



# **Annual Progress Report from VDOT on the Effect of the Aging Population on State Agencies**

**HB 2624 (2007)**

**Report to the Department of Aging**

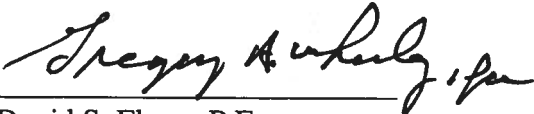
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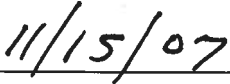
**November 2007**



**Report on the Response of the Virginia Department of Transportation to the Impact  
of the Aging of Virginia's Population  
November 15, 2007**

Pursuant to legislation enacted by the Virginia General Assembly of Virginia, the Department of Transportation submits this report of its progress in addressing the impact of the aging of Virginia's population.

  
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David S. Ekern, P.E.

  
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Date

**TABLE OF CONTENTS**

**EXECUTIVE SUMMARY ..... v**

**INTRODUCTION.....1**

**AGENCY DESCRIPTION.....3**

**SECTION 1: Data on the number of persons age 65 and older who received agency services..... 5**

**SECTION 2: Agency services utilized by senior citizens age 65 and older.....7**

**SECTION 3: Agency programs designed to serve seniors age 65 and older..... 9**

**SECTION 4: Agency publications and websites designed to be “senior-friendly”.....13**

**SECTION 5: Effect that aging of agency’s workforce will have on ability to deliver services..... 15**

**SECTION 6: Other agency services or plans to address the impact of the aging of Virginia’s population.....17**

**APPENDIX: VIRGINIA ACTS OF ASSEMBLY, Chapter 507 .....19**

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## EXECUTIVE SUMMARY

Demographic trends continue to show an increase in the population of Virginians age 60 and over. Between 2005 and 2006, there was a 3% increase in the number of Virginians age 65-74. There was an increase of 1% for Virginians age 75-84. According to the Virginia Department for the Aging, the population of Virginians age 60 and over will grow from 14.7% of the total population in 1990 to almost 25% by 2025 when there will be more than two million Virginians in this age group. As of June 30, 2007, Virginia licensed drivers age 65-74 comprised 8% of drivers. Persons 75-84 made up 4% of drivers, and persons 85 and over made up 1% of drivers. These demographic trends have implications for VDOT services.

While VDOT does not generally provide direct services, every resident and any person traveling a road in the Commonwealth is a customer. VDOT serves all residents of Virginia through direct use of the transportation system and through reliance on others who use the system. Well maintained roads and minimal road congestion are particularly significant for emergency responses for older residents and others.

VDOT's Older Driver Initiative is directed towards helping motorists in this demographic group by utilizing enhanced visual aids in signs, signals and roadway lighting and markings. Several initiatives have been implemented such as the use of the new Clearview® font on new and replacement signs.

VDOT awarded a grant to the Hampton Roads Planning District Commission to conduct multi-year studies on improving mobility for non-drivers. The first study, published in 2005, focused on improving mobility for elderly persons and persons with disabilities. The third and fourth studies included collecting data on persons over 65 and existing non-driver research conducted by AARP.

VDOT's Transportation Research Council helps support research conducted by the Virginia Tech Transportation Institute National Surface Transportation Safety Center for Excellence. The center is currently conducting a study of the responses of older drivers during crashes and other relevant driving events.

VDOT's website is compliant with World Wide Web Consortium specifications for accessibility. These enhancements are expected to benefit persons with disabilities and the senior population. The website also includes a link to VDOT's Older Driver Initiative as well as links to other information that may be of interest to older persons.

As a result of retirements, VDOT may potentially need to replace one-quarter of its workforce in the next 4-5 years. Strategies are being developed to ensure that the agency has adequate pools of highly skilled workers to fill critical positions. For example, the agency is developing a succession plan, assessing current and future needs, developing a workforce plan and assessing vulnerability in key leadership positions. The agency continues to emphasize employee development and empowerment at all levels, to ensure high quality project execution.

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## INTRODUCTION

Chapter 507 of the 2007 Acts of Assembly amended and reenacted section § 2.2-5510 of the *Code of Virginia* to require each agency to include an analysis of the impact of the aging population on delivery of services in the agency's strategic plan. In addition to inclusion in the strategic plan, the legislation requires agencies to submit an annual report to the Department for the Aging regarding progress in responding to the impact of the aging population on service delivery. This report was prepared in response to the reporting requirement of Chapter 507 (Appendix).

And, in accordance with the provisions of Chapter 507, an analysis of the impact of the aging population on service delivery is included in VDOT's strategic plan under the section entitled "Customer Trends and Coverage".

This report responds to the six response sections outlined in guidance established by the Secretary of Health and Human Resources, in accordance with Chapter 507.

The Virginia Department of Transportation (VDOT) will plan, deliver, operate and maintain a transportation system that is safe, enables easy movement of people and goods, enhances the economy and improves our quality of life.

Virginia has the third-largest state-maintained highway system in the country, just behind North Carolina and Texas.

Since 2002, through efficiency efforts, outsourcing and by shrinking in size, VDOT has achieved annual cost reductions of more than a quarter billion dollars.

As of June 1, 2007, VDOT employed about 8,600 people full time, compared to 10,380 at the close of Fiscal Year 2001. That's the lowest level since 1965.

During the same period, 2,894 miles of road were added to the state system, which totals 57,867 miles.

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## AGENCY DESCRIPTION

VDOT plans, delivers, operates and maintains Virginia's transportation network. VDOT designs the network to meet future needs, provides engineering and financing expertise to build the network's assets, and constructs, maintains, and operates the assets. The network is comprised of a variety of assets including vehicle, pedestrian, and bicycle lanes; sidewalks, ditches, and pipes; signals and signs; ferries; and any number of other structures and activities that help move people and goods over the highway system.

Code of Virginia, Title 33.1 "Highways, Bridges and Ferries," Chapter 1, "Commonwealth Transportation Board and Highways Generally" specifically provides authority to plan, designate, acquire, construct, reconstruct, operate and improve highways within the Commonwealth of Virginia.

The Commonwealth Transportation Board guides the department's work, much like a board of directors. The Secretary of Transportation serves as chairman and the Commonwealth Transportation Commissioner as vice-chairman. The 17 Board members are appointed by the governor and approved by the General Assembly. The director of the Department of Rail and Public Transportation also serves as a non-voting member of the board. Board meetings are held monthly and are open to the public.

VDOT is comprised of nine districts and a Central Office. The districts are divided into 42 residencies and two district satellite offices, responsible for one to four counties each. Each of Virginia's counties has at least one area maintenance headquarters strategically located in it. The VDOT central office in Richmond is headquarters for approximately 30 operational and administrative units.

The commissioner's staff is comprised of eight chiefs of the Virginia Department of Transportation's (VDOT) divisions, nine district administrators, a chief deputy commissioner, a federal intergovernmental transportation liaison and an inspector general.

VDOT envisions a transportation system that is safe, enabling efficient movement of people, goods & services, while enhancing the economy, and contributing to improvements in the quality of life for the citizens of the Commonwealth of Virginia. Based on key measures, VDOT's performance has improved, and operations are transparent to the public through the development of the Dashboard System. The Department's focus on performance measurements has made it more productive.

The Department will continue to have the ultimate responsibility for the highway system and the products and services that support the system. The future changes envisioned are the shift of the Department's focus to managing people and programs, not projects. With these changes will come the need to establish better tools for enforcing accountability, both internally and externally.

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**Section 1:** *To the extent such data is available, the number of persons who received services from the agency in the past fiscal year who fell into each of the following age ranges: 65-74; 75-84; 85 and older. If the agency can provide data that compares such numbers to numbers of senior citizens served in the past, please do so. If the agency lacks specific information about the number of senior citizens it serves, but has other evidence indicating that it is serving more or fewer senior citizens than it has in the past, please describe the basis for that estimation.*

VDOT is aware of trends that impact transportation programs and services. Two of the trends relate to the increased number of older drivers and the increased demand for mobility. Based on Census data, Virginia's older population continues to steadily increase and persons are driving longer. Transportation options provide citizens with mobility and independence. Census data on Virginia's population age 65 and over is shown in Table 1.

Age Range	2005 Population	2006 Population	Change	Percent Growth
65-74 years	462,885	474,860	11,975	3%
75-84 years	298,376	300,779	2,403	1%
85 years and older	106,714	112,129	5,415	5%

*Source: US Bureau of Census*

As of June 30, 2007, Department of Motor Vehicles (DMV) records indicate there were 5,259,512 licensed drivers in Virginia. Data on Virginia licensed drivers is shown in Table 2. Persons age 65 and over comprised 13.7% of all Virginia licensed drivers. This is a slight increase from 2006 when the percentage was 13.4%. Table 2 below shows the breakdown of licensed drivers by age range.

**Table 2  
Virginia Licensed Drivers by Age Range**

Age Range	Licensed Drivers	% of Licensed Drivers
64 years and under	4,536,432	86%
65 -74	434,043	8%
75 – 84	235,266	4%
85 years and over	53,771	1%
Total*	5,259,512	100%

*Source: DMV Virginia Highway Safety Office 6/30/07*

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**Section 2:** *Identify the agency services that are utilized by senior citizens 65 and older in significant numbers. Indicate whether the agency has the capacity at present to serve all interested seniors or whether the demand for certain services exceeds the agency's capacity. If so, does the agency maintain waiting lists for services?*

VDOT is responsible for maintaining and operating the transportation system for the traveling public. There are no specific programs or services targeted to senior citizens 65 and older. VDOT provides limited direct services upon request. The agency does not collect and maintain personal data such as age on persons who request services. As a recipient of federal funds, VDOT is responsible for ensuring access to all segments of the community and to ensure that persons are not adversely impacted on the basis of age and other protected factors, by VDOT programs and services. To that end, VDOT collects age data for persons who attend public hearings and for persons potentially negatively impacted by VDOT activities, such as persons displaced by VDOT projects. VDOT program activities are reviewed at least annually by the Civil Rights Division to ensure public participation and nondiscrimination on the basis of age and other protected factors.

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**Section 3:** *Identify current agency programs, specifically designed to serve seniors 65 and older, that fall into any of the following six categories: Health Care/Wellness; Education; Public Safety; Recreation; Financial Security (including Housing); and Transportation.*

### Transportation and Public Safety

#### Older Driver Initiatives

VDOT is committed to ensuring a safe environment for older drivers and pedestrians. There are many aspects of aging that must be considered such as diminished vision, fitness and flexibility, attention span, and reaction time when designing for older driver and pedestrian safety.

VDOT's Older Driver Initiatives program is managed by the Department's Traffic Engineering Division. The program is directed towards helping motorists by utilizing enhanced visual aids – Signs, Signals, Roadway Lighting and Markings.

Several improvements have been implemented that are helpful to all drivers, particularly older ones. For example, VDOT has begun using the new Clearview® font and brighter retroreflective sheeting on new and replacement guide signs. Studies conducted by the Pennsylvania Transportation Institute and the Texas Transportation Institute show that using this more readable font improves legibility by 16 percent for older drivers. These studies have been accepted and endorsed by the Federal Highway Administration, which issued interim approval for use of Clearview® font in 2004. VDOT uses fluorescent sign sheeting for construction work zones and pedestrian-school-bicycle signage.

VDOT now uses pavement markings that enhance wet and night visibility in construction zones.<sup>1</sup> Highly reflective marking material has been used for eight years on limited-access highways and certain other routes. Since 1970, VDOT has exceeded national standards requirement for 8-inch wide traffic signal lenses by using 12- inch wide lenses. For these reasons and others, VDOT is considered a national leader in its use of older driver-friendly materials that promote safety.

In addition to initiatives in the implementation phase, three other initiatives are being evaluated and motorists should begin to see the following in use during the 2007-08 biennium:

- Pavement Markings used in Construction Zones that function better in wet conditions;
- Pavement Markings used in Permanent Applications that function better in wet conditions; and
- Glass curb markers to delineate medians at certain locations.

#### Research

VDOT continues to research and study ways to increase mobility and make driving roadways as safe as possible for the traveling public, including older persons.

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<sup>1</sup> Use of these markings for permanent applications is being tested.

VDOT's Transportation Research Council (VTRC) located at the University of Virginia helps support research conducted by the Virginia Tech Transportation Institute (VTTI) National Surface Transportation Safety Center for Excellence. The contract currently in effect is for \$200,000.

VTTI has older drivers as a focus area. The center is currently working on a naturalistic driving study of older drivers to study the biomechanical responses of older drivers during crashes and other relevant driving events. This study is a one-year study to better understand older drivers (75+) who are at a much higher crash and fatality risk per mile driven compared with other drivers. It examines how older adults drive, their impairment profiles, and what situations are the riskiest for this group.

As part of the Rural Transportation Planning Program, VDOT awarded a grant to the Hampton Roads Planning District Commission (HRPDC) to conduct multi-year studies on improving mobility for non-drivers. The first study, which started in 2003, focused on improving mobility for elderly persons and persons with disabilities. The study, which used the National Household Travel Survey (NHTS), was published in June 2005. It revealed that elderly non-drivers travel half as much as elderly drivers, but elderly non-drivers living in denser areas have higher mobility due to walking and bus usage.

The second study, published in November 2006, examined non-drivers age 18-64. The first two studies concluded that living near destinations and having access to public transit causes the higher non-driver mobility.

However, due to the structure of the NHTS survey, neither study was able to directly measure the mobility impact of living near transit and living within walking distance of destinations. Therefore, a local survey was designed, implemented, and analyzed to measure these factors. A third study presented a statistical snapshot of local non-drivers based on data from the survey. Data was collected from 800 non-drivers in the Hampton Roads area, which included 400 persons age 65 and over.

The fourth study focused on improving the mobility of non-drivers using proximity to destinations and bus routes. The study included existing non-driver research conducted by AARP. The AARP survey of elderly (75+) persons indicates the importance which surveyed persons place on proximity to bus stops and grocery stores as a determinant of the likelihood of making bus and walk trips.

Key findings of this study were:

1) Bus infrastructure increases non-driver mobility

- Those who have a reduced ability to walk have increased mobility when transit stops are within 5 miles of their home.
- Those who do not have a reduced ability to walk have increased mobility when a transit stop is within 1 mile of their home.

2) Living within a half-mile of destinations increases non-driver mobility

- Those who do not have reduced ability to walk who live in High Activity Locations in Hampton Roads have odds of leaving home five times higher than those living away from activities.

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**Section 4:** *Identify the extent to which your agency provides “consumer-oriented” publications and websites online that are designed to be “senior-friendly”. If the information you currently provide is not readily accessible to seniors, identify any steps your agency is taking to improve accessibility.*

VDOT makes every effort to ensure website accessibility in compliance with W3C specifications. Specifically, the VDOT website has been designed to ensure accessibility by persons with disabilities by:

- providing equivalent alternatives to auditory and visual content using ALT tags with explanatory information.
- providing proper meta tag usage in compliance with the specification so that personalized information can be grouped together and located.
- providing appropriate meta tags to ensure that the site is easily searchable and title tags appear at the top of the page to ensure ease of use and readability.

The Virginia Department of Transportation attempts to reach all citizens, regardless of age, income or disability. VDOT constantly evaluates document sizes, load times, and other factors that would prevent computer users without high-speed Internet access from viewing our site. Additionally, VDOT encourages citizens to contact the Department with any challenges they might have in that regard and the Department will make changes or accommodations, accordingly.

The VDOT website includes a link to VDOT’s Older Driver Initiatives and links to other information that may be of interest to older persons.

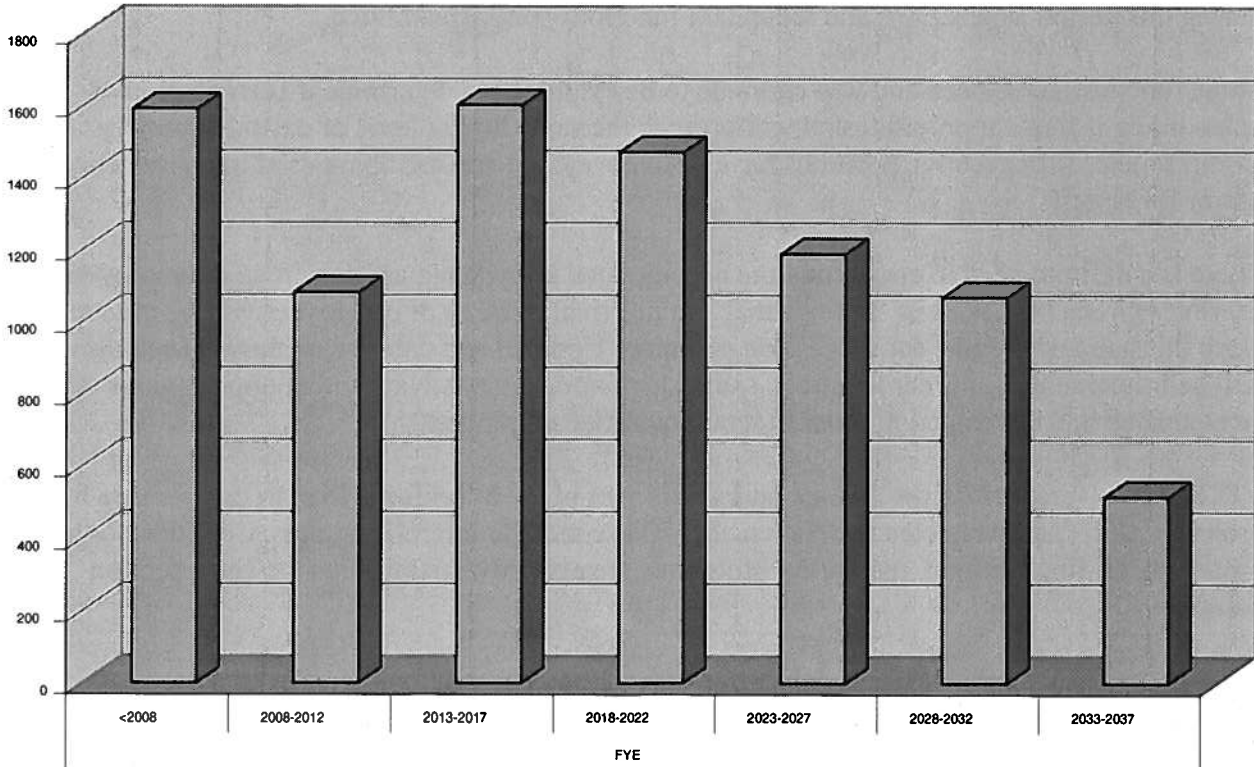
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**Section 5:** *Describe the effect that the aging of the agency’s own workforce will have on its ability to deliver services. Consider the number of retirements expected in the next two years, the effect these retirements might have (e.g., loss of leadership or institutional knowledge in certain programs), how losses might be replaced (e.g., promotions or transfers, recruitment, use of wage staff, including retirees, re-engineering, outsourcing), and the costs or savings from the replacements (e.g., staff development cost, salary savings). This item might be addressed by summarizing relevant portions of the agency’s workforce plan.*

VDOT has started to plan and prepare for anticipated demographic impacts of an aging population and to close skill gaps where changes in how we are delivering transportation services to the public are changing the way our employees need to perform their work.

Through retirements alone, VDOT faces the potential replacement of more than one-quarter of our workforce in the next 4-5 years. When we evaluate the potential retirements by critical career groups, we begin to see warning signs. The need for civil engineers, who form the backbone of the technical side of the agency, has suffered from a decade of engineers who elected to retire. While this rate remains high, this exodus has begun to level out and development programs have increased the number of engineers in the pipeline for permanent positions. Transportation operations, which form the front line in the building and maintenance of roadways, are approaching an upturn in the number of eligible retirees and the percentage of turnover.

Projected Retirement Eligibility Counts Current and in 5 year Intervals



We are developing a strategy to ensure that the agency has a continuous supply of highly skilled, competent workers to fill critical positions as they are vacated. VDOT has instituted innovative

programs that help mitigate the lack of qualified workers in certain roles. We will continue to emphasize training, employee empowerment, and improved performance and responsiveness of employees at all levels, to ensure on time, on budget, high quality project execution.

To further address the potential impact of retirement on workforce needs, VDOT will conduct an analysis of our workforce to predict and prepare for employee retirements and business changes to include:

- Develop a succession plan to prepare for executive and senior level retirements or exits within the next 3-5 years;
- Assess our current and future needs based on our strategic plan, goals and objectives, and priority programs and projects;
- Develop a workforce plan to manage the identified gaps between current and future needs; and
- Assess vulnerability in key leadership and individual contributor positions. The major focus will be on senior leadership; however, all key positions will be included in the plan. The plan will include a combination of training and developing existing staff, as well as external recruitments.

The agency has undergone major realignments in the last 24 months and will continue to make adjustments to allocate human and financial resources as our political and financial environment changes. Several divisions have been combined and others have been split to allow for the most efficient and effective use of staff and funding. The overall workforce has dropped considerably during this period as positions and redundant functions were streamlined.

Some functions have been and will continue to be evaluated to determine if privatization or outsourcing is more appropriate and will provide the same higher level of customer service. Competencies for executive positions have been developed and are being used in the selection of senior level staff.

There is a definite need to ensure that the accumulated knowledge and expertise of employees nearing retirement is not lost. Both formal and informal training of employees will be used to close this gap and prepare for succession planning. Updated and creative methods of recruitment will be implemented in order to attract a sufficient workforce. Advancement opportunities will be evaluated and developed in order to retain qualified employees.

VDOT has several initiatives that are an integral part of the Workforce Plan to compensate for projected skills and competency deficiencies. These include Intern Programs, Core development programs, on-line learning, mentoring programs, creative advertising, sign-on and retention bonuses.

We will continue to emphasize training, employee empowerment, and improved performance and responsiveness of employees at all levels, to ensure on time, on budget, high quality project execution.



**Section 6:** *Describe any other services or programs that the agency has implemented or plans to implement in the future to address the impact of the aging of Virginia's population.*

It should be noted that all 41 statewide Safety Rest Area and Welcome Centers have auxiliary restrooms which can be utilized as disabled or family access restrooms upon request. All rest areas are open and staffed 24 hours, seven days a week, year round.

Many older persons with limited mobility travel with the assistance of a caregiver or a family member who may be a person of the opposite gender. For the convenience of the traveling public with this situation and others, VDOT has officially designated "Family Access" for restrooms at three Safety Rest Area facilities. They are:

- I-64 West (Milepost 213) New Kent Safety Rest Area, New Kent County;
- I-64 East (Milepost 213) Safety Rest Area and East Coast Gateway Welcome Center, New Kent County; and
- I-85 North (Milepost 1) Bracey Safety Rest Area and Welcome Center, Mecklenburg County.

Two Safety Rest Area and Welcome Centers are currently under construction that will have official designation as Family Access Restrooms. Both construction projects are expected to be completed by the end of 2007. The locations are:

- I-95 South (Milepost 132) Fredericksburg Safety Rest Area and Welcome Center, Spotsylvania County and
- I-81 South (Milepost 320) Winchester Safety Rest Area and Welcome Center, Frederick County.

VDOT provides funding to Planning District Commissions to execute bicycle and pedestrian plans, paratransit and rural transit plans. VDOT administers federal Congestion Mitigation and Air Quality (CMAQ) funds, distributing them to Metropolitan Planning Organizations (MPOs) to fund transit projects and other improvements aimed at increasing travel options and reducing dependence on automobiles. These projects benefit older persons and other residents of Virginia.

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APPENDIX-VIRGINIA ACTS OF ASSEMBLY—2007 SESSION

CHAPTER 507

*An Act to amend and reenact § 2.2-5510 of the Code of Virginia, relating to the Government Performance and Results Act; effect of the aging population on state agencies.*

[H 2624]

Approved March 19, 2007

Be it enacted by the General Assembly of Virginia:

1. That § 2.2-5510 of the Code of Virginia is amended and reenacted as follows:

§2.2-5510 (Expires July 1, 2008) Strategic plan.

A. Each agency shall develop and maintain a strategic plan for its operations. The plan shall include:

1. A statement of the mission, goals, strategies, and performance measures of the agency that are linked into the performance management system directed by long-term objectives;

2. Identification of priority and other service populations under current law and how those populations are expected to change within the time period of the plan;

3. An analysis of any likely or expected changes in the services provided by the agency; and

4. An analysis of the impact that the aging of the population will have on its ability to deliver services and a description of how the agency is responding to these changes. ~~Based on guidance from the Secretary of Health and Human Resources, each agency shall report by October 1 of each year to the Governor and to the General Assembly its progress for addressing the impact of the aging of the population in at least five specific actions.~~ *Each agency shall report by November 15 of each year to the Department for the Aging its progress in addressing the impact of the aging of the population, according to guidance established by the Secretary of Health and Human Resources. Based upon information received, the Department for the Aging shall prepare a report summarizing the progress made by the agencies and submit such report to the Governor and the General Assembly by June 30 of the following year.*

B. Strategic plans shall also include the following information:

1. Input, output, and outcome measures for the agency;

2. A description of the use of current agency resources in meeting current needs and expected future needs, and additional resources that may be necessary to meet future needs; and

3. A description of the activities of the agency that have received either a lesser priority or have been eliminated from the agency's mission or work plan over the previous year because of changing needs, conditions, focus, or mission.

C. The strategic plan shall cover a period of at least two years forward from the fiscal year in which it is submitted and shall be reviewed by the agency annually.

D. Each agency shall post its strategic plan on the Internet.