Attachment 1
April 20, 1999

An Assessment of the Need for Veterans Nursing Home Beds

As Directed by Senate Bill 1366, Section 25.1, of the 1998 Session of the North Carolina General Assembly

STATE OF NORTH CAROLINA
Office of State Budget and Management
Management Section
Raleigh, NC 27603-8005

April 1999

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TABLES

EXHIBITS

I. INTRODUCTION

Section 25.1 of Senate Bill 1366, 1998 Session, requires the Office of State Budget and Management, Management Section, to conduct a study assessing the need for nursing home beds for veterans. The legislation required that the study include the following:

(1) The size and number of facilities required to meet the needs of the present and predicted veterans population.
(2) The need for geographical diversity in the location of facilities across North Carolina to serve the veterans and their families.
(3) The estimated cost of construction and operating new facilities and sources of funding for the construction and operations of the facilities.
(4) As an alternative to constructing new facilities, the feasibility of placing veterans in private nursing homes or other appropriate facilities where space is available and underutilized.
(5) Cost to the State and individual veterans for utilization of private facilities for veterans nursing home care, and comparison of such costs to the cost of construction, maintenance and provision of care in new facilities.

For purposes of this study a veteran is a person who has had active duty in the Armed Forces and has been discharged under other than dishonorable conditions. This is the same definition used by the US Department of Veterans Affairs. A nursing home for veterans is defined as a facility for veterans that need aid and attendance of another person and qualify for skilled nursing care as indicated by a physician. Demographic forecasts and projections for this report include the year 2005.

II. METHODOLIGIES

Several methodologies were employed during the conduct of this study. Consultations were sought and information was received from the North Carolina Department of Health and Human Services (DHHS), Division of Facilities Services (DFS) and the Division of Medical Assistance (DMA). Additional information and assistance was received from the North Carolina Department of Administration, Division of Veterans Affairs (NCVA) and Office of State Construction, as well as the U.S. Department of Veterans Affairs (USVA). *"The North Carolina Veterans Home 1993 Study,"* produced for the Department of Administration by Smith Sinnett Associates, P.A., was also studied.

III. BACKGROUND

The North Carolina Department of Administration, Division of Veterans Affairs recently opened the first state-operated veterans nursing home in Fayetteville. This 150-bed facility is a

newly constructed building located adjacent to the USVA hospital. Approval has also been received from the federal government, and $1,000,000 in state funds have been appropriated and certified, to convert a building on the USVA hospital campus in Salisbury to a 100-bed state-operated veterans nursing home. In addition, the USVA currently operates veterans nursing homes at the four USVA hospitals located in the state:

- 120-bed facility in Asheville
- 120-bed facility in Durham,
- 39-bed facility in Fayetteville, and
- 300-bed facility in Salisbury.

IV. NEEDS OF PRESENT AND PREDICTED VETERANS POPULATION

According to the North Carolina Office of State Planning, the general population of North Carolina is expected to increase from 7,654,091 during the current year to 8,211,384 by the year 2005, an increase of 7.3% (See exhibit A). During that same period, North Carolina's veteran population is expected to decrease from 683,600 in 1999 to 629,600 by 2005, a decline of 7.9%. General Statutes regulate the number of nursing home beds in North Carolina approved (for construction) by the Department of Health and Human Services, Division of Facility Services. This number is calculated to meet the need of the state without having an overage. Therefore, there is a sufficient number of nursing home beds in the state to meet the need of the general population, including veterans.

The veteran population in North Carolina is estimated to be 683,600 for 1999, decreasing to 629,600 by the year 2005. An examination of the increases reveals that the number of beds for veterans increases because of the aging veteran population. In 1999, 14.0% of the veteran population is estimated to be 75 years and older, but by 2005, 19.1% will be 75 years and over. This increase in the over-75 year age group is expected to continue modestly each year until 2019. Applying the beds/1000 population[1] that is used by DHHS/DFS for the general population, the beds needed for veterans for 1999 are 6,688, increasing to 8,788 by 2005, an increase of 31.4% (See exhibit B, line D). In 2019, the projected population shows a slight decrease in the over 75 year age group of veterans, as does the year 2020 (the last year of current projections by USVA).

If the state decides to provide sufficient nursing home beds for veterans in state-operated facilities, it would need to have 5,431 beds in 1999, and 7,531 beds by 2005 available (see exhibit B, line J). These figures are generated based on the number of beds currently available to veterans through various USVA auspices and NCVA veterans nursing homes (Fayetteville and Salisbury).

Since the total forecasted need for veterans may seem overwhelming, the legislature might consider the model currently used by the USVA for their analyses to base the state's need. According to USVA projection methodologies, the USVA anticipates a market share of 16% of the

[1] The beds/1000 population data are based on the following ratios from DHHS/DFS: Under age 65 (0.47 beds/1000); Age 65-74 (9.93 beds/1000); Age 75-84 (41.99 beds/1000); Age 85 and up (153.69 beds/1000).

veterans average daily census, and 16% of the 30% is allocated to USVA nursing home care, 40% to community nursing home beds, and 30% to state nursing home beds. If this methodology were adopted by the legislature, the state would need to provide 322 beds for veterans in 1999, increasing to 423 by 2005 (see exhibit B line L). (Of the 322 beds needed in 1999, the state already provides 150 beds at Fayetteville, and has funds appropriated for a 100-bed facility in Salisbury.) Given that 250 beds are already allocated, the state would need to provide 173 additional beds for its veterans to place them in state-operated nursing homes.

V. GEOGRAPHICAL DIVERSITY IN LOCATION OF FACILITIES

Using the USVA regional configuration for dividing the state into geographic regions (see exhibit C), there are approximately 168,166 veterans in Region 1, 194,826 in Region 2, 216,701 in Region 3, and 103,907 in Region 4. The table below identifies the number of beds needed for each region for 1999 through 2005 based on the veterans population in the regions. When looking beyond to the year 2005 when there will be a projected need for 423 beds, and taking into consideration that a 150-bed facility is in Region 2 and a 100-bed facility is planned for Region 3, it seems that any additional facilities should be located in Regions 1 and 4. This would mean that the state would need approximately 173 beds in 2005 divided between Regions 1 and 4.

Table 1. Projected Number of Beds Needed for Veterans, 1999-2005

	1999	2000	2001	2002	2003	2004	2005
Region 1	77	81	85	90	93	97	101
Region 2	80	84	89	93	97	100	105
Region 3	97	103	108	114	118	123	128
Region 4	68	72	75	79	83	85	89
Total	322	340	357	376	391	405	423

VI. COST OF CONSTRUCTION AND OPERATING NEW FACILITIES

Two models were developed to assist in determining the construction and operating costs of new nursing homes facilities. Both models assume that the facility would be 100 beds, with 50% of the beds being skilled nursing beds, and 50% of the beds being intermediate care. In general, skilled beds are more expensive than intermediate care beds because the skilled beds require more medical and nursing care on average. Both models also assume that the land (site) will be donated or conveyed to the state at no cost, as was the case with the Fayetteville facility. Both models also assume that the USVA will continue to fund 65% percent of the construction cost and that the state will fund the remaining 35% through its State Nursing Home Program.

Co-Located Facility

The overall design concept of the Fayetteville facility was used as a design model for both the co-located and the self-supporting facility. The primary difference between the two models is that a facility located near a hospital could outsource contracts for such services as laundry, pharmacy, medical care, and some dietetics. This reduces the construction cost of the facility in that new facilities would not need a large laundry, pharmacy, kitchen, and medical examination areas. The cost of construction for a co-located facility, in 1999 dollars, is shown below in Table 2.

Self-Supported Facility

This model describes a facility that is not located near a local hospital, or near any medical or service facilities that can provide contracted support services such as laundry, dietetics, or medical examinations. This facility would have the capacity to provide its own laundry services, its own pharmacy, dietetics, and medical examination rooms for the residents. As a result, the expenditures per bed increase because the need for additional square footage increases. The cost for construction for a self-supported facility, 1999 dollars, is shown below in Table 2.

Table 2. Estimated Construction Cost for Co-Located and Self-Supported Nursing Homes (1999 Dollars)

	Co-Located Facility	Self Supported Facility
Number of Beds	100	100
Gross Square Footage	57,000	65,000
Site Preparation	$ 855,000	$ 975,000
Construction: Utility Services	$ 57,000	$ 65,000
Construction: General Construction	$ 3,990,000	$ 4,550,000
Construction: Plumbing	$ 456,000	$ 520,000
Construction: HVAC	$ 855,000	$ 975,000
Construction: Electrical	$ 798,000	$ 910,000
Construction: Sprinkler System	$ 228,000	$ 260,000
Construction: Special	$ 114,000	$ 130,000
Equipment: Fixed	$ 228,000	$ 260,000
Equipment: Movable	$ 465,700	$ 465,400
Total Current Estimated Cost	$ 8,046,700	$ 9,110,400
Contingency	$ 241,401	$ 273,312
Design Fee	$ 580,167	$ 656,860
Total Estimated Project Cost	$ 8,868,268	$ 10,040,572
Federal Share of Project Cost (65%)	$ 5,764,374	$ 6,526,372
State Share of Project Cost (35%)	$ 3,103,894	$ 3,514,200
Total Estimated Cost per Bed	$ 88,683	$ 100,406
Federal Share of Project Cost per Bed	$ 57,644	$ 65,264
State Share of Project Cost per Bed	$ 31,039	$ 35,142

VII. ALTERNATIVES TO CONSTRUCTING FACILITIES

Three alternatives to the construction and operation of state veterans homes were analyzed for their feasibility as alternatives. As previously stated in Section IV of this report, the needs of present and predicted veterans population can presently be met through the existing number of private, state, and USVA nursing beds available in the state.

1. **Leasing Private-Sector Beds:** this option is currently utilized by the USVA in limited cases. The USVA contracts directly with a local nursing home for that facility to provide a bed for a veteran. The results from a recent USVA survey of nursing homes in North Carolina indicated overwhelmingly that long-term care facilities in the state were not interested in entering into additional agreements with the USVA to place veterans in private sector facilities.

2. **Leasing a Private Sector Facility:** From discussions with the USVA, it appears that the state could lease a qualified facility from a private sector firm, and then utilize it for veterans nursing home beds. It is likely that the state would be required to seek approval from the USVA in order to receive USVA reimbursements and allowances. The OSBM study team knows of no other state that presently leases a facility outright for use as a state veterans nursing home.

3. **Purchase an Existing Facility:** Again, from discussion with the USVA, it appears that the state could purchase a qualified existing nursing home facility, and then utilize if for veteran's nursing home beds. Again, approval from the USVA would likely be required in order for veterans to receive the USVA reimbursements and allowances. Again, the OSBM study team does not know of any other state that has pursued this option.

VIII. COST TO STATE AND INDIVIDUAL VETERANS IN USE OF PRIVATE FACILITIES

There are numerous categories that nursing home residents can be divided into, all of which carry different funding/costs associated with their care. Medicaid benefits are by far the most used method for paying a significant share of residents' stay in nursing homes. For example, approximately 70% of the residents in North Carolina nursing homes receive some level of assistance from Medicaid, and some receive benefits from Medicare (approximately 5%). As for veterans, the amount of money each individual may have to pay for staying in a private nursing home can be slightly reduced through the availability of a USVA supplement. If a veteran is a resident in a state-operated (or federally operated) nursing home, the USVA supplement is higher. The table below shows the difference in payments that a married veteran would receive if he were in a state-operated nursing home (such as Fayetteville) versus a private nursing home.

Table 3. Annual Cost for a Typical Veteran for State-Operated and Private Nursing Homes

	State-Operated Nursing Home	Private Nursing Home
Yearly Rate (cost) at Nursing Home[1]	$ 42,001	$ 35,927
Less: USVA Per Diem	$ 16,031	$ -
Less: USVA Aid & Attendance Allowance	$ 7,101	$ 7,101
Cost Less USVA Payments	$ 18,869	$ 28,826
Less: Average Annual Patient Liability	$ 7,551	$ 7,551
Costs/year to be recovered from Medicaid	$ 11,318	$ 21,275

1. The yearly rate (cost) for both types of facilities includes the annual contract or reimbursable Medicaid cost per bed. Also included in both figures is additional overhead, and construction cost, per bed for those facilities. The cost for the Fayetteville facility is reduced by $1,095 per bed per year as a result of the contractor's $3 per bed per day payment to the state for facility maintenance and renovation costs as stipulated in the contract. The figure shown includes this $1,095 reduction per bed per year.

In the above table, Average Annual Patient Liability is the amount of money that veterans in private North Carolina nursing homes receive from such sources as Social Security, disability payments, personal IRA withdrawals, military retirement, or any other sources available to him. Before Medicaid will become a contributor to the veteran's nursing home liability, all patient liability means must be expended. In the above table, Medicaid would assume the $11,318 amount for a veteran in a state-operated nursing home, and $21,275 for the same veteran if they are in a private nursing home. Since Medicaid requires state and local governments to pay a portion of Medicaid payments, the table below reflects which government would pay the remaining costs for the veteran. This assumes that the veteran has no other avenues for which he would use before Medicaid would come into play. Table 4 below describes the Medicaid liability to the federal, state, and local governments for both state-operated and private nursing homes.

Table 4. Annual Medicaid Liability per Bed

	State-Operated Nursing Home	Private Nursing Home
North Carolina's Medicaid Liability (31.56%)	$ 3,572	$ 6,714
Local Government's Medicaid Liability (3.5%)	$ 622	$ 1,170
Federal Government's Medicaid Liability (62.94%)	$ 7,124	$ 13,390
Cost/year to be recovered from Medicaid (100%)	$ 11,318	$ 21,275

IX. CONCLUSIONS

From data available from the USVA, DHHS/DMA, and DHHS/DFS, the following conclusions have been reached:

- The state at present has sufficient nursing beds to meet the needs of both the veteran's population and the general population.
- If the USVA model is applied, the state will have a need for an additional 173 nursing beds for veteran's in the year 2005.
- Any additional state-owned veteran's nursing beds should be located in Regions 1 and/or 4 (see Exhibit C).
- Veterans that require nursing care receive additional allowances and benefits from the USVA that would not be available to them in a private nursing home.
- State and local governments can realize modest savings in Medicaid expenditures by placing veterans in state-operated veteran's nursing homes versus placing them in private homes. However, the state would have to appropriate 35% of construction costs for the facilities. The state's share (in 1999) of the construction cost of a veteran's nursing home that is co-located with a local hospital would cost approximately $3.1 million. The state's share (in 1999) of the construction cost of a veteran's nursing home that is self-supported would cost approximately $3.5 million.
- The table below compares the estimated annual cost to the state for 422 nursing homes beds by the year 2005 for state homes versus the costs to the state to place those 422 veterans in private sector nursing homes. The figures shown have been inflated to the year 2003, assuming that those funds would be appropriated that year to place those veterans in facilities by 2005. The state would incur an estimated cash outflow of $3.9 million in one-time construction costs in 2003 in addition to the total first year's annual cost shown below.

Table 5. Estimated Annual Costs[1] to State and Local Government for 422 Nursing Home Beds for Veterans in 2005

	State-Operated Facilities	Private-Operated Facilities
Annual state contribution to Medicaid @90% occupancy	$ 691,483	$ 1,788,956
Annual local government to Medicaid @90% occupancy	$ 120,463	$ 329,665
Total First Year's Annual Costs	$ 811,946	$ 2,118,621

1. As mentioned in the paragraph above, in 2003 the state would incur a one-time $3.9 million cost for construction of the additional 173 beds.

There are some additional associated costs to state government for the operation of veterans nursing homes. The USVA requires one contract compliance officer be placed at each nursing

home. Also, the administrative costs to the Department of Administration will be increased in the fiscal office and, perhaps in the Division of Veterans Affairs, to provide proper services to the state-operated nursing homes. These costs are unknown at this time and are therefore not included in this report.

The Legislature should also remain aware that any and all costs associated with this report are subject to change. Such federal contributions as for Medicaid and USVA allowances and matching funds are subject to change. Also subject to change are the demographic information used. All demographic information in this report is based on the 1990 Census. When the 2000 Census is compiled there may be significant changes on veterans population.

North Carolina Projected General Population for Years 1999 through 2010

(in thousands)

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Under 65	6672.6	6749.2	6823.4	6899.7	6976.2	7053.6	7130.1	7199.4	7269.5	7333.3	7398.6	7463.4
65-74	543.0	550.4	553.2	555.3	559.4	567.0	577.1	589.2	604.4	627.3	650.7	671.6
75-84	330.7	340.0	346.3	353.3	361.1	367.2	372.3	376.0	378.5	383.2	388.2	394.0
85 and Over	107.8	112.5	118.5	122.8	126.0	128.3	132.0	139.5	145.4	149.6	154.0	159.5
Total	7654.1	7752.1	7841.4	7931.1	8022.7	8116.1	8211.5	8304.1	8397.8	8493.4	8591.5	8688.5

Source N. C. Office of State Planning - March 8, 1999
(Last update December 16, 1994)

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North Carolina Projected Veterans Population for Years 1999 through 2010

(in thousands)

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Under 65	440.3	430.9	422.4	414.5	406.7	399.2	391.3	383.5	375.1	365.0	354.7	343.6
65-74	147.9	142.5	136.8	131.1	126.2	122.5	118.3	114.0	110.9	109.7	110.0	111.9
75-84	86.8	92.1	95.9	98.7	99.9	98.9	98.6	97.8	96.4	95.0	92.6	89.5
85 and Over	8.9	10.4	12.1	14.1	16.3	18.8	21.4	24.3	27.0	29.2	31.0	32.7
Total	683.6	675.9	667.2	658.4	649.1	639.4	629.6	619.6	609.4	598.9	588.3	577.7

Source U.S. Department of Veterans Affairs based on 1990 Census
(Last update July 1, 1996)

EXHIBIT A

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EXHIBIT B

Projected North Carolina Veteran Nursing Home Need

Beds Needed for General Population

		1999	2000	2001	2002	2003	2004	2005
A	North Carolina General Population *(1)*	7,654,091	7,752,024	7,841,386	7,931,133	8,022,635	8,116,168	8,211,384
B	Beds Needed for General Population *(2)*	40,054 *(2)*	41,853 *(2)*	42,091 *(2)*	42,735 *(2)*	43,567 *(6)*	44,399 *(6)*	45,231 *(6)*

Beds Needed for Veterans Population

C	North Carolina Veteran Population *(3)*	683,600	675,900	667,200	658,400	649,100	639,400	629,600
D	Total Beds Needed for Veterans *(2)*	6,688	7,083	7,443	7,808	8,144	8,446	8,788
E	**Less:** USVA Beds Provided for Veterans *(3)*	579	579	579	579	579	579	579
F	**Less:** USVA Beds Provided thru Home Care *(3)*	313	313	313	313	313	313	313
G	**Less:** USVA Beds Provided thru Alternatives to In-patient Care *(3)*	130	130	130	130	130	130	130
H	**Less:** USVA Beds Provided thru Contracts w/Community Homes *(3)*	115	115	115	115	115	115	115
I	**Less:** NCVA Beds Provided for Veterans *(4)*	250	250	250	250	250	250	250
J	**Beds Needed for Veterans (adjusted for beds provided by NCVA and USVA)**	**5,431**	**5,826**	**6,186**	**6,551**	**6,887**	**7,189**	**7,531**
K	USVA Market Share (16% of veterans in need of care) *(5)*	1,070	1,133	1,191	1,249	1,303	1,351	1,406
L	**State Veterans Nursing Home Need (30% of USVA share)** *(5)*	**321**	**340**	**357**	**375**	**391**	**405**	**422**

Sources:

(1) N.C. Office of State Planning

(2) N.C. Department of Health and Human Services - Division of Facility Services

(3) U.S. Department of Veterans Affairs

(4) N.C. Department of Administration - Division of Veterans Affairs

(5) U.S. Department of Veterans Affairs - VA Nursing Home Model 82.0

(6) N.C. Office of State Budget and Management

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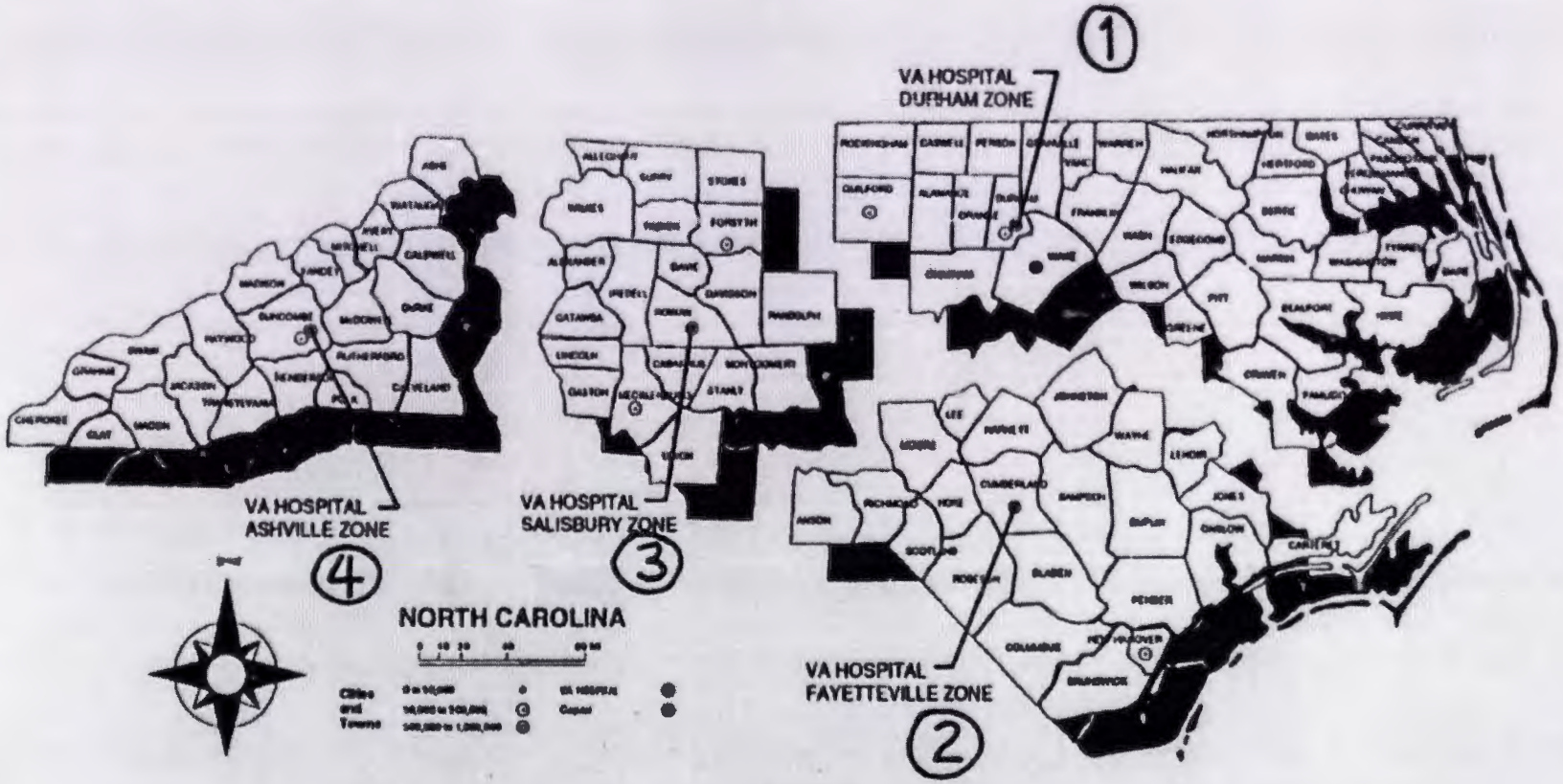

VETERANS ADMINISTRATION MEDICAL CENTER ZONE MAP FOR NORTH CAROLINA

EXHIBIT C

JOINT APPROPRIATIONS SUBCOMMITTEE

ON

GENERAL GOVERNMENT

Minutes

April 20, 1999

The Joint Appropriations Subcommittee on General Government met Tuesday, April 20 at 8:30 a.m. in Room 425 of the Legislative Office Building. Three of the Senate members were present. Representatives present were: Co-Chairs Jeffus and Wainwright , Vice Chair McLawhorn; Barefoot, Ellis, Hensley, Sherrill and Thompson. Pages were Adam Hurley, Amber Burwell, and Justin Hancock. Senator Ed Warren chaired the meeting.

Mr. Carl Byrd from the Office of State Budget and Management presented a report on the assessment of the need for Veterans nursing home beds. (See Attachment 1)

As directed by the 1998 session of the General Assembly, Mr. John Leaston, State Purchasing Officer, and Ms. Gwen Canady, Deputy State Controller, presented a report on the economic and financial reporting impact of the Procurement Card Program, based upon the pilot implementation to date. (See Attachment 2 for a full description of the Procurement Card Pilot Program.) In response to several questions from Representative Wainwright, Mr. Leaston stated the following:

- They have been working closely with the Office of the State Controller on a Procurement Card Reconciliation System.
- Next step would be to carefully implement the Program statewide by April 1, 1999.
- First Union Bank will administer the Card.
- No cost to State. Merchants using the Card will pay small fee.

Representative Sherrill said that she had had some real misgivings about the Card two years ago, but that she was impressed with the report and would like to go forward with it now.

Representative Hensley wanted to know the interest rate on the Card. Mr. Leaston said that the bills would have to be paid monthly; therefore, there was no interest.

Ms. Canady said that the Controller's Office was supportive of the current plan, and that the Reconciliation System would begin testing in May.

Mr. Don Waugh, Assistant State Controller, then reported on the pilot program on collection of bad debts by State agencies. A copy of the report, which was written in response to a special provision within Senate Bill 1366-Section 26 of the 1998 legislative session, is available as Attachment 3. Mr. Waugh especially asked the members of the Committee to study the "Conclusions and Recommendations" section beginning on Page 9 of the report.

The meeting adjourned at 9:50 a.m. to reconvene at 2:30 p.m. this afternoon.

Respectfully submitted,

Senator Ed Warren, Chairman

Wilma Caldwell, Committee Clerk