

REPORT OF

**The Commission on
Population Growth
and Development**

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



HOUSE DOCUMENT NO. 40

**COMMONWEALTH OF VIRGINIA
RICHMOND
1990**

**Report of the
Commission on Population Growth and Development
(HJR 435)
January 1990**

The Honorable L. Douglas Wilder, Governor
and
The General Assembly of Virginia

I. INTRODUCTION

The 1987 Chesapeake Bay Agreement focused Virginia and the Bay community on the issue of population growth and development and environmental degradation in a very specific way. One stated goal of the Agreement is to: *plan for and manage the adverse environmental effects of human population growth and land development in the Chesapeake Bay watershed.*

As part of the Agreement, the Chesapeake Executive Council commissioned a study to consider the consequences of anticipated population growth and land development patterns in the Bay watershed through the year 2020. This study was undertaken by a panel of experts, the Year 2020 Panel, which was requested to consider how to protect the environment while accommodating expected growth. The Report of the Year 2020 Panel was received by the Council in January of 1989.

The Year 2020 Panel found that both population growth and an increasing per capita consumption of land are having a detrimental effect on the water quality of the Bay, the natural resources of the watershed, and the quality of life of the region. Further, it found many of the issues surrounding both land development and environmental protection to be, by their very nature, multijurisdictional. These are problems that cannot be resolved by local governments alone; states, the Panel said, must assume greater responsibility in this area. Foremost among its many suggestions, the Report recommended that each of the Bay states, Maryland, Pennsylvania, and Virginia:

establish a Task Force or Commission to promote the preparation and implementation of a state-level plan;
and

create and fund a lead state planning agency with responsibility for preparing the state plan, coordinating planning and development activities, and achieving consistency among and with local plans and other state plans.

Thus, while mandated to study the consequences of population growth and development on the Chesapeake Bay, the Panel recognized that the issues involved were statewide and that meaningful state policies must apply statewide, as well.

As part of the Report, Panel members from each jurisdiction created an Action Agenda of items recommended for immediate implementation. Virginia's Action Agenda included the creation of a Commission to evaluate and recommend a statewide planning process in support of the Panel's recommendations.

Consequently, during the 1989 legislative session under House Joint Resolution 435, the General Assembly established a Commission on Population Growth and Development which was charged to "evaluate and recommend a statewide planning process for population growth and development in Virginia to the year 2020." (Appendix A) The nineteen-member Commission met in open sessions in Richmond once a month from July through September. At these meetings, the Commission heard from representatives of various state agencies, local governments, and other organizations on such issues as population growth, water resources, transportation, waste management, land use, and intergovernmental relations. (Appendix C) In October, having obtained a small grant from the Virginia Environmental Endowment, the Commission met for an overnight retreat to determine the direction that it wished to pursue. The final meeting of the Commission was in Richmond in late November.

(T)he state(s) must take a much more active and central role in the planning process for both land use and infrastructure, and a Comprehensive Development and Infrastructure Plan must be put in place ...to guide state investments and policy and to create coordination among local land use plans. *Population Growth and Development in the Chesapeake Bay Watershed to the Year 2020: The Report of the Year 2020 Panel to the Chesapeake Executive Council. December 1988*

This report is presented with the hope that the Commonwealth of Virginia will undertake a leadership role in the patterning of future growth and development of this state so that its citizens may enjoy continued economic prosperity, appropriate protections for their natural environment, and equality of opportunity, wherever they live.

II. POPULATION GROWTH AND DEVELOPMENT PATTERNS

For most of the life of this nation, population growth, expansion of the frontier, and control of nature have been viewed as the means to a secure future and economic well being. Recently, however, it has become increasingly clear that careless and uncontrolled growth and development may damage the very livelihood its promoters seek to ensure.

Here in Virginia we have been blessed with a desirable location, a moderate climate, and excellent natural resources. These characteristics have benefited the more than four million people who have been added to the Commonwealth since the turn of the century; but this progress has been a mixed blessing. One need only drive the length of Interstate 95 to note both the prosperity and the destruction that such growth has brought.

Population and Land Use Trends. The Commission knows population growth will continue; if current projections prove accurate, nearly two million more people will become residents of the Commonwealth by the year 2020. (Appendix D, Figure 1) Virginia's growth comes from two sources: natural increase and in-migration. While our recent birth rates are higher than the national average, it is in-migration that is the major source of growth. In fact, during the next decade, at least half of our growth is anticipated to come from individuals moving into the state.

Traditionally, natural increase could be expected to increase the population of the places where it occurred, slowly building communities. Today, however, both resident populations and in-migrants are drawn to the urban corridor, and some parts of the Commonwealth are feeling the stress of population decline. In fact, during the period 1980-2000, some 20 localities are projected to grow by more than 40 percent, while over 30, many of them small independent cities or counties in the far southwest, are projected to remain essentially the same size or even lose population.

Consequently, while in 1945 two-thirds of Virginia's people lived throughout its rural areas, today, the reverse is true. Two thirds of our population is urban and is located primarily in the eastern one-third of the state--more specifically, in the so-called Golden Crescent from Fairfax through Richmond to Hampton Roads.

In addition to the absolute population increase and its redistribution within the state, two other characteristics are combining to magnify the impacts of growth on our land and our resources: decreasing household size and increasing per capita land consumption.

Decreasing household size is the consequence of several con-

verging phenomena. These include smaller families, an extended lifespan for the elderly (who increasingly live alone), more single parent households, and increases in the number of young adults who are deferring marriage and living independent of their parents. This is clearly indicated by the fact that Virginia's household size was 3.5 persons in 1960, while in 1990 it is anticipated to be 2.3 persons. And these trends are expected to continue. Twenty-five year projections for the Washington metropolitan area anticipate a 32 percent increase in population but a 47 percent increase in the number of households.

Since the end of the Second World War, we have tended to accommodate most of our population growth in the suburban areas surrounding our central cities, a trend that shows few signs of abating. Suburban development, and that which occurs in the more rural fringe areas, consumes land at an even faster rate than the rate of population growth. A recent study documents that in nearby Maryland between 1970 and 1980, population increased by 7.5 percent while developed acreage increased by 16.5 percent. This doubling of the rate of land consumption over population growth was caused primarily by low density, large lot residential development.

As is usually the case, population and economic growth can be mixed blessings. Even though opportunities to improve the standards of living are created, these effects can jeopardize the natural resource base upon which rural economies depend. Therefore, there is a need to manage growth so that the positive benefits out-weigh the negative impacts. *The Future of Agriculture, Forestry, Food Industries and Rural Communities in Virginia: A Report to the Governor (Supplemental)*. January 1987

While no comparable figures have been collected for Virginia, this phenomenon clearly exists here as well. Population is growing in a way that consumes large portions of land for low intensity uses. For instance, one recent study, while perhaps extreme in its views, estimates that the Richmond metropolitan area will see a 200-300 percent increase in total land consumption from 1986 to 2010 while only experiencing a 36 percent increase in population. Further, this is not just a problem in rapidly growing areas. Even communities experiencing limited growth often see that growth occurring in low density developments outside established communities.

III. ISSUES ASSOCIATED WITH POPULATION CHANGE AND LAND DEVELOPMENT

Unequal Opportunities. The uneven regional changes in population from extremely high rates of growth to population loss can cause stresses in both types of communities and competition among localities for assistance from the state. The Commission found these stresses are especially evident in the areas of housing, employment, and infrastructure development.

Housing costs are so high in some areas of Northern Virginia that communities cannot house their service workers, and families are forced to locate in less expensive semirural areas. Consequently, agricultural land in farming communities often is consumed, damaging the traditional economy but not replacing it with other community-based sources of employment. Both the new residents and the community's other workers often are forced to commute long distances. Thus, the demand for highways increases as does the use of the automobile. (In one such county, a recent 31 percent population increase was accompanied by an 84 percent increase in automobiles.)

In many distressed areas, however, housing is often disproportionately in disrepair, and neither the owners nor the community is in a position to improve it. One example of this problem is lack of indoor plumbing; over 53,000 year round housing units in Virginia are without any plumbing. This is often, but not solely, a rural phenomenon and frequently is found in counties experiencing population decline or limited growth (Appendix D, Figures 2 and 3).

The nature of employment in the Commonwealth has changed considerably over the last twenty years. While population has grown dramatically, the number of jobs in the manufacturing and mining sectors has remained constant and is projected to remain at about today's levels. During this same period, employment in the construction, finance, and transportation and utilities sectors grew modestly, but future growth in these areas is limited. Only in government, trade, and, especially, the service sectors is there evidence of both past and future growth (Appendix D, Figure 4). Not surprisingly, projections of changing occupations also predict rapid increases in the need for service workers and persons in the professional/technical, managerial, and sales areas.

Thus, it is fair to note that there will be a demand for both low and high skilled labor and that unemployment in the Commonwealth is likely to remain relatively low. However, opportunities will not be evenly distributed geographically, and fairly high unemployment may be found in the future--as at present--in areas of limited growth (Appendix D, Figures 2 and 5).

For the most part, these jobs are not tied to a natural resource base, and they often require the presence of other individuals for their completion; therefore, most job creation is anticipated to occur within the urbanized eastern third of the state.

Resource dependent employment generally is on the decline. Today, many of those working the woods, farming, and harvesting our rivers and the Bay do so on a part-time basis. In fact, over 70 percent of Virginia farm family income is from non-farm sources. For the communities in which these individuals and their families live, growth and its accompanying development can be a two-edged sword. Jobs outside of the resource-based industries they have traditionally worked are essential if these workers are to remain in their home communities. However, if not appropriately managed, the growth that often accompanies new jobs can destroy prime farmland and fisheries habitats, limiting further these traditionally valued occupations and eliminating desirable open space.

Sprawl. Current growth and development patterns encourage sprawl: low density land development (generally considered to be four units per acre or less) that occurs in a hop scotch pattern. Sprawl has been known for some time to be a costly and inefficient use of land. Given present development conditions, low density housing initially may be less expensive for the individual homeowner since land at the edge of an urbanizing area is cheaper than that closer in. Also, semirural land often is developed with wells and septic systems and in areas providing a minimum of community services.

Subsequently, however, this pattern of land development becomes expensive for communities as the costs associated with adding infrastructure (highways, water and sewer) across scattered acreage are very high. One estimate places current (1986) public system water needs at more than \$600 million while wastewater needs are estimated at nearly \$800 million. (Appendix D, Table 1) Anticipated future infrastructure costs, which currently are being assessed by the Commission Studying Local Infrastructure Needs and Revenue Resources (HJR 432), will undoubtedly be higher.

While most water supply and wastewater needs are undertaken by local governments, many highway projects are funded by the state. These costs, too, are soaring, and there is no end in sight. For instance, shortly before the recent transportation bond issue, the state spent approximately \$121 million on primary, secondary and urban roads in one year. In the current year, the Department of Transportation will spend nearly \$500 million, but that is not the end of it. Maintenance expenses over the period 1985-1995 will more than double. And none of these figures include what local governments spend on roads.

The state needs a capital investment program to guide state investment decisions. Formulating a long-term capital investment program would allow policy makers to establish capital spending criteria that serve state policy objectives. *Towards a New Dominion: Choices for Virginians, Report of the Governor's Commission on Virginia's Future. December 1984.*

The Commission recognizes that efficient land use patterning would not make the need for water, sewers, and roads disappear. However, as has been known for some time now, a better structured and more timely buildout of development than that which we presently undertake can be cost effective initially and less expensive in the long run.

Environmental Degradation. One of the most critical consequences of the expansive, carelessly placed development that may all too often accompany growth--especially very rapid growth--is the damage to or loss of irreplaceable natural resources. The very characteristics of a locale--scenic vistas, open space, or nearby wildlife--that make it a desirable place to live often fall victim to their own popularity. Further, water quality, prime agricultural land, wetlands, and forests may be permanently lost or irrevocably damaged, unnecessarily, through the scattered placement of low density housing, poorly managed construction, improperly placed or maintained septic systems, excessive design criteria on low use roads, and miles of paving and acres of parking.

Wetlands are a prime example. Approximately 76,000 acres of Virginia wetlands were lost during the period 1950 to 1980, mostly due to their conversion to agricultural uses. While there are no comparable figures available for the past decade and the rate of loss appears to have abated, the problem still exists and is increasingly one of urbanization. Virginia is presently making a concerted effort to limit these losses and additional recommendations to that end have been developed recently by the Virginia Nontidal Wetlands Roundtable.

Prime agricultural land is among the first to fall to scattered development because it tends to be relatively level and available in large sections. As residential use increases in a previously agricultural area, conflicts between the different land users can occur; basic agricultural activities, which by their very nature can be dirty, smelly, or take place in the early hours of the day, are often found undesirable by homeowners. Agriculture can become difficult amid suburbanization, and further loss of agricultural land generally follows.

Certain changes in land use are inevitable as our population

grows and we seek housing and employment for future generations. Of great concern to the Commission, however, is how we can minimize those losses through the use of new technologies, appropriate and careful planning, and changes in our consumptive lifestyle. Our current institutional arrangements do not appear to be up to the job of managing our growth in a way that sustains our natural resources and our quality of life. The Commission has found that all too often there is a lack of coordinated planning at the state level, regionally among localities, and between the state and local governments.

IV. GROWTH, DEVELOPMENT AND GOVERNMENTAL STRUCTURES

Local Governments. Land use decisions traditionally have been the function of local governments. For some time now local governments have had at their disposal the basic land management tools: comprehensive planning, zoning, and subdivision ordinances. But not all localities use these basic tools. For instance, in 1988, while all cities, 98 percent of counties, and 80 percent of towns had comprehensive plans, only 71 percent of counties and 19 percent of towns had zoning ordinances. Further, many who have these structures in place, would appear unable to deal effectively with them since only 83 percent of cities, 53 percent of counties, and 10 percent of towns employed planning staff. (It should be noted, however, that some counties provide staff to towns within their borders, and Planning Districts also supply professional assistance to some of their constituent localities.)

Nevertheless, many local governments are conscientiously working to be creative and forward thinking in their land use decisions. This is especially true of high growth areas and those jurisdictions on the edge of these areas which see themselves succumbing to forces over which they seem to have little control. While many promising developments are occurring, efforts at growth management are often difficult for localities that must obtain individual permission from the legislature to enact new planning tools or that constantly face limiting judicial interpretations of their actions. Issues surrounding downzoning of land for commercial development in Fairfax County and transferable development rights in Virginia Beach are current examples of these issues.

Local governments should be empowered and encouraged to deal innovatively and responsibly with complex land use problems. *Towards a New Dominion: Choices for Virginians, Report of the Governor's Commission on Virginia's Future. December 1984*

Where growth is occurring very rapidly, and especially where land management tools may not be well institutionalized, local governments may be unable to keep pace with the development of needed infrastructure. Then, instead of the locality's comprehensive plan and capital facilities program leading the direction of development in an orderly fashion, independent developer decisions may become the guiding growth force in the area.

Similarly, in many localities, especially in low growth areas, the perception often exists that any development is better than no development. It appears that often too little is known both by the general public and by decision makers about the real and long-term costs of scattered and unmanaged development.

It is also true that the dependence of local governments on the property tax sometimes fosters community belief in growth--any growth--as a solution to economic problems. Further, it creates competitiveness among localities within an area, a problem exacerbated by the small size of Virginia's counties and our unique structure of independent cities.

It is increasingly self-evident that some governmental problems, especially those concerned with preserving the environment, are so difficult or pervasive that they cannot be resolved solely through unilateral local action. *The Need to Review Virginia's Local Government Structure. Report of the Local Government Attorneys of Virginia, Inc. March 1988*

Natural systems, like water in a stream, flow between political boundaries. Highways, too, move from jurisdiction to jurisdiction. Thus, growth initiated in one area can quickly spill its impacts over onto its neighbors. One community builds a shopping center--and garners the taxes such a development produces--while its neighbor may receive contaminated runoff from the parking lot and traffic congestion. Virginia's governmental system, as presently structured, provides limited mechanisms for considering regional impacts of local decisions, and this is evident now, as never before in our history. With the projected growth described earlier in this report, it is obvious that this situation is going to become worse. The Commission believes many local governments are trying to manage growth and that it would be beneficial for them to do this in fuller partnership with the state.

Planning District Commissions. A standard mechanism for resolving interlocal conflicts or rationalizing decisions affecting several jurisdictions is the regional planning or development agency. Virginia's twenty-two Planning District Commissions (PDCs) were established in 1968 with a number of purposes, among them fostering planning for development, performing governmental

functions regionally, and deterring fragmentation of services. PDCs are corporate bodies having political functions whose membership is made up of the jurisdictions within their territory.

They receive funding on a per capita basis from the state and their localities. In addition, PDCs may receive monies from the federal government, from special contracts or from other sources. Federal dollars, which constituted 73 percent of PDC funds in 1976 now make up only 20 percent of their budgets. During the same time, the state's share has moved from 11 to 35 percent. Local governments, themselves, in one form or another, make up the remainder.

For a variety of reasons, Virginia's PDCs do not presently play as great a role in mediating interlocal land use conflicts, creating regional service areas, or focusing on regional environmental problems as the Commission feels would be useful. The voluntary nature of its membership makes it rather easy for some jurisdictions to opt out of the PDC structure. Consequently PDCs may be cautious in their actions and their recommendations. Further, many PDCs have limited staff capabilities, and these often are used to provide technical assistance to member localities. A recent study shows a range of staff sizes from 4 to 25, with the average being just under 9 and the majority having a staff of 5 to 8 persons.

Few incentives appear to exist at present for localities to cooperate in regional activities such as planning and service delivery. Nor does the Commonwealth regularly make use of the PDCs or other regional entities in the planning of facilities, the delivery of services, the review of projects, or for assessments of the impacts of its programs on local governments. There are neither sufficiently institutionalized carrots nor sticks for local cooperation, although Governor Baliles, in a speech this fall to PDC directors, supported such actions, and the state has begun promoting regional correctional facilities.

The planning district commissions should be given a key role in developing and administering the Commonwealth's land use policy; they should be given the authority and resources necessary to play that role. *Towards a New Dominion: Choices for Virginians, Report of the Governor's Commission on Virginia's Future. December 1984.*

Some PDCs run economic development programs despite the fact that local dependence on the property tax can make such regional activities difficult. Other programs such as health care and human services are well suited to regionalism. As previously noted, the protection of environmental resources such as

groundwater, shorelands, and reservoirs and the construction of regional infrastructure, both of which are closely related to growth and development, are activities well suited to a regional approach but are too infrequently undertaken regionally. Consequently, it appears to the Commission that Virginia's PDCs are an underutilized resource.

State Government. The Code of Virginia, Section 10-178 declares:

It shall be the continuing policy of the government of the Commonwealth--in cooperation with the federal government, other state governments, local governments, other public and private organizations, and individuals --to initiate, implement, improve, and coordinate environmental plans, programs, and functions of the State in order to promote the general welfare of the people of the Commonwealth and fulfill the State's responsibility as trustee of the environment for the present and future generations.

The protection of the environment in the face of the demands on our resources from present and future growth and development requires better information, more cohesive state policies, and greater institutional capacity than the Commission believes is presently available. Although strides are being made in data collection, mapping, information display, and interpretation, insufficient land use and growth information resides with the state at present. While the Department of Planning and Budget collects some of this information, it has a short to middle-range orientation and is budget driven. Other agencies, such as the Department of Conservation and Recreation, the Department of Housing and Community Development, the Virginia Employment Commission, and the Council on the Environment, also collect and process some of this information, but no agency of state government can provide appropriate comprehensive statewide growth and land use information.

Land-use considerations are basic to decisions affecting growth and resource utilization since the commitment of land to a specific purpose directs and limits the available development alternatives within a geographic area....A positive coordinated process for land-use planning, encompassing governmental and citizen participation, is essential if the Commonwealth is to derive maximum benefit from its resource potential....One issue that transcends all individual land-use issues involves the need for general growth and development policies. *Report to the Governor: Findings and Recommendations on a State Posture in Land Resources Issues. December 1977*

But more important, there is a lack of consistency and coordination across state agencies as they deal with growth and development issues. Many state government activities either directly or indirectly drive the growth and development of local areas. Sometimes The Commonwealth seems to recognize this, as when it constructs a highway for purposes of economic development. At other times, there seems less awareness that every river crossing, every by-pass, every intersection, every community college, prison, or water impoundment serves not just the people already near it and those who would settle in the area without it. Every one of these constructions is in and of itself a cause of growth and of the land development which follows that growth.

The Commonwealth has policies and programs for the protection of water, air, and endangered species but it lacks any long range growth policies. Without such policies the state has no means to evaluate the appropriateness of its actions and expenditures. It cannot easily provide guidance to regional agencies in the analysis of developments having regional impact, and it has no basis upon which to offer incentives to local governments to improve their land use regulations.

The Commission has noted the extraordinary backlog of unmet infrastructure needs in roads, mass transit, water supply, and wastewater projects. Many of these needs have been met in the past through a combination of state, local and federal funds. In the near term, at least, federal dollars are likely to decrease, and the state may have to play a greater role in their future construction. Consequently, the opportunity for the state to influence growth and development patterns directly will also increase. If present trends continue, this will happen in a vacuum. The Commission believes this is inappropriate.

V. FINDINGS AND RECOMMENDATIONS

The Commission finds that the consequences of current growth and development patterns throughout the Commonwealth are often inefficient and inequitable, and that the Commonwealth cannot rely on its existing institutional arrangements to carry us forward responsibly into the 21st Century. Further, the Commission believes that the doctrine of the Public Trust carries with it a state responsibility for environmental guardianship, including the protection of the lands of the Commonwealth. To emphasize this, the Commission would like to repeat what has been said so well by an earlier commission:

To deal with the increasing pressures on land--to protect it and use it wisely for the long-term benefit of all Virginians--the Commonwealth should take a more positive leadership role....The Commonwealth needs now

to define those aspects of land use that are of regional or statewide concern, establish clear policies to carry out the Constitutional mandate to protect and enhance Virginia's land resources, and create effective mechanisms to assert the regional and state interests on a continuing basis. *Toward a New Dominion: Choices for Virginians, Report of the Governor's Commission on Virginia's Future. December 1984*

The Commission believes this state role must have the following characteristics:

- o It must consist of a shared leadership between the governor and the legislature.
- o It must include the assumption of appropriate financial responsibilities. Programs and actions assumed for the good of the Commonwealth should be supported by the people of the Commonwealth.
- o It must include an assessment of the Dillon Rule. The Commonwealth should consider comprehensively those land management authorities that are necessary for local governments to responsibly manage growth and authorize them. It should determine those authorities that are best for it to retain and then, having retained them, it should use them.
- o It must provide a vehicle for conflict resolution among localities and for assessments of regional impacts.

The Commission believes that the state must assume appropriate planning and growth management responsibilities; this means the development of a coherent set of goals and policies to protect the environment while addressing the reality of growth and development. Further, state infrastructure expenditures must reflect these policies and must be supportive of and coordinated with local governments' plans.

The Commission believes that the problems associated with water treatment, wastewater management, air and water quality protection, the reduction and processing of solid waste, and other issues associated with continued population growth may be alleviated, at least in part, by advances in technology. The state should play a greater role as a collector and disseminator of this information.

Finally, the Commission wishes to emphasize that while it believes that the state must assume the more active role described above, it fully endorses the concept that local governments are the appropriate jurisdictions to undertake on-going land management decisions. What the Commission is seeking is a

newly defined partnership for the benefit of all regions of the Commonwealth and of future generations.

Recommendations. Given the complexity and importance of these issues, the need for careful and detailed work, and the importance of on-going communications with persons from all parts of the Commonwealth and all sectors of the economy, the Commission recommends the creation by the legislature of an expanded statutory Commission on Population Growth and Development to continue its work and to make recommendations for legislation. (The final draft version of the bill is shown in Appendix E.)

A statutory commission will provide stability to a delicate process that must be sensitive to regional differences, respectful of all levels of government and which must reach a broad consensus. The Commission should have funding adequate to provide limited full-time staffing which it believes is essential to successfully complete its objectives.

The Commission will work closely with existing Commissions and study groups and with the agencies, institutions and people of the state. We, the members of the Commission, strongly encourage the continuation of this work because we believe that this is one of the most important actions the Commonwealth can undertake for our children and our grandchildren.

Respectfully submitted,

W. Tayloe Murphy, Jr., Chairman
Joseph V. Gartlan, Jr., Vice Chairman
Robert L. Calhoun
Whittington W. Clement
Elmo G. Cross, Jr.
Mary A. Marshall
John Watkins
James N. Carter, Jr.
Frank A. Crovo, Jr.
Jack D. Edwards
Myron P. Erkiletian
William J. Herring, Sr.
Carlton H. Hershner, Jr.
Grace V. Norbrey
Margaret D. Porterfield
Charles W. Steger
Stuart W. Connock, ex officio
John W. Daniel, II, ex officio
Curry A. Roberts, ex officio

APPENDIX A

COMMISSION ON POPULATION GROWTH AND DEVELOPMENT

W. Tayloe Murphy, Jr., Chairman
Virginia House of Delegates
Warsaw

Joseph V. Gartlan, Jr., Vice Chairman
Senate of Virginia
Mason Neck

Robert L. Calhoun
Senate of Virginia
Alexandria

Whittington W. Clement
Virginia House of Delegates
Danville

Elmo G. Cross, Jr.
Senate of Virginia
Mechanicsville

Mary A. Marshall
Virginia House of Delegates
Arlington

John Watkins
Virginia House of Delegates
Midlothian

James N. Carter, Jr.
President
The Bay Company
Irvington

Frank A. Crovo, Jr.
President
RF & P Corporation
Richmond

Jack D. Edwards
Professor of Government
College of William and Mary
Member, Board of Supervisors
James City County

Myron P. Erkiletian
President
Erkiletian Construction Company
Alexandria

William J. Herring, Sr.
President
Hearndon Construction Corporation
Chesapeake

Carlton H. Hershner, Jr.
Director
Center for Estuarine Research
and Policy
Virginia Institute of Marine Science
Gloucester Point

Grace V. Norbrey
Land Information Coordinator
Cooperative Extension Service
Virginia State University
Ettrick

Margaret D. Porterfield
Executive Director
Chamber of Commerce of the
Eastern Shore
Accomac

Charles W. Steger
Dean
School of Architecture and Urban
Studies
Virginia Polytechnic Institute and
State University
Blacksburg

Stuart W. Connock, ex officio
Secretary of Finance
Richmond

John W. Daniel, II, ex officio
Secretary of Natural Resources
Richmond

Curry A. Roberts, ex officio
Secretary of Economic Development
Richmond

APPENDIX B

SOURCES

Findings and Recommendations on a State Posture in
Land Resource Issues: Report to the Governor
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Richmond, VA
December 1977

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Virginia Cooperative Extension Service
Virginia Polytechnic Institute and State University
Blacksburg, VA
January 1987

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February 1989

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Richmond, VA
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University of Virginia
Charlottesville, VA
March 1988

Population Growth and Development in the Chesapeake Bay
Watershed to the Year 2020

The Report of the Year 2020 Panel to the Chesapeake
Executive Council

December 1988

Population Growth in Virginia: the 20th Century and Beyond
Prepared for the Joint Legislative Commission on Population
Growth and Development

Center for Public Service

University of Virginia

Charlottesville, VA

July 1989

Towards a New Dominion: Choices for Virginians

Report of the Governor's Commission
on Virginia's Future

Richmond, VA

December 1984

Water for Tomorrow: a Report on Water and
Wastewater Needs in Virginia

Virginia Water Project, Inc.

Roanoke, VA

October 1988

APPENDIX C

PRESENTATIONS

July 20, 1989

*Population Growth and Development in
the Chesapeake Bay Watershed to the
Year 2020, report of the Year 2020 Panel*

Fritts Golden
President
Rogers, Golden, & Halpern
Technical Staff, Year 2020
Panel

Population Growth and Development in
Virginia

Julia H. Martin
Research Director for
Demographics
Center for Public Service
University of Virginia

Housing

Neal Barber
Director
Virginia Department of Housing
and Community Development

Energy: the Regulatory View

William F. Stephans
Director, Division of Energy
Resources
Virginia State Corporation
Commission

Water Availability and Distribution

William R. Walker
Director
Virginia Water Resources
Research Center
Virginia Polytechnic Institute
and State University

Infrastructure

Richard Freeman Sale
Deputy County Administrator
for Community Development
Chesterfield County

August 24, 1989

Waste Water

Richard F. Weeks
Policy and Budget Manager
Virginia Water Control Board

Transportation

**Ray D. Pethtel
Commissioner
Virginia Department of Trans-
portation**

Solid Waste

**Cynthia V. Bailey
Director
Virginia Department of Waste
Management**

September 28, 1989

**Anticipated Growth and Development Fore-
cast for the Washington, DC Area:
1985-2020**

**Robert E. Griffiths
Director, Metropolitan De-
velopment and Information
Resources
Metropolitan Washington
Council of Governments**

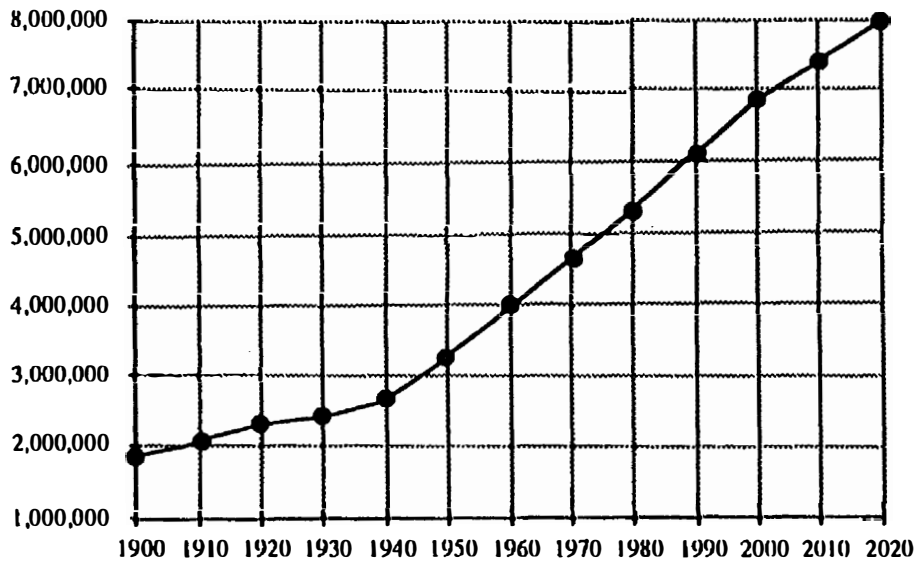
The Virginia Growth Management Forum

**Susan Dull
Virginia Coordinator
Chesapeake Bay Commission**

**Growth Management Strategies in Other
States**

**Edwin Thomas
Community Conservation Group
Severna Park, MD**

Figure 1. Population Growth in Virginia, 1900 - 2020



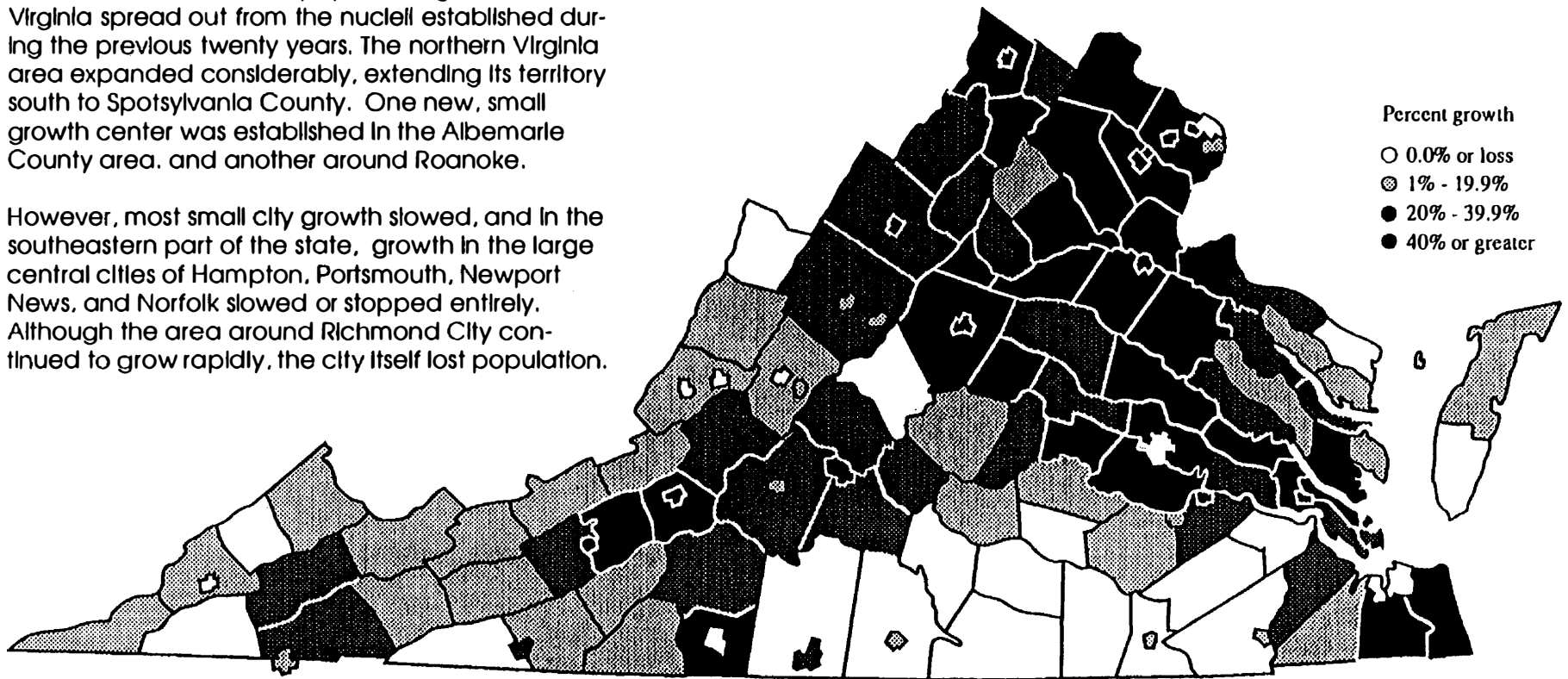
The Decennial Census of the United States shows that the population of Virginia increased from 1,844,469 in 1900 to 5,346,818 in 1980, the year of the most recent census. Projections from the Bureau of the Census indicate continued growth, to 7,943,000 in 2020. Thus, if these projections prove accurate, Virginia's population will have increased over fourfold in 120 years.



Figure 2. Population Change in Virginia Localities, 1960-1980

Between 1960 and 1980, population growth in Virginia spread out from the nuclei established during the previous twenty years. The northern Virginia area expanded considerably, extending its territory south to Spotsylvania County. One new, small growth center was established in the Albemarle County area, and another around Roanoke.

However, most small city growth slowed, and in the southeastern part of the state, growth in the large central cities of Hampton, Portsmouth, Newport News, and Norfolk slowed or stopped entirely. Although the area around Richmond City continued to grow rapidly, the city itself lost population.



D-2



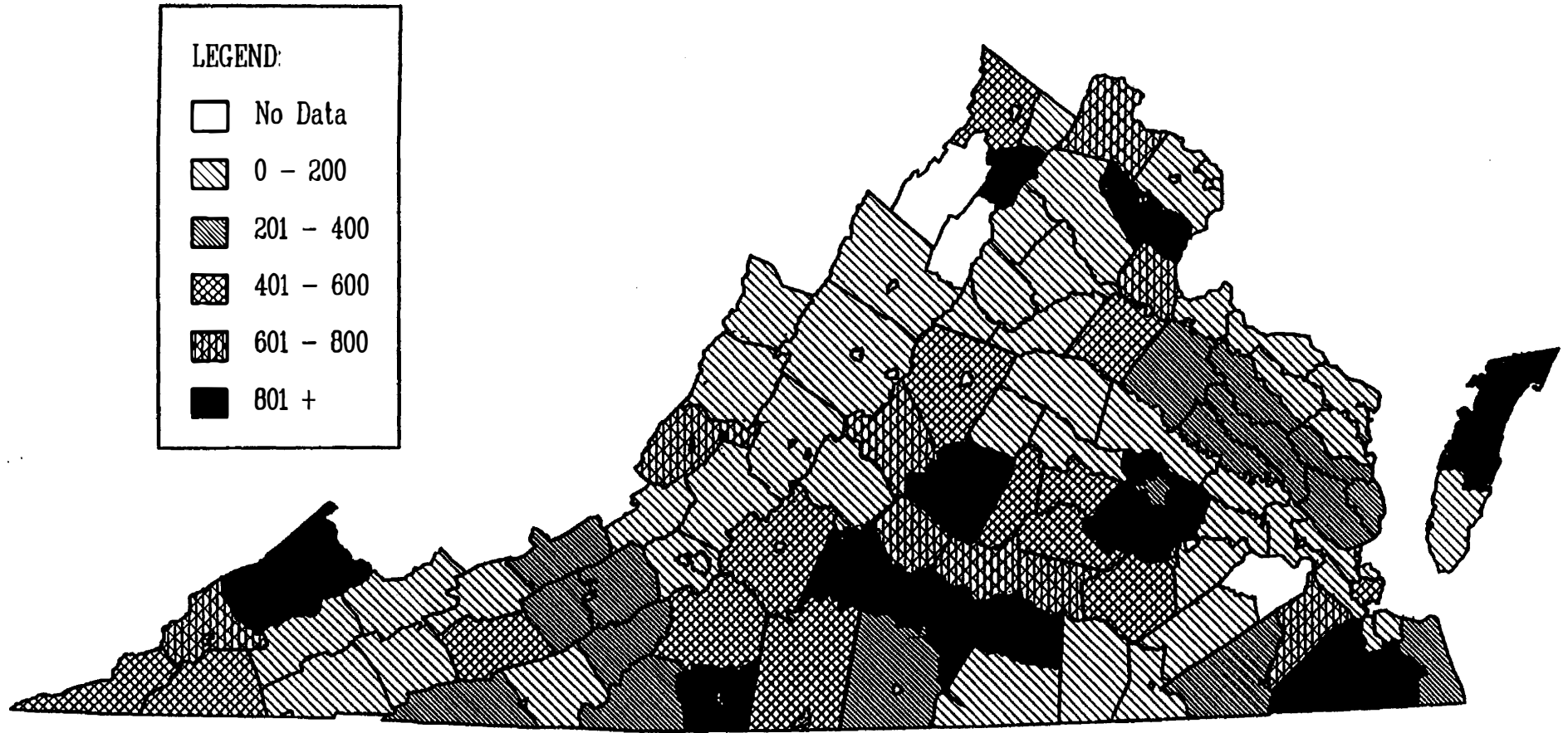


Figure 3: Estimated Number of Homes with Failing or Inadequate Disposal Systems

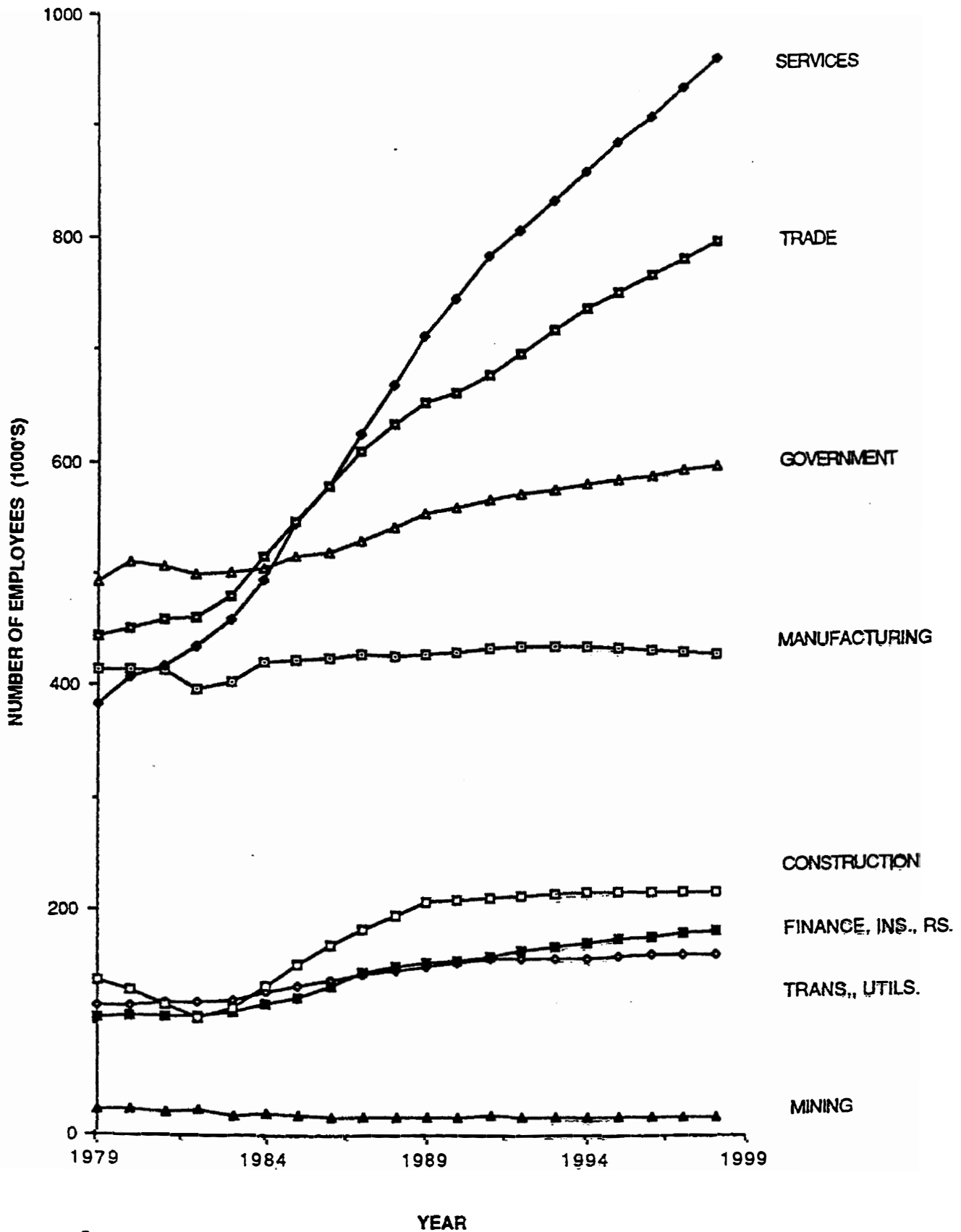


Source: Water for Tomorrow. Virginia Water Project, Inc., p. 23

Prepared by: VA EcoMAP SYSTEM, Council on the Environment

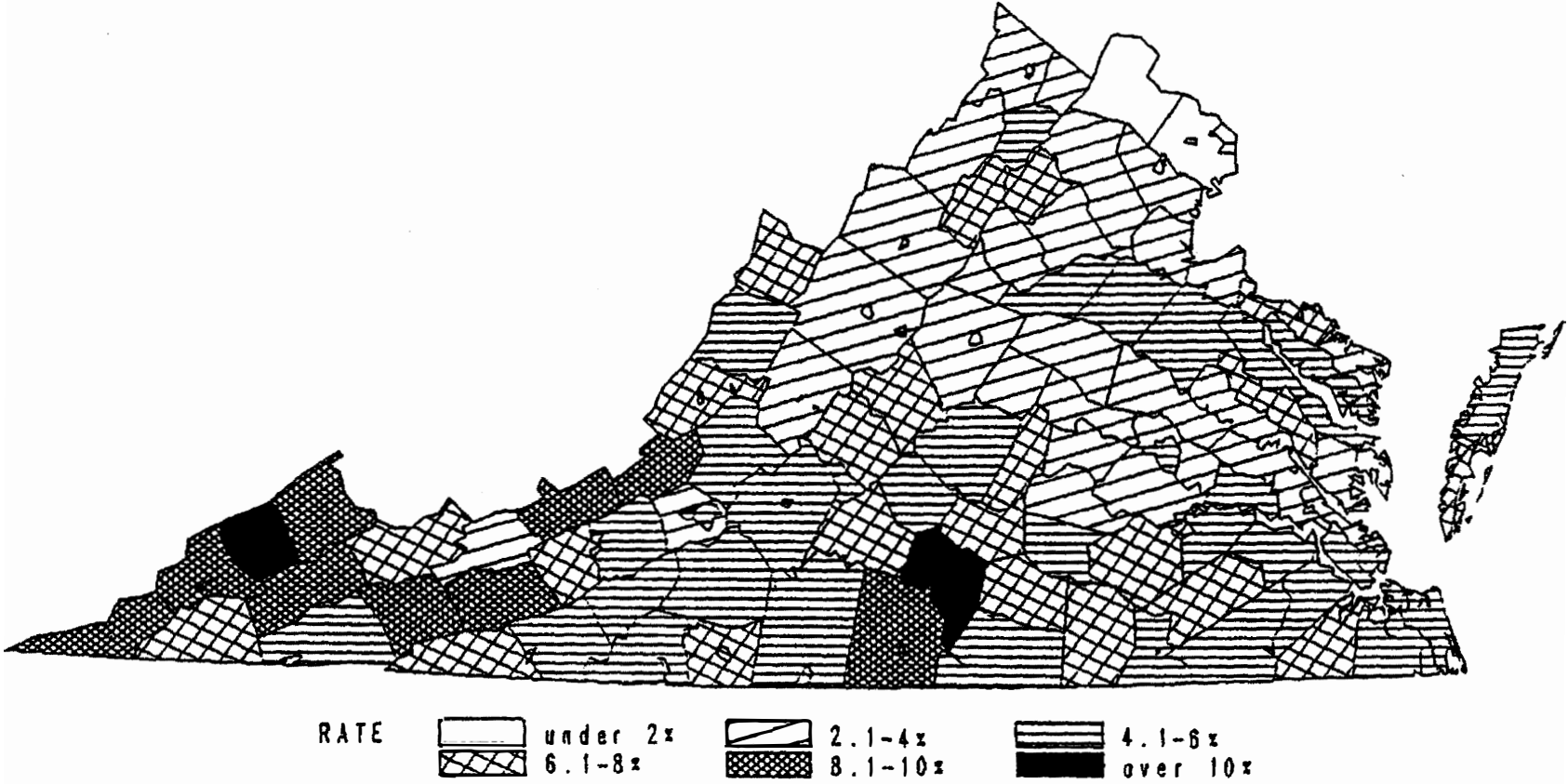


Figure 4. Virginia Number of Employed by Sector



Source: Virginia Employment Commission

Figure 5. Virginia Unemployment Rates, October 1989



Source: Virginia Employment Commission

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Table 1. Summary Statistics: Status of Water Systems in Virginia

	Counties	Cities	Both
Families below the poverty level	71,651	57,368	129,019
Number of householders 65 and over			
.....below the poverty level	14,731	9,899	24,630
Number of year round housing units	1,230,548	769,548	2,000,096
.....on public or private water system	726,263	743,159	1,469,422
.....with individual drilled well	332,606	21,051	353,657
.....with individual dug well	98,018	3,781	101,799
.....with some other water source	73,657	1,066	74,723
.....without complete plumbing for exclusive use	87,836	12,694	100,530
.....without any plumbing	50,479	2,712	53,191
.....with 1/2 bath or none	92,475	14,814	107,289
.....served by public sewer	607,762	707,517	1,315,279
.....with septic tank or cesspool	510,343	56,108	566,451
.....with other sewage disposal means	84,944	52,389	90,232
Estimated number of homes with failing or inadequate disposal systems	40,665	4,559	45,224
Estimated number of systems not correctable with present technology	7,095	1,133	8,228
Estimated number of inadequately constructed individual drilled wells	164,487	6,318	170,805
Estimated number of individual dug wells not using approved construction	65,001	2,938	67,939

=====

Costs (In Thousands)

Estimated cost of drainfield construction	61,491	6,125	67,616
Estimated cost to upgrade individual drilled wells	122,908	3,509	126,417
Estimated cost of approved individual water supply	314,830	6,812	321,642
Combined individual costs	504,826	14,466	519,292
Total current water needs (public systems) 1986	225,187	402,243	627,430
Total future water needs (public systems) 2005	804,642	466,695	1,271,337
Total current wastewater needs (public systems) 1986	393,331	400,604	793,935
Total future wastewater needs (public systems) 2005	550,518	442,856	993,374
Total present needs 1986	1,212,659	821,259	1,942,918
Total future needs 2005	1,859,197	927,723	2,786,920
Total needs (present-2005)	2,976,431	1,749,086	4,725,517

Source: Water for Tomorrow, Virginia Water Project, Inc. Page 37

1 D 12/12/89 Farber C 12/29/89 smw

Appendix E

2 SENATE BILL NO. HOUSE BILL NO.

3 A BILL to amend the Code of Virginia by adding in Title 9 a chapter
4 numbered 22.3, consisting of sections numbered 9-145.8 through
5 9-145.12, relating to the establishment of the Commission on
6 Population Growth and Development.

7

8 Be it enacted by the General Assembly of Virginia:

9 1. That the Code of Virginia is amended by adding in Title 9 a
10 chapter numbered 22.3, consisting of sections numbered 9-145.8 through
11 9-145.12, as follows:

12 CHAPTER 22.3.

3 COMMISSION ON POPULATION GROWTH AND DEVELOPMENT.

14 § 9-145.8. Commission established; duties.--The Commission on
15 Population Growth and Development is hereby established and shall be
16 referred to in this chapter as the Commission. It shall perform the
17 following functions:

18 1. To study and evaluate the consequences of present and
19 anticipated changes in population and patterns of development on the
20 economic vitality and environmental health of all regions of the
21 Commonwealth;

22 2. To develop initiatives which ensure that adequate planning,
23 coordination, and data dissemination occur at all levels of
24 government, to guide population growth and development in Virginia,
25 including consideration of the appropriate state, regional, and local
6 responsibilities;

1 3. To recommend alternatives for meeting the funding
2 requirements of infrastructure improvements and conservation measure
3 which will enhance the Commonwealth's ability to manage its population
4 growth and development;

5 4. To propose innovative and cooperative land management
6 techniques which will accommodate population growth and development;

7 5. To examine and evaluate methods of coordinating activities of
8 the General Assembly and state agencies relating to matters of
9 population growth and development, including but not limited to the
10 consideration of a statewide planning process and the role of the
11 state in such a process; and

12 6. To report annually its findings and recommendations to the
13 Governor and the General Assembly.

14 § 9-145.9. Membership; terms; advisory council; compensation;
15 chairman and vice chairman.--A. The Commission shall be composed of
16 thirty-three members representing the Virginia General Assembly, local
17 and regional government, and citizens at large. The members shall be
18 selected as follows:

19 1. Ten legislative members consisting of four members of the
20 House of Delegates appointed by the Speaker; three members of the
21 Senate appointed by the Senate Committee on Privileges and Elections;
22 and the Chairmen of the House Committee on Appropriations, the House
23 Committee on Finance, and the Senate Committee on Finance. The seven
24 legislative members, previously appointed by the Speaker of the House
25 of Delegates and the Senate Committee on Privileges and Elections to
26 the Commission on Population Growth and Development, created by House
27 Joint Resolution 435 of the 1989 Session, shall continue as members of
28 the Commission.

1 2. Eight members appointed by the Governor from among residents
2 of this Commonwealth who are representatives of local and regional
3 governments. Of these members the Governor shall appoint three
4 members to represent municipal government from among six persons
5 nominated by the Virginia Municipal League; three members to represent
6 county government from among six persons nominated by the Virginia
7 Association of Counties; and two members to represent regional
8 planning interests from among four persons nominated by the Virginia
9 Association of Planning District Commissions.

10 3. Fifteen members at large consisting of the nine citizen
11 members appointed to the Commission on Population Growth and
12 Development created by House Joint Resolution 435 of the 1989 Session
13 who shall continue to serve as members of the Commission and six
14 additional members to be appointed by the Governor from among
15 residents of the Commonwealth. The fifteen citizen members shall
16 reflect a balance of the following: development/real estate, economic
17 development, manufacturing/industrial, agricultural, and forestry/wood
18 products segments of the economy; the conservation community; and
19 academic institutions having expertise in public finance, land use
20 planning, environmental science, and demography. Commission members
21 shall be selected from all regions of the Commonwealth to ensure the
22 geographic diversity of the Commission's membership.

23 B. The terms of office of the legislative members shall be
24 coincident with their terms in the General Assembly. The continuing
25 and newly appointed citizen members shall serve for the duration of
26 the Commission, commencing from the effective date of this act. Any
27 vacancy that occurs shall be filled in a like manner.

28 C. The Governor's Cabinet Secretaries shall constitute an

1 Advisory Council to assist the Commission in its work with state
2 agencies and institutions.

3 D. The Commission may also establish advisory committees to
4 enhance its work. Such committees may be composed of Commission
5 members as well as other individuals selected by the Commission.

6 E. Commission members shall be compensated as specified in §
7 14.1-18 of the Code, and shall be reimbursed for their actual expenses
8 incurred in the performance of their duties in the work of the
9 Commission.

10 E. The Commission shall elect a chairman and a vice chairman
11 from among its members.

12 § 9-145.10. Staff support; application for and acceptance of
13 gifts and grants.--A. The Commission is empowered to employ such
14 staff as may be necessary to enable it to perform its duties as set
15 forth in this chapter. It is authorized to determine the duties of
16 such staff and to fix staff salaries and compensation within the
17 amounts appropriated therefor.

18 B. The Commission is further authorized to apply for, accept,
19 and expend gifts, grants, or donations from public or private sources
20 to enable it to better carry out its objectives.

21 § 9-145.11. Cooperation of other agencies.--All agencies of the
22 Commonwealth shall cooperate with the Commission and, upon request,
23 assist the Commission in the performance of its duties and
24 responsibilities.

25 § 9-145.12. Commission to expire.--The provisions of this
26 chapter shall expire on June 30, 1995, unless extended by an act of
27 the General Assembly.

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