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Selected aspects of Interstate 295: the interstate highway system of Virginia

Gilray Moyes Anderson

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SELECTED ASPECTS OF INTERSTATE 295
THE INTERSTATE HIGHWAY SYSTEM OF VIRGINIA

BY
GILRAY MOYES ANDERSON, JR.

A THESIS
SUBMITTED TO THE GRADUATE FACULTY
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JUNE, 1972
APPROVAL SHEET

The undersigned, appointed by the Chairman of the Political Science Department, have examined this thesis by

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Candidate for the degree of Master of Arts in Political Science, and hereby certify their approval of its acceptance.

[Signatures]

Robert F. Hasen

[Signature]

Philip L. Wheeler

[Signature]

Th. R. Morris
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CHAPTER I

INTRODUCTION

Man has come a remarkably long way since the invention of the wheel. Today this simple devise is the basis for countless tasks that have been delegated by man to do his work and provide for his pleasure. Henry Ford would never believe the progress that has taken place following his initial use of the automobile assembly line.

The wheel and Mr. Ford were instrumental in providing the world with millions of automobiles. At the beginning of the last decade 1,451,338 motor vehicles were registered in Virginia. By mid 1969, 2,112,486 vehicles were registered for use on the state highways. The rate of increase has been approximately 5.5 per cent for automobile registration in the past ten years. At the same time 2,300,000 persons were licensed to drive these cars in Virginia.¹

An automobile is a necessity, a hobby, a sport, a business, and at all times an expense. There is hardly a family that would be without a car. Many feel that two, even three are mandatory. The American people have demanded and the

¹Into the 70's: A Review of Virginia's Nine Year Highway Program (Submitted by the State Highway Commission to the Virginia Advisory Legislative Council, 1969), p. 9.
world automobile manufacturers have supplied more, better and safer cars. Automobiles produced today come equipped with such standard and optional features as seat belts, harness belts, shock absorbing steering columns, blow out proof tires, protected gas tanks, sealed luggage compartments, passenger compartment separation, steel beamed protected passenger compartments, glare resistant body parts, padded dashboards, safety locks and door releases and head restraints, to name a few.

With the cry for quality in the vehicles it drives and the tremendous increase in volume, the public has made increasing demands for higher quality roads to travel. The 1950's found this country with a vast volume of cars and automobiles accelerating at too great a speed for the highways provided for travel. The technological advances of the modern world made mobility a requirement for the needs of the people.

Former President Dwight David Eisenhower, the thirty-fourth President of the United States, on October 18, 1966 wrote a letter to James C. Hagerty, his former Press Secretary, listing twenty-three of the proudest achievements of his eight-year term. One of these was the "initiation, and the great progress in, the most ambitious road program by any nation in history." At the present time the United

States Government and the forty-nine states involved (Alaska is not included in the Interstate System) are in the process of constructing one of the safest, most beautiful, efficient and best planned high speed highway systems ever to be built. The federal government created the ground work for a 41,000-mile Interstate Highway System in 1956. This is also known as a system of National Defense Highways to insure that this country will be prepared to defend itself as quickly as possible from any form of invasion or aggression. The beginning of the German autobahns in the late 1920's provided a worldwide image to be followed. Adolf Hitler was responsible for convincing the world of the military value of such highways. The United States has learned through war experience the importance of a good means of land travel. The term "Interstate System" arose from the fact that it is essential to the national interest and because of "its primary importance to the national defense."3

Motorists will be able to travel nonstop except for possible rest, food and car service from the East Coast to the West Coast on the new highways. Interstate 80, beginning in New York City, will allow a motorist to travel west and on to Oakland, California, without ever leaving the Interstate System. Canada is linked to Mexico by I-5 from Washington to San Diego. The longest north-south route is I-95 from

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Houlton, Maine to Miami, Florida, making the old and notorious U. S. Route 1-301, connecting the same destinations, greatly outdated. All the forty-eight continental United States are tied to each other by the System without a traffic signal.4

The interstate highways will carry a fifth of the traffic in the country on little more than 1 per cent of its 3.7 million miles of public roads and streets. The system can possibly pay for itself over the first five years after completion in benefits totaling $11 million a year to highway users based on studies of completed interstate roads. These benefits result from time saved, lower accident costs, and lower operating costs. It is estimated that 8,000 lives a year nationwide will be saved.5 The higher design standards of the interstate highways has been responsible for saving the lives of an estimated 495 persons during the decade of the 1960's who would otherwise have died in traffic accidents on conventional roads in Virginia.6 The System is


6Into the 70's: A Review of Virginia's Nine Year Highway Program (Submitted by the State Highway Commission to the Virginia Advisory Legislative Council, 1969), p. 9.
estimated to be two and a half times as safe as conventional roads.\(^7\)

Driving time between major cities has been and will be with future completion reduced by as much as 25 per cent.\(^8\)

To exemplify the enormous nature of the project, 85 per cent of the System has been or will be built on entirely new location. An average rural mile costs about $732,000 and an urban mile $3,739,000. The Interstate System will have 15,500 stream and other types of bridges, 13,500 interchanges and 25,500 highway and railroad grade separations. The average distance between access interchanges will be four and a half miles in rural areas, closer in urban areas.\(^9\)

Anyone who has traveled in this state or this country, or even just driven about the City of Richmond, has traveled on an Interstate highway, has seen construction going on toward the completion of an interstate highway, or perhaps a green sign directing traffic to one.

The Interstate Highway System which is a national highway program initiated by the federal government, directly affects Virginia drivers and indirectly, all Virginians.


\(^8\) Ibid., p. 9.

\(^9\) Ibid., p. 10.
The System which is the largest public works program in the history of this country has greatly enriched the economy of Virginia. Land development around the Interstate has increased many times over. New industry is interested in areas around the highways. Industry depends on good safe high speed highways to bring its workers to their jobs and home again, to transport the raw materials and bring the finished products to market. Investments already made and those anticipated in the future by private enterprise in new residential, commercial and industrial facilities development are encouraging to the Interstate System. The groceries we buy in our supermarkets are fresher due to the quicker and easier means of transportation afforded by the Interstate System. Increased travel has meant larger tax revenues from gas, tires, and other automobile items. The safer roads mean a substantial reduction in accident costs and loss of human lives.

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10 Into the 70's: A Review of Virginia's Nine Year Highway Program (Submitted by the State Highway Commission to the Virginia Advisory Legislative Council, 1969), p. 5.

11 Ibid., p. 8.

Another reason for the effect on the population of Virginia is that the state itself is playing a good part in the Interstate System. The State of Virginia has 2.6 per cent of the highway mileage allotment of the 41,000 miles of the original national Interstate System. This percentage ranks Virginia fourteenth among the forty-nine states and District of Columbia with interstate mileage. Table I should be helpful in relating the mileage status of each state. This percentage means more in the light of the fact that Texas leads the nation with a little over 7 per cent, or 3,166.33 miles of planned interstate roadways. Alaska does not have any mileage planned. 13

The interstate highways are excellent roads that compare favorably with state expressways such as the New Jersey Turnpike and the Sunshine State Parkway in Florida. They have no stop signs, stop lights, or intersections. All traffic moves along at uninterrupted speed. A number of states share the maximum speed limit on the System of 75 miles per hour, although a few states have unlimited speed limits requiring motorists to use safe and reasonable speeds only. Virginia, as do some other states, has a posted forty miles per hour minimum speed limit. A speed limit map of the United States is shown on the following page. Page 9 is a table showing each of the participating state's share of interstate highway mileage.

# TABLE I

## STATES IN ORDER OF MILEAGE

Each State's Share in Total Interstate Mileage

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<tr>
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<tr>
<td>2</td>
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</tr>
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<td>3</td>
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<td>Florida</td>
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<tr>
<td>7</td>
<td>New York</td>
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<td>8</td>
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<td>9</td>
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<td>10</td>
<td>Arizona</td>
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CHAPTER II

HISTORY

Interstate 295, the planned partial circumferential around Richmond, Virginia is being planned and will be built with a good deal of highway history and experience on which planners and builders can rely.

Roads are as old as the wheel and the cavemen that invented it. Man had to clear a path to transport himself and his goods. The first settlers in this country initiated road building in America on existing Indian paths and trails. An account of the roads in the nation's infancy when the United States Constitution was ratified exemplifies conditions: "The country through which we passed was extremely dismal, being covered with forests upon which the axe has yet made but little impression. . . . our progress was very slow, not exceeding thirteen miles in four hours."¹

Today's highway system had its very beginnings in Indian trails. Examples of trails that later became well traveled roads are: The Path of Armed Ones, The Wilderness Road, Iriquois Trail, The Boston-Albany-Buffalo Road,

Nemscolin's Path, which became the National Road or Cumberland Road. The intersection of Indian trails was influential in the establishment of some of this country's largest cities, such as Boston, Detroit, Chicago and St. Louis, to name but a few.

As early as 1632 the Virginia House of Burgesses established a system of road administration. In 1639 the Massachusetts Bay Colony legislative body, the General Court, directed the building of roads from each town to its nearest neighboring town. Road building was further enhanced by the establishment of an overland postal system. The Boston Post Road was the first route over which a postal rider traveled. By 1717 regular mail service had been instituted between Boston, Massachusetts and Williamsburg, Virginia. The first toll road in America was built between Warm Springs and Jennings Gap, Virginia in 1785-1786. Toll roads or turnpikes, as they were called, were owned mainly by private stock companies during the late eighteenth and early nineteenth centuries. The Fairfax and Loudoun Turnpike Road

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3 Ibid., p. 10.


5 Mason, op. cit., p. 11.
Company built in Northern Virginia and was the nation's first such company. Another builder who operated in Virginia was the Little River Turnpike Company. Virginia aided these private companies by buying stock in them. The "Turnpike Era" lasted a little over a century, 1772-1875.

After this country won its independence, the military and the continuing westward expansion were influential in the building and improving of roads. In 1779 "the Virginia legislature authorized the improvement of Wilderness Trail" which ran through the Shenandoah Valley to Eastern Virginia. The National Road, mentioned earlier, was selected in 1806 by Congress to become a national highway from the eastern seacoast to the Ohio River. This roadway extended from Cumberland, Maryland westward through Ohio, Indiana and into Illinois by 1852.

The beginning of the twentieth century saw Virginia's highway structure as it stands today initiated. In March of 1906 the first Virginia State Highway Commission was initiated.

6 Vaughan, op. cit., p. 6.
7 Mason, op. cit., p. 31.
8 Vaughan, op. cit., p. 25.
9 Mason, op. cit., p. 17.
10 Ibid., p. 18.
established by law. The State Highway Commission was
renamed Department of Highways in 1927 with the Commission
being retained as the top administrative and policy making
body of the Highway Department. This interruption of
the history is inserted here because of the important role
the Highway Department has in directing Virginia's inter-
state highway program.

The twentieth century brought with it the first impor-
tant federal subsidy for road construction. Half a million
dollars was appropriated in 1913 for rural free mail delivery.
This preceded the organization of the Bureau of Public Roads
only five years after the turn of the century. In 1911
Claude A. Swanson, a Virginia Senator, introduced a bill
appropriating $20,000,000 annually for five years to aid
the local communities and states in the improvement of public
roads. This bill did not pass the Senate.

The first federal government assistance to the states
for highway construction came in 1916. The Federal-Aid for
Highway Act of this year provided for the classification of
highways and for federal funds to aid states in the improve-

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11Vaughan, op. cit., p. 11.
12Ibid., p. 15.
13Mason, op. cit., p. 51.
14Claude A. Swanson, speech in Senate of the United
States in advocacy of Senate Bill No. 2935, Printed by U. S.
ment of national and state highways. The idea of a na-
tional Interstate Highway System or Defense Highways, as
it is sometimes called, was born with this Act. The states
were responsible for an administrative and financial pro-
gram to provide for work on the different classes of roads
within its borders. The Act which was initiated in the
administration of Woodrow Wilson appropriated $75,000,000
to be spent over a five year period for the federal highway
program. The funds were to be fifty-fifty, the states and
the Federal Aid funds. The states paid for work and then
claimed reimbursement for the federal share. Virginia re-
ceived $1,429,000 out of this annual fund for general road-
way construction. This program was to become one of the
most successful of state-federal partnerships. This leg-
islation created a new era in this country's road building.

In order to be eligible for this aid a state had to
have a highway department to administer funds and to main-
tain constructed roads. Governor Andrew Jackson Montague

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15 United States Congress, House of Representatives, Committee on Public Works, 1968 National Highway Needs Re-
port, a Study Transmitted by the Secretary of the Department of Transportation to the Congress, in Accordance with the Require-
ments of Section 3, Senate Joint Resolution 81, Public Law 89-139, 90th Congress, 2nd Session, February, 1968 (Wash-

16 Vaughan, op. cit., p. 13.

17 Mason, loc. cit.
created a State Highway Commission in 1906.\textsuperscript{18} In 1916 Virginia established a system of state highways. Included in this system was the Valley Turnpike and the Richmond-Washington highway, predecessor of US 1.\textsuperscript{19}

Congress acted to restrict the construction of scattered roads in 1921 by restricting the use of federal funds to a network of connected highways selected by the states and limited to 7 per cent of its present existing road mileage.\textsuperscript{20} The Federal Bureau of Public Roads announced a long range program for the construction of a nationwide highway system in 1939. With the advent of World War II the program was halted along with most road building.\textsuperscript{21} In 1944 Congress authorized the establishment of an interstate highway system. The National System of Interstate and Defense Highways of this year was a comprehensive highway building program.\textsuperscript{22} The legislation directed that all possible metropolitan cities and industrial complexes be connected as directly as feasible to serve the national defense and connect our border

\textsuperscript{18}Vaughan, \textit{op. cit.}, p. 11.

\textsuperscript{19}Ibid., p. 14.


\textsuperscript{21}Mason, \textit{op. cit.}, p. 59.

\textsuperscript{22}1968 \textit{National Highway Needs Report}, \textit{loc. cit.}
points with routes of continental importance.\textsuperscript{23} Half a million dollars was appropriated for the first three post-war years. This money was to be divided for use for an Interstate Highway System ($225,000), for secondary roads ($150,000) and urban roads ($125,000). The proposed program was delayed because of the eventual slowdown of our peace-time economy.\textsuperscript{24}

It was not until 1956 that Congress finally acted to help solve the country's ever growing traffic problem.\textsuperscript{25} Credit is given President Dwight D. Eisenhower for the present Interstate Highway System. Eisenhower first proposed the bill in 1953. It finally passed into law on June 29, 1956.\textsuperscript{26} The Act was intended to insure a technically planned system to alleviate the problems of speedy, safe travel--farm to market transportation, inter-city movement and metropolitan area congestion. The System was

\textsuperscript{23}\textit{Ibid.}, p. 41.
\textsuperscript{24}\textit{Mason, op. cit.}, p. 59.
to be completed simultaneously in all states within a thirteen-year period. The completion schedule, of course, has not been met but the simultaneous completion is still being observed as practicable and possible because of fund holdouts to states ahead of schedule.27

The importance of the System to the national defense created the name "National System of Interstate and Defense Highways".28 The Interstate System began with the enactment of the Federal-Aid Highway Act of 1956. Up until this time the country had known only inter-regional and interstate systems among a few states. The best example in Virginia of this type of highway is State Route 301 and U. S. Primary 1 from Maine to Florida, passing through Richmond. These are United States highways with joint federal-state funds. State route number 168 on the Virginia peninsula is a state-local funded roadway.29 This all-encompassing Act positively signaled the beginning of the modern


28Ibid., p. 42.

Interstate Highway System.

Leaving the financial background of the Interstate System, the 1956 Act created superhighways which will connect 90 per cent of all major cities with a population of over 50,000 people. A total of 209 cities in 48 contiguous states will be joined by the 41,000 mile network of highways. The Act called for approximately 40,000 miles of roadway. Subsequent legislation revised the mileage to 41,000 in 1959.31

The allocation of mileage to Virginia amounted to a total of 1,056 miles of which 935 miles are to be located in rural areas and the other 121 miles are to be within urban areas. In regard to the location of this highway mileage, the general corridor locations were selected by the Virginia Department of Highways. This had to be approved by the Highway Commission and receive the final concurrence of the United States Department of Commerce,


Bureau of Public Roads. The mileage leaves Virginia's Interstate System ranked fourteenth in the nation from the standpoint of length and eighth from the top in cost. (See mileage table, Chapter I, page 9).

Additional federal legislation concerning the interstate highway building program came in 1963 when Congress amended the Federal-Aid Highway Act to provide that construction standards be adequate to handle traffic forecast for the next twenty years from the date of the proposed project. The 1968 Federal-Aid Highway Act provides for 1,500 more miles to the Interstate System, but it did not put up any money for construction. The State of Virginia received 15.5 miles to bring its total to 1,071.5 miles.


Thirty-six and nine-tenths of the 41,000 mile Interstate Highway System will one day in the near future comprise the partial circumferential from west to east on the north side of the City of Richmond. Designated Interstate 295, it was and is part of the original 1,056 miles of Virginia's superhighways. Although the major north-south routes, Interstates 95, 85, and 81, and east-west Interstate 64 are more renowned at the present time, it is felt that the benefit of Interstate 295 to the people of Richmond and its visitors will be great enough to warrant this work.36

The 1956 legislation also placed the entire financial burden for the System on the highway user through higher taxes. This legislation provided complete financing for a nationwide system of controlled access freeways. The tax provision for this Act was written by the House Ways and Means Committee and was approved by the Senate Finance Committee near the end of May, 1956. Financing of the original bill called for a $38,000,000,000 federal highway construction trust fund which covers sixteen years and was to begin July 1, 1956. The federal government pays 90 percent of the construction cost while the states pay 10 percent.

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36 Letter from Mr. Henry R. Conner, Executive Director, Central Richmond Association, November 6, 1970. See Appendix A.
cent. The above financial program placed these highways on a "pay-as-you-build" basis. That is to say that the funds had to be available before construction could proceed. Congress in 1956 set up a Highway Trust Fund to pay the federal share of the interstate program. All of the federal funds which are channeled into the Trust Fund come from federal excise taxes levied on highway users.\footnote{United States Department of Commerce, Bureau of Public Roads Quarterly Report on the Federal-Aid Highway Program, December 31, 1969 (FHWA-422 Washington, D. C.: Bureau of Public Roads, 1969), p. 2.}

Federal spending on the interstate highways began in 1956 at $1,000,000,000 a year and will gradually work up to the sum of $4,000,000,000 for the fiscal year ending June 30, 1973. The fiscal year ending June 30, 1974 calls for an expenditure of $2,225,000,000.\footnote{Federal-Aid Highway Act of 1968, op. cit., p. 43.}

Original estimates of cost for the 41,000 mile System were $28,000,000,000 in 1956. By 1964 estimates had risen to $46,000,000,000, and today the cost is near $60,000,000,000 for completion. Costs are obviously climbing on just about everything, and the cost of history's finest road program is by no means an exception.\footnote{Virginia Highway Commission, Virginia's Highways: A Plan for Growth, 1966-1972 (Richmond, Virginia: Highway Commission, 1965), no page.}

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\textsuperscript{38} Federal-Aid Highway Act of 1968, op. cit., p. 43.

It was estimated by the State Highway Commission "that inflation has increased highway cost about 30% per cent since 1965".\textsuperscript{40}

The State of Virginia, which like all other states has to provide 10 per cent of the money for the interstate highways, has funds allocated for the building of these highways by the Virginia General Assembly. The General Assembly does not alter allocations for the Interstate Highway System because it is bound by the means of financing--90 per cent federal funds. When the federal government gives the states these funds, the states must match them with their own 10 per cent. Experience to date, that being more than fourteen years of planning and constructing the System, has shown that various incidentalas to which the federal authorities take exception, such as added cost of right-of-ways, building materials and contractors, has increased the state's share to perhaps 10.75 per cent.\textsuperscript{41}

Virginia, like all the fifty states, has raised the money to pay for her highways through the users themselves since 1923 when the Virginia General Assembly voted to make

\textsuperscript{40} Into the 70's: A Review of Virginia's Nine-Year Highway Program. Submitted by the State Highway Commission to the Virginia Advisory Legislative Council, December 15, 1969, p. 2.

the users bear the cost. Motor fuel tax has been the principal source of highway revenue for many years in all fifty states, as well as for the federal government, in financing the Interstate System. The State motor fuel tax at seven cents per gallon (nine cents on trucks of three axles or more) accounted for 42 per cent of Virginia's total highway income from all sources for fiscal year 1970-1971, Interstate federal funds provide 25 per cent of all state funds (which require 90-10% matching funds) and third, motor vehicle licenses 14 per cent. 42

Cutbacks in federal funds by the Kennedy and Johnson Administrations have created a certain delay in the prospective completion date. In an announcement as early as June 6, 1966, Highway Commissioner, Douglas B. Fugate, warned that a shortage of federal aid would more than likely forestall completion of the Interstate Highway System. 43 This program, which began with the Eisenhower administration, received continued support under the administration of President John Kennedy. In the summer of 1961 Kennedy released money ahead of the scheduled time for the Interstate System.


43 News item in the Richmond Times-Dispatch, June 7, 1966.
This action was taken to stimulate the country's economy plus expedite the Interstate System and other Federal Aid Highways. The action did maintain the progress of the System at a rate which could see the completion come by 1972 as expected, but did not make possible an earlier completion. The Johnson administration initiated a policy that will certainly cause a delay of completion. In the fall of 1966, November 24, President Johnson, as an anti-inflation move, ordered federal road spending cut by 25 per cent. The action removed $1,100,000,000 from the $4,400,000,000 allotted to the states for road work in the fiscal year 1967-1968.45

Virginia was allotted $124,000,000 for the fiscal year 1967-1968, most of which was for interstate construction. A 5 per cent cutback in effect for this fiscal year allowed Virginia to spend just $112,500,000 in federal aid during the calendar year of 1968.46 The original completion date of 1972 had already been pushed up to 1974 or 1975 because of a lack of federal money. Fugate has said it may be 1977 or 1978 before the Interstate Highway System is completed in the State.47

44 Ibid., August 16, 1961.
46 Ibid.
47 Ibid.
CHAPTER III

PLANNING OF INTERSTATE 295

The planning for I-295 began in 1956 with the passage of the Federal Aid Highway Act. The thirty-six and nine-tenths mile semi-circumferential of Richmond was an initial part of the 1,060 miles of the proposed interstate highways in Virginia. I-295 was adopted by the United States Department of Commerce, Bureau of Public Roads and the State Highway Commission in 1956. The highway is being planned with almost every conceivable consideration for safety, adequacy, beauty, convenience and durability.

Virginia began work on its Interstate Highway System in 1957 with a proposed completion date of 1972. The completion has now been projected to be the late 1970's. As already mentioned, the Federal Government wants the entire system completed as nearly as possible at the same time. Progress on the System is controlled to a large extent by the release of Federal Funds since these monies represent about 90 per cent of the cost. The Virginia Highway Commission gave priority to interstate routes that would alleviate overloaded existing arterial routes such as U. S. Routes 1, 11 and 250.¹ These routes have been or are in

¹Letter H. R. Perkinson, Jr., State Planning and Scheduling Engineer, Department of Highways, Commonwealth of Virginia, Richmond, Virginia, October 22, 1970. See Appendix A.
the process of being replaced by Interstate routes I-95, I-81 and I-64.

Adequate planning for the Interstate System involves a multitude of problems. Initially, Virginia was allotted 1,056 miles of designated interstate highways. Preliminary engineering at the Highway Department had to have surveys taken, feasible routes, availability of land and cost estimates. The Construction Engineering Department is responsible for final route location, accesses and exits, and construction details. The adequate performance of the presently planned system is for 1990. All of the system is planned for twenty years of adequate handling of projected traffic.²

Safety is of prime consideration in planning and building for all of the Interstate System as it will be for I-295. Access is strictly controlled, traffic enters and exits the Interstate routes where it is felt necessary due to heavy congestion on main thoroughfares. Traffic is able to leave the System by means of speed reduction lanes and is allowed to enter by using acceleration lanes of 1,000 feet. There are no intersections along the way to impede travel. Major routes are crossed by overpasses or underpasses. No rail-

²Letter from H. R. Perkinson, Jr., State Planning and Scheduling Engineer, October 22, 1970. See Appendix A.
road crossings exist at the same grade as the highways.3

The traffic lanes are twelve feet wide and in rural areas the highways are divided by a median strip of at least thirty-six feet. Even in metropolitan areas such as in Richmond on I-95 and I-64 the roadways are separated by a median strip with steel guard rails. Four-lane divided roads are the rule with as many as eight-lane divided routes in metropolitan areas as in northern Virginia on I-95. Ten foot shoulders are provided both left and right except where made impossible or impractical because of highly developed areas. Bridge widths are equivalent to the width of the roadway and shoulders serving the bridge. Vertical clearance was initially planned at fourteen feet for underpasses. This requirement was revised to a seventeen foot elevation to allow military forces to haul huge missiles over the Interstate System. An eight-foot clearance on the right and four and a half foot on the left is required for underpasses.4

The traffic lanes are engineered for high speed traffic. Curves are banked to allow uninterrupted and constant speeds. Dangerous curves and elevated lanes are protected by heavy


gauge steel guard rails. The State Highway Department now uses a rail which slowly dips to ground level at the end which faces oncoming traffic to prevent an automobile from stopping abruptly against a guard rail. Many states are now replacing rigid highway signposts with breakaway types. If struck, the post will fly up and out of the way of the vehicle. In areas of flat, rolling country with horizontal grades of 3, 4 and 5 per cent, highways are being designed for speeds of seventy, sixty and fifty miles per hour respectively. The grade may be increased to 7 per cent in rugged terrain.5

The State of Virginia has done and is doing an excellent job of creating a very attractive Interstate Highway System. The trip to Charlottesville, Virginia from Richmond on the new I-64 is an example of the scenic beauty on some of these roads. As much of the natural beauty as possible is saved along the system, "and highway landscapers have added thousands of native plants".6

John E. Harwood, Deputy Commissioner and Chief Engineer of the State Highway Department, said the objective in design "is to make a sincere effort to fit the road into the terrain through which it passes and avoid imposing a forced alignment

5 Ibid., p. II-178.

on the landscape. The use of plantings that fit into the natural growth along with the original beauty of the landscaping is preferred rather than a great deal of unusual and exotic plants. Median strips are well maintained with trees and grass planted throughout.

Nineteen sixty-eight marked the third straight year and fourth time in the last six years that a new Virginia Interstate had won an award presented by Parade Magazine as one of the nation's five most scenic new highways. The latest award went to an eighteen-mile stretch of highway passing through Alleghany County on I-64. I-495, between US 50 and 350 near Alexandria was a winner in 1962, I-95 between Fredericksburg and Woodbridge in 1964, and I-81 between Christiansburg and Newbern in Southwest Virginia previous state winners. These routes were selected among a handful of new roads best "embodying the principles of good design, beauty, utility and sound land use." The four Virginia choices were planned by the Location and Design division of the Highway Department. The beauty is exemplified in the nickname given the 179-mile length of roadway between the Wash-

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7 News item in the Richmond Times-Dispatch, March 15, 1968.


9 Albert W. Coates, Jr., Virginia and Its Interstate System; A Dream Becomes a Reality, Public Information Office (Richmond, Va.: Virginia Department of Highways, 1968), p. 3.
D.C. metropolitan area and the North Carolina border, I-95, known as the "Showcase Route". 

As of the 1965 Highway Beautification Act, states have to control outdoor advertising, junk yards, sanitary land fills and other detracting land blight along the Interstate System and primary highways to receive federal aid. By mid-1970 billboards will have to be removed along the System except in industrial and commercial areas. Advertising is banned within 660 feet of the right-of-way. States are compensated for the removal of outdoor advertising by the federal government. Unscreened junk yards within 1,000 feet of the roadway were banned altogether effective July 1, 1970. This same legislation provides funds for planting trees and shrubs. A twenty-mile section of the Interstate may possibly bring a $100,000 contract for the landscaping.


Virginia is very prudent in regulating and zoning in areas adjacent to the right-of-way on the highways. Automobile graveyards are prohibited, as are other refuse areas within the 660 feet right-of-way limits. Roadside advertising is not allowed. The only signs on the Interstate System are for speed, directions, route numbers and information as to fuel stops, restaurants, and lodging. The 1958 Federal Aid Highway Act provides for reimbursement to the extent of 1/2 of 1 per cent of total cost of the highway to any state which adopts legislation controlling roadside advertising.13

Location and length requirements for the System are determined by Virginia to adequately connect cities and towns throughout the state. Three Interstate roadways will carry travelers across the state; I-81 from Maryland to North Carolina, I-95 from Washington to North Carolina and I-64 from West Virginia to the Eastern Shore. The markings of the System designate clearly the direction. Even-numbered highways will run in a general east-west direction, odd-numbered routes a general north-south direction. Interstate routes numbered in the hundred such as I-295 are circumferential or partial circumferential highways.14

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13 Ibid., p. 11-26.

Richmond's proposed partial circumferential highway, I-295, is one of many such highways throughout the United States either completed, under construction, or on the engineer's drawing board. Construction on I-295 is tentatively scheduled to begin in July, 1975. The primary reason for the low priority for completing the highway is based on estimates that it will "carry lower traffic volumes initially".  

I-295, based on previous experience with the Interstate System, will be a tremendous boost to the development of the area through which it passes. The highway with its fifteen accesses will readily connect all sections of Richmond and its suburbs. It will tie more interstate highway, expressway and state highway traffic than any single roadway span in Virginia. Major roads which will be directly integrated into I-295 or linked by means of spur routes are I-95 and I-64, the proposed Richmond Expressway, Chippenham Parkway and State Routes 288, 1, 301, 250 and 360.  

The thirty-six and nine-tenths mile interstate partial circumferential of Richmond is actually a semi-circle to the
east and north of the city. The cost for the entire route is projected to be $170,000,000, an estimate that has more than tripled over the past decade.17

I-295, as did all of Virginia's interstate highways, had to be first adopted by the United States Department of Commerce Bureau of Public Roads and the State Highway Commission. This was done in 1956.18 The State Highway Department has made numerous studies, surveys and location evaluations. The first of two public hearings on the general corridor location of the route along with layouts and supporting facts for the highway took place on October 26, 1965.19 The second and final public hearing will take place sometime preceding the initiation of the letting of construction contracts. At the present time there are no plans and no foreseeable possibility of making I-295 a complete interstate circle about Richmond. As already discussed, the circumferential will be completed in the west and the south by State Route 288.

17Interview with Mr. P. B. Coldiron, Location and Design Engineer, Department of Highways, Richmond, Virginia, March 3, 1972 in Richmond, Virginia.

18Interview with Mr. E. J. Arnold, Highway Location Engineer, Department of Location and Design, State Highway Department, July 15, 1969, at Department of Highways, Richmond, Virginia.

19Department of Highways Inter-Departmental Memorandum, Mr. P. E. Coldiron, Location and Design Engineer, Department of Highways, Richmond, Virginia, September 27, 1965.
The proposed interstate partial circumferential will extend northeasterly from an interchange with I-64 in the vicinity of Short Pump in western Henrico County to an interchange with I-95 near the Henrico-Hanover County Line. From this point it will extend southward in a broad arc to the east of the city, skirting the outer fringes of Highland Springs and Byrd Field. It will then proceed to tie into the Richmond-Petersburg toll road, I-95, at its existing Falling Creek interchange in Chesterfield County. At this location State Route 288 will begin to complete the circumferential. There are fifteen interchanges planned for I-295 at the present time. All of these interchanges will be in the counties around Richmond. The map on the following page will be helpful in giving a graphic location of the proposed interstate.

The original plans called for the last interchange of the southeast section of I-295 to connect with I-95 about two miles north of Chester in Chesterfield County. A proposal was considered to make the last interchange four miles further north on I-95 at Falling Creek. This would have re-

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20 Map: Proposed Highway Development Interstate Route 295, Chesterfield, Henrico and Hanover, Department of Highways (Richmond, Virginia, 1970). See Appendix B.

21 Letter from Mr. F. E. Tracy, Assistant Location and Design Engineer, Department of Highways, Richmond, Virginia, November 19, 1970, p. 2. See Appendix A.
Proposed

Interstate 295
duced overall length of the roadway by some three miles and shortened its arc so as to bring it closer to the city. This location was desirable to provide an adequate connection between the interstate route and State Route 150 (Chippenham Parkway). This idea was abandoned for the original idea and the broader arc with the connection of the proposed State Route 288. In September of 1965 the Falling Creek interchange was shifted four miles south to the Kingsland area of Chesterfield County. A problem of lack of space between I-95 and the James River was realized at Falling Creek. The interchange would have been too close to the river. 22

An estimated $25,000,000 or more of the funds allotted for I-295 are for the construction of a 4,500 foot, toll free bridge over the James River located at Kingsland Reach. Access and exits for the 36.9 mile interstate roadway will be provided by at least fifteen interchanges, as mentioned previously. The fifteen will be located as follows: (1) Interstate 64 west of Richmond near Short Pump in western Henrico County; (2) State Route 33 (Staples Mill Road), northwest of Richmond; (3) United States Route 1, north of the city; (4) I-95 north of Richmond; (5) United States Route 301, northeast of the city; (6) State Route 627;

22 Interview with Mr. E. J. Arnold, Highway Location Engineer, Department of Location and Design of the State Highway Department, Richmond, Virginia, July 15, 1969 in Richmond, Virginia at the State Highway Department.
(7) United States Route 360, north of Mechanicsville; (8) Creighton Road, near Simpkins Corner; (9) Hanover Road; (10) I-64, east of Richmond near Seven Pines; (11) Route 156 east of Seven Pines; (12) Charles City Road; (13) New Market Road, State Route 5; (14) Varina Road; (15) I-95 Richmond-Petersburg Turnpike in southern Chesterfield. There is a spur connection of State Route 288 planned that will tie I-295 to United States Route 250 at a point near its intersection with Three Chopt Road. Further proposals and recommendations are being considered by the state for additional interchanges. (See Map, page 39).

The State Highway Commission approved the general location of I-295 in 1965. Even though there is still a waiting period before purchase of land for right-of-way, much time, effort and expense have gone into surveys, design and engineering consulting already. Consideration has to be given people whose homes or businesses have to be moved.

Two groups of consulting engineers have been retained by the State Highway Department to survey I-295. Each has conducted studies on separate areas of the project. The

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23 Map: Interstate 295 State Route 288 State Highway Department, Richmond, Virginia, 1970. See Appendix B.

24 Interview with Mr. E. J. Arnold, Highway Location and Design Engineer, Department of Location and Design, State Highway Department, July 15, 1969 in Richmond, Virginia at the Highway Department.
Proposed

Interstate 295

- Interchanges 1-15
first, J. K. Temenson, has completed its survey, which involved an area from Proctor's Creek on the southern end to a point east of Route 5. American Engineering, the other consultant firm, has surveyed from near Route 5 to the Henrico-Hanover County line up to U. S. 1; all of these surveys have received approval of the Bureau of Public Roads. A survey was done on the proposed section from U. S. 1 to Route 33 (Staples Mill Road) and on the projects interchange at I-64. 25

Construction on the System is designed to be durable and lasting. All work has to be inspected and approved by the Virginia Highway Department. Standards are revised and upgraded as new innovations are available.

The circumferential highways, all of which are numbered in the hundreds, as is I-295 in Richmond; I-495, in the Washington, D. C. area; I-264, Norfolk, in the Interstate System, will be located throughout the country in the larger cities. A few of the other circumferentials across the United States are Springfield, I-495 and Hartford, I-291 in New England; New York City, I-287; Baltimore, I-295 in the East; Atlanta, I-285; Birmingham, I-459; Jacksonville, I-295; Dallas, I-635; San Antonio, I-410; Fort Worth, I-820

25 Letter from Mr. P. B. Coldiron, Location and Design Engineer, Virginia Department of Highways, February 16, 1970. See Appendix A.
and Galveston, I-610 in the South; San Francisco, I-280; Los Angeles, I-210 and San Diego, I-805 on the West Coast. 26

The longest route in the State connected to I-295 will be the 265 miles of I-64. The major east-west link in Virginia, from Norfolk to West Virginia, has 173.4 miles completed. 27 The 22 mile section from Anderson's Corner to the now completed section east of Richmond at Bottom Bridge is presently under construction. It is scheduled for completion by early 1973. The ten mile section from Anderson's Corner to Williamsburg will be the last completed section of I-64.

An explanation of the route of I-64 through the Richmond area will be of assistance in understanding its relationship with I-295. I-64 enters eastern Henrico County 200 yards north of Route 60 at Bottoms Bridge and directs traffic almost due west into the City of Richmond. It intersects Laburnum Avenue, Nine Mile Road and Route 360 (Mechanicsville Turnpike) on its course to the city. A mile west of the Mechanicsville Turnpike I-64 and I-95

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join to become one for four and a half miles. I-64 regains its identity at the western end of Laburnum Avenue where it begins its scenic ascent to Charlottesville and beyond. Its Short Pump interchange in western Henrico County is the proposed beginning of I-295. Broad Street Road (Route 250) is crossed twice before reaching the I-295 entrance at Short Pump.28

Interstate 95 is the old superhighway in the Interstate Highway System of Virginia in that it was the first to be officially incorporated into the Interstate program of the state. Its 179 miles cross Virginia from Washington, D.C. to North Carolina. It is Virginia’s major north-south highway and her most heavily traveled. I-95 was the first and so far the only Interstate to prove to be inadequate for its tremendous volume of traffic. Forty-six per cent of the state’s interstate travelers move over I-95. One lane on each side of the roadway has been added from the northern city limits of Richmond to Ashland, Virginia, creating a total of eight lanes of traffic. As most travelers know who have driven I-95 in Northern Virginia, the work of expanding the roadway will probably never be completed.

Entering Hanover County north of Richmond I-95 parallels U S 1 in its southern path through the city. The

28 Interview with Mr. E. J. Arnold, Highway Location Engineer, Department of Location and Design of the State Highway Department, at Department of Highways, Richmond, Virginia, July 15, 1969.
only interstate in Virginia to have toll facilities is found on I-95. The Richmond-Petersburg Authority is responsible for the Richmond to Petersburg span which was made a part of the interstate mileage in 1956. The tolls are required of travelers to pay off a twenty-year bond.

I-295 has a proposed interchange with I-95 at the Hanover-Henrico County boundary six miles north of the Richmond city limits. I-95 takes travelers through the Lakeside area of northern Henrico County and meets I-64 at Bryan Park. It then passes through the heart of downtown Richmond at 12th Street by the Medical College of Virginia (V.C.U.) Hospital in the south-east direction. Crossing the James River, I-95 spans Richmond to its most southern tip where it enters Chesterfield County. Two miles from Route 10, I-95 will intersect with the proposed I-295 in southern Chesterfield County. The arc formed by I-295, beginning at Short Pump will end at this point, less than a mile from I-95 with the junction at U S 1-301. Proposed State Route 288 will join I-295 at this interchange at I-95.29

29Map: Interstate Arterial Highway System of Virginia, Department of Highways, April, 1971 (Richmond, Location and Design Division, 1971). See Appendix B.
The three-quarter arc that I-295 will create around the City of Richmond will be completed by Route 288. In the original interstate network planned in 1956, I-295 was proposed as a partial circumferential around three sides of the city and that much was counted in the system. A 1968 request by the State Highway Department to the United States Department of Transportation proposed an addition of the circumferential to add a southwest arc through Chesterfield County to complete the I-295 circle. Virginia's recommendation was omitted as additional mileage to the system. 30

As stated in a previous chapter, Congress authorized 1,500 miles to fill gaps in the original 41,000-mile interstate network in 1968. 31 Presently Route 288 will be built as a state highway. At present, the acquisition of right-of-way for the route is being done with state funds. The funding

30 Interview with Mr. E. J. Arnold, Highway Location Engineer, Department of Location and Design of the State Highway Department, July 15, 1969, at Department of Highways, Richmond, Virginia.

for construction, State or State-Federal assistance, will depend on which fund happens to be available when construction for the project begins. The thirty-mile arc will consist of a divided four-lane roadway. It will pick up where I-295 ends at I-64 in western Henrico County and will sweep southward and then eastward to north-south I-95 in southern Chesterfield County. Goochland County will be included in the route of 288 to make three counties incorporated in its path.

The newest proposed superhighway system in the Richmond area is the Richmond Expressway. The thirteen-mile roadway which is estimated to cost $95,000,000 has already encountered more than its share of setbacks in its short history. The 1966 General Assembly authorized the Expressway which is to be financed through the sale of public revenue bonds. The bonds will be paid for by tolls paid by the expressway users. The Assembly set up the Richmond Metropolitan Authority to direct the Expressway. Control of the Authority is in the hands of the local governments in that they appoint a Board of Directors consisting of

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32 Letter from Mr. F. E. Tracy, Location and Design Engineer, Virginia Department of Highways, November 19, 1970. See Appendix A.

eleven members. The Chesterfield County Board of Supervisors appoints two for terms of two and four years, the Board of Supervisors of Henrico County appoints two for two and four years, and the Richmond City Council appoints six. Three will serve two years and three will serve four years. The State Highway Commission appoints one ex-officio member.34

The Richmond Metropolitan Authority has been faced with three setbacks to date. The first being bids by private contractors higher than those expected by engineering estimates. The second setback was one that was resolved in 1968. Initially the Richmond Metropolitan Authority had hoped to swap mileage of I-295 for inclusion of 3.3 miles of the Expressway as Interstate mileage.35 The mileage known as the Beltline Expressway which is now under construction was incorporated into the Interstate System in 1968 as Interstate 195. The mileage involved was part of the 1,500 additional mileage allotment of 1968.36

34 Act of the General Assembly of Virginia, Chapter 173, March 30, 1966. Code of Virginia be amended by adding in Chapter 3 of Title 33 an article numbered 112, containing sections numbered 33-255.41:11 through 33-255.44:32 Article 11.2 Richmond Metropolitan Authority, p. 2.

35 Letter from Mr. George W. Cheadle, General Manager, Richmond Metropolitan Authority, November 24, 1970. See Appendix A.

third setback was a refusal of a request for more than the 3.3 miles that were eventually granted.

The Richmond Expressway is to consist of a network of high speed toll roads between Bryan Park on the north, Chippenham Parkway in Chesterfield County on the south, Huguenot Bridge on the west and the Richmond-Petersburg Turnpike in the downtown area. It will be made up of four divided lane highways. The Riverside Parkway will begin just south of the Huguenot Bridge and extend southeast along the south shore of the James River to Powhite Creek between the river and Willow Oaks Country Club. At this point it will join the Powhite Parkway, which would begin at the Chippenham Parkway, an existing roadway, and follow a course north-east alongside the Powhite Creek. It will pass by the Willow Oaks Country Club golf course where it will cross the James River to the east of the golf course. The six-lane bridge across the river, costing an estimated $4,000,000, will link the Riverside Parkway, the Powhite Parkway and the Beltline Expressway on the north side of the James River. It will be located up river from the railroad bridge of the Seaboard Coast Line Railroad-Richmond Fredericksburg and Potomac Railroad and just west of the Boulevard Bridge.37

37 Map: Richmond Expressway System, Richmond Metropolitan Authority, December 14, 1966, Howard, Needles, Tammer and Bergendoff, Consulting Engineers (New York, 1966). See Appendix B.
The Beltline Expressway will carry traffic from the new bridge to meet I-64 at Bryan Park. This roadway will parallel the congested Belt Boulevard and alleviate its heavy traffic burden at peak hours. The downtown Expressway will intersect with the Broad Street Road, I-95 interchange in downtown Richmond, and passing parallel to the James River will allow west bound travelers to reach the Beltline Expressway at the City Stadium.38

The Richmond Expressway will be a wonderful aid to commuting motorists. With a planned completion date in late 1973, motorists bound for western Henrico County from the downtown area will be able to travel uninterrupted, except for a toll barrier on the Downtown Expressway opposite Lombardy Street, with no traffic signals or intersections on their trip. A toll of fifteen cents will be the cost of this trip, opposed to the twenty-five cents for those who use the congested Richmond-Petersburg Turnpike Authority. The city will be relieved of heavy congestion in the Shockoe Valley-Broad Street area by the proposed location of the Downtown Expressway. The two parkways on the south side of the river (Riverside and Powhite Parkway) will serve more than 65,000 residents living in this area. The recommended toll for these residents to cross from the Powhite Parkway across the new James River Bridge to a connection north

38Ibid. See Appendix B.
along the Beltline to I-195 will be twenty cents as set by the Richmond Metropolitan Authority. 39

The Richmond Metropolitan Authority was informed by Douglas Fugate, Virginia Highway Commissioner, that the state intends to provide maintenance for the Expressway. The Authority can obtain help from the Commission if toll revenue is not enough to pay for maintenance. This action could mean a savings of a fourth to a half of 1 per cent on the interest rate on the estimated $95,000,000 bond sale. 40

I-295 will be linked to the Richmond Expressway on the west of the city by I-64. The span between Short Pump and the Beltline Expressway (I-195) at Bryan Park will tie the two highways together. The roadways will be connected in the downtown area by I-95 between Broad Street and the Falling Creek interchange in Chesterfield County. 41


40 Ibid., p. 12.

Many other smaller, but by no means less important, United States and state routes will be served by the proposed partial circumferential. U. S. Routes 1-301 are to be made easily accessible by I-295 with interchanges to the north and south of Richmond. Route 250 (Broad Street Road) will be linked in western Henrico at Short Pump and by I-95 in the downtown area. The Mechanicsville Turnpike (Route 360) presently intersects Interstates 95 and 64 in the city and will have an interchange with I-295 in Hanover County. The new Chippenham Parkway (Route 150), a four-lane divided roadway from Huguenot Road to I-95 just south of Richmond forms a semi-circumferential in Chesterfield County and Richmond. This new road is now serving this fast growing area south of the James River. Route 6 (Patterson Avenue) will be linked to the new highway system by I-195, the Beltline Expressway. I-64 ties Staples Mill Road (Route 33) to the system already. 42

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42 Ibid. See Appendix B.
CHAPTER IV

POLITICAL IMPLICATIONS

This chapter will relate the feelings of the political subdivisions involved in the planning and construction of Interstate 295. As stated previously I-295 was part of Virginia's original Interstate mileage. Mileage has since been added to the system (Federal-Aid Highway Act of 1968), but I-295 is still proposed and years away from initial construction.1 Are there any reasons for this slow start and what parties, if any, are responsible? Has I-295 faced opposition?

As stated earlier, the states are responsible for the location and priorities of their own interstate highway system. The Federal Government in most cases exerts no special force or support for any state interstate roadway. There has been no specific congressional pressure to expedite construction of I-295, although there has been considerable congressional effort to speed up the interstate system as a whole.2

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2Letter from Mr. John S. Brooks, Special Assistant to Senator Harry F. Byrd, Jr., United States Senate, April 2, 1971. See Appendix A.
In reply to a letter written to Senator William B. Spong, Jr. no reason was available as to the low priority of the I-295 project. The only response was that the states are responsible for the need and priority of construction. Congress has mandated the speed up of the completion of the Three Sisters Bridge and its approach highways located in Northern Virginia, a Virginia Interstate Highway. This is the only Virginia Interstate roadway where such pressures have been applied.\(^3\) Congress mandated construction of this bridge by the Federal-Aid Highway Act of 1968.\(^4\)

The State of Virginia has shown full support of the Interstate Highway System. I-295, with an initial expected construction date of July, 1975, will be the last interstate route to be completed in Virginia. The magnitude of the project will demand three to four years for completion. Traffic needs are the main criteria for the planning, construction and completion of interstate roadways in the State.\(^5\)

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\(^3\)Letter from Senator William B. Spong, Jr., April 8, 1971. See Appendix A.


\(^5\)Letter from Mr. P. B. Coldiron, Location and Design Engineer, Department of Highways, Commonwealth of Virginia, March 23, 1971, p. 3. See Appendix A.
The Richmond-Petersburg Turnpike Toll Road has been a good boost to the traffic needs of the Metropolitan Richmond area. This toll road was important to Virginia's Interstate System, because of the heavy requirements of the north-south traffic flow through the State. The Turnpike was an initial portion of the Interstate System of Virginia, I-95.

The Richmond area traffic needs were aided further with the completion of the east-west route of I-64. The completion of these two highways will offer motorist in the State a route through Virginia nonstop: North-South, East-West with connection between the two in the Richmond area.\(^6\)

The State traffic demands as well as the "availability of Federal funds relating to the completion of other interstate facilities have placed I-295 on a low priority schedule".\(^7\) Priorities in Virginia for the planning and construction of interstate highways is directed toward those arterial routes that have high volumes presently such as U. S. Route 1 (supplemented by I-95) and 11 (supplemented by I-81). Traffic surveys based on congestion, consistency of use and expectations were used to aid in the determination of highway importance. "Since I-295 is a proposed partial circumferential route estimated to carry lower traffic volumes initially, it was given one of the last

\(^6\)Ibid., p. 1. See Appendix A.

\(^7\)Ibid., p. 1.
priorities for construction. I-64 and I-95 handle the traffic needs from a wider perimeter. The State Highway Department has connected most major cities in the State with interstate highways.

On the following page a map, showing the interstate highway system of Virginia, indicates in broad red lines the completed interstate. As can be seen, these lines are generally through routes of the State. I-81, the western-most north-south route is complete except for two short sections. I-85, the southwestern route into North Carolina is completed. Spur routes and partial circumferentials have been built to complete connections for such cities as Roanoke (I-581), Norfolk (I-264 and I-464) and the Washington, D. C. area (I-495).

Money to finance interstate highway construction in Virginia is based on the priority of the route. Due to the low priority of I-295 money is not available presently for construction of I-295. The State Highway Department expects to begin gathering funds in the very near future and will in all likelihood have financial means by 1975 to begin

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8 Letter from Mr. H. R. Perkinson, Jr., State Planning and Scheduling Engineer, Department of Highways, Commonwealth of Virginia, October 22, 1970. See Appendix A.

9 Map: Interstate Arterial Highway System of Virginia, Department of Highways, April, 1971 (Richmond, Location and Design Division, 1971). See Appendix B.
Right-of-way negotiations have taken place for some properties for acquiring interchange locations and hardship situations (extra time or money required for relocation) along the proposed route of I-295. The planning and design of the project as a whole has not progressed to the stage where complete right-of-way acquisition is feasible at present.\textsuperscript{10}

Wilber Smith and Associates of New Haven, Connecticut, a private consulting firm for the State of Virginia on the I-295 project has made it clear that the highway can be built with no interference to the Richmond-Petersburg Turnpike (I-95). There had been a question as to whether I-295 would be in competition with the toll road between Richmond and Petersburg.\textsuperscript{11} The Virginia General Assembly in the Richmond-Petersburg Turnpike Authority Act of 1954 guaranteed no competing turnpikes and toll roads would be constructed. The Act stated that no limited access express

\textsuperscript{10}Letter from Mr. P. B. Coldiron, Location and Design Engineer, Department of Highways, Commonwealth of Virginia, March 23, 1971, p. 2. See Appendix A.

highway could be located within twenty-five miles of any portion of the project as long as toll bonds were outstanding. The accepted exception in the Act was an independent consulting engineer selected by the State, determining that the construction of a roadway such as I-295 would not create a substantial reduction in the volume of traffic on the Turnpike.12

The Richmond-Petersburg Turnpike Authority has recognized the validity of the studies and confirmed that no adverse affect on the traffic and revenue would be occasioned by the construction of I-295. Frank H. Blackwell, Executive Director of the Turnpike Authority, expressed no opposition to the construction of I-295. No effort has been made by the Authority to change the location corridor of I-295 or its interchange locations, as planned by the Highway Department and the Federal Highway Administration.13

Some benefits could be realized by the Authority because of the location of I-295. The proposed partial circumferential may relieve some of the traffic congestion


13 Letter from Mr. Frank H. Blackwell, Executive Director, The Richmond-Petersburg Turnpike Authority, April 6, 1971, p. 1. See Appendix A.
on the Turnpike in the Richmond area, and in all probability, it will increase traffic and revenue south of its proposed connection with the Turnpike.\textsuperscript{14}

Mr. P. B. Coldiron, State Highway Department Location and Design Engineer, wrote that to his knowledge there is no indication of "any pressure having been exerted against the construction of the interstate route".\textsuperscript{15} The Virginia State Senate has made no effort to influence the location of I-295. State Senator William F. Stone reported that he would consider it highly improper for the Senate to try to do so.\textsuperscript{16}

The City of Richmond is not directly affected by the proposed partial circumferential. I-295, as planned, will be located in the two counties surrounding the City, Chesterfield and Henrico, and a third, Hanover County to the north.

Although I-295 is proposed for location in the above three counties, Richmond for the most part has been in favor of the general route corridor.\textsuperscript{17} Two existing partial

\textsuperscript{14}Ibid., p. 2. See Appendix A.

\textsuperscript{15}Letter from Mr. P. B. Coldiron, Location and Design Engineer, Department of Highways, Commonwealth of Virginia, March 23, 1971, p. 2. See Appendix A.

\textsuperscript{16}Letter from Mr. William F. Stone, Senator, Commonwealth of Virginia, 12th Senatorial District, Martinsville, Virginia, March 8, 1971. See Appendix A.

\textsuperscript{17}Letter from Mr. J. A. Jones, Assistant to the Richmond City Manager, City of Richmond, Virginia, March 31, 1971. See Appendix A.
circumferentials already enter the City with yet a third
close by in northwestern Henrico County. Chippenham Parkway (State Route 150) enters the City in the area under
disputed annexation south of the James River. Laburnum Avenue, a partial circumferential east of the City crosses
the northern tip of Richmond. Parham Road is a north-west arc just outside the City limits. The traffic needs served
by these three existing roadways has created a favorable corridor to be served by the outer route of I-295. The
present interchange proposals made accessibility of I-295 to other roadways extremely good.18

The Richmond Regional Planning District Commission is
in favor of the proposed I-295 location. The Commission's Transportation Committee worked with the State consultants,
Wilber Smith and Associates in developing an area transporta­tion needs survey.19 The Central Richmond Association
is aware of I-295 and is very much in favor of the proposed circumferential. The Association is involved in the needs
of the Richmond area and a very active organization.20

No economic boost is seen for the City of Richmond be-
cause of the proposed route. It is felt that there is a

18Letter from Mr. Edward G. Councill, III, Executive Director, Richmond Regional Planning District Commission, Richmond, Virginia, April 21, 1971. See Appendix A.

19Ibid. See Appendix A.

20Letter from Mr. Henry R. Gonner, Executive Director, Central Richmond Association, Richmond, Virginia, November 6, 1970. See Appendix A.
good chance for decentralization of industrial and commercial activity in order to have access to the new highway. The surrounding counties will, with little question, realize an economic boost. Richmond is much more interested in her own roadways and partial circumferentials than in I-295.

Henrico County with the majority of the proposed I-295 within its boundaries and ten of the planned fifteen interchanges is faced with the greatest financial outlay due to the partial circumferential. Henrico is the only county involved in I-295 which maintains its own roads. Thus, it will have to pay for any road alterations they feel necessary because of I-295. The County administration does favor I-295 as presently planned although there seems to be some reservation.

There are no construction costs that are mandatory for a locality such as Henrico in the interstate program. Local roads which are in conflict with interstate construction will be carried over or under the interstate roadway at the

21 Letter from Mr. J. A. Jones, Assistant to the Richmond City Manager, City of Richmond, Virginia, March 31, 1971. See Appendix A.

22 Interview with Dr. Ray Shadwell, Vice-Chairman, Henrico County Board of Supervisors, Henrico County, Virginia, February 21, 1971, in Henrico County, Virginia.
existing location and to the standards existing when the work takes place by federal and state funds.\footnote{Letter from Mr. A. T. Dotson, Jr., County Engineer, Henrico County, Virginia, February 22, 1971, p. 1. See Appendix A.}

A locality which accepts these conditions effectively limits any future development or creates a tremendous future burden when improvements to the roads and structural crossings become necessary.\footnote{Shadwell, loc. cit.} Improvements at this time are to be paid for by the locality with some possible federal and state assistance. Many of the roads crossed by the proposed I-295 in Henrico have existing narrow rights-of-way, minimum width paved sections and poor alignment. The future rights-of-way and improvements are planned near enough in the future to create an excessive burden on the County if they are delayed beyond construction of I-295.\footnote{Letter from Mr. A. T. Dotson, Jr., February 22, 1971, p. 1. See Appendix A.}

The County has approved a program to provide the needed improvements through the I-295 corridor prior to or in coordination with the construction of the interstate route to assure the facilities now to meet future needs. The Henrico County Board of Supervisors allocated $2,500,000.00 for County roads during the construction of I-295.\footnote{County of Henrico, Virginia, Board of Supervisors Minutes Agenda Item #156-68, title: Resolution-Structural Crossings of Henrico County Roads at I-295, March 27, 1968, p. 4.}
I-295 as presently planned is favored by the County. The location and design of I-295 within the general corridor established at the beginning of the interstate system was coordinated with the Henrico administration. Many suggestions and recommendations of the County have been incorporated into the final plan.27

Henrico County must maintain the surface of all structures carrying County roads over I-295 other than at interchange locations. All public service roads established during construction of I-295 are to be maintained by the County. These roads which are constructed to minimum County subdivision standards are to be included in the official County road system when requested by the Virginia Department of Highways and accepted by the Henrico Board of Supervisors. As earlier stated, I-295 creates an obligation to Henrico County to provide improvements to its roads within the interstate route before or during construction.28

The only action toward construction or completion of I-295 by Henrico County has been to vocally urge completion as soon as possible. There has been no action taken by the County favoring additional mileage of I-295. The County

27 Dotson, loc. cit. See Appendix A.

28 Ibid. See Appendix A.
administration does feel I-295 will be an economic boost, especially in the eastern section of the County where a great deal of land is available for residential and industrial development.²⁹

There is only about one-half mile of I-295 planned for Chesterfield County. The County is generally in favor of the route of I-295 although it stopped short of the major good it could do for Chesterfield. Route 288, the state highway which will complete the circumferential begun by I-295, is of prime interest to the County. It will be almost entirely within Chesterfield. Less than a mile of Route 288 will be constructed in Goochland County. Rights-of-way for both I-295 and Route 288 have been given by the County, seeking to promote early construction.³⁰

Insofar as Chesterfield knows, it will have no financial obligation to the construction of I-295. With the termination of I-295 such a short distance into the County there is to be only one interchange and that is with I-95. The County could possibly realize an economic boost because of the location of I-295. It is believed there will be a

²⁹ Letter from Mr. E. A. Beck, County Manager, Henrico County, Virginia, February 22, 1971. See Appendix A.

³⁰ Letter from Mr. M. W. Burnett, Executive Secretary, County of Chesterfield, Chesterfield, Virginia, February 23, 1971. See Appendix A.
plus due to the fact that workers can get to the indus-
trial areas of Chesterfield easier, which may ease the
need for labor in the area. 31

The northwest route of I-295 will pass through Han-
over County. Hanover will have four interchange locations
at routes 301, 627, 360 and at Creighton Road. 32 Accord-
ing to Robert Goodlow, Executive Secretary of Hanover
County, there is anticipation for an economic boost due to
I-295. The Ellerson section of the County foresees its
industrial development aided by I-295. The whole corridor
of I-295 will mean a rise in commercial development. Han-
over does not maintain their own roads as does Henrico
County so that there will be no financial requirements be-
cause of the new interstate route. The County would like
to see an additional interchange at Old Cold Harbor Road. 33

31 Ibid. See Appendix. A.

32 State Highway Department Map: I-295 and Route 288,
January, 1971. See Appendix. B.

33 Interview with Mr. Robert Goodlow, Executive Secretary,
County of Hanover, Hanover, Virginia, September 21, 1971 in
Hanover, Virginia.
CONCLUSION

This paper has hopefully given the reader a better understanding of the Interstate Highway System in the United States and Virginia through a general history, with related planning and process of a particular roadway, I-295. Using I-295, this thesis has attempted to correlate the connection of one planned interstate roadway in Virginia with others in the Virginia system.

The interstate highway system in Virginia is the accumulation of the history of roads in the State from the first Indian trails and paths. Based on what the present has given us the future will bring larger, safer and even faster means of transportation. The interstate highways are a step in the right direction.

Today's expressways and interstate highways are the result of much foresight by the early settlers, the governing bodies of our colonies and original states. The need and desire to trade, buy and sell among all the people of the new country being welded together hastened the road network. The establishment of a central government and the formation of the United States created roadways throughout the east coast.

The problems of communication (mail) and the national defense were the first two most prominent reasons for the
build up of roads by the federal government during the first half of the Twentieth Century. Economical mail delivery was impossible without adequate roads. The rise of prospective world conquerors such as Germany, Japan and Italy prompted the United States Government to see the need for a nation connected by interstate highways. Thus the creation of the present 42,500 mile Interstate Highway System.

The State of Virginia has been active in road building since her very beginning as a Colony. Many of today's highways date back to early foot trails. Route 1 was a major interstate route north-south through Virginia. The Interstate Highway System in Virginia has prospered under good political and administrative leadership. Safety is of prime importance in the planning of I-295. Although not by any means perfectly safe the route will be built with as much concern for the safety of its users as possible and practical.

I-295 like all of the Virginia Interstate will be constructed to take advantage of the beauty and terrain of the countryside through which it passes. The natural landscaping will be used along with planned addition of the Highway Department. Drivers may still see unsightly auto graveyards or billboards although they are being improved or phased out of the view of the interstate user.

This thesis explored the reasons for the low construction priority for I-295. Evidence indicates that I-295 is a low
priority roadway in the total Virginia Interstate System because of these main factors:

a) The low traffic potential of I-295 when compared with other circumferentials in Virginia (I-495, I-264) and with the through state system (I-95, I-64, I-81);

b) Present partial circumferential state roads presently have unused vehicle capacities;

c) The construction of the Richmond Metropolitan Authority Expressway System.

The State Highway Department is responsible for the priorities given to the interstate highways in Virginia. First concern was given to inadequate existing roadways in the state. I-95 was built to alleviate the tremendous traffic demands of U. S. 1-301. Work was begun on I-64 to correct over crowded conditions on U. S. 60 and U. S. 250 and is completed except for a section between Bottoms Bridge and Williamsburg. This particular portion of the highway is four lanes and divided. Traffic use on existing through routes of the state left little doubt which roadways should be replaced by Interstate highways. I-81 in Western Virginia replaces U. S. 11, I-85 replaces U. S. 1 south of Petersburg and I-66 will reduce problems on the inadequate route 55 in Northern Virginia.

I-295 will not replace or directly alleviate existing traffic demands with its proposed route. It will be built on a new location. The needs of the future were considered when I-295 was originally planned. Unlike the Richmond area's partial interstate circumferential, I-495 was completed early
in the Virginia interstate highway program because of pressing traffic congestion in the Northern Virginia - Washington, D. C. area. I-295 will ease traffic congestion on the Richmond-Petersburg Turnpike upon its completion. Based on anticipated increases in traffic volume through the present decade the Turnpike will not be adversely effected by I-295.¹ The need for the through interstate routes in Virginia could be substantiated by the simple over-crowded condition on existing U. S. or state routes. I-295 will save motorist traveling time from points north or south of Richmond to places located east of the City. The greatest savings will be for those travelers using the new James River crossing south of Richmond from the I-95 and I-295 junction west of the river into the Varina District of Henrico County to the east side of the James River. A savings will be available for motorists traveling from points west to north of the Richmond area. I-295 will offer an alternative north-south route through the city although longer than I-95.² The proposed interstate partial circumferential will offer the motorist a selection in his route of travel. It will ease some over crowded conditions which exist now and will most certainly increase by the time of its completion.


²Ibid., p. 11.
The location of the highway has been decided with possible minor changes to come with the last public hearing. The fifteen interchanges allowing traffic to enter and exit I-295 are set. There is the possibility of additions.

As stated earlier (Chapter III, p. 34) two public hearings take place before an interstate highway is constructed. I-295 has had one hearing in 1965. The last one will take place sometime in the mid 1970's before actual construction begins. To date there has been no organized opposition to I-295. The concern for the environment today will possibly lead to some objections to I-295 by the time of the second public hearing. Justification for this foresight can be given by I-66 in Northern Virginia, I-266 (Three Sisters Bridge) in Washington, D. C. and Route 288 in Goochland County.

Nine miles of I-66 in Arlington County has caused public concern because of its possible effect on the environment. Presently the route is proposed to run through portions of Bon Air Park and Spout Run Parkway. Opposition has arisen from near by residents of the proposed route who are disturbed by the potential noise level. Proponents of a mass transit system in Northern Virginia and Washington, D. C. contend that the state had not given due consideration to this means of travel. The first week of April, 1972 brought an injunction temporarily blocking the State Highway Department from further construction on this section of interstate highway. 3

The Three Sisters Bridge has met a great deal of resist-

3News item in the Richmond Times Dispatch, April 12, 1972.
ance because of the National Capital Transportation Agency which in 1963 advanced plans for a mass transit system.

Federal funds were frozen on the project with the thought that the mass transit system could replace the proposed highway. The State Highway Department contended that the bridge was also needed. The Federal-Aid Highway Act of 1968 took action to finally mandate the construction of the Three Sisters Bridge. Environmentalists are concerned with the effect on Glover-Archerbold Park which I-266 passes.

The first public hearing on state route 288 in 1967 brought objections concerning its proposed location in Goochland County. The locations of the route would pass across the eastern edge of the Tuckahoe Plantation property. Public concern for the destruction of this historic property caused the creation of an alternate route by the Virginia Highway Department. The alternate route will bring the roadway about a half mile east of the plantation. The road will cross Patterson Avenue about .4 miles west of Henrico instead of the original line .8 miles west of the Henrico-Goochland County line.

It will not be surprising to find opposition to I-295 by the time of the second public hearing. Earl Robb of the Environmental Division of the State Highway Department indicated

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5News item in the Richmond Times Dispatch, January 29, 1969.
problems could arise from residents in the vicinity of the proposed interstate objecting to noise and commercialism. People concerned with the preservation of the environment will find objections involving destruction of the Chickahominy Swamp area. I-295 as proposed will cross the Chickahominy River twice. The first being to the north of Richmond between I-95 and Route 301 where a 2,500 foot channel relocation is planned. The second crossing is in Eastern Henrico County north of Hanover Road where creek relocation is also planned. The rechanneling and straightening of the river is planned to bring it to the center of the flood plane.6

The Virginia Highway Department works closely with biologists, the Water Control Board and the Department of Game and Inland Fisheries to assure proper planning of passage through an area such as the Chickahominy Swamp. The department is concerned with the deterioration of the land and is asserting an effort to protect the natural environment. Based on the growing concern for pollution and the destruction of our natural environment, it seems inevitable that opposition will arise before I-295 can be built.

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Interview with Mr. H. R. Perkinson, Jr., State Planning and Scheduling Engineer, Department of Highways, Richmond, Virginia, October 22, 1970.

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Letter from Mr. E. A. Beck, County Manager, Henrico County, Virginia, February 23, 1971.

Letter from Mr. Frank H. Blackwell, Executive Director of the Richmond-Petersburg Turnpike Authority, April 6, 1971.

Letter from Mr. John S. Brooks, Special Assistant to Virginia Senator Harry F. Byrd, Jr., United States Senate, April 2, 1971.

Letter from Mr. M. W. Burnett, Executive Secretary, County of Chesterfield, Chesterfield, Virginia, February 23, 1971.

Letter from Mr. George W. Cheadle, General Manager, Richmond Metropolitan Authority, November 24, 1970.


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Tracy, F. E.; letter, Assistant Location and Design Engineer, Virginia Highway Department, Richmond, Virginia, November 19, 1970.
February 22, 1971

Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson,

Your letter directed to the Board of Supervisors has been accepted by this office for reply on behalf of the Board. I am also informed that Mr. A. T. Dotson, County Engineer, has replied to your letter to him and in some cases there were duplicate questions.

1. The County Board of Supervisors is in favor of the presently planned general route corridor of I-295 and has supported by resolution its construction.

2. No position favoring additional mileage in the Short Pump area has been taken.

3. Except for urging completion as soon as possible no further action has been taken.

4. Recommendations have been advanced through the office of the County Engineer as explained in Mr. Dotson's reply to you.

5. Mr. Dotson has answered.

6. Definitely. Particularly in eastern Henrico where large tracts of land are available for residential and industrial growth.

7. Yes.

8. Mr. Dotson has answered.

The office of County Manager has file copies of the Virginia Department of Highways reports and publications. It is suggested that duplication of these could run into considerable expense. However, the Department of Highways may be able to provide you with duplicates at some saving in cost to you.
We hope this information will be of value to you in preparing your paper. In the event we can be of additional assistance to you please let us know.

Very truly yours,

E. A. Beck
April 6, 1971

Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson:

I have your letter of April 2, 1971 relative to your thesis on Selected Aspects of Interstate Highway I-295, and I will answer your questions in the sequence in which they have been posed.

1. The Richmond-Petersburg Turnpike Authority does not oppose the construction of I-295, therefore, no actions have been taken to delay or prevent its construction.

2. The Authority is satisfied that I-295 will not have an adverse effect on toll revenues as reported by the Virginia Department of Highways consultants.

3. The Authority has made no effort to change the location corridor of I-295 or its interchange locations, as planned by the Highway Department and the Federal Highway Administration. However, the Authority reserves the right to approve the configuration of the I-295 interchange with the Turnpike planned for location approximately two miles north of Route 10.

4. The Authority could realize some benefit because of the location of I-295. This circumferential...
may relieve some of the traffic congestion on the Turnpike in the Richmond area, and, in all probability, it will increase traffic and revenues south of its proposed connection with the Turnpike.

5. As requested, I am enclosing a copy of the Turnpike Act with Amendments through 1966, and also, a copy of House Bill No. 776, enacted by the 1970 Virginia General Assembly, further amending the Turnpike Act.

If I can assist you with any further information, please do not hesitate to call on me.

Sincerely yours,

[FHB/c]

Frank H. Blackwell
Executive Director

FHB/c
Enclosures
Dear Mr. Anderson:

Senator Byrd has asked me to give special attention to your recent letter concerning I-295.

So far as I am aware, there has been no specific congressional pressure to expedite construction of this highway.

However, there has been considerable congressional effort to speed up the interstate system as a whole.

I suggest that for further information on this subject you write to The Honorable Douglas Fugate, Commissioner, Department of Highways, 1221 E. Broad Street, Richmond, Virginia.

Sincerely,

John I. Brooks
Special Assistant

Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia, 2366
Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson:

Your letter dated February 10, 1971, addressed to Mr. Irvin G. Horner was sent to this office for reply.

I must assume that you are aware of the termini of Rt. 295 and that you probably are not aware of the plans for Rt. 288 which connects the termini of Rt. 295 to form a ring road around Richmond. I will try to answer your questions as numbered:

1. Chesterfield is all for the general route of 295; however, we believe that it stopped short of the major good it could do for our County. As you know there is only about one-half mile of Rt. 295 in Chesterfield.

2. We have practically forced the Highway Department to plans for Rt. 288 which will extend the traffic from 295 on through Chesterfield.

3. The County has sought to encourage early construction of this road by promising rights of way, etc.; however, it seems that neither 295 nor 288 has been completely funded to the point where construction plans can be let for bid.

4. There is only one possible chance for an interchange with Rt. 295 in Chesterfield and that is its interchange with Rt. 95 which is a necessity.

5. Insofar as we know the County will have no financial obligation.

6. I do believe there will be an increase plus due to the
fact that workers can get to the industrial area of Chesterfield much easier, which may ease the need for labor in this area.

7. Chesterfield has not been generally satisfied with Rt. 295 in that the County was virtually left out in its planning; however, this to some degree has been changed with the addition of Rt. 288.

In answer to No. 8, again so far as we know there will be no obligations or responsibilities that accrue to the County.

Should you wish amplification of any of these statements, please let me know.

Sincerely yours,

M. W. Burnett
Executive Secretary
Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson:

This will acknowledge receipt of your letter of November 6, 1970 concerning Richmond Metropolitan Authority.

The Authority was created by an Act of the General Assembly of the State of Virginia during its' 1966 session. I am enclosing a copy of the original news release on October 23, 1966 which contains most of the basic data concerning the proposed Richmond Expressway System.

We have introduced some changes in alignment and design as a result of the Public Hearings held on November 8, 1966, but the system still conforms to the general location recommended by the Engineers. A copy of the approved route is also enclosed.

The idea of dropping 9.6 miles of Interstate Route 295 was first suggested by the Board of Supervisors of Henrico County in exchange for the allocation of 3.3 miles in Interstate Milage to the Beltline Expressway of the proposed Richmond Expressway System. This idea was later endorsed by all of the local jurisdictions including the Governor and the State Highway Commission. The request was not approved by the Bureau of Public Roads.

Interstate 195 designation to the same section of the Expressway System as outlined above was later approved using additional mileage allotments approved by the Congress in 1968. This in no way affects the originally approved mileage for Interstate 295.

We are now in the process of planning the construction of the first Phase of the system which will include the Powhite Parkway, a new James River Bridge and a connection north along the Beltline to Interstate 195. The recommended toll for this section will be 20¢.
This in effect will connect existing Chippenham Parkway, Route 1, 301, 60, 360, 10, 147 and Forest Hill Avenue to Interstate Routes 64 west and 95 north as well as Route 6, 250 and 33 to the west of Richmond since all of these major routes are intersected.

I hope this information will be helpful to you.

Sincerely,

George W. Cheadle
General Manager

GWC: sj
Enclosures
Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson:

Your letter, dated March 12, 1971, addressed to our Commissioner, Mr. Douglas B. Fugate, has been handed to me for reply regarding Interstate Route 295.

We are pleased to furnish you the following information and data in response to the comments and questions outlined in the above mentioned letter:

1. The completion of the Richmond-Petersburg Turnpike Toll Road provided much needed traffic services in the Richmond Metropolitan area. Since the toll road was designated as part of the overall Interstate System, I-95, it was vital to complete the system in Virginia as quickly as possible to facilitate the north-south traffic demands. Also, completion of I-64 in the Richmond Regional Area provided traffic services for the east-west corridor and, of course, the State is now connecting the segments together for a continuous highway system across Virginia.

These factors, as well as other factors such as the completion of other interstate facilities and availability of Federal funds, have placed I-295 on a low priority schedule.
In regard to having sufficient funds to finance this work on Route 295, this is to advise that this work does not have as high a priority as some other Interstate Construction, therefore, funds have not been apportioned to it as of the present. We do expect, however, to begin accumulating funds for it in the very near future and should have sufficient funds by 1975 to begin construction.

There has been no indication, to my knowledge, that any pressure is being exerted against the construction of this Interstate Route.

Attached, herewith, is a copy of the resolution passed by the Highway Commission on December 16, 1965, approving the Corridor Location of I-295 as presented at the Public Hearing on October 29, 1965.

Enclosed are copies of the sketch maps showing the location of I-295 with the interchanges shown in a blue circle.

 Certain properties have been approved for advanced right of way acquisitions; such as hardship cases and protection of interchange locations. The planning and design has not developed to the point where we are in a position to start complete right of way negotiations for the entire route.

Based on the availability of Federal funds, we expect to start construction on I-295 in 1975. A project of this magnitude would require three to four years to complete.

Qualified Consultants have conducted studies to determine whether or not proposed I-295 would be in competition with the Richmond-Petersburg Turnpike Authority. Their studies revealed that proposed Route 295 would not have significant impact upon the traffic and revenues of the toll facility. The Authority recognized the validity of the studies and confirmed that no adverse effect on the traffic and revenue would be occasioned by the construction of Route 295.
Also, enclosed are miscellaneous publications and pamphlets relative to the highway system.

We hope the above information and data will be beneficial to you in your endeavor.

Thank you for your interest in our highway program.

Yours very truly,

P. B. Coldiron
Location and Design Engineer
April 21, 1971

Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Re: Request for Information

Dear Mr. Anderson:

In response to your letter of April 16, 1971 requesting information with regard to the proposed location of 1-295, I will be happy to provide whatever information I can, particularly since Dr. Horgan has been kind enough to serve on several of our functional committees. Please note that I can cite actions taken by the Commission, but other than that answers reflect staff opinions and should not be taken as official RRPDC comments as your questions would seem to indicate.

In answer to your first question, we are on record as being in favor of the proposed 1-295 location. Our Transportation Committee worked closely with Wilbur Smith and Associates in development of the Richmond Regional Area Transportation Study, approved after a public hearing in September, 1969. The proposed route is essentially that as contained in the recommended 1980 Thoroughfare Plan, which is a part of that study.

I believe, there is ample evidence of support for the need for the outer circumferential and that the Commission is fully aware of the need. As widening and realignment as well as new construction of the partial circumferential (Chippenham Parkway, Laburnum Avenue, and Parham Road) are included as part of the 1980 Thoroughfare Plan, this should be taken as recognition for the need for these facilities.

The Commission, to my knowledge, has never gone on record regarding the questions of including Route 288 and 1-295 in the Virginia Interstate System. The idea is not altogether illogical though, since both are proposed to be constructed to interstate standards.

From a staff point of view, there is little question but that an economic boost to the surrounding jurisdictions is anticipated. I think it would be safe to say that many individual Commissioners realize this also.
I hope I have provided you with the information you needed. If I can be of further assistance, please let me know. In the meantime, best of luck in completing your thesis.

Sincerely,

Edward G. Councill, III
Executive Director

EGC/mpp
Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson:

Reference is made to your letter of February 10, 1971 requesting information concerning Route I-295 and its effects on Henrico County. We will attempt to answer your questions in the order presented in your letter.

(1) What financial burdens will the County be responsible for because of Route I-295? The answer to this question requires explanation in that it is a qualified answer.

The federal and state policy on interstate highway construction generally provides that no cost of construction will be borne by the locality where local roads in conflict with the interstate construction will be carried over or under the interstate road at the existing location and to the standards existing when the work takes place.

Any locality accepting these conditions effectively limits future development or creates a tremendous future burden when improvements to the roads and structural crossings become necessary since improvements at that time are to be paid for by the locality with some possible federal and state assistance. Most of the Henrico County roads crossed by Route 295 have existing narrow rights of way, poor alignments, and minimum width paved sections for which future rights of way and improvements are planned near enough in the future to create an excessive burden if the replacement in kind policy is permitted with the 295 construction.

The County administration recommended and the Board of Supervisors approved a program which is attached to provide the needed improvements through the Route I-295 corridor prior to or in coordination with the construction of Route 295 to assure that replacement in kind would provide the improved facility now to meet future needs.

This program was approved by the state and federal agencies involved and thus accelerated the financial burden that would have to be met by the County in the future.

(2) Can you or your department influence the location of I-295 in the County? The location and design of Route I-295 within the general corridor established at the inception of the interstate system was completely coordinated with the
County administration with many of our suggestions and recommendations incorporated into the final plans. To this extent we influenced the location of I-295 in the County.

(3) Has the County had any success in influencing interchange locations? We have furnished information and data, which was not otherwise available to justify establishment of three interchanges which were not provided in the preliminary location and design study. One has been approved and incorporated into the construction plans, one has been tentatively approved for incorporation and the third is still under consideration. The location of a fourth interchange which cannot be justified at this time is under discussion and we expect it to be approved as a future interchange site. Based on the above the answer to this question is in the affirmative.

(4) Is the County in favor of I-295 as it is presently planned? The County administration favors the I-295 as presently planned and the Board of Supervisors have approved it by resolution.

(5) Generally what obligations or responsibility does the County have to I-295 - a Federal-State financed project? The main responsibility and obligation the County has to I-295 is to meet the commitments made to provide improvements of County roads within the I-295 corridor prior to or during construction of I-295. It is also the obligation and responsibility of the County to maintain the surface of all structures carrying County roads over I-295 other than at interchange locations.

The County is also obligated to maintain all public service roads established during construction of I-295 that are constructed to minimum County subdivision standards for inclusion in the official County road system when requested by the Virginia Department of Highways and accepted by the Board of Supervisors.

We would suggest that you contact the Virginia Department of Highways for publications and reports on Route I-295 if you have not done so. We have file copies of the material that has been made available which could be reproduced at some expense.

Should you wish to arrange for reproduction of this material please contact Mr. J. D. Clark, County Public Information Officer.

We hope this information will be of assistance to you. Please let us know if we can be of further help.

Very truly yours,

A. T. Dotson, Jr.
County Engineer

cc: J. D. Clark
Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson:

We hope the following information will be of assistance to you on your thesis for a degree from the University of Richmond.

In response to your questions:

(a) Yes, our association is aware of the proposed circumferential Interstate 295.

(b) We are definitely in favor of I-295.

(c) Our association is involved with learning the needs and stimulating government authorities to take necessary action to improve traffic ways and patterns. We are also concerned with ceremonial festivities and programs for the opening of roads in our area. We assume we will be asked to participate when I-295 is completed.

(d) All circumferential roads have a lower priority than through routes with some exceptions, as 495 around Washington D.C. This area had no direct north-south or east-west routes. Richmond has very good through routes, I-95 running north and south and I-64 east and west. I-295 is a big project compared to the circumferential around Roanoke which involved only a few miles. Money, of course, is a factor.

(e) We know of no action, political or otherwise, to hasten the completion. One might write the federal government to release interstate funds as soon as they are available.

(f) Central Richmond Association is very definitely in favor of the Richmond Expressway System and has worked closely with
the Richmond Metropolitan Authority. Mr. George Cheadle, General Manager of RMA keeps our membership advised of developments by speaking at various functions. We also aided in the relocation of businesses displaced by the new expressway through our Central Locations Committee.

I hope this information will be of assistance to you.

Good luck on your thesis.

Cordially,

Henry R. Ganner, Executive Director
Central Richmond Association

HRG:sm

Enc.
March 31, 1971

Gilray M. Anderson, Jr.
33 Cunningham Drive
Hampton, Virginia  23366

Dear Mr. Anderson:

Subject: Location of I-295, Richmond, Virginia

This will acknowledge your letter of March 24 to the Honorable Thomas J. Bliley, Jr., Mayor, who has requested that I respond to your inquiry.

I have discussed your several questions with Mr. A. Howe Todd, Director of Planning and Community Development. Mr. Todd has been involved with the Richmond Regional Planning District Commission, the Department of Highways and Federal representatives in the planning for the location of this circumferential route. The following answers are in the same order in which they were posed.

1. By and large Richmond has been in favor of the proposed route with the exception of possible ecological harm to the Chickahominy Swamp.

2. In favor.

3. If you will refer to the Richmond Master Plan and information available through the Richmond Regional Planning District Commission, you will no doubt see that there are three partial or full circumferential routes around the City, the I-295 being the outermost route.
4. We have not favored additional interchanges.

5. No economic boost is seen for the City of Richmond because of the proposed route. On the contrary, we feel there is a good chance for decentralization of industrial and commercial activity in order to have access to the new highway.

6. Although we are generally satisfied in the determination of the location of I-295, we do feel that there are priorities more important to the Central City than a circumferential highway and will continue to state our case for additional State and Federal aid in relief of urban traffic congestion.

If there are additional questions or information you wish, I suggest you contact Mr. Todd who probably has the type of information on this project which might be helpful to your paper. I would further suggest that you work through Mr. Ed Councill, Executive Director of the Richmond Regional Planning District Commission. The Commission would be the logical place to receive specific information or background information on political or physical problems involved in this project.

Sincerely,

J. A. Jones, Assistant to the City Manager

JAJ/asp

CC: The Honorable Thomas J. Bliley, Jr.-Mayor
Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia  23366

Dear Mr. Anderson:

Mr. J. P. Mills, Jr. has referred to me your inquiry of October 9, 1970, in which you requested certain information to be used in a thesis for your Masters Degree on the subject matter.

Generally speaking, highway improvements of the interstate type are presently being designed to adequately service 1990 estimated traffic volume. On Route 295 a public hearing for corridor location has been held and another public hearing for location and design will be scheduled at a later date, after which the plans will be released for right of way acquisition.

Progress on the Interstate System is controlled to a large extent by the release of Federal Funds since these monies represent about 90 percent of the cost. In Virginia, the Highway Commission developed a priority of improvements for interstate routes that give first attention to the overloaded existing arterial routes such as U.S. Routes 1 and 11. Since Interstate 295 was a circumferential route estimated to carry lower traffic volumes initially, it was rather obviously given one of the last priorities for construction.

The subject you have chosen for your thesis is, of course, rather involved; and I am sure that you will need more detailed information, especially in regard to preliminary engineering and plan design. It is suggested that you contact Mr. F. E. Tracy, Assistant Location and Design Engineer, who is quite an expert on interstate matters. I am sure that Mr. Tracy or one of his engineers could provide you with this type of data.
In the meantime, I am taking the liberty of sending you some maps which I trust will be of help to you as material in the development of your thesis.

Sincerely,

H. R. Perkinson, Jr.
State Planning and Scheduling Engineer

cc: Mr. J. P. Mills, Jr.
    Mr. F. E. Tracy
April 8, 1971

Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson:

Thank you very much for your letter requesting information on Interstate Route 295, the proposed circumferential highway at Richmond, in connection with your thesis. To respond to your questions:

1. I do not know why the construction of Interstate 295 has been a low priority project. For the most part, the states have jurisdiction over the setting of construction priorities, and I believe that representatives of the Virginia Department of Highways could respond more effectively than I to this question.

2. Indirectly, yes. Congress has mandated construction of the Three Sisters Bridge and its approach highways in Northern Virginia. This is a highly controversial project, and is the subject of litigation.

   Congress has expressed concern generally over the impoundment of Highway Trust Fund money. Impoundments have had the effect of slowing progress on interstate highway construction. Please note the "sense of Congress" language in Section 107 of the enclosed copy of the Federal-Aid Highway Act of 1970.

3. I cannot respond to this question because the State Highway Department has jurisdiction over construction priorities.

4. The previous Administration unilaterally announced an intention not to construct the Three Sisters Bridge and its approaches. This was negated by the Federal-Aid Highway Act of 1968, which mandated construction.

4.5. These questions are answered in considerable detail in the transcript of hearings for the Federal-Aid Highway Act of 1970, being sent to under separate cover.

I am enclosing with this communication a copy of PL 91-605, the Federal-Aid Highway Act of 1970, and a copy of the Senate Committee Report
on the legislation.

Please let us know if we can be of any further assistance.

With kind regards.

Sincerely,

[Signature]

William B. Spong, Jr.

enclosures
Mr. Gilray M. Anderson, Jr.
2133 Cunningham Drive
Hampton, Virginia 23366

Dear Mr. Anderson:

Thank you for your letter of March 4, 1971.

I have no information concerning the proposed construction of this road, except to state that the Senate has made no effort to influence the location of I295, and I would consider it highly improper for us to do so.

I believe if you will direct your questions to Mr. Douglas B. Fugate, Commissioner of Highways, State Capitol, Richmond, Virginia, he will give you prompt answers to your questions.

Sincerely yours,

Wm. F. Stone

WFS/bjs
Interstate System  
Route 295  
Chesterfield, Henrico, Hanover Cos.

Mr. Gilray M. Anderson, Jr.  
2133 Cunningham Drive  
Hampton, Virginia 23366

Dear Mr. Anderson:

This is in response to your letter of November 6, 1970 requesting information pertaining to Interstate Route 295 in the Richmond area.

The several questions which you asked are listed below, together with our reply.

1. Was your Department responsible for the original location of I-295?

   A. The location for Route I-295 was determined by this Department. A public hearing was held on October 26, 1965. Following this, the State Highway Commission approved the location. Subsequent action by the Federal Highway Administration confirmed this approval.

2. Is your Department involved with the accessibility of land for the proposed route. If not, how is this coordinated with other departments?

   A. The intent of your question is not fully understood. If you refer to the accessibility of individual properties which may be cut off from all previous frontage by means of the new route, then the answer is that provisions are made in our design to provide the necessary access, or in lieu of this damages are paid. If your question pertains to the accessibility of adjacent lands,
then the answer is that this can only be accomplished by means of the proposed interchanges or by means of existing road networks.

3. Are 14 interchanges still planned for I-295?
   A. We have firm plans for 15 interchanges with the possibility that others may be added.

4. Who will build Route 288 - the completion of the Richmond circumferential, Federal - State or both?
   A. Proposed Route 288 is not a part of the designated Interstate System. Right of way acquisition for portions of the route is underway utilizing 100% State funds. Its construction will be either State financed or State-Federal aid financed depending on the availability of funds at the time of construction.

5. How many lanes are planned for I-295 at present?
   A. Between Route 95, south of Richmond, and Route 64, east of Richmond, our present plans are for 6 through traffic lanes; from this point to Route 95 north of Richmond 8 lanes are proposed and from Route 95 to Route 64 west we propose 4 lanes. These are supplemented by auxiliary lanes and collector-distributor roads as necessary.

6. Is the length still 36 miles for I-295?
   A. The total length as presently designed is 36.9 miles.

7. Is there any information available in regard to safety devices on highways such as guard rails, or break away sign mountings?
   A. Many individual safety features will be incorporated into Route I-295. These will consist of the use of a blocked out beam guard rail, the introduced ends of which will be either turned down flush with the shoulder surface or buried into a cut slope. Traffic signs will be normally mounted in such a position as
to be inaccessible to vehicular traffic. Where it is necessary for a sign to be in an exposed area, it will be of a break-away design. Slope faced parapet walls will be used on bridges carrying the main roadways. These parapets will be removed from the through pavement edge by a distance equivalent to the usable shoulder and they will be of a design which should redirect an out-of-control vehicle without its penetrating the parapet or abruptly entering an adjacent lane. At underpasses, the piers will be set back approximately 30' from the pavement edge in the interest of safety.

Slopes will be of such a design that in the shallow areas they may safely be negotiated by a vehicle in an emergency. In higher fill areas guard rail as described above will be used.

A wide median will be used throughout the route. In most areas, its width will exceed 100 feet. Outer separators between the main roadways and collector-distributor roads will also be very wide in the interests of safety.

8. Have any new safety innovations been added in planning I-295?

A. Most of the features indicated in Item 7 above are not solely used on Route I-295. They are used in applicable situations on our current designs for our higher type road systems.

It is sincerely hoped that the above information will be helpful to you in your graduate study at the University of Richmond. If this office can be of any further assistance, please feel free to call on us.

Yours very truly,

F. E. Tracy, Assistant Location and Design Engineer

FET:pmn
APPENDIX B

Interstate-Arterial Highway System of Virginia, Map.

Interstate-295, Map.

National System of Interstate and Defense Highways, Map.

Proposed Highway Development Route 288 Chesterfield, Goochland and Henrico Co's., Map.

Proposed Highway Development Interstate Route 295 Chesterfield, Henrico and Hanover, Map.

Richmond Metropolitan Authority-Richmond Expressway System, Map.

PROPOSED HIGHWAY DEVELOPMENT
ROUTE 288
CHESTERFIELD, GOOCHLAND & HENRICO CO'S

Projects: 0288-020-101; 0288-037-101; 0288-043-101
From: Int. Rte. 250 & 295 (W. of Richmond)
To: Int. Rte. 360 (SW. of Richmond)
PROPOSED HIGHWAY DEVELOPMENT
INTERSTATE ROUTE 295
CHESTERFIELD, HENRICO & HANOVER
PROJECT NO'S
0295-020-101 0295-043-101
0295-043-102 0295-043-103
0295-042-101
FROM: INT. INTERSTATE RTE. 95 (S. OF RICHMOND)
TO: INT. INTERSTATE RTE. 64 (W. OF RICHMOND)
LENGTH = 37.0 MI.
**Virginia's HIGHWAY DOLLAR 1970-1971**

### Income

- Motor Fuel Taxes: 42¢
- Interstate Federal Funds (Require 90-10 Matching): 25¢
- Motor Vehicle Licenses: 14¢
- Motor Vehicle Sales and Use Tax: 7¢
- Primary, Secondary, Urban Federal Funds (Require 50-50 Matching): 7¢
- Motor Vehicle Registration, Operators' Permit Fees: 3¢
- Miscellaneous: 2¢

### Expenditures

- 55¢: Construction
- 19¢: Maintenance
- 12¢: Right-of-Way
- 5¢: Support of Other State Agencies
- 4¢: Administration, General Expenses, Capital Outlay
- 4¢: Direct Payments To Municipalities
- 1¢: Two Counties Not In Secondary System
The researcher for this thesis was born in Richmond, Virginia twenty-nine years ago. In 1954 his family moved to Henrico County where he graduated from Douglas S. Freeman High School.

He received his Bachelor of Arts degree in Political Science from the University of Richmond in 1966. The following year was spent as a full-time student in the graduate school of the University of Richmond. During his full-time undergraduate and graduate work he was swimming coach for the Country Club of Virginia and the James River Aquatic Club in Richmond, Virginia.

1967 brought a move to Hampton, Virginia as an employee of the Virginia Electric and Power Company in the Commercial Sales Department. The next year he married Beverley Ann Kritzer of Richmond, Virginia.

A friend and he began a foreign car parts and accessories company in 1971. This presently is a part-time business located in Newport News, Virginia.