United States General Accounting Office 13/466

Report to the Honorable Edward Zorinsky **United States Senate**

August 1986

ARMY NATIONAL GUARD

Opportunities to Improve the Condition and Operation of **Armories**





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United States General Accounting Office Washington, D.C. 20548

Human Resources Division B-221238

August 7, 1986

The Honorable Edward Zorinsky United States Senate

Dear Senator Zorinsky:

This report responds to your request and to questions raised at the September 6, 1985, briefing we provided your staff. As agreed with your office, we obtained information on (1) the expanding federal role of the Army National Guard, (2) the adequacy of armories to accommodate the Army National Guard's changing federal mission, (3) the ability and willingness of the states to pay their required 25-percent matching share for construction and 100 percent of maintenance and repair costs for state-owned armories, and (4) recent actions and proposals to increase the federal share of armory operating costs.

To obtain information on the condition of armories, we sent a question-naire to all 54 adjutants general (highest state military officials) in the 50 states, Guam, Puerto Rico, Virgin Islands, and Washington, D.C.; 50 officials responded. We visited 16 states to discuss the construction, maintenance, and repair backlogs with both adjutants general and state budget officials. Also, we visited 34 armories in 13 of the 16 states to gain an understanding of the condition of armories. Within the Department of Defense (DOD), we gathered information at the National Guard Bureau, the Office of Deputy Secretary of Defense (Guard/Reserve Materiel and Facilities), and the Reserve Forces Policy Board. The detailed results of our work appear in appendixes I and II.

We did not examine whether the existing number of armories was needed or whether more joint utilization of facilities—primarily with other Reserve components—is possible.

Results in Brief

Since DOD's Total Force policy was initiated in 1970, the Army National Guard has assumed an expanded national defense role. Accordingly, the Guard has been assigned early deployment and combat roles comparable to those of regular Army units. This expanded defense mission has placed new demands on the Army National Guard's 2,655 state-owned armories. Troop levels have increased, and the Guard has increased both the number of full-time federal personnel working in the armories and the amount of equipment stored at the armories.

However, National Guard Bureau records show that 42 percent of these armories are inadequate to accommodate this expanded federal role, largely due to lack of sufficient training, office, and equipment storage space. Further, in response to our questionnaire, state adjutants general reported many armories to be in a poor state of repair, resulting in an estimated \$172-million backlog of maintenance and repair projects. Unlike other military facilities, replacement or repair of armories is dependent on the availability of state funds. States, according to the adjutants general, have not committed the funds needed for construction, modification, maintenance, and repair because of fiscal problems, relatively low state priority placed on Guard facilities, and the expectation that armories would be used primarily for the federal mission.

To help the states, in fiscal year 1986 the Congress provided increased funding to expand equipment storage facilities. Also, for the first time, the Congress approved limited funds to operate, maintain, and repair armories. This action is helpful but will not bring all armories up to Army standards. Federal and state Guard officials believe that inadequate or poorly maintained armories hamper personnel recruitment, retention, and training. But federal efforts to improve armory conditions will involve increased federal outlays. The Congress will have to decide whether these improvements are of sufficient priority to warrant increased federal funding.

Army National Guard's Federal Role Expanding

The Army National Guard has both a federal and state mission. The federal mission is to augment the Active Forces of the United States in time of war or national emergency. The state mission is to protect life and property and preserve peace and public safety.

Prior to 1970, the Army generally relied on the Army National Guard to back up the Active Forces. However, under DOD's Total Force policy established in 1970, the Army's dependence on the Army Guard expanded rapidly. Greater reliance was placed on the Army National Guard and Reserves to perform key defense roles—including early deployment missions comparable to those of the Active Army. This trend was accentuated recently when a cap of 780,000 was placed on the size of the Active Army. By 1985, the Army Guard had 26 percent of the Army's early deployment troops scheduled for activation should mobilization be necessary. Overall, the Army Guard has grown to 46 percent of the Army's total combat units and 37 percent of its support forces.

This expanded defense mission has placed new demands on Guard armory facilities, creating a need for more space to store equipment and house personnel. Prior to 1970, the Army Guard units generally had only a minimal amount of equipment for training purposes. However, under the Total Force policy the Guard units generally train with the equipment that they will use to fight with. Since 1970, the Army has added 18,885 full-time federal personnel, a large number of whom work in the armories to make the training more effective. Also since 1970, the number of troops in the Army National Guard has increased by over 25,000 and is planned to rise by another 65,000 by 1990.

Many Armories Considered Inadequate and in Need of Maintenance and Repair

Federal National Guard Bureau officials and state adjutants general or their representatives believe that many state-owned armories are inadequate to accommodate the expanded federal role assigned the Guard. Bureau records show that, based on bureau design criteria, 1,118 of the 2,655 state-owned armories are inadequate, 573 need to be replaced, and another 545 need additions or modifications. These armories lack adequate classrooms, administrative offices, inside and outside storage space for equipment, and/or outside parking for Guard personnel. Based on actual construction during the period 1983-86, the need for replacements and additions to or modifications of armories represents a backlog of 24 and 95 years, respectively.

A principal reason for this backlog is the outmoded design of many older armories. Over 53 percent of the 1,636 armories built more than 25 years ago are in need of replacement or additions and modifications, according to bureau records. Many were not designed to meet modern standards, nor do they provide the space needed to accommodate recent and planned increases in the amount of equipment and the number of guardsmen and full-time federal employees. For example, the older 100-member armories were generally constructed with approximately 10,000 square feet of space on 2.75 acres of land, while current design requirements call for approximately 20,000 square feet of space and 10 acres of land.

Adjutants general in the states we visited told us that many of their armories lacked adequate space to store increased inventories of equipment and accommodate training on site. For instance, bureau records show that more than 80 percent of Tennessee's 85 state-owned armories are considered to be inadequate or have some deficiencies. The adjutant

general of Tennessee told us that most of the state's armories are inadequate because of one or more conditions, including insufficient administrative and equipment storage space, undersized and unsafe kitchen areas, unsafe small arms ranges, inadequate overall square footage for assigned units, shortages of vehicle parking space, and insufficient outside training areas.

In addition to the need for replacement or additions and modifications, some state-owned armories are poorly maintained as evidenced by the backlog of maintenance and repair projects, amounting to \$172 million in 1985. The states are responsible for paying 100 percent of these costs. Projects in the backlog include painting and repair and maintenance for roofs and heating and cooling, electrical, and plumbing systems. This backlog has been increasing since 1980 and will continue to increase in the next 5 years, according to most state officials. Many of the 34 armories we visited were experiencing maintenance and repair problems. For example, at an armory in Kentucky, both inside walls and ceilings and exterior walls and windows were damaged from roof leakage. On the other hand, the backlog of maintenance and repair projects for nonarmory facilities such as logistical and training facilities has been decreasing. The federal government generally pays 75 or 100 percent for maintenance and repair costs of these facilities.

Inadequate armories make it harder to recruit, retain, and train guardsmen, according to federal National Guard Bureau and state adjutant general officials, who say this can have an adverse impact on a unit's federal mission. Nevertheless, all adjutant general officials we visited believe they are meeting federal mission requirements.

A major reason for the construction, maintenance, and repair backlogs is the unavailability of state funding. Unlike other military facilities, states must pay 25 percent of the cost of constructing state-owned armories, provide the land for the armory, and pay 100 percent of operations and maintenance costs.

Of the 41 adjutants general reporting a need for more armory construction, 27 indicated that state fiscal problems, the 25-percent state matching share, and the relatively low priority states placed on Guard expenditures were the primary factors limiting more construction. Only 8 of the 41 said that the unavailability of federal funds was a significant factor affecting construction. Other factors contributing to the backlog of maintenance and repair, adjutants general said, were aging armories

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and increased operating costs arising partly from the growing use of armories by full-time federal personnel.

Changes in Federal Cost-Sharing

Both the Congress and the National Guard Bureau have recognized the difficulty many states are having with construction and maintenance of state-owned armories. While no action has yet been taken on your proposal introduced in the Congress to increase the federal matching share of construction to 90 percent, several changes have occurred recently to help states improve armory conditions.

The Congress provided \$40 million in fiscal year 1986 for the delivery, storage, training, and maintenance of Army Guard equipment. A bureau official stated that it plans to use these funds mainly for storage buildings that are funded 100 percent by the federal government. Also, while the 75/25-percent cost-sharing rate continues as the primary funding arrangement for the construction of most armories, the Congress and DOD have made several changes, such as providing 100-percent federal funding for construction of new armories on federal land and construction of critical portions of armories related to the federal mission.

Moreover, the Congress recently moved for the first time to provide federal funds for armory operations, maintenance, and repair. The Conference Report on the Department of Defense Authorization Act for fiscal year 1986 included funds for the modification and repair of armories resulting from the increased federal mission and to offset armory operating costs resulting from increased federal equipment and full-time personnel. The Conference Report on the fiscal year 1986 appropriation for DOD specified that \$33 million be used to fund these activities.

The availability of new federal funds for operations, maintenance, and repair will provide significant new opportunities to improve the condition and operation of Army Guard armories. These opportunities will be maximized if states do not use the new funds as a substitute for existing state resources. Thus, we believe that states should be required to maintain their outlays for operations, maintenance, and repair as a condition for receiving the new federal funds. Although it would be preferable to require states to maintain last year's spending levels, such levels in 3 of the 16 states visited are atypically high due to recent capital bond issues (two states) and a supplemental appropriation used for Guard facilities (one state). Accordingly, in implementing a maintenance-of-effort requirement, the bureau could decide to exclude nonrecurring capital expenditures from individual states' spending baselines.

Further federal action to improve the condition of armories would involve a congressional policy decision. While many armories are rated as inadequate or poorly maintained by the bureau and the states, greater federal efforts to improve their condition will require increased federal funding. The Congress will have to decide whether these improvements warrant such increased funding.

National Guard Bureau Monitoring of Armory Conditions Needed

Regardless of the outcome of the funding issue, the federal government has a major stake in the Army National Guard and its ability to meet the federal mission. Since the federal mission has increased, we believe the National Guard Bureau should have management information on key aspects of its armory programs.

The bureau has not, however, actively tracked states' performance in maintaining armories. Although federal-state armory agreements require states to maintain armories for 25 years, the bureau does not monitor states' efforts nor collect data on armory maintenance and repairs. Further, the adequacy of a state's maintenance and repair of armories is not considered in the bureau's decisions to fund state proposals for new construction. On the other hand, the bureau maintains records on the nonarmory backlog, where the federal government pays a percentage of the maintenance and repair costs.

We believe an armory record-keeping process similar to the one maintained for nonarmories could be used by the bureau to carry out its responsibility to assure that armories are adequately maintained. Such information would provide a means for monitoring the states' level of effort in funding operations, maintenance, and repair projects and for determining the backlog of maintenance and repair projects. This information would also be helpful to decision makers in deciding what future funding levels the federal government should consider for maintenance and repairs.

Also, the bureau should encourage states to maintain armories in a good state of repair. Current financial arrangements for construction and maintenance of armories have not provided sufficient inducement to prevent the growth of the armory maintenance and repair backlog. To provide additional incentives to states for proper maintenance, we believe the bureau should consider each state's maintenance and repair record in its decision process for awarding funds for construction of new armories.

Recommendations to the Secretary of Defense

We recommend that the Secretary of Defense require the Chief of the National Guard Bureau to develop and implement:

- A policy requiring each state to maintain its prior year's level of operations, maintenance, and repair funding for the Army National Guard as a condition of receiving new federal funds for armory operations, maintenance, and modification. Nonrecurring state capital expenditures could be excluded from this requirement on a case-by-case basis.
- A policy to require that each state's maintenance and repair record be considered by the bureau when reviewing that state's proposal for the construction of a new armory.
- Procedures to monitor the backlog of maintenance and repair projects of armories.

Agency Comments

In its comments on a draft of this report, DOD agreed with our recommendations that states' maintenance and repair records be considered when their proposals for new armory construction are reviewed and that the National Guard Bureau monitor the backlog of armory maintenance and repair. It is moving to implement both recommendations.

DOD partially concurred with our first recommendation requiring states to maintain prior year's funding levels for maintenance and repair as a condition for receiving new federal funds for these purposes. It indicated agreement with the basic purpose of this recommendation and is implementing a new policy requiring states to maintain last year's operations and maintenance funding level to obtain new fiscal year 1986 funds, as set forth in the fiscal year 1986 House Committee Appropriations report. However, DOD believes that, as a condition for receiving federal funds to reduce the maintenance and repair backlog, states should be required to fund maintenance and repair at a level sufficient to take care of the annual recurring maintenance requirements for their armories. The growing backlog is evidence that states are not currently spending enough to satisfy these annual recurring maintenance needs.

While we do not disagree with DOD's analysis, it would be difficult to implement this proposed state maintenance-of-effort requirement. First, the definition of annual recurring maintenance requirements could be controversial and vary considerably based on armory age, use, and climatic location. Second, DOD's proposed requirement might cause states with the greatest gap between their spending and their annual recurring needs to refuse to accept the new federal funds rather than increase their spending enough to meet the new requirement. This would be

counterproductive, as these states have the greatest needs for the new federal maintenance and repair funds.

DOD also provided other comments on our findings that we have incorporated where appropriate into the report. A detailed discussion of its comments on each of our major findings is contained in appendix III.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its issue date. At that time we will make copies available on request.

Sincerely yours,

Richard L. Fogel

Richard Logel

Director

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Abbreviations

DOD	Department of Defense
GAO	General Accounting Office

Introduction

The National Guard Bureau within the Department of Defense administers and coordinates the federal mission in both the Army National Guard and the Air National Guard. The bureau is the operating agency that provides the interface between the states and the Departments of the Army and the Air Force. The Navy and the Marine Corps have no units in the National Guard.

The National Guard is different from other military service components because it has both a federal and state mission. The federal mission is to augment the Active Forces of the United States in time of war or national emergency. The state mission is to provide protection of life, property, preservation of peace, and public safety under state or federal authorities.

The armory is a facility used for unit training and administration. As of January 1985, the Army National Guard had 2,819 armories, which it classifies by troop capacity. Typically, armories are designed to accommodate from 60 to 800 members of the Army National Guard. The states in which these armories are located own 2,655 (about 94 percent) of them. The federal government owns the remainder. This report generally pertains to state-owned armories only.

The state-owned Army National Guard armories are used to serve the federal and state missions and the local community. The federal mission has priority over state and local community usage. In addition to paying 100 percent of personnel costs for guardsmen on drills and annual training and for full-time guardsmen, the federal government provides the equipment for the federal mission. The states pay personnel salaries for the use of the Guard in state and local missions.

Unlike other military facilities, which by law are generally funded entirely by the federal government, states share the construction costs of Army National Guard armories because they are used for both federal and state missions. The basic federal-state cost-sharing arrangements for the construction of armories was established under the National Defense Facilities Act of 1950. The act generally provides that construction costs are shared on a 75-percent federal/25-percent state basis. Furthermore, the states must provide the land, which is not included in their 25-percent share, and agree to pay 100 percent of the operations and maintenance costs.

In contrast, the federal government pays 100 percent for construction of nonarmory facilities (administrative and logistical support facilities

such as maintenance shops and motor vehicle storage sheds) and training area facilities (such as firing ranges, barracks, and mess halls) used by the Army National Guard. The federal government also pays 75 and 100 percent of the operations and maintenance costs of nonarmories and training area facilities, respectively. Many of these facilities are located on state land.

With regard to Air National Guard facilities, the federal government pays 100 percent of construction costs and generally pays 75 percent of operations and maintenance costs. Air National Guard facilities are generally located on land federally owned or leased by the Air Guard.

In summary, table I.1 shows the percent of costs for construction, operations, and maintenance that the federal government ordinarily pays for Army and Air National Guard facilities.

Table I.1: Federal Share of Costs for Construction, Operations, and Maintenance of Armories

	Federal sha	re (percent)
		Operations and maintenance
Army National Guard facilities:		
Armories	75	0
Nonarmories	100	75
Training areas	100	100
Air National Guard:		
All facilities	100	75

In 1985, the total budgeted expenditures by the 47 states and 3 territories responding to our questionnaire amounted to over \$212 million for both the Army Guard and Air Guard. (See app. II for the amount budgeted by each state and territory.) In fiscal year 1985, the federal government provided approximately \$4.6 billion for personnel, operations and maintenance, construction, and equipment for the Army National Guard; further, approximately \$2 billion in equipment was sent from the Active Army to the Army National Guard. The federal government's share of the cost for the Air National Guard was approximately \$4 billion for fiscal year 1985.

Objective, Scope, and Methodology

As agreed with Senator Zorinsky's office, we obtained information on (1) the expanding federal role in the Army National Guard, (2) the adequacy of armories to accommodate the Guard's changing federal mission, (3) the ability and willingness of states to pay their required share of the construction and maintenance costs of armories, and (4) recent actions and proposals to increase federal sharing of operating costs of armories.

Our review concentrated on Army National Guard armories because the states bear the greatest share of costs for these facilities. We did not examine whether the existing number of Army Guard armories was needed or whether more joint utilization of facilities with other Reserve components was possible.

We did work at the following offices within the Department of Defense: the Deputy Secretary of Defense (Guard/Reserve Material and Facilities), the Department of Defense Reserve Forces Policy Board (the principal policy advisor to the Secretary of Defense on matters relating to the Reserve components), and the National Guard Bureau (the principal administrative organization responsible for the Army and Air National Guard). We also discussed armory conditions with the National Guard Association of the United States (an organization that represents the National Guard before the Congress).

For the study, we visited 16 states (Alabama, Arkansas, California, Connecticut, Georgia, Kansas, Kentucky, Massachusetts, Michigan, Mississippi, Missouri, Nebraska, New York, Oklahoma, Tennessee, and Texas). Our selection of states was broadly governed by a need to include different areas of the country. We also selected several states that Bureau data revealed to have contrasting rates of new armory construction and state spending for operations and maintenance.

We mailed a questionnaire to the 54 adjutants general (highest state military official) of the National Guard in the 50 states, Guam, Puerto Rico, Virgin Islands, and Washington, D.C. We received responses from 50 adjutants general. Three states and one territory did not respond to our questionnaire.

To determine the basis for establishing federal and state cost-sharing arrangements for armories, we reviewed legislative history before and since the National Defense Facilities Act of 1950 was passed. We discussed the cost-sharing arrangements for armories with DOD and National Guard Association officials.

At the National Guard Bureau, we interviewed officials responsible for administering the programs for construction and maintenance of National Guard facilities. We discussed the adequacy of Army National Guard armories, the rate of new construction and additions, and the effects of poorly maintained and inadequate armories on the federal mission. We also discussed changes in the federal mission of the Army National Guard.

At the 16 states visited, we interviewed adjutants general or acting adjutants general, facility management officers, and state budget officials. We discussed changes in the Army National Guard's mission since 1950, conditions of armories, the willingness of states to provide funds to maintain the armories in good repair, and the willingness of states to fund their share of armory construction costs. We reviewed states' methodologies used to compute the backlog of maintenance and repair. We also discussed the potential effects of inadequate armories on the Guard's ability to perform the federal mission. In 13 of these 16 states, we visited 34 armories in part to observe their adequacy and conditions.

The review was performed in accordance with generally accepted government auditing standards.

Army National Guard's Federal Role Expanding

Today's National Guard has undergone numerous changes since its beginning as a state militia. The Constitution of the United States recognizes the existence of the state militia and provides for calling forth the militia to execute the laws of the Union, suppress insurrections, and repel invasions.

The modern-day image of the Guard began to emerge under the Militia Act of 1903. This act gave the federal government an active role in organizing, training, and equipping the Guard to meet standards established for the regular Army.

Since this act, the federal government's involvement in the Guard has expanded. In 1916, the Congress approved the National Defense Act, which provided federal funds to pay officers and enlisted personnel in the Guard. The act also outlined training activities and requirements for the Guard. In 1917, the Army Emergency Increase Act authorized the President to draft the National Guard into active service. In 1933, the Congress established the National Guard as a Reserve component of the Army, giving the President the authority to "call up" the Guard during a national emergency without having to call each state's governor.

In 1950, the National Defense Facilities Act (Public Law 783) authorized the federal government to contribute 75 percent of the construction cost for an armory with the state paying 25 percent. The state must also provide the land, which is not considered part of the state's 25-percent share, pay 100 percent of operations and maintenance costs, and agree to maintain and preserve the armory in good repair. The 75/25-percent cost ratio was based on the assertion that the national defense required a troop strength approximately three times the size collectively required by the states.

In the past several years, the Congress and DOD have made several changes including funding 100 percent of construction for armories built on federal land and construction of critical portions of armories related to the federal mission. The 75/25-percent cost-sharing arrangement remains the primary funding method for new construction of state-owned armories, however.

Guard an Integral Part of Army's Defense Capability Under Total Force Policy

The most significant change in the Army Guard's mission since 1950 resulted from DOD's adoption of the Total Force policy in 1970. Prior to 1970, the Army generally relied on the Army National Guard to supplement the Active Forces—under circumstances to be decided on a case-by-case basis—in a national emergency or some time following an outbreak of hostilities. In contrast, under the Total Force policy, the Army Guard has become an integral part of the Army's day-to-day defense plans. The rationale for the policy was to expand the role of the Reserve and National Guard forces to augment the combat and support units of the Active Forces, reducing the number of Active Forces needed and providing cost-effective defense capabilities.

Under the Total Force policy, the Army has assigned the Army Guard early deployment missions and roles comparable to those of the regular Army. The Army Guard is to provide 22,000 (26 percent) of the 86,000 troops in the Army's early deployment structure. This includes medical, maintenance, and transportation units that must be ready for activation soon after mobilization begins. In addition, the Army Guard provided 46 percent of the Army's combat units and 37 percent of its support forces in 1985. This included 10 of the Army's 28 divisions, as well as 5 "round out" brigades, and 7 "round out" battalions. Each "round out" unit provides the additional personnel needed to bring an active Army unit up to wartime strength.

Army Guard Troop Level, Full-Time Personnel, and Equipment Increased

As a result of the Total Force policy and an apparent decision in 1980 to stabilize the active Army at approximately 780,000 military personnel, the growth in total Army troop strength has been achieved by increasing troop strength in the Guard and Reserve components. The Army Guard provided 29 percent of the Army's total force in 1985. Table I.2 shows the change in troop levels in the Army's Total Force.

Table I.2: Troop Levels in Army's Total Force

Year	Active Army	Army Guard	Army Selected Reserve	Total
1950	593,000	326,395	230,000	1,149,395
1970	1,322,000	409,192	255,591	1,986,783
1980	777,000	368,254	197,400	1,342,664
1985	781,000	435,006	276,750	1,492,756
1990 (planned)	780,990	499,657	343,200	1,623,847

As shown in the table, an increase of about 90,000 is planned for the Army Guard over the 20-year period from 1970 to 1990. From 1970 to 1985, the actual increase was over 25,000. The 1985 level of over 435,000 is the highest troop level ever actually achieved in the Army Guard.

As a result of these troop increases and changing training requirements, the Army Guard has made a major increase in full-time federal personnel located in armories. These Guard and Reserve unit personnel implement and administer the increasing training requirements associated with the expanding federal mission. The Army Guard's Full-Time Manning program consists primarily of active Guard personnel and civilian technicians. The active Guard personnel program was established in 1979 with 1,098 personnel. In 1985, it had increased to 18,885 personnel with further increases planned to provide a total of about 37,000 personnel by 1990. A large number of these personnel require office space inside the armories to perform their work.

Additionally, the Army National Guard has a technician program, established in 1916. Since 1950, it has been fairly stable with about 27,000 technicians, of whom 4,800 work in armories similar to active Guard personnel. The remaining technicians work in other facilities such as headquarters and aviation flight facilities and maintenance shops. The Army also plans to add about 4,500 technicians to the program by 1991. Some of these additional technicians will work in armories.

According to DOD's Reserve Force Policy Board and National Guard Bureau's Mobilization Readiness officials, the Army National Guard has received an increasing amount of equipment and supplies as a result of the Total Force policy. Before 1970 the Army Guard received between 50 and 80 percent of required equipment, Policy Board officials said. Generally, the equipment was old and was used only for training. Under the Total Force policy, Guard units generally train with the equipment that they will use to fight with, and receive 100 percent of equipment requirements. Further, early deployment units in the Guard get a high priority and receive new equipment at the same time as the Active Army.

According to the Chief of the National Guard Bureau, the Department of the Army distributed approximately \$1.8 billion in equipment to the Army Guard in fiscal years 1984-85. This equipment includes major combat weapons, such as tanks and armored personnel carriers, that are stored both inside and outside of the armories, at remote sites, and at training sites.

The changes ushered in by the Total Force policy have led to a corresponding increase in the use of the Army Guard for the federal as opposed to the state mission, according to the states. Of the 50 adjutants general responding to our questionnaire, 45 said that the federal mission had increased substantially since 1950, while only 16 said that the state mission had increased substantially during this period.

Agency Comments

DOD agreed with our evaluation that the Guard's federal role is expanding. DOD agreed that the expanded federal missions assigned to the Army National Guard have had an impact on facilities and that its expanded defense mission has placed new demands on the state-owned armories. However, DOD disagreed with a statement in the draft report that cost-sharing arrangements for armories have remained unchanged since 1950, citing actions it and the Congress have taken to give states more help. Nevertheless, the primary arrangement used to fund armory construction remains the 75/25-percent cost-sharing established in 1950. A more detailed discussion of changes in federal cost-sharing since 1950 begins on page 33.

Many State-Owned Armories Considered Inadequate

Many of the Army National Guard's armories lack adequate classrooms, administrative offices, and inside and outside storage space. Of the 2,655 state-owned armories, National Guard Bureau's records showed that 573 needed to be replaced and another 545 needed additions or modifications in January 1985. At the average rate of construction for the period 1983-86, these needs represent an approximate backlog of 24 years for replacements and 95 years for additions or modifications. Years ago, many of the older armories were constructed with fewer square feet of space and on fewer acres of land than the bureau requires today.

According to bureau officials and most adjutants general or their representatives at states visited, inadequate armories make it harder to recruit, retain, and train guardsmen. This in turn can adversely impact on a unit's ability to perform its mission. Nevertheless, adjutants general or their representatives at all states visited believe they are meeting the federal mission.

Inadequate Armories Reported by States

The adequacy of each armory facility is determined at the state level based on guidance and criteria provided by the National Guard Bureau. The guidance requires the states to annually evaluate each armory by type of facility and function, compare the space needed (according to bureau criteria) with the actual space available, and reach a conclusion about the armory's adequacy. The status of each facility is then reported to the bureau for its facilities' inventory and stationing plan. As of January 1985, the bureau records showed that 1,118 (42 percent) of the 2,655 state-owned armories were considered inadequate. Of these, 573 needed replacement and 545 needed addition or modification. As shown in table I.3, the older armories were more apt to be considered inadequate, with 53 percent (864 out of 1,636) over 25 years old classified as inadequate.

Table I.3: Armories by Age and Adequacy

Α.	ge (years)		
0-25 26-50		Over 50	Total
762	680	80	1,522
76	297	200	573
178	325	42	545
3	4	8	15
1,019	1,306	330	2,655
	0-25 762 76 178 3	762 680 76 297 178 325 3 4	0-25 26-50 Over 50 762 680 80 76 297 200 178 325 42 3 4 8

When comparing the number of inadequate facilities with the number of years needed to replace them at current funding levels, the construction backlog is substantial.

As shown in table I.4, the bureau constructed 96 new armories (an average of 24 each year) and made 23 additions and modifications (an average of 5.8 each year) during 1983-86.

Table I.4: Actual and Planned Armory Construction (Fiscal Years 1983-87)

Fiscal year	New armories	Armories modified or added to	Estimated total federal and state dollars (millions)
Actual:			
1983	25	7	\$26.9
1984	26	6	34.9
1985	21	3	39.8
1986	24	7	25.7
Planned:			
1987	16	14	48.5

^aFor fiscal years 1983-1987, we estimated the state portion at 25 percent.

Assuming this level of construction is maintained in the future, it would take over 24 years to replace the 573 current armories that are inadequate and over 95 years to make the 545 additions and modifications. This does not consider additional armories that become inadequate over this period and assumes that the bureau's records are accurate.

Armories Lack Sufficient Space

Because bureau records do not show the specific reasons or the extent to which armories are inadequate, we asked the state adjutants general or their representatives at the 16 states visited to explain why armories were classified as inadequate. They said that such armories lack sufficient space for storage of equipment, classrooms, administrative offices, and parking, and lack the land area needed to expand. For instance, bureau files showed that more than 80 percent of Tennessee's 85 state-owned armories are considered inadequate or deficient, The adjutant general of Tennessee told us that most of the state's armories are inadequate because of such conditions as insufficient administrative space, undersized and unsafe kitchen areas, unsafe small arms ranges, inadequate overall square footage for assigned units, inadequate equipment storage space, shortages of vehicle parking space, and insufficient outside training areas.

According to bureau officials, older 100-member armories were generally constructed to meet a space requirement of 10,000 square feet and were not designed to meet the space requirements needed to carry out the Army Guard's expanded mission. Today, the same size unit requires 20,000 square feet to accommodate the Guard's modern-day criteria and methods, larger inventories of equipment assigned to the Guard, and increasing need for administrative offices for federal personnel working full time in the armories.

Storage of increased amounts of equipment provided the Army Guard appears to be the most significant problem. All 50 adjutants general responding to our questionnaire reported that armories in their states lacked sufficient storage space for federal equipment. The adjutants general were asked to compare their situation in 1985 with that experienced in 1980. Thirty-four reported that their storage situation was substantially worse in 1985; 10 said it was somewhat worse. The remaining six adjutants general said that their storage situation was about the same or somewhat better.

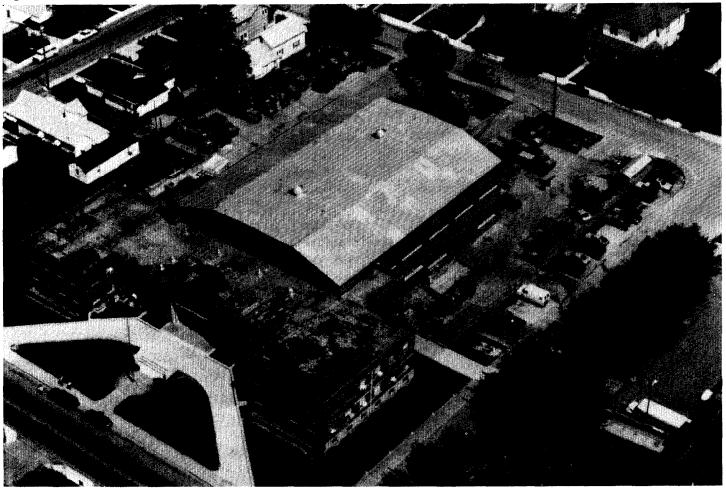
Many of the 34 armories visited in 13 states had problems storing equipment. Many Guard units are using shower areas, classrooms, and portions of the drill halls within the armories for storage. Equipment stored in these areas include tents, camouflage gear, radios, generators, and tool sets. For example, in Connecticut, we observed a classroom being used for storage. In California, equipment was being stored on the drill floor.

At the end of fiscal year 1985, a backlog of 1,022 storage projects amounting to \$45 million was identified by 35 states. These projects are necessary to accommodate the equipment being received by National Guard units. To address the storage problem, the bureau began in fiscal year 1984 a storage building program funded 100 percent by the federal government. At the end of fiscal year 1985, the bureau had funded 40 new storage buildings. In fiscal year 1986, the Congress provided \$40 million for minor projects to facilitate training and the delivery, storage, and maintenance of Army Guard equipment. A bureau official stated that it plans to use these funds mainly for storage buildings and that the funds should take care of the majority of the storage backlog.

According to bureau officials, insufficient land area also constrains the capacity of Guard units to accommodate the growing federal mission. Today, the bureau generally requires up to 10 acres of land for an armory site. Many older armories were built on 2.75 acres of land, which

does not provide enough outside area for vehicle parking or troop training. As shown in figure I.1, some armories are surrounded by housing, which allows little or no room for outside training or expansion.

Figure I.1: Armory Confined by the Surrounding Community



States' Fiscal Problems Slowing New Armory Construction, Officials Believe The 25-percent state-matching share required for new armory construction places states in a position to either promote or slow the pace of new construction. The ability and willingness of states to fund new armory construction costs depends on the priority given by each state to the Army National Guard.

Of the 50 adjutants general responding to our questionnaire, 41 said too little construction had taken place during the period 1980-85. Of these, most believed that state fiscal problems or priorities, not limited federal funds, were the primary factors contributing to limited construction of new armories in their states (see table I.5).

Table I.5: Factors Contributing to Limited Construction of Armories

	Extent to whi	ch construction	affected
Factors	Great to very great	Moderate	Little to none
States' fiscal problems	31	2	8
States' 25-percent share too costly	28	7	6
New armories a low state priority	27	7	7
Requirement that states cover 100 percent of land costs	24	7	10
States share more than 25 percent of costs	19	13	9
No federal sharing in operations and maintenance costs	15	10	16
Armory expected to be used primarily for federal mission	11	4	26
Federal funds unavailable	8	11	22

Further, these 41 adjutants general reported that they needed 498 new armories or additions from 1980 to 1985 that were not approved or proposed. Of these potential projects, 218 (44 percent) were turned down by higher level state executive or legislative branch officials and 9 (2 percent) were rejected for funding at the federal level. Another 215 projects (43 percent) were not proposed due to the low likelihood of obtaining state or federal approval. The remaining 56 projects were not initiated for other reasons.

In addition, adjutants general in 27 states indicated that they had experienced delays in 78 approved and funded federal construction and modification projects for armories during 1980-85. Of the delayed projects, 17 adjutants general indicated that delays for 41 projects were due to a lack of state funds.

States differ somewhat in their fiscal support of Guard activities. In the 16 states visited, 9 adjutants general or their representatives said that construction of armories was a low priority in their states. State budget officials or their representatives in these states said that armory facilities were important in their states, but the states' budget for the construction of armories received a lower priority in competing for state resources than did prisons, colleges, and other educational buildings. For example, Connecticut reported a need for five new armories for the period 1980-85. Other than one armory constructed in 1981, however, Connecticut had not completed a new armory since 1975.

Although the low state interest in these nine states can be attributed in some cases to fiscal problems, in other cases it may stem from the growing use of Guard facilities for federal purposes. One adjutant general described the view of that state's legislature on the construction of new armories as: "If the federal government wants more armories, then let the federal government build them." Another state's military representative said that currently the primary purpose of the armories is to support the federal mission and therefore the federal government should increase its financial support for the armories.

Adjutants general or their representatives in the remaining seven states, however, said that construction of armories was at least competitive with other state building programs. For instance, Oklahoma has built nine armories since 1980 and currently has one under construction even though the state has experienced recent fiscal problems. Further, Oklahoma plans to construct nine more armories during the period 1986-90. These are included in the bureau's plans.

Federal and State Views on Effects of Inadequate Armories

National Guard Bureau officials and 10 out of 16 adjutants general or their representatives at states visited believe that inadequate armories make it harder to recruit, retain, and train guardsmen, which can make it more difficult to achieve the Guard unit's federal mission. These officials had no reports or studies to support their opinions. Nevertheless, all the adjutants general or their representatives visited believe they are meeting the federal mission.

We asked the 41 adjutants general who said the amount of construction had been too little since 1980 to indicate the effects of limited armory construction in their states. Table I.6 shows how they responded.

Table I.6: Perceived Effects of Inadequate Construction

	Response b	y 41 adjutants	general
Effect of inadequate construction	Agree	Disagree	Neither agree nor disagree
Increase in storage problems	40	0	1
Increase in future construction costs	39	0	2
Inability to house more troops	38	1	2
Increase in repair costs	37	2	. 2
Retention of troops harder	36	1	4
Enlistment of recruits harder	29	2	10
Other (e.g., increase in training problems and operating costs)	11	0	0

Agency Comments

DOD agreed that 42 percent of the armories in the bureau's inventory are inadequate and that the 25-percent state share of armory construction cost permits states to slow down armory construction. DOD agreed also that storage of equipment is the most significant problem. However, DOD indicated that the storage problem may largely be taken care of with the \$40 million in new federal funding recently approved by the Congress for fiscal year 1986.

DOD also stated that the number of years it will take to replace or modify inadequate armories is highly speculative due to fluctuations in both funding and armories' needs. We agree that the future course is uncertain, but used the average numbers of armories or additions actually funded over the past four years to project the level of unmet need at current funding levels.

Many Armories Poorly Maintained

While the National Guard Bureau maintains data on the structural adequacy of armories, it does not keep records on maintenance conditions, as the federal government does not share in these costs. Responses by adjutants general to our questionnaire indicated that the states had a backlog of maintenance and repair projects of about \$172.2 million or an average of \$65,000 per armory at the end of fiscal year 1984. (See app. II for the backlog of each state and territory.) Insufficient state funding was the primary reason for the backlog; states pay 100 percent of armory operations and maintenance costs.

Although estimates of prior year backlogs are not available, 33 of the 50 adjutants general responding said that their backlog of maintenance and

repair projects was worse in 1985 than in 1980. By contrast, bureau records indicated that the backlog of maintenance and repair projects was decreasing in 1985 for nonarmory facilities, where the federal government generally pays 75 percent of the costs.

Backlog of Maintenance, Repair Projects Reported by States

The 50 adjutants general reported about \$172.2 million (an average of \$65,000 per armory) in backlogged maintenance and repair projects. They also said that their states spent about \$87 million for operations and maintenance of Army Guard facilities during state fiscal year 1984, or about one-half the level needed by the states to eliminate the backlog.¹

We also asked the adjutants general to compare their 1985 backlog of projects to the backlog in 1980 and predict the trend over the next 5 years through 1990. Thirty-three reported a worse backlog in 1985 than in 1980, and 36 said they expected their backlog for armories to increase over the next 5 years. Of the 16 states visited, adjutants general or their representatives in 7 states told us that routine maintenance cycles had been lengthened, leading to more extensive and costly repairs in the future. Adjutants general or their representatives in seven other states said that they did not have a routine maintenance cycle in their states, causing increases in the number of major repairs. Of the remaining two states, one state's adjutant general representative believed it had an adequate routine maintenance cycle, and the other adjutant general's representative believed that lack of routine maintenance did not make repairs more costly.

At the 16 states visited, the adjutants general and their facility managers told us that a major portion of the backlog for armories consist of repair problems in roofs and in heating and cooling, electrical, and plumbing systems. The most often cited example was a roof repair or replacement, which might require additional repair to ceilings and floor tiles damaged by water leaks. Figures I.2, I.3, and I.4 show actual problems inherent in faulty and leaking roofs.

An April 1985 report by the House Surveys and Investigations staff stated that many state-owned armories are in poor condition because state operations and maintenance funds have been far less than needed.

¹We reviewed methodologies used in 16 states visited to compute this backlog. Thirteen states had adequate supporting documentation, and three states lacked sufficient documentation of field surveys done to access armory conditions.

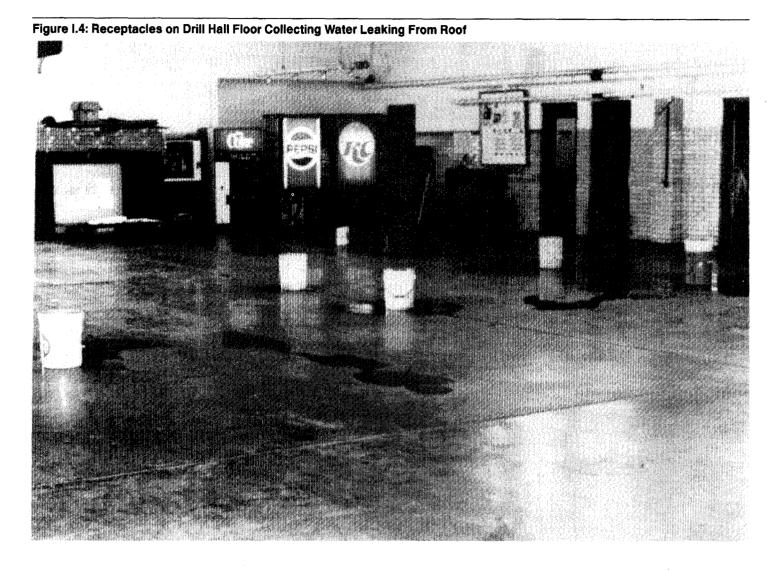
Many armories need new roofs, improved plumbing, modern electrical wiring, larger kitchens with adequate equipment, new windows, and refurbishing with new ceiling and floor tiles and other appearance items. Some are in such a poor state of repair that replacement or major rehabilitation is required. In our visits to 34 armories in 13 states, we observed many armories with maintenance and repair problems. For instance, an armory in Kentucky with a leaky roof and inadequate gutters had damaged inside walls and ceilings and damaged exterior walls, windows, and steps.

By contrast, the backlog of projects for nonarmory facilities in the Army Guard is decreasing, since the federal government generally pays 75 percent of these costs. In comparison to the backlog of \$172 million for the 2,655 state armories, bureau records show that the backlog for about 2,200 nonarmory facilities was about \$52 million (\$23,000 per facility) at the end of fiscal year 1985, down from \$59.2 million at the end of fiscal year 1984.

Figure 1.2: Water Retained on Flat Armory Roof

The state of the state





Factors in Backlog of Maintenance, Repair Projects

Similar to the construction of armories discussed earlier, 38 of 50 adjutants general responding to our questionnaire (76 percent) said that insufficient state funding was the primary factor in the backlog of armory maintenance and repair projects. Other contributing factors were aging armories, increased operating costs, and added use of the armories for the federal mission. The adjutants general responses are shown in table I.7.

Table I.7: Why Projects Get Backlogged

	Extent to which	factor affect	ed backlog ^a
Factors	Very great	Great	Moderate, little, or none
Insufficient state funds	38	3	8
Aging armories	27	15	7
Increased operating costs	23	16	10
Other (including lack of personnel and added use of armories for federal mission)	4	6_	. 2

^aReflects only 49 responses, as one respondent did not answer the question.

Adjutants general in 13 of 16 states visited told us that their states were unable to reduce the backlog of maintenance and repair projects for armories because of the lack of available state funds and relatively low priority states give armories. In New York, for instance, the adjutant general requested \$6 million for repair projects, but was only allocated \$600,000 in the state's budget process. New York reported a backlog of maintenance and repair projects amounting to over \$8.7 million.

In 3 of the 16 states, adjutants general said that their backlog of maintenance and repair projects was decreasing because of their states' recent willingness to fund projects. In Texas, for instance, the backlog of projects in 1986 is expected to decline due to the infusion of \$1.5 million in new state funds for armory maintenance and repair.

The 16 adjutants general also said that older armories are more expensive to maintain because many have flat roofs that are prone to leak and inefficient old heating and plumbing systems. Also, older armories are more expensive to operate because they are not well insulated nor energy efficient.

Operating costs for armories have been increasing in recent years, due both to rising utility costs and the growth in full-time use of armories by active guard personnel. Faced with limited operations and maintenance funds, adjutants general in 13 of the 50 states and territories responding said they had to use funds budgeted for maintenance to pay operating costs.

Finally, we believe that the National Guard Bureau has not actively encouraged states to adequately maintain armories in a good state of repair. While federal-state armory construction agreements require states to maintain armories for 25 years, the bureau does not monitor states' efforts in this area. The bureau has not collected national data on

armory maintenance and repair conditions or on state operations and maintenance expenditures, as the federal government does not share in these costs. Further, the bureau does not consider a state's maintenance and repair record in its decisions to fund a state's new construction proposal or requests for new Guard units.

Perceived Effects of Inadequately Maintained Armories

As previously stated, National Guard Bureau and state adjutant general officials at 10 of 16 states visited believe that poorly maintained as well as inadequate armories make it harder to recruit, retain, and train guardsmen and this can adversely impact a Guard unit's ability to perform its federal mission. However, in all states visited, the adjutants general or their representatives believe they are meeting the federal mission.

In addition, in some states, the adjutants general or their representatives told us that the cost of maintenance and repairs can increase when work is delayed on armories. Such delays can lead to major maintenance problems that are more costly to repair. For example, a \$4,000 roof repair on an armory in a northern state increased to \$20,000 because state funds were not available when the need for repair was identified.

Agency Comments

DOD agreed that many armories are poorly maintained because of insufficient state funding due to states' fiscal problems and priorities and that the National Guard Bureau does not monitor states' funding of operations and maintenance for armories or actively encourage the states to adequately maintain the armories. Also, DOD concurred that the bureau does not take states' funding of operations and maintenance into consideration when funding new construction of armories.

Finally, DOD agreed that the additional full-time personnel have led to some increase in the operating costs of state-owned armories but questioned whether the increase was significant. Although we did not attempt to quantify the impact, states told us that the increased numbers of full-time personnel required more office space and increased utility costs. Further, as discussed on page 34, the bureau has proposed in a planning document that a federal payment of \$520 per year be provided to states for each additional full-time federal person to defray the cost impact of these personnel on armories.

Changes in Federal Cost-Sharing for Armories

Both the Congress and the National Guard Bureau have recognized the difficulty many states are having with construction and maintenance of state-owned armories. Senator Zorinsky introduced a bill in the 98th Congress (S. 3054) to increase the federal share for armory construction costs from 75 to 90 percent, but no action was taken on this proposal. While the 75/25-percent rate for federal-state cost sharing continues as the primary funding arrangement for construction of most armories, actions have been taken by the Congress and the bureau to provide states with more help under certain circumstances to improve armory conditions.

First, beginning in 1985, the Congress provided funding for 100 percent of construction costs to build 40 of the 1,022 storage buildings needed by the states. In fiscal year 1986, the Congress provided \$40 million for minor projects to facilitate the delivery, storage, and maintenance of Army Guard equipment. A bureau official said they plan to use these funds mainly for storage buildings. DOD cited six other changes since 1980 that affect federal-state cost sharing for armories under certain conditions, including 1984 changes providing 100-percent federal funding for construction of armories built on federal land and of critical portions of armories related to the federal mission. However, most armories continued to be built under the 75/25-percent cost-sharing rate established in 1950.

The Congress initiated a major change in funding for operations and maintenance in fiscal year 1986 by providing federal funding for these costs for the first time. The Conference Report on the Department of Defense Authorization Act for fiscal year 1986 included funding for operating costs, partial funding of major repairs, and modifications in armories. The Conference Report on the fiscal year 1986 DOD funding bill specified that \$33 million be spent for operations, maintenance, repair, and modification of armories. The report targeted \$20 million for operating costs of the armories, \$7 million for major repair and renovations to the armories, and \$6 million for modification and repair of office and other work spaces in the armories.

Recognizing the difficulty states were having, the bureau submitted two proposals in a planning document to the Army to help states fund operations, maintenance, and repair costs of armories starting in 1989. These proposals would provide:

- a federal payment of \$520 per year for each full-time federal personlocated in the armory. The estimated federal cost is about \$26 million for fiscal year 1989.
- a federal subsidy of a major portion of maintenance costs for roofs and heating and air conditioning systems in the armories. The estimated federal cost is about \$14.8 million for fiscal year 1989.

However, there is no assurance that these proposals will be funded because the Army has not yet formulated its fiscal year 1989 budget.

Adjutants General Views on Changing Federal Share for Construction, Operations, and Maintenance

In response to our questionnaire, 35 adjutants general (70 percent) said the cost-sharing ratio for construction of armories should be changed to 90-percent federal/10-percent state, while 9 preferred no change. Of the six remaining, four adjutants general preferred that the federal government pay 100 percent of the construction costs of armories, one preferred a 70-percent federal/30-percent state ratio, and one was undecided. However, the National Guard Association (whose members include the adjutants general) in 1984 rejected a resolution to increase the federal share of construction from 75 to 90 percent because it was felt that the state's matching share provided for greater state interest in and control over the armories.

Of the 50 adjutants general, 49 indicated that the federal government should also pay a part of the operations and maintenance costs of armories. Forty-five adjutants general (90 percent) preferred that the federal government pay a fixed percentage (most preferred 75 percent) of armory operations and maintenance costs. Three preferred that the federal government pay a flat rate for each federal employee working in an armory, and one liked both proposals equally well.

Agency Comments

DOD generally agreed with our evaluation of the changes in cost sharing for construction and maintenance of state-owned armories.

In commenting on the draft report, however, DOD indicated we had not adequately recognized six changes in federal cost sharing initiated by the Congress and DOD since 1980. Listed fully in its letter in appendix III (p. 43), these include providing 100-percent federal funding for construction of armories on federal land and construction of critical portions of armories related to the federal mission, as well as federal upgrading and transfer of federal facilities to states for joint state-federal utilization.

While these new provisions have offered some relief to states under certain circumstances, the primary method used to finance armory construction remains the 75/25-percent cost-sharing arrangement established under the National Defense Facilities Act of 1950. For example, of 71 armories built since fiscal year since 1984, only 2 were built on federal land. Of the 16 additions, only 1 was funded at 100 percent by the federal government. As of June 1986, no facilities have been transferred to the states to promote joint utilization.

Conclusions

DOD's Total Force policy beginning in 1970 has changed the Army Guard's role in support of the federal defense mission. The effect of this policy change has been the large increase in the amount of federal equipment requiring storage in the state-owned armories or other Guard facilities and the significant increase in the number of full-time federal personnel working in these armories. Many of the existing state-owned armories are not designed, however, to provide sufficient space to accommodate the equipment and administrative offices for the additional full-time personnel. Likewise, many existing state-owned armories are in a poor state of repair.

Under current cost-sharing requirements, replacement or upgrading of older inadequate armories is dependent on the provision of state funds. States, however, have not provided all the funds needed to replace the aging armory inventory or reduce the backlog of maintenance and repair projects. The reasons include state fiscal problems, states' relatively low priority placed on Guard facilities, and some states' expectation that the armory will be used primarily for federal mission purposes.

Federal and state Guard officials believe that inadequate, poorly maintained armories make it harder to recruit, retain, and train guardsmen. Federal efforts to improve the condition of armories, however, will require increased federal funding. The Congress will have to decide whether these improvements are of sufficient priority to warrant it.

As new federal funds become available for operations, maintenance, and repair, states should not use the funds as a substitute for existing state resources devoted to these purposes, particularly when the backlog is so great. Accordingly, we believe that the National Guard Bureau should require states to maintain their state outlays for operations, maintenance, and repair as a condition for receiving new federal funds for operations and maintenance. Although it would be preferable to require states to maintain last year's spending, recent expenditures for Guard

facilities in 3 of the 16 states visited were atypically high. This was due to bond issues in two states and a supplemental appropriation in another state used for Guard facilities. Accordingly, in implementing a maintenance-of-effort requirement, the bureau could decide to exclude nonrecurring capital expenditures from individual state baselines.

Regardless of the amount of federal funding for state-owned armories, the federal government has a major stake in the Army National Guard. Since the Guard's federal mission has increased, the bureau should have adequate management information on all aspects of its armory program. While this information is collected on the adequacy of armory facilities to house units and their equipment, the bureau needs to begin gathering systematic data on the maintenance and repair status of armories, as it currently does for nonarmory facilities. Such information would provide a means to monitor the states' level of effort in funding operations and maintenance projects and the amount needed to eliminate the backlog of maintenance and repair projects. This information would also help decision makers decide what future levels of funding the federal government should provide for operations and maintenance.

Once sufficient information is collected on armory maintenance, the bureau should give states incentives to maintain armories in a good state of repair. The current financial arrangements for construction and maintenance of armories have not provided sufficient incentives to prevent the growth of the armory backlog of maintenance and repair projects. To provide additional incentives to states for proper maintenance, we believe the bureau should consider each state's maintenance and repair record in its decision process for awarding funds for construction of new armories.

Recommendations to the Secretary of Defense

We recommend that the Secretary of Defense require the Chief of the National Guard Bureau to develop and implement:

- a policy requiring each state to maintain its prior year's level of funding for armory operations, maintenance, and repair as a condition for receiving new federal funds for operations, maintenance, and modification of armories. Nonrecurring state capital expenditures could be excluded from this requirement on a case-by-case basis.
- a policy to consider each state's maintenance and repair record when reviewing the state's proposal for the construction of new armories.
- procedures to monitor annually the backlog of maintenance and repair projects of armories similar to nonarmory facilities.

Agency Comments

In commenting on a draft of this report, DOD agreed with our recommendations that states' maintenance and repair records be considered when reviewing their proposals for new armory construction and that the National Guard Bureau monitor the backlog of armory maintenance and repair. DOD is moving to implement both recommendations.

pod partially concurred with our first recommendation requiring states to maintain prior-year funding levels for maintenance and repair as a condition for receiving new federal funds for these purposes. It indicated agreement with the basic purpose of this recommendation and is implementing a new policy requiring states to maintain last year's level of operations and maintenance funding to obtain new fiscal year 1986 funds, as set forth in the fiscal year 1986 House Appropriations Committee report. However, DOD believes that states, as a condition for receiving federal funds to reduce the maintenance and repair backlog, should be required to fund maintenance and repair at a level sufficient to take care of the armories' annual recurring maintenance requirements. The growing backlog is evidence that states are not currently spending enough to satisfy these annual recurring maintenance needs.

While we do not disagree with DOD's analysis, it would be difficult to implement its proposed state maintenance-of-effort requirement. First, the definition of annual recurring maintenance requirements could be controversial and vary considerably based on armory age, use, and climatic location. Second, DOD's proposed requirement might cause states with the greatest gap between their spending and annual recurring needs to refuse to accept the new federal funds rather than increase their spending enough to meet the new requirement. This would be counterproductive, as these states have the greatest needs for the new federal maintenance and repair funds.

Armory Maintenance and Repair Backlog and Total State Expenditures

	No. of state-	Backlog of	1985 budgeted state expenditures		
	owned armories	maintenance and repair	Total Army	Total Air	Total Army and Air
Alabama	141	\$ 9,588	\$ 6,665	\$ 425	\$ 7,090
Alaska	13	867	6,014	321	6,335
Arizona	30	1,000	763	360	1,123
Arkansas	77	133	2,289	126	2,415
California	112	894	10,734	1,548	12,282
Colorado	24	610	1,455	122	1,577
Connecticut	33	3,000	3,924	739	4,663
Delaware	13	675	162	188	350
District of Columbia	1	0	0	0	0
Florida	52	1,543	11,352	161	11,513
Georgia	71	778	2,312	320	2,632
Guam	0	0	242	2	244
Hawaii	20	500	682	331	1,013
ldaho	30	350	1,601	124	1,725
Illinois	52	18,300	7,988	1,479	9,467
Indiana	67	2,287	8,275	357	8,632
lowa	60	7,194	3,211	248	3,459
Kansas	65	2,560	2,107	298	2,405
Kentucky	43	a	a	а	
Louisiana	65	2,372	6,143	125	6,268
Maine	25	4,959	2,534	512	3,046
Maryland	30	1,879	5,467	437	5,904
Massachusetts	63	9,200	2,517	218	2,735
Michigan	53	2,200	8,176	712	8,888
Minnesota	68	3,818	4,748	382	5,130
Mississippi	100	3,000	3,191	258	3,449
Missouri	58	3,200	4,721	435	5,156
Montana	27	1,183	1,432	866	2,298
Nebraska	30	391	1,607	143	1,750
Nevada	11	124	276	146	422
New Hampshire	19	192	1,452	70	1,522
New Jersey	43	4,009	7,365	285	7,650
New Mexico	30	3,541	991	435	1,426
New York	72	8,759	16,756	1,374	18,130
North Carolina	98	850	5,287	110	5,397
North Dakota	31	8,241	1,106	88	1,194
Ohio	82	7,000	3,529	879	4,408

	No. of state- owned armories	Backlog of maintenance and repair	1985 budgeted state expenditures			
			Total Army	Total Air	Total Army and Air	
Oklahoma	83	a	а	а		
Oregon	47	\$1,177	\$4,394	\$329	\$4,723	
Pennsylvania	95	5,780	3,168	а	3,168	
Puerto Rico	29	450	700	200	900	
Rhode Island	9	1,700	2,139	330	2,469	
South Carolina	80	3,910	3,235	178	3,413	
South Dakota	44	750	876	162	1,038	
Tennessee	85	19,500	5,837	679	6,516	
Texas	133	15,200	11,964	404	12,368	
Utah	32	1,436	1,327	70	1,397	
Vermont	20	140	1,853	339	2,192	
Virginia	35	810	3,068	121	3,189	
Virgin Islands	3	а	а	а		
Washington	29	2,000	3,319	664	3,983	
West Virginia	33	776	2,522	598	3,120	
Wisconsin	67	a	а	а		
Wyoming	22	3,409	1,877	114	1,991	
Total	2,655	\$172,235	\$193,353	\$18,812	\$212,165	

^aInformation not available.

Source: The number of state-owned armories in each state was obtained from the National Guard Bureau's Facilities Inventory and Stationing Plan as of January 1985. The backlogs for state-owned armories, Army Guard expenditures, and Air Guard expenditures were obtained from the qestionnaires sent to the 54 adjutants general. The 1985 budgeted state expenditures include operations, maintenance, construction, and personnel items.

Advance Comments From the Department of Defense



ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

June 25, 1986

RESERVE AFFAIRS

Mr. Frank C. Conahan
Director, National Security and
International Affairs Division
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office draft report "Opportunities to Improve the Condition of Army National Guard Armories," dated April 1986, (GAO code 118805), OSD case 6999.

The report addresses the condition of state-owned armories and mentions the recent developments in federal funding of state-owned armory operations and maintenance costs. However, it does not make any recommendations with respect to future federal funding of state-owned armory operation and maintenance costs as a means to improve that condition. Therefore, the Department's response does not address the merits of federal funding of state-owned armory operations and maintenance costs, and this response should not be interpreted as DoD concurrence with such federal funding.

The report's narrow focus on only state-owned armories distorts the vehicle storage problem. Track vehicles are found predominantly at non-armory facilities by design, and these facilities are 100 percent federally funded.

There have been several legislative changes in the relative funding of armory construction costs between the states and the federal government since 1980, as detailed in the enclosures.

The Department has no data to show that armory operations costs have risen due to the increase in full-time manning.

The report recommends that the states be required to maintain the prior year's level of funding for operations, maintenance and repair to be eligible for new federal funding for

Appendix III
Advance Comments From the Department
of Defense

operations, maintenance and modification of armories. Since the level of maintenance and repair funding recently applied by the states has led to a growing backlog, this level is not adequate to protect the capital investment in armories. The states should be required to fund maintenance and repair at least at a level necessary to stop the growth of backlog as a condition for receiving new federal operations and maintenance funds, were they to be made available.

The Department supports recommendations 2 and 3 of the draft report, that the National Guard Bureau consider the states' maintenance and repair records when reviewing their proposals for new construction, and that the National Guard Bureau monitor the backlog of maintenance and repair of state-owned armories on an annual basis. These actions should provide additional incentives to the states to properly maintain the state-owned armories.

The Department appreciates the opportunity to comment on this draft report.

Sincerely,

James H. Webb, Jr.

Enclosures a/s

GAO DRAFT REPORT - DATED APRIL 21, 1986 (GAO CODE 118805) - OSD CASE 6999

"NATIONAL GUARD: OPPORTUNITIES TO IMPROVE THE CONDITION OF ARMY NATIONAL GUARD ARMORIES"

DOD COMMENTS

Army National Guard Role Is Expanding. The GAO noted FINDING A: that the National Guard is different from the other Military Service components as it has both a federal (national defense) and a state (civil order and public safety) mission. pointed out that the National Guard Bureau within the DoD administers the federal mission in both the Army and Air National Guard. The GAO pointed out that Air National Guard facilities are almost completely federally funded, but that the states bear the greatest share of costs on National Guard armories. pointed out that under the National Defense Facilities Act of 1950, the states fund 25 percent of state-owned armory construction costs, provide the land, and fund 100 percent of state-owned armory operations and maintenance costs (25 percent for logistical facility operations and maintenance and nothing for training facilities operations and maintenance). The GAO noted that the DoD adopted the Total Force concept in 1970; assigning the Guard early deployment missions and roles comparable to those of the regular Army. The State Adjutants General maintain, according to the GAO, that the federal mission has increased substantially since 1950; however, the cost-sharing arrangement has remained unchanged. The GAO found that under the Total Force policy, (1) the Guard units generally train with the equipment they will fight with, resulting in units receiving 100 percent of equipment requirements (rather than the earlier 50-80 percent), (2) the Guard has grown in troop strength, and (3) the Guard has received increasing amounts of equipment and supplies, including major combat weapons (tanks, or armored personnel carriers). The GAO concluded that the Guard's expanded defense mission has placed new demands on the Army National Guard's state-owned armories. (pp. 9-12, 15-20, 44 Appendix I, GAO Draft Report)

Now on pp. 12-13, 15-18, 35-36.

DoD comment:

The Department partially concurs.

The DoD agrees with the basic facts that the National Guard's federal and state missions make it unique; that the National Guard Bureau administers both National Guard components; that Air National Guard facilities are mostly federally funded; that the states bear the greatest cost of state-owned armories, including 25 percent of construction, 100 percent of the land and 100 percent of the operation and maintenance costs; that the states provide 25 percent of the operation and maintenance cost of logistical facilities, that the states provide none of the operation and maintenance cost of training facilities; that the

Guard has early deploying missions under the Total Force Policy; that the Adjutants General maintain that the federal mission of the Guard has increased substantially since 1950; that the Guard is receiving increased amounts of equipment; and that troop strength has grown.

The DoD agrees that the expanded federal missions assigned to the Army National Guard have had a facilities impact. However, a significant portion of the impact due to storage of track equipment is being addressed with non-armory facilities at 100% federal funding.

The DoD agrees that the Guard's expanded defense mission has placed new demands on the state-owned armories. However, a significant portion of the armory facilities shortfall is due to modern day criteria and methods.

The DoD, however, does not agree that the cost-sharing arrangement for federal and state shares of armories has remained unchanged since 1950. There have been five changes since 1980 that affect the relative amounts of federal and state funding:

- 1. 1980: Added 10 USC 2233(a)(5) to permit 75% federal funds for existing armories that are inadequate.
- 2. 1981: Added 10 USC 2233(a)(6) to permit 100% federal funds for construction of armory arms rooms.
- 3. 1982: Amended 10 USC 2233(a)(2) to permit granting federal facilities to the states for joint use with the ARNG where the federal government would transfer ownership to the states after funding all structural deficiencies at 100% federal funding to promote joint utilization of facilities with the ARNG.
- 4. 1984: DoD determined that armories could be constructed on federal land with 100% federal construction funds, with title to remain with the federal government, with the states paying the operational costs.
- 5. 1984: Amended 10 USC 2233(a)(6) to permit 100% federal funding for construction of critical portions of armories related to the federal mission.

Additionally, starting in 1986, under revisions to 10 USC 2233 (b) and (e), federal funds may be used to prefinance the states' share of design funds for armories. While this revision does not change the final federal and state shares upon project completion, the initial federal share of design cost is 100 percent, with the state's 25 percent share not being required until the armory is actually constructed.

FINDING B: Many State-Owned Armories Are Considered Inadequate. The GAO found that, as of January 1985, 1,118 (42 percent) of the 2,655 armories are listed by the Guard Bureau as inadequate (573 need replacement, 545 need additions or modifications). According to the Adjutants General, the GAO reported, armories lacked sufficient space for storage of equipment, for classrooms, for administrative offices and parking, and the land area upon which the armory stood was insufficient. The GAO found that the most significant problem appeared to be a lack of equipment storage space, especially for such vehicles as tanks and personnel carriers. The GAO found that the Guard Bureau began a federally funded storage building program in FY 1984 and by the end of 1985, 40 new storage buildings had been funded; however, a backlog of 1,022 storage projects amounting to \$45 million remained. According to the GAO, the Guard Bureau estimates armory construction will increase to an average of 55 new armories and 13 additions per year between FY 1987 and FY 1990. The GAO concluded that at those rates it would take 10 years to replace the currently inadequate armories and 41 years to accomplish the additions and modifications. The GAO also concluded that the 25 percent state share of new construction places states in the position to either promote or slow the pace of armory construction, and that depends, according to the GAO, on the priority given by each state to the Army National Guard. (pp. 20-26 Appendix I, GAO Draft Report).

Now on pp. 19-22.

DoD comment:

The Department partially concurs.

The DoD agrees that 42 percent of the armories are listed by the Guard Bureau as inadequate, that the armories lack sufficient space, that 40 storage buildings have been 100 percent federally funded, and that the 25 percent state share of armory construction cost permits the states to slow down armory construction in their states.

The DoD agrees that the storage of equipment is the most significant problem; however, the storage of most track vehicles such as tanks and personnel carriers is accomplished through non-armory facilities with 100% federal funds, usually at training sites.

The DoD agrees that there is a backlog of \$45 million in storage buildings in 35 states; however, this backlog may be largely taken care of with 100% federal funding. Legislation for \$40 million for minor construction of storage sheds is currently under consideration by the Congress.

The DoD disagrees with the conclusions concerning the number of years that it will take to replace, as well as accomplish modifications and additions to, armories. The number of new armories and armory additions that will be accomplished between FY 1987 and FY 1990 is highly speculative. These programs are subject to fluctuations in both funding and program composition.

FINDING C: Many Armories Are Poorly Maintained: The GAO reported that the Adjutants General have indicated that the states had a backlog of maintenance and repair projects of about \$172.2 million and it is increasing. The GAO found that operating costs for armories have been increasing in recent years, due to both rising utility costs and the growth in fulltime use of armories for the federal mission. The GAO also reported that both the House Surveys and Investigations staff and the Adjutants General believe that insufficient state funds have been allocated to armory maintenance. Some Adjutants General, the GAO reported, faced with limited operations and maintenance funds have had to resort to using funds intended for maintenance to pay operating costs. The GAO also found that the Bureau does not monitor the states funding efforts, nor does the Bureau consider the states maintenance and repair record when making funding decisions for new construction or new Guard units. The GAO further found that the Guard Bureau has not actively encouraged states to adequately maintain armories. concluded that the states have not provided the funds needed to replace the aging armory inventory or to reduce the backlog of maintenance and repair projects because of state fiscal problems, the relatively low priority placed on Guard facilities, and the expectation that the armory would be used primarily for federal mission purposes. The GAO also concluded that the Bureau needs to begin gathering systematic data on the maintenance and repair of armories (as is currently done for non-armory facilities). This information, the GAO additionally concluded, would provide a means of measuring the funding required to eliminate the backlog of maintenance and repair projects. The GAO finally concluded that the Guard Bureau should provide incentives for states to maintain armories in good repair and the states' maintenance and repair record should be considered in awarding funds for the construction of new armories. (pp. 27-36, 44, 46 Appendix I, GAO Draft Report).

Now on pp. 25-32, 35, 36.

DoD comment:

The Department partially concurs.

The DoD agrees that the reported backlog of maintenance and repair is \$172 million; that operating costs have been increasing due to rising utility costs; that insufficient state funding has been allocated; that the National Guard Bureau does not monitor the states' operation and maintenance funding or take it into consideration when funding new construction or units, or actively encourage the states to adequately maintain the armories; that low state funding is due to fiscal problems and priorities; that the National Guard Bureau should collect data on armory maintenance and repair and use the data in considering the award of new construction.

Appendix III
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of Defense

The DoD has no data to show that armory operating costs have been rising due to the increase in full-time use. While the increase in full-time use has probably led to some increase in the operating costs of state-owned armories, the report does not quantify the amount. Since the armories already had some full-time employees, the amount of additional operating costs due to some additional full-time personnel may or may not be significant. That is, depending upon the exact location of the additional full-time employees relative to the existing full-time employees, and whether or not the building is "zoned" for heat, there may or may not be additional operating costs.

The DoD agrees that the expectation that the armory would be used primarily for federal mission purposes is a reason that states have not provided funds for replacing armories. However, the report states that only 22% of the Adjutants General indicated that this was a great to very great factor, and the majority indicated that this had little or no impact.

The DoD agrees that there has been an increase in full-time use; however, the full-time members referred to in the report are serving under the command of the governors of the respective states in full-time National Guard duty status rather than in federal status. Full-time National Guard members are solely under the control of state authorities while performing their assigned duties. Although not in federal status, much of the workload of these members contributes to the accomplishment of assigned federal contingency missions.

FINDING D: Changes Are Occurring In Federal Cost Sharing And The GAO found that since 1983, both the Congress and the Guard Bureau have recognized the difficulty that many states are having with the construction and maintenance of state-owned armories. The GAO found that the Congress has provided additional construction funds for several years and federal funding of armory operation and maintenance costs in FY 1986. The GAO reported that 70 percent of the Adjutants General favor increasing the federal government share of construction costs to at least 90 percent. The GAO also reported that the Appropriations Conference Report on the FY 1986 DoD funding bill specified that \$33 million be spent for operations, maintenance, repair and modifications of armories. The GAO found, however, that the DoD has made only \$6 million available for FY 1986, based on DoD interpretation of the authorization legislation and the Authorization Conference Report. The GAO also pointed out that the FY 1986 Appropriations Conference Report specified, partially based on a Guard Bureau proposal, that the DoD should only request funds for armory operations and maintenance that would match the growth in state funds allocated for these purposes over FY 1986. The GAO found, however, that the FY 1988 Guard Bureau budget request includes (1) a proposal for continuous yearly funding of \$520 for each full-time federal employee located in the armory, and (2) a federal subsidy of a major portion of maintenance costs for roofs, heating and air conditioning. The GAO concluded, as new federal funds become available for operations and maintenance, states should not substitute these funds for existing state resources. further concluded, therefore, the Guard Bureau should require states to maintain their outlays for operations and maintenance as a condition for receiving such new federal funds, excluding non-recurring capital expenditures. (pp. 37-45. Appendix I, GAO Draft Report).

n pp. 33-36

DoD comment:

The Department partially concurs.

The DoD agrees that problems exist with state funding for construction and maintenance of state-owned armories, that Congress has provided additional construction funding, that \$33 million was appropriated in FY 1986 for armory operation and maintenance, that the Appropriations Conference Report recommended future federal funding only to match the increase in state funding for armory operation and maintenance, and that states should not reduce their funding for operation and maintenance if federal operations and maintenance funding is made available. Additional comments on state outlays are included with Recommendation 1.

Appendix III Advance Comments From the Department of Defense

The DoD agrees that the survey shows that 70 percent of the Adjutants General favor an increase in the federal share of armory construction to 90 percent; however, the National Guard Association, which the report indicates has been interviewed for this report, rejected a resolution at its annual conference in 1984 to recommend such an increase. The DoD position is to support 75 percent federal funding for armory construction.

The DoD agrees that initially only a portion of the \$33 million appropriated for armory operation and maintenance was available; however, OMB has now apportioned the remainder of the \$33 million. The National Guard Bureau is issuing to the states the remainder of the \$33 million, less \$3.63 million for Gramm-Rudman-Hollings sequestration.

The DoD disagrees that the FY 1988 National Guard budget contains the items listed. The FY 1988 National Guard budget referred to in the draft report was a programming document that has already changed, and is subject to many more changes. The FY 1988 budget has not yet been formulated.

Now on pp. 7, 36.

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense require the Chief of the National Guard Bureau to develop and implement a policy requiring states to maintain their prior year's levels of funding for armory operations, maintenance and repair as a condition for receiving new federal funds for operations, maintenance, and modification of armories. Nonrecurring state capital expenditures could be excluded from this requirement on a case-by-case basis. (p. 6, GAO Draft Report)

The Department partially concurs.

The DoD agrees with the need for a policy that addresses the states' funding level of operations and maintenance as a determining factor in the distribution of federal funds for the same purpose. The recommendation reiterates a House Appropriations Committee requirement for the FY 1986 federal funding of armory operations and maintenance. The Department is complying this year by obtaining certification from the states that they are funding operations and maintenance at least at the FY 1985 level. The appropriate National Guard Bureau regulations will be revised by October 1, 1986 implementing this policy.

In order to establish the proper level of funding for armory operations and maintenance, two aspects should be considered. First is the amount of annual recurring requirements; that is, the funding that must be applied each year to prevent any further degradation of the facilities. Obviously, the annual recurring requirements are not being met since the report states that the backlog is increasing. The annual recurring requirements need to be established by the states. Second, a contribution toward backlog reduction must be made each year, until it is reduced to some acceptable level. Both the annual contribution toward backlog reduction and the acceptable level of backlog need to be established. This methodology would clearly indicate the effect of the operations and maintenance funds applied by the states each year and facilitate management of the problem. Further, the states should be required to fund maintenance and repair at least at the annual recurring requirements level rather than at the previous year's level.

RECOMMENDATION 2: The GAO recommended that the Secretary of Defense require the Chief of the National Guard Bureau to develop and implement a policy to consider each states' maintenance and repair record when reviewing the states' proposal for the construction of new armories. (p. 6, GAO Draft Report)

The Department concurs.

The Department will develop and implement a policy, effective at the start of calendar year 1987, that adds this consideration when determining the Army National Guard military construction program. This will be a factor, but not the only factor, used in determining where to locate new construction.

Now on pp. 7, 36.

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Now on pp. 7, 36.

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense require the Chief of the National Guard Bureau to develop and implement procedures to monitor the backlog of maintenance and repair projects of armories similar to nonarmory facilities on an annual basis. (p. 6, GAO Draft Report)

The Department concurs.

The Department will obtain a report of armory backlog of maintenance and repair from the states for the end of each fiscal year starting with fiscal year 1986.





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