In fiscal year 1983, of 8,736 Allen Park inpatient discharges, 17 percent involved veterans who lived within 6 miles of the facility, 35 percent involved veterans who lived within 6 miles of the proposed Detroit site, and 5 percent involved veterans who lived within 6 miles of each site.

Of 25,022 outpatient visits made to Allen Park in fiscal year 1983, 19 percent were made by veterans who lived within 6 miles of the facility, 34 percent were made by veterans who lived within 6 miles of the proposed Detroit site, and 5 percent were made by veterans who lived within 6 miles of each site.

Over 40 percent of veterans treated as out-patients and inpatients lived more than 6 miles from both locations.

This information, which we independently developed, agrees substantially with similar information developed by VA for Congressman Dingell in May 1984.

DISCUSSION:

We analyzed VA's fiscal year 1983 inpatient discharge and outpatient visit data to determine where veterans lived in relation to the Allen Park facility and the proposed Detroit site. The results of our analyses, as summarized in the following tables, showed that more veterans lived within 6 miles of the proposed Detroit site than within 6 miles of the Allen Park facility. Over 40 percent of veterans treated as outpatients and inpatients lived more than 6 miles from both locations.

Locations of Veterans' Residences for
Those Treated at the Allen Park Facility
During Fiscal Year 1983 Relative to the
Allen Park and Proposed Detroit Sites

<u>Locations of veterans' residences</u>	<u>Inpatient discharges</u>	<u>Percent of total inpatient discharges</u>	<u>Out- patient visits</u>	<u>Percent of total out- patient visits</u>
Within 6 miles of proposed Detroit site	3,037	34.7	8,616	34.4
Within 6 miles of Allen Park facility	1,501	17.2	4,822	19.3
Within 6 miles of each site	454	5.2	1,274	5.1
More than 6 miles from both locations	<u>3,744</u>	<u>42.9</u>	<u>10,310</u>	<u>41.2</u>
Total	<u>8,736</u>	<u>100.0</u>	<u>25,022</u>	<u>100.0</u>

QUESTION NO. 13: How many of the inpatient discharges and outpatient visits at the Allen Park facility involved veterans aged 65 and over?

ANSWER:

About 20 percent of the inpatient discharges and outpatient visits at the Allen Park facility in fiscal year 1983 involved veterans aged 65 and over. The percentages of visits by veterans aged 65 and over treated as inpatients and outpatients at the Allen Park facility in fiscal year 1983 who lived within 6 miles of the facility and within 6 miles of the proposed Detroit site were comparable to the percentages of all veterans treated during the same period.

DISCUSSION:

We analyzed fiscal year 1983 inpatient discharges at the Allen Park facility to determine the ages of veterans and the reliability of the VA data.

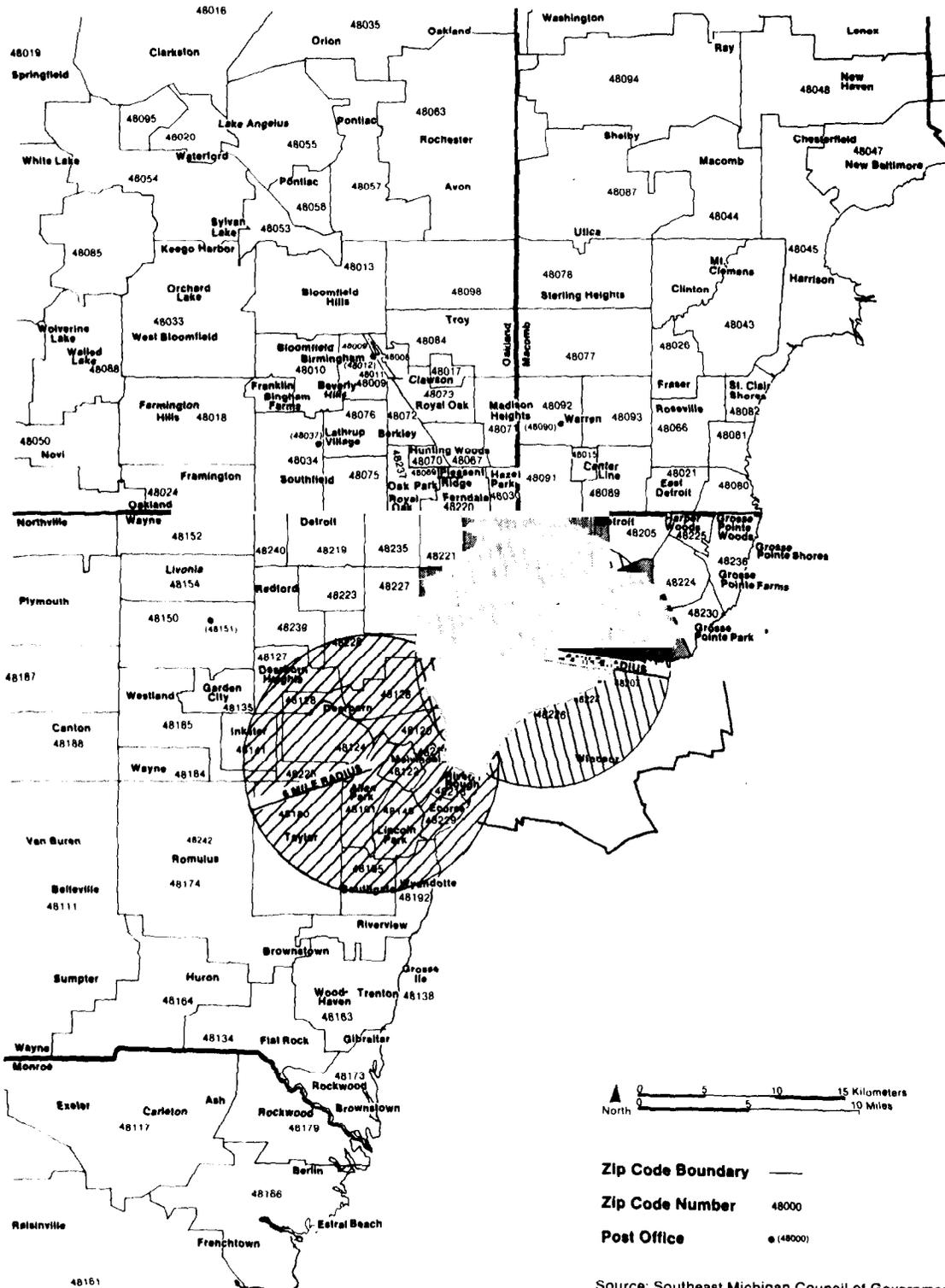
As shown in the tables below, the percentages of veterans aged 65 and over who received inpatient and outpatient treatment were about the same for those who lived within 6 miles of the proposed Detroit site or within 6 miles of the Allen Park facility.

Inpatient Discharges Involving Veterans Over
and Under Age 65 at Allen Park Facility
in Fiscal Year 1983 Relative to Distance From
the Allen Park and Proposed Detroit Sites

<u>Locations of veterans' residences</u>	<u>Inpatient discharges</u>				
	<u>Under 65 years</u>	<u>Percent</u>	<u>65 years and over</u>	<u>Percent</u>	<u>Total</u>
Within 6 miles of proposed Detroit site	2,379	78	656	22	3,035 ^a
Within 6 miles of Allen Park facility	1,181	79	319	21	1,500 ^a
Within 6 miles of each site	345	76	109	24	454
More than 6 miles from both loca- tions	<u>3,056</u>	82	<u>688</u>	18	<u>3,744</u>
Total	<u>6,961</u>	80	<u>1,772</u>	20	<u>8,733^a</u>

^aTotals are different from the table presented in response to question 12 because the ages of three veterans could not be determined.

**Map To Show Postal
Zip Codes Within 6 Miles Of Allen Park
VA Medical Center And Proposed Downtown Site**



Further analysis of the inpatient data showed that there were 1,253 inpatient discharges at the Allen Park facility of veterans who lived within 3 miles of the proposed Detroit site. Of the 1,253 visits, 343 (27.4 percent) were made by veterans aged 65 and over.

As shown in the table below, the percentages concerning the elderly veterans who made outpatient visits in fiscal year 1983 were comparable to the inpatient discharge data shown in the table on page 24.

Outpatient Visits by Veterans Over
and Under Age 65 at the Allen Park Facility
in Fiscal Year 1983 Relative to Distance from
the Allen Park and Proposed Detroit Sites

<u>Locations of veterans' residences</u>	<u>Outpatient visits</u>				<u>Total</u>
	<u>Under 65 years</u>	<u>Percent</u>	<u>65 years and over</u>	<u>Percent</u>	
Within 6 miles of proposed Detroit site	6,930	80	1,686	20	8,616
Within 6 miles of Allen Park facility	3,681	76	1,141	24	4,822
Within 6 miles of each site	930	73	344	27	1,274
More than 6 miles from both loca- tions	<u>8,588</u>	83	<u>1,722</u>	17	<u>10,310</u>
Total	<u>20,129</u>	80	<u>4,893</u>	20	<u>25,022</u>

We also found that regardless of whether veterans were over or under 65, more veterans treated at the Allen Park facility as outpatients and inpatients lived within 6 miles of the proposed Detroit site than within 6 miles of the facility.

QUESTION NO. 14: How many veterans received inpatient and outpatient treatment at the Allen Park facility in fiscal year 1983 and how many were treated more than once?

ANSWER: The 8,736 inpatient discharges at the Allen Park facility during fiscal year 1983 involved 6,022 veterans. About 28 percent of the veterans were discharged two or more times.

During the same period 5,058 veterans made 25,022 outpatient visits. About 37 percent of the veterans made one outpatient visit; the others made two or more outpatient visits.

DISCUSSION:

We analyzed VA's fiscal year 1983 inpatient discharge data to determine the number of veterans who were discharged one or more times from the Allen Park facility and whether they lived within 6 miles of the facility or the proposed Detroit site. Our analysis showed that the 8,736 inpatient discharges during fiscal year 1983 involved 6,022 veterans. Seventy-two percent of the veterans were discharged once, while the rest were discharged two or more times. The table below summarizes the number of veterans who received inpatient treatment at the Allen Park facility and the number of times they were discharged.

**Number of Veterans Who Were Discharged
One or More Times From the
Allen Park Facility in Fiscal Year 1983**

<u>Number of inpatient discharges</u>	<u>Number of veterans</u>	<u>Percent of veterans</u>	<u>Total inpatient discharges</u>	<u>Percent of inpatient discharges</u>
1	4,358	72.4	4,358	49.9
2	1,050	17.4	2,100	24.0
3	363	6.0	1,089	12.5
4	148	2.5	592	6.8
5	63	1.1	315	3.6
6	21	0.3	126	1.4
7 or more	19	0.3	156	1.8
Total	<u>6,022</u>	<u>100.0</u>	<u>8,736</u>	<u>100.0</u>

Further analysis of the data showed that:

--Of the 1,985 veterans who lived within 6 miles of the proposed Detroit site, 1,374 (69.2 percent) were discharged once from the Allen Park facility, 386 (19.4 percent) were discharged twice, and 225 (11.4 percent) were discharged three to nine times.

--Of the 1,001 veterans who lived within 6 miles of the Allen Park facility, 720 (71.9 percent) were discharged once, 179 (17.9 percent) were discharged twice; and 102 (10.2 percent) were discharged 3 to 14 times.

We analyzed VA's fiscal year 1983 outpatient data to determine the number of veterans who made one outpatient visit or more to the Allen Park facility and whether they lived within 6 miles of the facility or the proposed Detroit site.

Number of Veterans Who Made One or More
Outpatient Visits to the Allen Park Facility
in Fiscal Year 1983

<u>Number of outpatient visits</u>	<u>Number of veterans</u>	<u>Percent of veterans</u>	<u>Total outpatient visits</u>	<u>Percent of outpatient visits</u>
1	1,901	37.4	1,901	7.6
2	617	12.1	1,234	4.9
3	417	8.2	1,251	5.0
4 to 13	1,762	34.6	12,754	51.0
14 to 23	299	5.9	5,049	20.2
24 to 33	60	1.2	1,633	6.5
34 to 43	19	0.4	718	2.9
44 to 53	10	0.2	482	1.9
Total	<u>5,085</u>	<u>100.0</u>	<u>25,022</u>	<u>100.0</u>

Our analysis also showed that 1,825 veterans (35.9 percent) receiving outpatient treatment lived within 6 miles of the proposed Detroit site, while 1,068 (21.0 percent) lived within 6 miles of the Allen Park facility, and 232 were within 6 miles of each site and about the same distance from both locations. Further analysis of the data showed that:

--Of the 1,825 veterans who lived within 6 miles of the proposed Detroit site, 579 (31.7 percent) made 1 outpatient visit; 203 (11.1 percent) made 2 visits; and 1,043 (57.2 percent) made 3 to 53 visits.

--Of the 1,068 veterans who lived within 6 miles of the Allen Park facility, 348 (32.6 percent) made 1 outpatient visit to the facility, 131 (12.3 percent) made 2 visits, and 589 (55.1 percent) made 3 to 44 visits.

QUESTION NO. 15: How many veterans with diagnoses of service-connected disabilities were treated at the Allen Park facility and lived within 6 miles of the proposed Detroit site?

ANSWER: VA data showed that 48 percent of the inpatients treated during fiscal year 1983 who lived within 6 miles of the proposed Detroit site (including the overlap area with the Allen Park facility) were veterans with service-connected disabilities and that about 11 percent of these inpatient discharges were for treatment of service-connected disabilities. Our review of VA's information showed that it was accurate.

QUESTION NO. 16: If the Allen Park facility is relocated to the proposed Detroit site, will enough volunteer help be available?

ANSWER: Information we developed supports the belief of VA officials responsible for the volunteer program, the state director of veteran services, and others, that enough volunteers will be available if the facility is relocated to Detroit.

DISCUSSION:

Volunteers provide a wide range of services for patients in the medical center, including transporting them to and from clinics, providing reading materials, assisting at church services, and assisting in educational, occupational, and physical therapy. Volunteers contributed over 130,000 hours of service during 1983 and over 120,000 hours from January through November 1984. The chief of the Allen Park volunteer program told us that although volunteers perform valuable services, they do not replace permanent employees.

Officials at the Allen Park facility responsible for the volunteer program believe that enough volunteers will be available if the facility is relocated to Detroit because (1) many volunteers come from veteran organizations that are dedicated to helping veterans, (2) the distance that volunteers must drive does not appear to be a major factor in their decision to serve,

(3) volunteers from similar organizations should be available in communities near the Detroit site, and (4) the Allen Park facility has an active volunteer recruitment program.

We reviewed a June 30, 1984, roster of volunteers (the most current roster available at the time of our review) to determine the extent to which veteran organization members participated in the Allen Park facility volunteer program. As the table below shows, 8 of the 10 organizations providing the most volunteers were veteran organizations. These eight organizations provided 461 (about 52 percent) of the total 893 volunteers. Community organizations with a commitment to veterans include the American Red Cross, American Gold Star Mothers, B'nai B'rith, Elks, and Masonic Service Association. These organizations encourage their members to participate in the volunteer program, and both the organizations and their members receive credit for the hours of service volunteered.

Volunteer Organizations Serving
Allen Park Facility

<u>Organization</u>	<u>Number of volunteers</u>
Veterans of Foreign Wars Auxiliary	108
Veterans of Foreign Wars	79
American Red Cross	74
American Legion Auxiliary	63
Disabled American Veterans	60
Disabled American Veterans Auxiliary	45
Polish Legion of American Veterans Auxiliary	42
American Legion	36
Benevolent and Protective Order of Elks	33
Amvets Auxiliary	<u>28</u>
Total	<u>568</u>

The state director for veteran services stated that the veteran organizations solicit volunteers from their membership. The director believed that volunteers will continue to serve if the Allen Park facility is relocated to Detroit. He said that contacts with non-VA hospitals in the DMC area have indicated that they have not experienced problems in obtaining volunteers.

Volunteer program officials at the Allen Park facility told us that the distance volunteers live from the facility does not appear to be a major factor affecting their decision to serve

since volunteers come from cities located throughout the Detroit metropolitan area. According to the officials, factors that they believe are more important than distance include free parking, safety at the facility, being assigned meaningful tasks, a desire to serve others, and the facility showing appreciation for the services rendered.

To determine the extent that the volunteers come from cities located throughout the Detroit metropolitan area, we identified the city of residence for Allen Park's current volunteers. As of June 30, 1984, the 893 volunteers providing services to the facility came from 70 cities in southern Michigan and 2 cities in northern Ohio. For 26 of the 72 cities where nine or more volunteers lived, we determined by ranges the distances the cities were from the Allen Park facility. We found that 786 of the 893 volunteers, about 88 percent, resided in these 26 cities.

Our information showed that of the 786 volunteers, 260 (33.1 percent) had a drive of 5 to 10 miles, while 169 (21.5 percent) had a drive of over 10 miles to get to the Allen Park facility. Our information also showed that 197 of the volunteers came from Detroit.

The chief of Allen Park's volunteer program said that the facility has an active recruiting program because the facility normally experiences a turnover of about 400 volunteers annually, and recruiting of new volunteers is an ongoing activity. Volunteers leave because they obtain paid employment, become ill, or have transportation difficulties. He stated that if the facility were relocated to Detroit, he would expect to replace lost volunteers with volunteers who lived closer to the Detroit site. In addition to working with the current organizations, he would recruit volunteers from Wayne State University (WSU), Detroit public schools, and business organizations. He said that if the facility were relocated, he would begin contacting these organizations 2 or 3 years in advance of the move.

The president and director of administration of the DMC Corporation provided us data which showed that DMC hospitals use volunteers extensively. As of June 1984, the DMC hospitals had 1,187 volunteers, of whom 289 were age 18 and younger and in junior programs, which are conducted each summer in conjunction with area schools.

The director of administration told us that DMC hospitals have experienced no difficulty in recruiting volunteers. DMC hospitals' volunteers come from the American Red Cross, church groups, universities, and local communities.

QUESTION NO. 17: Is the Allen Park facility experiencing shortages of nurses, and will enough nurses be available if the facility is relocated to Detroit? Are nursing salaries at the facility comparable with salaries paid by DMC hospitals?

ANSWER: Information we obtained showed that the Allen Park facility is not experiencing nurse shortages and supported VA officials' beliefs that enough nurses should be available if the facility is relocated to Detroit. Information we developed also showed VA nurses' salaries are competitive with those of DMC hospitals.

DISCUSSION:

The Allen Park facility has 400 nursing positions--240 for registered nurses (RNs) and 160 for licensed practical nurses (LPNs) and nursing assistants. As of February 16, 1985, the hospital had 384 of the 400 positions filled. There were 231 RNs and 153 LPNs and nursing assistants. Allen Park's chief and assistant chief of nursing service told us that the facility does not have difficulty recruiting nurses when vacancies occur.

The officials believe the facility would be able to hire enough nurses if the facility were relocated to Detroit because salaries paid by VA are competitive with salaries paid by DMC hospitals. In addition, the assistant chief said the facility's beginning salary of over \$19,000 for RNs exceeds the beginning salary of about \$15,000 for RNs in most VA medical centers in other parts of the country, because VA's central office authorized the facility to offer higher starting salaries in order to compete with other medical facilities in the Detroit area.

The following table shows the beginning and maximum salaries for RNs at the Allen Park facility and DMC hospitals as of 1983.

Salary Ranges for RNs
at Allen Park Facility
and in DMC Facilities

<u>Facilities</u>	<u>Beginning salaries^a</u>	<u>Maximum salaries</u>
Allen Park VA Medical Center	\$19,116	\$27,384
Children's Hospital	19,240	24,024
Detroit Receiving Hospital	19,344	24,128
Hutzel Hospital	19,760	23,920
Harper-Grace Hospital	19,531	24,419
Rehabilitation Institute	20,467	26,145

^aBeginning salaries reflect the wages paid to qualified RNs without any experience. Depending on education and experience, a higher salary may be offered.

LPN and nursing assistant positions at the Allen Park facility are included under the federal General Schedule pay system. (Salaries cited below were based on the General Schedule in effect as of Jan. 8, 1984.) The beginning salary for these positions is not as competitive as the beginning salary for RNs. For example, the beginning salary for LPNs and nursing assistants at the Allen Park facility at the time of our review was \$11,017. The beginning salary for LPNs at DMC hospitals ranged from \$13,728 to \$14,976. For nursing assistants, the beginning salary ranged from \$12,084 to \$15,371. However, the differences between salaries at the Allen Park facility and the DMC hospitals were less when maximum salaries were compared. At the facility, the maximum salary for LPNs and nursing assistants was \$17,986. At DMC hospitals, the maximum salaries for LPNs ranged from \$16,744 to \$18,720. For nursing assistants, the maximum range was from \$12,688 to \$18,491.

Although the beginning salary for LPNs and nursing assistants at the Allen Park facility is lower than that offered by DMC hospitals, officials at the facility believe that persons for these positions will be available when needed. The officials said that factors other than salary influence decisions to accept or reject employment offers. These factors include job security, retirement plan, and the hospital's teaching and learning environment.

QUESTION NO. 18: Are nursing requirements of DMC hospitals being adequately met?

ANSWER: A DMC Corporation official told us that hospitals in the DMC area were not experiencing problems in hiring nurses. In fact, he said that when DMC hospitals advertised nursing positions, they were always filled quickly.

DISCUSSION:

The president and executive vice president of the DMC Corporation told us that DMC hospitals (1) had no problems hiring nurses and (2) filled advertised nursing positions quickly. The officials said that this may be due partly to economic conditions; i.e., male spouses being unemployed and wives with nursing skills returning to the job market. The officials stated that DMC hospitals have an active recruitment/training program with the WSU School of Nursing. These officials also said that many applications for nursing positions and currently employed nurses at DMC hospitals come from Detroit's suburban communities.

The officials also stated that some DMC hospital officials felt threatened by the prospect of the Allen Park facility relocating to the DMC area. The officials said these hospitals fear that if the VA facility offers higher salaries and benefits than they do, nursing personnel may be lost to the VA facility.

QUESTION NO. 19: Is the sharing of equipment and services between VA and non-VA hospitals permitted, and does Allen Park share equipment and services with, or acquire care from, non-VA hospitals?

ANSWER: VA is authorized by law to enter into agreements with medical schools, hospitals, and research centers to expand the availability of unusual, costly, or scarce medical resources.

The assistant director at the Allen Park facility told us that the facility is a full-service hospital and has no need to rely on non-VA hospitals for its vital medical and surgical services. As a result, the facility has only two sharing agreements. When unforeseen or unique medical needs arise, the

facility may also acquire medical services or equipment through purchase orders or contracts.

DISCUSSION:

VA may authorize veterans to use non-VA hospitals (public or private) at VA expense only when VA or other federal facilities are not feasibly available, such as when the urgency of an applicant's condition, the relative distance involved, or the nature of the treatment required makes it necessary or economically advisable. According to an official in the fiscal service office at the Allen Park facility, the VA Administrator may use various methods to obtain needed outside medical resources when VA or other federal facilities are not available. These include sharing agreements, the fee-basis contract care program, consultant contracts, and purchase orders.

Some medical resources obtained through two sharing agreements

Sharing agreements involve formal contracts that are designed to satisfy foreseen medical needs. Fees are specifically identified, and when appropriate, billing is for a predetermined time period; i.e., biweekly, monthly, etc. Sharing agreements may exist where

- a community hospital could use, at agreed-upon rates, VA resources that otherwise would not be used to the maximum effective capacity (mutual use agreement);
- a VA facility could use a resource of a community hospital at agreed-upon rates (mutual use agreement); and
- a VA facility could use a resource of a community hospital and, in exchange, the community hospital could use a VA resource (exchange of use agreement).

Currently, the Allen Park facility has two sharing agreements--one with the University of Michigan (U of M), and one with the Oakwood Community Hospital. The agreement with the U of M is a mutual use agreement for veterinary services involving laboratory animals. The cost to the facility for this contract during fiscal year 1984 was \$7,915.

The agreement with the Oakwood Community Hospital is an exchange of use agreement. The community hospital provides the Allen Park facility with laboratory services, and the facility provides Oakwood with electron microscopy services. Under this agreement during fiscal year 1984, the facility billed Oakwood Community Hospital \$11,444 for services, while services provided by the community hospital cost the facility \$313. The facility's chief of supply services stated that both sharing agreements were still in effect as of May 1985. He said that no other agreements are anticipated.

Substantial use made by the
Allen Park facility of the
fee-basis contract care program

Generally, veterans who seek medical care at VA expense must obtain such care in a VA facility. One exception is medical services provided under the fee-basis contract care program, which was established for veterans who could not economically travel to a VA facility due to illness, disability, or geographical location. When appropriate, these veterans may be authorized to receive services at non-VA facilities. These facilities bill VA for the care provided.

In fiscal year 1984, the Allen Park facility spent about \$7.9 million in its fee-basis contract care program. Medical care provided under the program included nursing home care, outpatient services, and inpatient hospital services. A list of expenditures by program categories is shown below.

Fee-Basis Contract Care Program Expenditures
by Program Categories at Allen Park Facility
During Fiscal Year 1984

<u>Category</u>	<u>Costs</u>	<u>Percent</u>
Community nursing homes	\$1,687,109	
State nursing homes	2,866,155	
State domiciliary homes	<u>381,285</u>	
Nursing home care	<u>4,934,549</u>	62.5
Dental fee	212,272	
Contract dialysis	293,794	
Pharmacy fee	544,932	
Medical fee	<u>1,264,654</u>	
Outpatient services	<u>2,315,652</u>	29.3
Patients directly admitted to non-VA hospitals	494,007	
VA patients transferred to non-VA hospitals	<u>155,457</u>	
Inpatient services	<u>649,464</u>	<u>8.2</u>
Total	<u><u>\$7,899,665</u></u>	<u><u>100.0</u></u>

About \$4.9 million (62.5 percent) of fiscal year 1984 expenditures went to provide either community or state nursing home domiciliary care for veterans. A veteran who no longer requires hospital care but needs nursing home care may be permitted to use non-VA nursing home care facilities. The VA Community Nursing Home program is designed to assist the veteran and his or her family in making the transition from the hospital to the community. The program's primary goal is to maintain or restore the veteran to the highest level of health attainable. For many such veterans, placement will represent an interim period of care pending completion of arrangements to return to their own homes.

Veterans were sent to non-VA facilities because the 72 nursing home care beds at the Allen Park facility have remained at full occupancy over the last 4 years. Veterans are given an

opportunity to choose a nursing home from a list of facilities approved by VA. Currently, the Allen Park facility has contracts with 25 Detroit metropolitan area nursing homes. Veterans are usually placed in a facility near family and friends. During fiscal year 1984, the facility on average had 75 veterans a day occupying community nursing home beds.

VA's Great Lakes Region director told us that VA does not anticipate providing nursing home care in VA facilities for all eligible veterans. He stated that DM&S, in a given fiscal year, expects only 40 percent of the veterans needing nursing home care to receive such care at VA facilities, 20 percent to receive care in veterans' nursing home facilities operated by the state of Michigan, and the other 40 percent to receive care in community nursing homes.

Outpatient services in non-VA facilities amounted to about \$2.3 million in fiscal year 1984. These services included 31,181 prescriptions, about 30,000 visits to medical providers, 424 treatments and 608 examinations by dentists, and 187 treatments for dialysis. Non-VA hospitals may be used when VA facilities are not feasibly available or when urgency of the applicant's condition, the relative distance involved, or the nature of the treatment required makes it necessary or economically advisable.

Officials of the Allen Park facility authorized 35 transfers of veterans to non-VA hospitals during fiscal year 1984 at a cost of about \$155,000. These patients were initially admitted to the facility. However, because of a lack of either available intensive care beds or specialized treatment facilities (e.g., for a severe burn case) and because another VA facility was not feasibly available, the patients were transferred to non-VA facilities. Once the patients had been stabilized and the Allen Park facility could accommodate them, they were transferred back to the facility or discharged. The remaining \$494,000 involved veterans who were directly admitted to non-VA hospitals. They were transferred to the VA facility when an appropriate bed became available. In fiscal year 1984 inpatient services at non-VA facilities amounted to \$649,464 and 2,424 days of patient care.

Consultant contracts

Consultant contracts are another means by which the Allen Park facility obtains outside medical resources. Consultants are obtained to provide specialized medical services ranging from treatment for severe eye problems to teaching classes.

From October 1983 to August 1984, the facility used 165 consultants at a cost of \$116,250. Consultants are paid \$75 a visit by VA, and the 165 consultants made 1,550 visits to the facility.

Purchase orders

Purchase orders are another method used by the Allen Park facility to obtain non-VA medical services as well as other commodities needed by the facility. Purchase orders are initiated at the time a need arises. They do not require a formal contract or preset prices. The facility's chief of supply services told us that purchase orders are used to obtain a wide variety of commodities ranging from soap to an X-ray machine. For example, he said that when the facility needs specific laboratory tests that it cannot perform, it may obtain the service using a purchase order. He said that no specific limit has been established on the amount of an individual purchase order, although VA central office approval is sought for some large medical equipment purchases. During fiscal year 1984, the facility issued 13,854 purchase orders for goods and services totaling about \$23 million.

QUESTION NO. 20: To what extent will the use of non-VA medical resources increase if the Allen Park facility is relocated to Detroit?

ANSWER:

VA's planning is in the conceptual phase, and decisions on whether the use of non-VA medical resources will increase if the Allen Park facility is moved to Detroit have not been made. VA's conceptual planning assumes, however, that the new facility will provide a full range of medical services if it is located in Detroit and that opportunities for sharing will exist.

DISCUSSION:

The Allen Park facility's assistant director told us that currently there are no plans to increase the number of sharing agreements under either the reconstruction or relocation options. He said that by law the VA medical care system is to provide timely and complete medical care to eligible veterans and that VA's conceptual planning assumes that the new facility will provide a full range of medical services. The assistant director added that relying on non-VA hospitals for major services can be expensive.

The regional director for VA's Great Lakes Region told us that if the Allen Park facility is relocated to Detroit, additional sharing opportunities will exist in areas like radiation therapy and physical rehabilitation.² The director said that VA must consider each opportunity carefully to determine the benefits to VA and to the veterans. However, he said that DM&S will not discuss any future sharing agreements until after the Administrator has decided on the medical facility's location.

QUESTION NO. 21: What are the occupancy rates for hospitals in the DMC area of Detroit and for the Allen Park facility?

ANSWER: According to 1983 information obtained from the DMC Corporation and the Greater Detroit Health Council, the average occupancy rates for DMC hospitals ranged from 67 to 88 percent. The average occupancy rate for 75 hospitals in southeastern Michigan was 80 percent.

The occupancy rate for the Allen Park facility was about 77 percent.

DISCUSSION:

To obtain information on occupancy rates, we reviewed records at the Allen Park facility and discussed this matter with the facility director. At the DMC Corporation, we contacted the director of administration, who gave us data on occupancy rates for DMC hospitals. We also discussed the occupancy situation with the Corporation's president. Furthermore, we contacted the Greater Detroit Area Health Council, which collects occupancy rate information on southeastern Michigan hospitals.

Calendar year 1983 occupancy rates (the latest annual data available when we reviewed the rates) for DMC hospitals are shown in the table below. The occupancy rate for the Allen Park facility was about 77 percent. The average occupancy rate for

²The regional director's statement agrees with the draft Mission Statement for VA's Medical District 14 for fiscal year 1990. The draft statement, a 5-year plan of projected events, shows that the VA facility is in Detroit and will have sharing agreements with DMC hospitals in areas including nuclear magnetic resonance, linear accelerator, and supervoltage radiation therapy.

the 75 hospitals included in the southeastern Michigan hospital report was about 80 percent.

Calendar Year 1983 Occupancy Rates for
DMC Facilities and the Allen Park Facility

<u>Facility</u>	<u>Occupancy rates</u> (percent)
Children's Hospital	67
Detroit Receiving Hospital	74
Hutzel Hospital	74
Allen Park Facility	77
Grace Hospital	83
Harper Hospital	83
Rehabilitation Institute	88
 Average rate for 75 hospitals in southeastern Michigan	 80

QUESTION NO. 22: What impact does distance have on the affiliation programs between the Allen Park facility and the Wayne State University Medical School?

ANSWER:

According to officials from the Allen Park and the Ann Arbor VA facilities and from medical schools at WSU and the U of M, distance precludes affiliation programs from working as effectively as they could. The officials said that having a hospital located near a medical school is important to affiliation programs and that being near one another fosters the establishment of informal relationships important to the exchange of information between the hospital and the medical school. The officials also stated that by being close, (1) it is easier to get medical specialists to come to the hospital to consult on a few cases, (2) staff and students are not inconvenienced by lost travel time, and (3) the image of the VA facility is upgraded in the eyes of non-VA medical personnel.

DISCUSSION:

VA is authorized under 38 U.S.C. 5054 to enter into affiliation agreements with medical schools, hospitals, research centers, and medical professionals to facilitate the exchange of medical information and techniques. According to VA's Operations Manual M-8, dated August 1978, DM&S supports a broad policy of cooperation and professional interchange with educational institutions. In keeping with VA policy, as of January 23, 1985, the Allen Park facility had affiliations with 34 institutions involving 76 medical programs for the training of students. Students at the facility receive training in disciplines including the traditional medical and surgical specialties, nursing, pharmacy, psychology, social work, rehabilitation medicine, and health administration.

The acting chief of staff for education at the Allen Park facility stated that both the medical school and VA benefit from affiliation programs. The medical school benefits by having a medical facility where its students can obtain required clinical (direct patient care) experience, and VA benefits by meeting its commitment to continuing education and having the medical students, as they obtain clinical training experience, provide medical services to veterans. Also, he stated that affiliation programs require students to be monitored by the medical school, and a faculty member must be present at the medical facility or hospital. He stated that this requirement is met at the Allen Park facility in that most of its physicians are also appointed to the WSU Medical School staff. Of 105 full- and part-time physicians at the facility, 71 (68 percent) are on the staff of the medical school.

WSU participates in 39 (51 percent) of the 76 affiliation programs at the Allen Park facility. The medical school, located in the DMC area in Detroit, is about 10 miles from the facility. (See map on p. 21.) To determine the impact that distance can have on affiliation programs, we contacted officials from the Allen Park and Ann Arbor VA medical facilities and the medical schools at WSU and the U of M. We contacted officials at the U of M and at the Ann Arbor VA medical facility because they have affiliation programs with each other and are located about 2 miles apart. We also contacted an official at Henry Ford Hospital in Detroit because the hospital has affiliation programs with the U of M, which is about 35 miles away, and we wanted to determine the impact that this distance had on the programs.

The dean of WSU's Medical School, the coordinator for medical affiliated hospital relations at the U of M, and the acting chief of staff for education at the Ann Arbor VA facility all told us that having a hospital located near a medical school is important to affiliation programs. The officials said that being near one another fosters the establishment of informal relationships between medical personnel. They said that these relationships allow for increased information exchanges between colleagues and that these exchanges help to keep the staff aware of new techniques and procedures. They added that this can lead to better patient care.

We also were told by one or more of the officials that:

--In an emergency or to confirm a diagnosis, it is easier for a medical specialist to consult on a case if the VA facility is close to the medical school. An official said that a doctor's time is valuable and doctors prefer not to spend time traveling for a few cases. The official also stated that students and staff are inconvenienced and sometimes choose not to travel to the Allen Park facility because of the distance.

--When a VA facility is located in a medical center area, its image is upgraded through increased involvement of non-VA staff, who may develop an interest in and a more complete understanding of the VA facility.

The dean of WSU's Medical School told us that the Allen Park facility is vital to its affiliation program because the university needs a good hospital where its medical students can obtain their clinical experience. The dean said that the affiliation will become more active if the Allen Park facility moves to Detroit. He said that currently the facility experiences difficulty in getting staff to drive to Allen Park because of the distance. Students also have difficulty in obtaining transportation to Allen Park. For example, the dean stated that third-year medical students generally rotate among affiliated hospitals in the DMC area; i.e., Harper, Hutzler, and Grace hospitals and the Allen Park facility to obtain their clinical experience. He said that about once a week they return to WSU to attend a lecture or seminar. He added that a move to Detroit by the VA facility would improve this situation. In addition, he stated that the advantages of being near a medical school may enable VA to recruit more and better doctors. The acting chief of staff for education at the Allen Park facility also told us that affiliation programs with WSU would be enhanced and new programs added by a move to Detroit.

The coordinator for medical affiliated hospital relations for the U of M stated that the medical school has affiliation programs with Henry Ford Hospital in Detroit, which is about 35 miles away. He said that the U of M Medical School needs hospitals for the clinical experience required for its students, and the Henry Ford facility is a fine hospital. He also said that usually more students volunteer for the clinical training positions at Henry Ford Hospital than can be accommodated. Commuting between the medical school and the hospital is limited because while at Henry Ford Hospital, the students generally do not attend classes at the university. He added that students spend an entire year at the hospital and are offered low-cost housing nearby.

Nursing students also are required to obtain clinical experience. The Allen Park facility, through affiliation programs primarily with Wayne County Community College and Highland Park Community College, provides clinical experience for nurses.

We contacted nursing school officials to obtain their opinions of the effect a move to Detroit by the Allen Park facility would have on the various programs. The dean of WSU's Nursing School stated that, because of rising tuition costs and the increased costs of transportation, nursing students are less willing to travel to the Allen Park facility for their clinical experience. She said that, as of January 1985, the nursing school had no students in training at the facility. However, she said that if the facility were to relocate in Detroit, the affiliation program would become active again.

The dean stated that having hospitals close to the nursing school is important in making affiliation programs as active as possible. She said that DMC hospitals are close to the nursing school and about 70 percent of the students receive their clinical training at these hospitals.

The dean of nursing and health programs at Wayne County Community College told us that students usually prefer hospitals that are close to home to receive their clinical training. She said that the school usually has about 30 student nurses receiving their training at the Allen Park facility. She also said that a move to downtown Detroit should not affect the number of nursing students that currently obtain their clinical experience at the VA facility.

The dean of the nursing school at Highland Park Community College said that a move to Detroit by the Allen Park facility will enhance its affiliation program because the facility will

be closer to the college. The dean said that a major difficulty for students obtaining clinical experience at the Allen Park facility is the lack of inexpensive transportation. The dean stated that the transportation problem is compounded by the fact that, in some instances, students must take courses at the college while obtaining their clinical experience at the facility. She said that the school has 100 nursing students each year who receive their clinical experience at DMC hospitals, the Allen Park facility, or the state hospital in Northville, Michigan.

QUESTION NO. 23: Were 1982 statistics collected by DMC officials on crime within the DMC area and 24 community areas reliable, and what were the sources of the data?

ANSWER:

We verified that the crime information was accurately reported by DMC officials. The crime statistics were developed by DMC officials using a 1982 Michigan Department of State Police Uniform Crime Report for Michigan communities and information gathered by DMC security personnel on crimes committed in the DMC area. Because of the relatively few residents in and the unique characteristics of the DMC area, however, it may not be appropriate to compare the DMC area with the residential communities.

DISCUSSION

The crime statistics collected by DMC officials compared 1982 DMC area reported crimes in four categories with statistics from a 1982 Uniform Crime Report for 24 metropolitan area communities in Macomb, Oakland, and Wayne Counties. The population of the communities ranged from 10,000 to 25,000. Communities of this size were selected because DMC officials believed they could be compared with the DMC area, which has a population of about 17,000 (about 2,500 residents and 14,500 employees). Communities selected for the comparison are primarily residential, whereas the DMC area consists of several hospitals, a medical school, a library, and relatively few residences.

The Uniform Crime Report used for the comparison was prepared by the Michigan Department of State Police. The DMC officials reported that the DMC area:

--Had fewer assaults than 23 of the 24 communities.

--Had no murders and no rapes, whereas 11 of the 24 communities had at least one murder, and 18 of them had at least one rape in 1982.

--Had fewer robberies than 22 of the 24 communities.

We performed the same comparative analysis using information contained in the 1982 and 1983 uniform crime reports. Information on the four categories of crime for the 24 communities was compared to information on the same four categories of crime for the DMC area. The categories of crime were assault, murder, rape, and robbery. The results we obtained through our 1982 analysis were comparable to the crime statistics developed by DMC officials. Our 1983 comparative analysis was substantially the same as for 1982, with the DMC area reporting fewer crimes in the four categories than most of the 24 communities.

Incidents of crime surrounding the DMC area were higher than crime within the DMC area for seven categories of crime, as evidenced by a Detroit Police Department (DPD) report. DPD's crime prevention section obtained the crime information for an area bounded by Warren Avenue on the north, the Chrysler Expressway on the east, Mack Avenue on the south, and Woodward Avenue on the west. The DMC area is located within this "study area."

The information accumulated by DPD was for crimes that occurred in the area for the first 9 months of 1983. We then scaled up the data by a factor of 1.33 to develop an estimate of annual figures.

We compared the 1983 crime data for the study area and the 1983 crime data for the DMC area that we had obtained from DMC officials. The results of our comparison show that in every category but one, fewer crimes were committed within the DMC area.

Types of Crime Committed in DMC Area
and in DPD Study Area

<u>Type of crime</u>	<u>DMC area</u>	<u>DPD study area</u>
Assaults	-	52
Auto theft	125	402
Breaking and entering	38	39
Homicides	-	4
Larceny	12	465
Robbery	6	73
Rape	-	5
Total	181	1,040

In addition, we compared calendar year 1981-83 crime statistics for the DMC area obtained from the director of administration for the DMC Corporation. Our comparison of the crime incidents showed crime was down in 1982, but increased in 1983. During 1981, 151 incidents of crime were reported to DMC security personnel. The incidents of reported crimes dropped to 117 in 1982, but increased to 181 during 1983. Stolen automobiles accounted for 75 percent of the 1983 increase.

QUESTION NO. 24: What type of security measures are anticipated if the Allen Park facility is relocated to the DMC site in Detroit?

ANSWER:

VA's director of security services stated that VA had not developed any formal proposals on security needs for a medical center located in the DMC area of Detroit, because VA is only in the conceptual planning phase of its planned construction project.

DISCUSSION:

According to VA Manual MP-1, the Administrator is responsible for the protection of patients, visitors, employees, and property and the maintenance of law and order on property under the charge and control of VA. To address this responsibility, VA has established security staff at its medical facilities.

The chief of security services at the Allen Park facility told us that as of February 1985 he had not been consulted on security needs for a VA hospital located in the DMC area.

VA's director of security services told us that DM&S has not presented a proposal to him on security needs for a VA hospital in downtown Detroit. He said that a major factor in determining security needs for a hospital is the number of beds. He stated that since VA is only in the conceptual phase of its planned construction project, no proposals have been presented to his office for consideration. However, a VA central office DM&S official told us that for conceptual estimating, the proposed design for a hospital in Detroit assumed a security staff of about 20 officers. As of March 1985, the Allen Park facility employed 21 on its security staff, including the chief and one secretary.

We determined security measures taken at the DMC area by contacting officials from the DMC Corporation and DPD. Information provided by these officials showed that the DMC area is policed by WSU public safety personnel, officers from the 13th precinct of DPD, and DMC security officers.

The director of administration for the DMC Corporation provided us data on specific measures taken to ensure the safety of persons who work in and visit the DMC area. According to information he provided, police activity is highly visible in the area. The information showed that DMC hospitals have a total of 141 security officers who made around-the-clock patrols of buildings, parking areas, sidewalks, and streets in the area. The patrols are made by officers on foot and in marked and unmarked cars and motorized carts.

In addition to patrols by DMC personnel, the information showed that WSU has two buildings located in the DMC area. Although not all of WSU's 44-officer security force is in the DMC area, it patrols the area 10 to 20 times daily. Information obtained from DPD showed that a two-man patrol vehicle from the department's 13th precinct is assigned solely to the DMC and the immediate area.

Information obtained from the DMC Corporation director of administration showed that other security measures include:

- High intensity vapor lights to light the entire DMC area.
- A standardized radio system, which allows security personnel from the different institutions to keep in touch with each other and the 13th precinct.
- Maintaining parking structure security through security patrols, a parking attendant during the day, and a security officer at night and on weekends.

--An electronic surveillance system used by all DMC hospitals. Each hospital has its own equipment and control room which is staffed 24 hours a day. The equipment monitors hospital entrances and exits and the surrounding grounds. Overall coordination of the system is through a central room at DMC corporate headquarters. The control room is also staffed 24 hours a day.

Data we obtained showed that security chiefs from DMC hospitals, WSU, and the 13th precinct commander meet monthly to discuss security problems and to coordinate security efforts in the area.

QUESTION NO. 25: Has VA adequately considered parking for a relocated hospital in Detroit?

ANSWER: VA has recognized that a parking structure will be needed if the facility is relocated to Detroit. However, as of March 1985, VA had not estimated the parking requirements for the proposed Detroit facility.

DISCUSSION:

VA is authorized under 38 U.S.C. 5009 to provide garages and parking facilities for its medical facilities. For the past 10 years, VA has determined its parking needs using general criteria that it applies to all facilities without considering unique or local circumstances applicable to individual facilities.

VA is now revising its parking criteria. According to VA officials, future determinations of parking needs will consider such factors as geographic location, ridesharing, inpatients, and affiliation status with universities. Also, the unique parking needs of general medical, surgical, and psychiatric hospitals will be considered separately.

As of March 1985, the transportation coordinator at VA's central office told us that VA had not estimated the parking needs for the proposed Detroit site in the DMC area or for a modernized Allen Park facility using VA's new method. VA is only in the conceptual planning phase, but has recognized that a parking structure will be needed and included a preliminary cost estimate in its conceptual plan. (See p. 59.)

QUESTION NO. 26: Have sufficient data been developed so that VA could make firm construction cost estimates for the Allen Park project?

ANSWER: Firm construction cost estimates have not been made because the project is early in the planning phase and most data VA has developed are considered preliminary.

DISCUSSION:

As of February 1985, VA was still officially considering four construction alternatives (concepts) and did not plan to decide on which concept to follow until January 1986. (See p. 6.) Because of this early point in the planning stage, we could only review and comment on VA's actions and decisions during the conceptual phase, which is the first planning and development component of VA's construction process. During the conceptual phase, VA's Office of Construction coordinates with DM&S, the Department of Veterans Benefits, and the Office of Data Management and Telecommunications to develop and plan a data package that includes estimates of the project's scope, staffing, bed distribution, and workload.

SH&G developed the conceptual designs and cost estimates for concepts A, B, and C. VA developed the conceptual design and cost estimates for concept D. To develop its conceptual designs and estimates, VA used (1) its historical data base, which is a compilation of completed and ongoing construction and renovation projects at VA medical centers; (2) its engineering judgment and experience; (3) its space planning program criteria, which include guidelines on the number of square feet needed for each medical service/department and support service/department to be renovated or constructed; (4) conceptual architectural drawings prepared by VA's Office of Construction; (5) Office of Management and Budget (OMB) economic projections; and (6) Boeckh Building Cost Index Numbers, which VA uses as a guideline for future escalation (inflation) of a project's cost.

The first cost estimates are developed during the conceptual phase of a construction project, generally several years before construction begins. These estimates are based on limited knowledge of a project's scope, an architect/engineer's subjective judgment and experience, and a standard application of the engineering principles and techniques as specified in the VA Construction Project Handbook. According to VA officials, conceptual cost estimates are best defined as "ball park" figures.

During the next phase of VA's construction planning process, known as the preliminary phase, a complete project scope (a specific description of what will be accomplished by the project) and specific construction cost estimates are established, which lead to the development of working drawings and construction specifications. The Allen Park project will not reach the preliminary phase until the VA Administrator decides which alternative to adopt.

QUESTION NO. 27: Have any funds been appropriated to VA for the Allen Park project?

ANSWER: No funds have been appropriated because VA has not decided on an alternative for the project.

DISCUSSION:

Since fiscal year 1978, VA through its advance planning fund has been able to carry out efforts on major construction projects relating to the activities identified with the conceptual and preliminary phases of the construction planning process; that is, before the projects have to be identified in the budget request.

When VA's fiscal year 1985 appropriation act was passed by the Congress in June 1984 (Public Law 98-371), VA requested \$8 million for site preparation, acquisition, demolition, and relocation expenses for the Allen Park project. This \$8 million was not appropriated by the Congress. The President's fiscal year 1986 budget included no funds for the project.

QUESTION NO. 28: Did VA follow established guidelines and usual practices when it developed the original construction cost estimates for the Allen Park project?

ANSWER: VA generally followed its established guidelines and used reasonable judgment in developing cost estimates for this project during the conceptual planning phase--the earliest phase in VA's construction process.

During our review of VA's construction design concepts and related cost estimates, however, we noted several erroneous computations, inconsistencies in how cost estimates were developed among the four concepts, and use of the wrong data to escalate estimated construction costs.

These discrepancies are not highlighted, however, because in most cases VA officials took corrective action soon after we questioned their data. For the minor discrepancies noted in its most current revised cost estimates, VA officials said these would be rectified when more precise cost estimates are developed in the next planning phase.

DISCUSSION:

SH&G used its conceptual designs to develop the base construction cost estimates for each concept as of December 1982. The base construction costs included all planned new construction and alterations to the Allen Park structures, necessary utility connections and changes outside the structures, and the planned sitework, involving parking lots, roads, sidewalks, and landscaping, as of the date the design drawings were prepared.

As required by VA, SH&G also developed estimates to recognize the escalation costs that would be incurred during the several years it would take to design and construct each of the planned concepts along with estimates for contingency reserve and technical services costs. When the escalation, contingency reserve, technical services, site acquisition and clearance, utility and other agreements, and impact costs are added to the base construction costs, the total is referred to as "total project cost." (See pp. 60 to 63 for definitions and details.)

VA accepted the conceptual designs and the related base construction cost estimates from SH&G as of December 1982. VA, however, revised the contractor's total project cost estimates because they were not computed according to VA's established methods for estimating escalation, contingency reserve, and technical services costs.

VA developed the base construction cost and total project cost estimates as of December 1982 for concept D, independent of SH&G's conceptual designs and cost estimates. However, the same medical services and distribution of beds were used in developing the designs for all four concepts. (See p. 8.)

The original construction cost estimates developed in December 1982 by SH&G and VA to modernize/relocate Allen Park were revised and updated by VA's central office in August 1984 and in February 1985. The August 1984 revision updated the estimated base construction costs and the escalation rate. The February 1985 revision recognized a change in the escalation

rate and decreased the time during which the escalation rate would be applied.

In analyzing the February 1985 revised estimates, we noted that the escalated construction cost estimates, which were first revised as of August 1984, were not updated. We pointed this out to a VA Office of Construction official, who said the impact of not updating the escalated construction cost estimates to February 1985 would be relatively insignificant on the total project cost estimates. As a result, all four concepts were affected similarly in that the construction cost estimates were all slightly overstated. He added that VA had no plans to revise its estimates again until data on the split facility concept were developed.

According to VA, the revised cost estimates developed in August 1984 and February 1985 (1) incorporated unit cost estimates derived from VA's recent experience in constructing and renovating other medical centers (see p. 56), (2) applied revised space criteria for VA nursing home care facilities (see p. 56), (3) recognized OMB's directive to federal agencies to use a lower escalation rate than at the time the original Allen Park cost estimates were developed (see p. 60), and (4) estimated total project costs to April 1987, the date VA plans to award a contract to a private firm to construct the project (rather than to the mid-point of construction³ as in the December 1982 cost estimates) (see p. 60).

As shown in the table below, the original total project cost estimates decreased for each of the concepts.

³Mid-point of construction refers to the estimated average point in time, considering all phases of a project, when about half of each phase of a construction project would be completed.

Comparison of Original and Revised
Total Project Cost Estimates for
Four Concepts Being Considered
for the Allen Park Project

	<u>Years needed to complete construction</u>	<u>Original total project cost estimate</u>	<u>Revised total project cost estimate</u>	<u>Decrease from original estimate</u>
		----- (millions) -----		
Concept A-- Major renovation and new construction	9	\$213.0	\$159.9	\$53.1
Concept B-- Major renovation and new construction	8.5	206.0	155.3	50.7
Concept C-- Major new construction and some renovation	5.5	201.0	159.4	41.6
Concept D-- New construction and relocation	3.25 ^a	232.0	195.6	36.4

^aWhen the original total project cost estimate was developed, VA estimated it would take 3.5 years to complete construction.

We analyzed the revised total project cost estimates for the four concepts and found that for concepts A, B, and C, lower base construction cost estimates accounted for about 13 percent, 6 percent, and 8 percent, respectively, of the decreases. The major reasons for the decreases were (1) the use of a lower escalation rate--5 percent rather than 7 percent--and (2) the change in escalating costs for less time, to the award date of the construction contract, rather than to the mid-point of construction. For concept D about 22 percent of the decrease in estimated total project costs occurred because of the lower estimated base construction costs. The major reason for the decreased concept D cost estimate was the lowered escalation rate discussed above. VA officials said that VA usually estimates

total project costs to the award date of the construction contract. Decreases to related contingency reserve and technical services costs accounted for minor reductions in estimated total project costs for all four concepts.

According to DM&S officials, as of March 1985, concepts A and B were no longer considered to be viable options for the Allen Park project. A DM&S official stated that the renovated structures would not fully satisfy current patient care standards as provided in the accreditation process primarily because the corridors of the older structures would still be too narrow and space deficiencies for some medical services/departments could not be completely remedied. In light of these statements, we limited our detailed analyses of VA's revised cost estimates to concepts C and D.

QUESTION NO. 29: Why did VA decrease estimated unit costs and nursing home space requirements for concepts C and D in 1984, and what impact did these decisions have on the estimated cost for the Allen Park project?

ANSWER:

In December 1982, VA developed estimates of the number of gross square feet required to implement concepts C and D and the estimated costs for each square foot.

In August 1984, VA decided to decrease the estimated unit cost of new construction for the four Allen Park project concepts because of its experience during the 1970's and 1980's in planning and constructing medical centers, primarily in Richmond, Houston, and Los Angeles, where the actual bids for construction projects were lower than the estimated construction costs primarily because of reduced inflation rates. VA officials also believed that due to the current economic conditions in the Detroit area, construction labor and material costs would be less than when the first cost estimates were made in 1982.

In February 1984, a VA task force developed a revised model for VA nursing home care facilities which called for reduced nursing home space requirements (fewer square feet) than the existing model. Although the proposed

model and procedures relating to nursing home space requirements were still in draft form as of August 1984, VA decreased the estimated total gross square feet needed for the Allen Park project in anticipation that the proposed model and procedures would be implemented soon.

By using a lower unit cost estimate and applying that estimate to fewer gross square feet, the estimated total cost decreased from \$114.5 million to \$109.3 million for concept D and from \$103.2 million to \$101.1 million for concept C.

DISCUSSION:

The original construction cost estimates developed in December 1982 by SH&G and VA were revised in August 1984 and February 1985. The tables on pages 57 and 59 are dated February 1985, but these computations were performed in August 1984 and not revised after that date.

In December 1982, VA estimated that the proposed downtown facility--concept D--would consist of 930,900 gross square feet and that the estimated cost for each gross square foot would be \$123. As shown in the table on page 57, this resulted in an estimated cost for new construction of \$114.5 million. In August 1984, VA lowered the number of gross square feet by 9,500 because of the draft proposal relating to nursing home facilities discussed above and also lowered the estimated cost for each gross square foot of new construction to \$118.58 because of its experience in the 1980's in constructing other medical centers. In applying these revised data, VA developed an estimate of \$109,255,000 for concept D.

For concept C, as of December 1982 VA estimated that new construction for 768,174 gross square feet would cost \$92,140,000--that is, \$119.94 a gross square foot. Also, VA estimated that 151,805 gross square feet of alterations would cost \$11,047,000--that is, \$72.77 a gross square foot. When added together, new construction and alterations for concept C totaled \$103,187,000. In August 1984 VA decreased the cost for each gross square foot for new construction to \$118.58--the same unit cost as concept D revised--and also decreased the number of gross square feet of new construction by 9,500 for the same reasons cited in the previous paragraph for concept D. In applying these revised data, VA developed an estimate of \$89,964,000 for new construction.

For concept C alterations, VA used the same number of gross square feet, 151,805, in both the original and revised cost estimates but increased the unit cost for each gross square foot from \$72.77 to \$73.21 in the revised estimate, an increase of about 0.6 percent. This estimated increase was derived from the Boeckh Index, which VA uses to measure escalation of construction costs over time. VA's revised estimate for alterations was \$11,114,000. The total for new construction and alterations for concept C as of February 1985 was \$101,078,000.

Comparison of Original and Revised New Construction/
Alterations Cost Estimates for Concepts C and D
for the Allen Park Project

<u>Cost element</u>	<u>Concept C</u>		<u>Concept D</u>	
	<u>Dec. 1982</u>	<u>Feb. 1985</u>	<u>Dec. 1982</u>	<u>Feb. 1985</u>
	----(thousands)----		----(thousands)----	
New construction	\$ 92,140	\$ 89,964	\$114,500	\$109,255
Alterations	<u>11,047</u>	<u>11,114</u>	<u>-</u>	<u>-</u>
Total	<u>\$103,187</u>	<u>\$101,078</u>	<u>\$114,500</u>	<u>\$109,255</u>

In analyzing these cost estimates and revisions, we found that VA was consistent in using the same techniques for concepts C and D. Using the same cost per square foot for both concepts as of February 1985 appeared to be an acceptable decision by VA. As more definitive design data are developed during the preliminary planning phase, the cost estimates will change and become more precise.

Regarding the 9,500 gross square feet decrease based on a draft proposal to change the space requirements for nursing home care facilities, VA Office of Construction officials advised us that they could not document exactly how this number was developed. DM&S officials confirmed in December 1984 that a revised prototype for nursing home care facilities was being developed. As of March 1985 VA was still developing revised nursing home care space criteria. The planned reduction in gross square feet was applied to concepts C and D, and the differences in the resultant cost estimates amounted to about 1 percent of the base construction cost for each concept; therefore, the impact of this change on the total project cost estimates was minimal.

QUESTION NO. 30: What other elements contributed to the base construction cost estimates for concepts C and D?

ANSWER:

In addition to the cost elements discussed on pages 55 to 57, concepts C and D both included costs for utilities and sitework (parking, roads, walks, and landscaping) in the original base cost estimates. Concept D also provided amounts for a parking structure and an energy building--a separate structure that will house the power source for the medical center.

DISCUSSION:

Concepts C and D both included costs for utilities and sitework in the original estimates. In August 1984, both concepts' estimates for utilities and sitework were increased by about 0.6 percent, to recognize inflation from December 1982. VA said this increase was derived from the Boeckh Index. When the utilities and sitework estimates were added to the total of new construction and alterations, the base construction cost for concept C as of August 1984 totaled \$114,082,000.

Concept D also provided amounts for parking facilities and an energy building. Just as with the utilities and sitework described above, the original December 1982 estimates were increased by about 0.6 percent, the inflation increase derived from the Boeckh Index. By adding the amounts for utilities and sitework as well as for parking facilities and an energy building to the total for new construction and alterations, the base construction cost for concept D as of February 1985 totaled \$137,019,000.

Comparison of Base Construction Cost Estimates
for Concepts C and D
for the Allen Park Project

	<u>Concept C</u>		<u>Concept D</u>	
	<u>Dec. 1982</u>	<u>Feb. 1985</u>	<u>Dec. 1982</u>	<u>Feb. 1985</u>
	----(thousands)----		----(thousands)----	
Total for new construction and alterations (see p. 57)	\$103,187	\$101,078	\$114,500	\$109,255
Utilities and sitework	12,927	13,004	10,491	10,551
Parking structure and lots	-	-	14,580	14,663
Energy building	-	-	<u>2,535</u>	<u>2,550</u>
Base construction cost as of computation date	<u>\$116,114</u>	<u>\$114,082</u>	<u>\$142,106</u>	<u>\$137,019</u>

In concept D, VA included a 1,000-space parking structure and 142 parking spaces to be scattered around the proposed medical center. VA originally estimated these 1,142 parking spaces would cost \$14,580,000. VA arrived at this estimate by allowing 412.5 square feet for each of the 1,000 spaces to be in the structure and then multiplied each square foot by \$35. For the other 142 parking spaces, VA estimated a cost of \$1,000 a space. With an estimate of \$14,438,000 for 1,000 spaces, VA was allowing \$14,438 for each parking space, or about 2.5 times the usual cost per parking space in an above-ground structure. As of August 1984, VA estimated the cost of the parking structure to be 0.6 percent (or \$14.6 million) higher to recognize escalation costs. VA officials acknowledged that the cost estimates for parking arrangements were quite high, especially since no underground parking was planned. A VA Office of Construction official said he did not believe the estimates should be revised at this early stage of planning.

When VA used the Boeckh Index rate, it was applied consistently to the cost elements for base construction costs in concepts C and D, including alterations, parking, utilities, and sitework.

QUESTION NO. 31: Were escalation rates properly applied by VA in revising the construction cost estimates for concepts C and D?

ANSWER: VA properly applied the revised OMB-directed escalation rate for concepts C and D from the date the revised conceptual planning estimates were prepared in August 1984 to April 1987, when VA expects to award a construction contract for this project.

DISCUSSION:

In preparing construction cost estimates during the conceptual phase of planning, VA routinely factors in escalation costs for the time it will take to award a contract to a construction company to build the planned facility. Each year OMB directs VA on the escalation rate to use, based on current inflation data. The table below compares the estimated base construction costs plus escalation costs to April 1987 for both concepts as revised.

Comparison of Base Construction Cost Estimates
Plus Escalation Costs for Concepts C and D
Projected to April 1987

	<u>Concept C</u>	<u>Concept D</u>
	----- (thousands) -----	
Base construction cost (see p. 59)	\$114,082	\$137,019
Escalation costs to October 1985	<u>+ 7,940</u>	<u>+ 9,536</u>
Construction cost to award of architect/engineer contract (Oct. 1985)	122,022	146,555
Escalation costs (Nov. 1985 to Apr. 1987)	<u>+11,994</u>	<u>+10,975</u>
Base construction costs plus escalation costs to April 1987	<u>\$134,016</u>	<u>\$157,530</u>

The escalation costs to October 1985 were developed by multiplying the base construction costs for both concepts by 6.96 percent. A VA official advised us that VA developed the 6.96 percent figure by compounding 5 percent monthly over 15 months from July 1984 to October 1985, when VA expects to award a contract to an architect/engineer firm to design preliminary

plans for the Allen Park project. The 5-percent escalation rate came from OMB, which directed VA to use this rate when developing its fiscal year 1985 budget request for major construction projects.

The escalation costs to April 1987--the date when VA plans to award a contract to begin construction--were developed in line with VA's usual practices and procedures. For concept C, VA analyzed the three phases of construction as provided in the conceptual design and applied OMB's average 5-percent escalation rate to the scheduled starting dates of each phase and estimated the total escalation costs to be \$11,994,000. For concept D, a rate of 8.01 percent was used to develop escalation costs over the 18 months from November 1985 to April 1987. By multiplying the base construction cost, \$137,019,000, by 8.01 percent, VA computed the estimated escalation costs to April 1987 to be \$10,975,000.

QUESTION NO. 32: What additional factors contributed to the total estimated project costs for concepts C and D?

ANSWER:

Factors included in VA's estimated construction costs for concepts C and D are shown in the tables on pages 57, 59, and 60. The following table shows the other items that constitute the estimated total project costs of both concepts.

Comparison of Total Project Cost Estimates
for Concepts C and D
Projected to April 1987

<u>Cost items</u>	<u>Concept C</u>	<u>Concept D</u>
	----- (thousands) -----	
Base construction costs plus escalation costs to April 1987 (see p. 60)	\$134,016	\$157,530
Contingency reserve costs	10,453	11,815
Technical services costs	13,154	15,755
Impact costs	1,750	-
Utility and other agreements' costs	-	2,500
Site acquisition costs	-	<u>8,000</u>
 Total project cost (Apr. 1987)	 <u>\$159,373^a</u>	 <u>\$195,600</u>

^aVA rounded this number up to \$159.4 million in its revised total project cost estimate. (See p. 54.)

DISCUSSION:

During the conceptual stage of planning for major construction projects, VA also estimates costs for technical services and contingency reserve. Technical services involve activities carried out by VA or a contractor to design the project, including laboratory tests, onsite inspections, and soil testing. During the conceptual planning phase, VA applies a standard 10-percent rate to the total of the escalated construction costs plus the contingency reserve costs to the date the architect-engineer contract is to be awarded in order to develop an estimate of technical services costs.

The contingency reserve is established by VA to provide for unexpected problems or developments, modifications, or additional time during the construction phase. For alterations, during the conceptual stage, VA uses 10 percent of the estimated construction costs after design is completed to estimate contingency reserve costs; for new construction, VA uses 7.5 percent of estimated construction costs after design is completed. When a combination of alterations and new construction is planned for a project, as in concept C, a weighted average of between 7.5 and 10 percent is used to estimate contingency reserve costs, depending on the ratio of base construction costs for alterations and new construction.

For concept D, VA used a rate of 7.5 percent multiplied by \$157,530,000 and arrived at \$11,815,000 as contingency reserve costs. For concept C, VA used a weighted average of 7.8 percent as the rate. This rate took into consideration that about 11 percent of the construction costs under this concept involved alterations, rather than new construction. (See p. 57.)

VA computed technical services for both concepts by applying its 10-percent technical services rate to the escalated construction costs plus contingency reserve costs as of October 1985.

Under concept C, \$1,750,000 was added for impact costs; that is, costs incurred as a direct result of a construction project, including temporary on-site and off-site storage, purchase/rental of temporary trailers or buildings, and contracted labor for the relocation of patients, employees, and equipment to comply with phasing plans related to the construction. According to VA officials, this was a rough estimate based on engineering judgment and experience. Similar costs were not anticipated for concept D.

On the other hand, concept D included estimates of (1) \$2.5 million for utility and other agreements to provide for initial utility hookups and other basic arrangements necessary to begin construction at a cleared site in downtown Detroit and (2) \$8 million to acquire the site, relocate the residents, modify the existing streets as needed, and eventually clear the site so that construction could begin. The \$8 million site acquisition/clearance estimate was developed by the city of Detroit in April 1983. (See pp. 12 and 13.) As of February 1985 VA had not confirmed this estimate or otherwise developed a specific proposal concerning these items, and according to the project supervisor, such a proposal will not be developed unless VA officially decides to adopt concept D. Similar costs were not anticipated for concept C.

For both concepts VA added the contingency reserve, technical services, impact, utility and other agreements, and site acquisition costs when appropriate to the base construction costs plus escalation costs to April 1987 to arrive at the total project costs of \$159,373,000 for concept C and \$195,600,000 for concept D.

Based on the data made available to us and discussions with knowledgeable VA officials, we believe that the methods used and computations developed by VA as of February 1985 for the estimated construction costs of concepts C and D for the Allen Park

project were generally reasonable and complete, and that VA generally followed its established procedures. The project was still in the conceptual planning phase at that time, however, and VA expects that as more definitive design data are developed, the cost estimates will continue to change, and the estimates will be more precise.

Even though the estimated difference between the revised total project costs for concepts C and D was \$36.2 million, the difference between the base costs of new construction and alterations of the new medical facility alone was only about \$8.2 million (concept D--\$109,255,000; concept C--\$101,078,000, as shown on p. 57). Other cost items that were necessary for concept D, but not for concept C, contributed significantly to the estimated cost difference. These included:

Parking structure	\$14.6 million (see p. 59)
Energy building	2.5 million (see p. 59)
Utility and other agreements (before construction begins)	2.5 million (see p. 62)
Site acquisition, demolition, and clearing costs	8.0 million (see p. 62)

QUESTION NO. 33: What is the status of the Environmental Impact Statement (EIS) for the Allen Park facility?

ANSWER:

VA contracted with Resource Assessment, Inc., in September 1983 to prepare an EIS for the replacement or modernization of the Allen Park facility. The contractor submitted a draft of the EIS⁴ to VA in July 1984. In August 1984, the draft EIS was published in the Federal Register for review and comment. Through December 1984, VA and the contractor reviewed the comments received, and in December 1984 the contractor completed a preliminary final EIS. In February 1985, VA decided not to

⁴The draft EIS contained information on the (1) various proposed construction concepts, (2) land that would be acquired in Detroit if the VA facility were moved to that location, (3) type of affiliation programs the Allen Park facility had with colleges and universities for training students, (4) availability of volunteers, (5) availability of parking at the proposed Detroit location, and (6) characteristics and residences of veterans who use the Allen Park facility.

proceed any further with the EIS because it wanted to consider an additional concept for the Allen Park project.⁵

As of May 1985, VA was extending the contract to update and revise the EIS. VA expects the draft EIS to be republished for review and comment in July 1985 and published in final by the end of 1985.

⁵See page 6.

OBJECTIVES, SCOPE, AND METHODOLOGY

Since the mid-1970's, VA has been considering the need for a modern medical center in the Detroit metropolitan area. At the time of our review, VA was considering whether to modernize the Allen Park facility, build a new medical center at the Allen Park site, or build a new medical center in downtown Detroit. The objectives of our review were to determine (1) if VA was considering all pertinent issues in deciding which of four construction designs to adopt and (2) the accuracy and completeness of the information that the VA Administrator will consider in making this decision.

The review was performed primarily at VA's central office in Washington, D.C., and at its medical center in Allen Park, Michigan. Documents reviewed included a draft of the EIS; the Rossetti Associates Master Plan Study; Smith, Hinchman, & Grylls Associates, Inc., Technical and Functional Evaluation of the VA Medical Center at Allen Park, Michigan; and VA's Five-Year Facility Plans. In addition, we reviewed VA's policies and procedures and applicable sections of the United States Code and the Code of Federal Regulations to become knowledgeable concerning the laws and regulations governing VA's medical care and construction activities.

To obtain information on potential problems associated with acquiring land at the proposed site in Detroit, we held discussions with the director and the community development coordinator of Detroit's Community and Economic Development Department. This is the Detroit department that will assist VA in acquiring land at the proposed site if the Allen Park facility is relocated to Detroit. We also obtained information on the state of Michigan's "Quick Take" Act, used by the city of Detroit to acquire title to property before compensation to the owners has been decided by the courts. To determine if any property located on the proposed site had historical significance, we visited the proposed site and reviewed files in VA's Real Estate Division and talked with the VA Historic Preservation Officer.

We also obtained documentation from and held discussions with the chief engineer at the Allen Park facility and the director of real estate at the VA central office to determine the value of the existing facility and an estimate of its replacement value. To verify an estimate of the current value of land at the facility, we contacted a certified appraiser with an office in the city of Allen Park. Because the deed which made the land available to VA contained a restrictive use clause, we talked with VA's general counsel for Medical District 14 and

reviewed the deed to determine the legal rights of the Ford family if VA decides not to use the facility.

To obtain information on whether VA has adequately considered parking needs for a new hospital in downtown Detroit, we held discussions with a transportation coordinator at VA's central office and the chief engineer and chief of security services at the Allen Park facility. In addition, we contacted DMC Corporation officials to obtain information on the importance of having adequate parking in the DMC area and how the Corporation meets its parking needs.

Concerning the Allen Park facility volunteer program, we obtained documentation on the number of volunteers in the program, the cities where they lived, and the hours of service volunteers contributed during calendar year 1983 and January through November 1984. We also identified the veteran, civic, or fraternal organizations they represented. We held discussions with the chief of the volunteer program at the Allen Park facility to obtain information on whether a problem would exist in recruiting adequate numbers of volunteers, should the facility relocate in Detroit. We did not talk with individual volunteers because the chief of the volunteer service told us that, by 1990, about 80 percent of the current volunteers would no longer be in the program. In addition, we contacted the president of the DMC Corporation to determine if DMC hospitals had a volunteer program and whether enough volunteers were available.

To obtain information on whether enough nurses would be available should the Allen Park facility move to a Detroit location, we held discussions with the facility's chief of staff for medical services, the chief and assistant chief for nursing services, and the chief of fiscal services. We reviewed VA records on the number of nursing positions at the facility and the extent that nursing positions were occupied. We obtained documentation needed to compare salary ranges for nursing positions at the Allen Park facility and at the five DMC hospitals. In addition, we talked with the president of the DMC Corporation and other Corporation officials concerning the availability of nurses for its hospitals. We also talked to a statistician from the American Nursing Association and an official from the WSU Nursing School on the availability of nurses in the Detroit metropolitan area.

We held discussions with the associate director, the chief of supply, and the chief of medical administration at the Allen Park facility to obtain information on sharing agreements, purchases of medical services from others, and proposed sharing

agreements, should the Allen Park facility relocate in Detroit. We reviewed the facility's sharing agreements, purchase orders, and fee-basis contract care records, as well as documents on transferring veterans to community and state hospitals. We also discussed with the president of the DMC Corporation whether the Corporation plans to share medical resources with the Allen Park facility should it relocate to Detroit.

Concerning occupancy rates, we held discussions with the director of the Allen Park facility and the president of the DMC Corporation. We also contacted the Comprehensive Health Planning Council of Southeastern Michigan and the Greater Detroit Area Health Council, Inc., to obtain occupancy rate statistics for other hospitals in the Detroit area.

To obtain information on the advantages of the Allen Park facility being near its affiliated medical schools, we had several discussions with and obtained documentation from officials of WSU's Medical School in Detroit, the U of M's Medical School in Ann Arbor, the student affairs coordinator at Henry Ford Hospital in Detroit, and several metropolitan Detroit area nursing schools. We also talked with several officials from the Ann Arbor and Allen Park VA Medical Centers.

We obtained crime statistics information from 1982 and 1983 reports prepared by the Michigan Department of State Police, DPD, security services at the Allen Park facility, and the director of administration at the DMC Corporation. Information obtained identified seven major categories of crimes that occurred at the Allen Park facility, the DMC area, a DPD study area, and cities and communities located throughout Michigan. To obtain the reports and related information, we held discussions with an inspector in the DPD crime prevention section, chiefs of security services for the Allen Park facility, and the director of administration for the DMC area hospitals.

We reviewed the process used by the Allen Park facility to collect and keypunch onto cards, data for inpatient discharges and outpatient visits. The cards are sent by the Allen Park facility to VA's Austin, Texas, Data Processing Center, where the information is put on computer tapes. We reviewed the process to determine if internal controls were adequate to ensure the accuracy and completeness of the data being sent to the processing center. When shortcomings in the process were identified, we determined the effect that the shortcomings had on the reliability of the computerized output data as it related to the purposes for which the data were used. To help us better understand the process, we had discussions with Allen Park

facility officials responsible for collecting the data and key punching the data onto cards. We also had discussions with officials responsible for entering the data onto computer tapes at the Austin Data Processing Center.

To determine if statistics on veterans developed by VA for the Allen Park facility's primary service area were reasonable and reliable, we asked VA to duplicate on computer tapes information on inpatient discharges and outpatient visits from its computer tapes for the facility. Using information on these tapes, we performed the analyses necessary to determine if the statistics on veterans for the facility's primary service area were reasonable and reliable. We also had a discussion with the chief of VA's Research Division, Office of Information Management and Statistics/Statistical Policy and Research Service, and obtained several documents to help us identify sources of information used by VA for its veteran population projections and to understand the methods used to make the projections.

To determine whether VA had developed reasonable cost estimates for its proposed modernization or relocation of its Allen Park facility, we held discussions with DM&S officials, VA Office of Construction officials, and the director of VA's Great Lakes Region and several Medical District 14 officials. We reviewed VA policies and procedures for completing major construction projects to determine if they were followed in developing specifications and estimated costs for the proposed Allen Park construction project. We also reviewed the cost estimates and designs for each of the four concepts and compared them to one another.

We reviewed information contained in VA's December 1984 final draft EIS for the areas addressed by the questions in our review. We compared data we developed during our review to information contained in the EIS to determine if that information was accurate and complete. We also reviewed the Code of Federal Regulations, VA's policies and procedures, and the process VA used to prepare the EIS to determine if the applicable regulations, policies, and procedures had been followed.

Our review was conducted from June 1984 through mid-March 1985 and performed in accordance with generally accepted government auditing standards. The views of VA officials were obtained during the review and are included in the report where appropriate. As directed by the requester, a copy of the draft report was not furnished to VA for its review and comments.

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