

**URBAN STREETS AND HIGHWAYS—
A LOOK TO THE FUTURE**

**REPORT OF THE
VIRGINIA ADVISORY LEGISLATIVE COUNCIL**

To

THE GOVERNOR

And

THE GENERAL ASSEMBLY OF VIRGINIA



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COMMONWEALTH OF VIRGINIA
Department of Purchases and Supply
Richmond
1967

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URBAN STREETS AND HIGHWAYS—A LOOK TO THE FUTURE

REPORT OF THE VIRGINIA ADVISORY LEGISLATIVE COUNCIL

Richmond, Virginia, December, 1967

To:

HONORABLE MILLS E. GODWIN, JR., *Governor of Virginia*

and

THE GENERAL ASSEMBLY OF VIRGINIA

Since the genesis of the present Highway Department in Virginia, which began with the creation of the first State Highway Commission in 1906, the responsibility for and emphasis on highway construction has been primarily on rural roads. Although more and more assistance has been given to the municipalities over the years, and the formula for the distribution of available funds has been altered to their benefit, the major emphasis in the present nine-year program for highway construction in Virginia is still upon the roads connecting the municipalities, principally the 1,060-mile Interstate System and the 1,738-mile arterial highway network.

At the same time, Governor Harrison, being aware of the rapid trend to urbanization in Virginia, in 1964 requested the Virginia Advisory Legislative Council to make a study of urban highway needs and the financing thereof. At the time this study was completed and the Council reported to the 1966 Regular Session of the General Assembly, only a bare beginning had been made in the needs studies in the major urban areas which were required of the Highway Department as a condition to further participation in federal aid. The Council therefore recommended that the study be continued and in consideration of this recommendation the General Assembly adopted Senate Joint Resolution No. 23, under which the Council's current study was conducted.

During this biennium, there have been completed needs studies in 45 metropolitan areas in Virginia and two more are in contemplation. Based on these, the Highway Department made a study of urban needs up to 1985. We attach as an appendix to this Report the text of the Highway Department's Report to the Council.

In very brief summary, that Report shows that the population of Virginia is at the present time estimated to be 62.9% urban and that by 1985 it is expected to be 85.3% urban and only 14.7% rural. To meet the anticipated needs of this greatly increased urban population, it is estimated that 3.8 billion dollars would have to be expended for construction costs and purchase of rights-of-way whereas only 900 million dollars in anticipated revenues from present sources will be available.

It is obvious that long range planning must be undertaken now to meet the situation which will confront the cities and towns of the Commonwealth if a major crisis in their streets and highways situation is to be avoided. Since it is hoped that the rural highway needs will be reasonably well satisfied with the completion of the present program, it also appears that thought must be given to the development of a new allocation formula for highway funds, to channel what funds are available toward the needs which are most acute. Action must also be taken immediately looking

toward the reduction of the one major aspect in highway cost which is to some extent subject to the State's control, that is, acquisition costs for rights-of-way.

With these thoughts in mind, the Council makes the following recommendations.

RECOMMENDATIONS

1. The State Highway Commission should be authorized, upon the adoption of preliminary plans for highway projects and after holding public hearings thereon, to file such plans in the clerk's offices wherein deeds are admitted to record in the counties or cities where the land proposed to be used lies, such filing to have the effect of zoning the land for highway purposes and to bar the construction of improvements thereon. In order that the owners of such lands will not be deprived of the use thereof without compensation, the Highway Commission should further be required to purchase the land upon request of the owner; in case the Commission is unable to do so, the zoning would be ineffective as to that property.
2. As a further protection to land which may be needed for future rights-of-way, there should be established a set-back line of 50 feet from the edge of all highways in the State within which no new improvements could be constructed without specific authorization from the State Highway Commission.
3. § 33-57.1 of the Code presently permits advance acquisition of rights-of-way for the Interstate Highway System within a period of 12 years and for other highways within 10 years. This should be increased, in the major metropolitan areas to a period of 16 years for all highways.
4. During the biennium 1968-1970 the State Highway Commission should set aside a minimum of five million dollars each year for the advance purchase of rights-of-way.
5. Enhancement to remaining property resulting from the construction or improvement of a highway should be an offset against the value of any property taken for such construction or improvement.
6. The present allowance to municipalities for maintenance, improvement, construction or reconstruction of streets not a part or an extension of the primary system should be increased from \$1,000 to \$1,100.
7. The study of urban streets and highways by the Virginia Advisory Legislative Council with the cooperation of the State Highway Department and other State agencies, should be continued.

DISCUSSION OF RECOMMENDATIONS

1. It is unreasonable to require that a person owning property which may be needed for future highway development refrain from making the highest and best use of his land without compensation. However, experience has shown that the cost of right-of-way acquisition may be enormously increased if buildings or structures are erected on such property and later must be purchased and either moved or demolished by the State Highway Department. The landowner is also inconvenienced if he makes improvements to his property in ignorance of the Highway Department's plans. We accordingly recommend that the State Highway Commission, when it has developed preliminary plans for an individual highway project and after the holding of a public hearing thereon, file in the clerk's office where deeds are admitted to record in the county or city wherein any land which will be needed for such project lies, a plat showing the proposed location of the highway and the ownership of the land which will be

required. The filing of such plan would operate to zone the land shown within the lines of the highway for highway use only. The owner or tenant of record of any such land would thereafter be prohibited from constructing a building or buildings or making other improvements on the land without the approval of the State Highway Department. The landowner, however, would be authorized to require the Department, or the municipality in the case of a primary urban project, to acquire the land if the landowner desires to dispose of it. In the event of failure by the Department to take steps looking toward the acquisition of such property, the zoning provisions of the bill would be inoperative as to that land. At present cities have such powers within their boundaries and within portions of surrounding counties.

The time limitations within which advance purchase of rights-of-way must be made by the State Highway Department would be inapplicable to any land so acquired.

2. For further protection against increases in right-of-way acquisition costs by the construction of buildings or structures on land which may be needed for highway improvements, we propose the establishment, for all highways, of a 50-foot setback line from each edge of the highway within which no improvement could be made without the consent of the State Highway Department. The State Highway Commissioner or other authority having jurisdiction over the highway would be permitted to grant a variance in the setback requirement to alleviate a clearly demonstrable hardship approaching confiscation. Court review of the decision of the Highway authority would be provided for.

The setback requirement would be inapplicable in any county, city or town which has setback regulations as a part of a zoning ordinance.

3. Since the problem of increasing costs for right-of-way acquisition is most acute in the rapidly developing metropolitan areas within the State, we recommend that the limitations on the State Highway Commissioner's advance acquisition of right-of-way, currently 12 years for the Interstate Highway System and 10 years for other highways, be increased to 16 years for all highways within cities, towns and counties adjacent to cities of 50,000 population or more.

4. In order to provide funds to expedite the advanced acquisition of rights-of-way we recommend that the State Highway Commission set aside at least 5 million dollars in each year of the 1968-1970 biennium for the purchase of right-of-way in advance, which could thereafter constitute a revolving fund for this purpose.

5. It is obvious that the condemnation of part of a parcel of land and the building of an improved highway thereon in many cases will materially increase the value of the remaining portion of the landowner's property. It appears only fair to us that the State should get the benefit of this enhancement in value and we accordingly recommend that it be permitted as a setoff against the value of the land taken. We would not, however, permit recovery over of any excess against the landowner. Such setoff is permitted in federal condemnation cases and under state law in North Carolina. Virginia now permits setoff only against an award for damages to the remainder of the landowner's property.

6. § 33-35.4 of the Code presently permits the payment to cities and incorporated towns with populations of 3,500 or more of \$1,000 per mile for maintenance, improvement, construction or reconstruction of streets not a part of or extension of the primary system. In the light of the infla-

tion of all costs dealing with highway maintenance and construction we regard this figure as inadequate and recommend that it be increased to \$1,100 per mile.

7. In the light of the urban highway problems which we have alluded to above and which are discussed in more detail in the Report of the Highway Department which is appended to this Report, it is obvious that many changes will have to be made in the statutes and practices of the Highway Department if the needs of the urban areas of the State are to be realistically faced. We therefore recommend a continuation of the Study by the Council, with the assistance of the Highway Department and other State agencies as required, during the next biennium.

CONCLUSION

The Council desires to express to the members of the State Highway Commission, the staff of the State Highway Department and others who assisted it in connection with this Study, its appreciation of such assistance.

Bills and a resolution to accomplish the recommendations discussed above are attached to this Report.

Respectfully submitted,

TOM FROST, *Chairman*

CHARLES R. FENWICK, *Vice-Chairman*

C. W. CLEATON

JOHN WARREN COOKE

J. D. HAGOOD

CHARLES K. HUTCHENS

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WILLIAM F. STONE

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DISSENTING STATEMENT OF GARNETT S. MOORE

While I am in accord with much of the proposed VALC report on Urban Streets and Highways, I cannot agree to certain parts of it.

I am, and have been for many years, fully aware of problems connected with increase in costs for securing right of way for highway purposes. However, the grant of the power of Eminent Domain to the Highway Department is in derogation of the individual's right to own, hold and use property as the owner so desires. I recognize, however, that the right of Eminent Domain is a necessary grant of power in the instance of taking land for highway purposes, but I further believe that the authority under the present statutes is ample and should not be further extended.

The Highway Department has authority to acquire by purchase (or condemnation), land for *future use* by the Highway Department for highway purposes. I do not feel that any further authorization to take land without purchasing it at the time it is taken, is justified. I reach this decision fully aware of the ever-advancing costs for right of way procurement. It has become more evident that the general trend at all levels of government during the last several years has been toward penalizing a person who owns land by subjecting him to all types of rules and regulations, including ever-rising local tax levies for support of government.

Under the proposal in this report, a person who had his land zoned by the recording of a plat showing proposed future highway location would then be saddled with the burden of asking an administrative arm of the State, the Highway Department, how he could use that land. The extent to which this penalizes him can not be emphasized any better than by pointing to the first sentence of section 4 of the bill, where the landowner would even have to get permission to cut down a tree, or remove timber, or any other material on his own property for which he had not received one penny from the State. If this does not amount to taking without due process, then the phrase is meaningless.

The Bill proposing to carry out this plan has been rejected by the House side of the General Assembly in at least three different legislative sessions.

I point to one further recommendation in this report which would allow "claimed" enhancement in value to be set off against the value of the land taken. It specifically provides that no charges would be assessed against the landowner if this was more than full value. This is a very similar proposal to that which we heard when we allowed enhancement to be set off against damages.

Enhancement is purely a speculative condition that may or may not arise. It would only be one very short step further, in those cases where it was claimed that enhancement in value was more than the value of land taken, to require the landowner to come forth and pay to the State additional sums for the enhancement.

I therefore request that I be recorded as voting against these proposals.

Respectfully,
GARNETT S. MOORE

I also am opposed to the features of the report discussed in Mr. Moore's statement.

SAM E. POPE

APPENDIX A

A BILL to authorize the State Highway Commission to adopt preliminary plans for any interstate, primary, secondary or urban highway project and to alter or amend the same at any time; to provide for a public hearing on such plans; and to provide for the filing of any such plans in the clerk's office of any county or city wherein deeds are admitted to record and in which county or city land affected by such plans is located; to provide for the effect of such filing; to require persons owning property which is within the location of a proposed highway project to obtain the approval of the Highway Commission before making improvements thereon; to provide that the Highway Department may be required to acquire such property; and to provide for the effect of failure or refusal to acquire such property.

Be it enacted by the General Assembly of Virginia :

1. § 1. As used in this act the following terms shall have the meanings respectively ascribed them unless the context clearly requires a different meaning.

(a) "Commission" means the State Highway Commission ;

(b) "Department" means the State Department of Highways ;

(c) "Clerk's office" means the clerk's office of the court in the county or city wherein deeds are admitted to record and in which county or city land affected by a plan adopted by the Department lies ;

(d) "Interstate highway" means a highway within the National System of Interstate and Defense Highways as authorized in Article 2.1, Chapter 1, Title 33 of the Code ;

(e) "Primary highway" means a highway within the primary system of State highways as authorized in Article 2, Chapter 1, Title 33 of the Code ;

(f) "Secondary highway" means a highway within the secondary system of State highways as authorized in Article 4, Chapter 1, Title 33 of the Code ;

(g) "Urban highway" means a highway within the urban system of highways as authorized in Article 2, Chapter 1, Title 33 of the Code ;

(h) "Preliminary plans" means the plans for any future highway project in the interstate, primary, secondary or urban system which the Department is authorized to adopt, and which has been platted and placed on a plat filed in the clerk's office and shall include alterations and amendments of such plans ;

(i) "Plat" means a map or other survey filed in the clerk's office of the county or city showing the preliminary plan for any interstate, primary, secondary or urban highway project in such county or city which has been adopted by the Commission and which shows the ownership of the land lying within the location of such future highway project ; provided that the boundary lines of such highway project shall be indicated by permanent markers, which markers shall be designated on such map or survey ;

(j) "Construct" includes construct, enlarge, add to, improve, extend or reconstruct a building or other improvement on land shown within the lines of a proposed highway project shown on any plat filed under the provisions of this act in a clerk's office.

§ 2. (a) The Commission is authorized to advance individual highway projects in such manner as in its judgment may be required to maintain an orderly and continuous construction program consistent with available funds. Before preparing final plans for the development of a highway or section thereof the Department will hold a public hearing, after at least thirty days notice, at which preliminary plans for development, including alternates, if any shall be presented.

(b) Upon adoption by the Commission of the preliminary plans for a project for which a public hearing has been held, plats showing the proposed location of such highway by such descriptions as will disclose the ownership of the land which will be required may, at the option of the Department, be filed in the clerk's office of the county or city in which the affected land lies. Property owners and tenants of record affected by plans so filed shall immediately be given notice thereof by registered mail, together with notice of the provisions of this act. Plans so filed may be altered or amended as may be necessary in developing final plans for the project to be constructed. Notice of any alteration or amendment shall be given to property owners and tenants of record affected by such change by registered mail. The Department shall provide books wherein such plans and plats thereof may be spread and made available to the public.

§ 3. The filing of any such preliminary plans shall operate to zone the land shown within the lines of such interstate, primary, secondary or urban highway for highway uses only. Any alteration or amendment duly adopted shall be noted on the plat of record by the clerk at the time a revised plat is filed by the Department. All such plats and amendments thereto shall be indexed in the general indices of such clerk's office in the name of the person holding record title to each parcel of land or interest therein situate within the lines of such highway. The names of the persons holding such record title shall be indicated on any plat so filed and a list thereof shall be furnished to the clerk by the Department at the time of filing. The clerk shall be paid a fee by the Department of fifty cents for each person in whose name such plat shall be indexed. Nothing in such zoning shall operate to prevent the use of such land for a then existing use until such time as such land is acquired by the Department, or by a municipality in the case of a primary urban project if applicable, in the manner provided by law, but no locality shall have authority to change the zoning of such land to permit a different use.

§ 4. Any owner or tenant of record of land lying within the lines of a proposed highway project as shown by the plat filed in the clerk's office and desiring to construct a building or buildings for any purpose on such land or to make other improvements thereon or to excavate any material or remove any timber for commercial use from such land shall apply in writing to, and obtain the approval of, the Department before so doing. Any construction, improvement, excavation or removal done in violation of the provisions of this act shall be unlawful and shall not entitle the then existing or a subsequent owner or tenant of such land to an award or damages in condemnation for the construction or improvements made without the consent of the Department.

§ 5. Any person owning land which lies within the boundaries of a proposed highway project as shown on a plat filed in accordance with the provisions hereof may require the Department, or municipality in the case of a primary urban project, if applicable, to acquire such land if such owner desires to dispose thereof, and the Department fails or refuses to approve an application for a permit to construct or reconstruct an improvement on such land or to excavate material or remove timber from such

land within sixty days of application therefor. If at any time the Department refuses to acquire such land for a period of more than ninety days, beginning on a date when the owner thereof sends a certified letter to the Department requesting it to make such acquisition or if the Department fails to acquire any property located within the boundaries of a proposed highway within seven years from the date of filing of the plat, then such land shall not be subject to any other provisions of this act and the Department shall cause to be entered by the clerk such fact of record in an appropriate place in the plat book furnished by the Department which book shall contain such pages as may be necessary for the listing of owners who have requested the Department to acquire their land and who have been refused by the Department.

§ 6. In the event the Department desires to acquire such land and is unable to agree with the owner as to the purchase price the Department shall proceed under the laws of eminent domain as set forth in Title 33 within ninety days of the owner's demand that such land be acquired. Any land acquired under this act shall not be subject to the provisions of § 33-57.1.

A BILL to amend the Code of Virginia by adding in Title 33 a new section numbered 33-112.1, relating to setback requirements from existing highways.

Be it enacted by the General Assembly of Virginia :

1. That the Code of Virginia be amended by adding in Title 33 a new section numbered 33-112.1 as follows :

§ 33-112.1. (a) For the purpose of promoting the public safety, welfare and convenience and the enjoyment of public travel and to protect the public investment in highways, it is hereby declared to be in the public interest to regulate and restrict construction adjacent to highways by means of setback requirements.

(b) For the purpose of this section the following definitions shall apply :

(1) "Highway"—Every way or place of whatever nature which is open to the use of the public for purposes of vehicular traffic and which is maintained and controlled by the State Highway Commission, the governing body of any county, city or town or any other public authority having jurisdiction over roads.

(2) "Right-of-Way"—The entire width between the boundary lines of a highway as shown by recorded deeds and plats. In absence of recorded data the center of the general line of passage, conforming to the ancient landmarks where such exists shall be presumed to be the center of the way and the ancient landmarks shall establish the boundary lines. In absence of any other proof the width of the highway shall be presumed to be thirty feet.

(c) Notwithstanding any other law to the contrary, no person shall erect or construct any new building or structure within fifty feet of the edge of any highway in this State unless permitted to do so by this subsection.

The State Highway Commissioner or other authority having jurisdiction over the highway involved may grant a variance in the above setback requirement when such authority is satisfied that the variance will alleviate

a clearly demonstrable hardship approaching confiscation, as distinguished from a special privilege or convenience sought by the applicant, provided that all variances shall be in harmony with the intended spirit and purpose of this section.

The State Highway Commissioner or other authority having jurisdiction over highways may remove the setback requirement from any highway or portion thereof under its control and jurisdiction in any case where such authority finds that such setback is not necessary on such highway or portion thereof, provided such removal does not defeat the purpose of this act; and provided further in any case where an extension of the Primary System is involved, no city or town may remove such setback requirement without the concurrence of the State Highway Commissioner.

(d) Any person aggrieved by the decision of the State Highway Commissioner or other authority in granting or denying a variance in the setback requirement or in removing the setback requirement may present to the circuit or corporation court of the county or city in which the highway is located a petition specifying the grounds on which aggrieved within thirty days after the decision has been rendered by such authority. The court shall review the action of the authority making the decision and either affirm or reverse the same.

(e) The provisions of this section shall not apply to the highways within any city, town or county which has a zoning ordinance which includes regulations as to setbacks from existing highways.

A BILL to amend and reenact § 33-57.1, as amended, of the Code of Virginia dealing with the acquisition of real property which may be needed for highways or projects by the State Highway Commissioner.

Be it enacted by the General Assembly of Virginia :

1. That § 33-57.1, as amended, of the Code of Virginia be amended and reenacted as follows :

§ 33-57.1. When the State Highway Commissioner determines that any real property will be required in connection with the construction of a highway, or "project" as defined in § 33-228 of the Code, within a period not exceeding twelve years for the Interstate Highway System or ten years for any other highway system from the time of such determination, and that it would be advantageous to the State to acquire such real property, he may proceed to do so; *provided further that within cities, towns and counties adjacent to cities of 50,000 population or more the period of time for advance acquisition of right-of-way for both Interstate and other systems shall be sixteen years.* The State Highway Commissioner may lease any real property so acquired to the owner from whom such real property is acquired, if requested by him, upon such terms and conditions as in the judgment of the Commissioner may be in the public interest. In the event that *construction* of the highway or project contemplated has not been ** undertaken within * the period of time set forth above ** from the date of the acquisition of such property, upon written demand of the owner or owners, their heirs or assigns, such property shall be reconveyed by the Commonwealth of Virginia to such owner or owners, their heirs or assigns, upon repayment of the original purchase price, without interest.

A BILL to amend and reenact § 33-75.9 of the Code of Virginia relating to revenue for the Highway Right-of-Way Fund.

Be it enacted by the General Assembly of Virginia :

1. That § 33-75.9 of the Code of Virginia be amended and reenacted as follows:

§ 33-75.9. *Notwithstanding any other provisions of law, from all funds available to the State Highway Commission for highway purposes, and after the cost of administration but before any of such funds are distributed and allocated for any road or street purposes the Commission shall set aside a minimum of five million dollars each year of the 1968-1970 biennium for the Highway Right-of-Way Fund and each year thereafter set aside such funds as the Commission deems necessary and desirable to carry out the purpose of the Fund.*

*In addition to the above, all revenues paid into the State treasury from the proceeds of taxes on motor vehicle fuels, motor vehicle licenses, and any other sources which are required by law to be segregated for the construction, reconstruction and maintenance of State highways, not otherwise expressly appropriated, are hereby declared to be available funds to be expended as provided in this article. For purposes of this article any revenue paid into the State treasury in excess of the estimated receipts from such segregated revenues in the appropriation act for the current biennium shall be considered as available funds; provided, however, in the event there should be any expenditures by the State Highway Commission in any fiscal year in excess of the amount appropriated for such purpose, by virtue of a deficit appropriation authorized by the Governor, any revenues paid into the State treasury in excess of the estimated receipts for such fiscal year shall not be considered as available funds under this section until such deficit appropriation has been repaid. The State Comptroller is directed to transfer such available funds to the special fund herein created at such time as it appears that current revenues segregated for highway purposes exceed the estimated sums otherwise appropriated *.*

A BILL to amend and reenact § 33-73 of the Code of Virginia, relating, to enhancement being offset against damages in eminent domain actions brought by the State Highway Commissioner.

Be it enacted by the General Assembly of Virginia :

1. That § 33-73 of the Code of Virginia be amended and reenacted as follows:

§ 33-73. In all cases under the provisions of this article, the enhancement, if any, in value of the remaining property of the landowner by reason of the construction or improvement contemplated or made by the Commissioner, shall be offset against the damage, if any, resulting to such remaining property of such landowner by reason of such construction or improvement. * If such enhancement in value shall exceed the damage * to such remaining property, the excess shall be offset against the value of the property taken, but in no event shall there be any recovery over against the landowner for such excess.

A BILL to amend and reenact §§ 33-35.4 and 33-50.2, as amended, of the Code of Virginia, both relating to payment to certain cities and towns for maintenance of streets.

Be it enacted by the General Assembly of Virginia :

1. That §§ 33-35.4 and 33-50.2, as amended, of the Code of Virginia, be amended and reenacted as follows :

§ 33-35.4. The State Highway Commission is authorized and empowered to allocate and pay to all cities and incorporated towns having a population of thirty-five hundred or more according to the last United States census for which population figures are available, * for maintenance, improvement, construction or reconstruction of streets which are not a part or an extension of the State highway primary system in the corporate limits of such cities and incorporated towns, the sum of * *eleven hundred* dollars per mile annually, if such streets and roads or portions thereof be maintained up to a standard satisfactory to the Commission. However, with the exception of streets or portions thereof located within territory annexed or incorporated since July one, nineteen hundred fifty, or hereafter, which streets a portion thereof (1) have been paved and have constituted parts of the secondary system of State highways prior to such annexation or incorporation, or (2) have constituted parts of the secondary system of State highways prior to such annexation or incorporation and are paved to a minimum width of sixteen feet subsequent to such annexation or incorporation and with the further exception of streets or portions thereof which have previously been maintained under the provisions of § 33-50.1 or § 33-50.4, or which have been eligible for maintenance payments under § 33-50.2, no such allocation or payments shall be made by the Commission to any such city or incorporated town unless the portion of the street for which said allocation is made has an unrestricted right-of-way width of not less than thirty feet and a hard surface width of not less than sixteen feet; and any such street established after July first, nineteen hundred fifty, shall have an unrestricted right-of-way width of not less than fifty feet and a hard surface width of not less than thirty feet; provided, however, that cul-de-sacs may have an unrestricted right-of-way width of not less than forty feet and a turnaround that meets State Highway Commission standards.

Allocations and payments made pursuant to this section to such cities and incorporated towns, shall be paid by the Commission to the governing bodies of such cities and towns from funds allocated under § 33-35.1.

Notwithstanding any other provisions of this section, any incorporated town which shows to the Commission by satisfactory evidence that its population has increased to thirty-five hundred inhabitants, or more, since the last preceding United States census, shall be included in the provisions of this section.

Plans and specifications for construction and reconstruction shall be approved by the State Highway Commissioner. The fund allocated by the Commission shall be paid in equal sums in each quarter of the fiscal year, and no payment shall be made without the approval of the Commission.

The city or town receiving this fund will be required to make quarterly reports accounting for all expenditures and certifying that none of the money received has been expended for other than the maintenance, improvement, construction or reconstruction of the streets in such city or town.

§ 33-50.2. The State Highway Commissioner of Virginia is hereby authorized and empowered, subject to the approval of the State Highway

Commission, upon request of the governing bodies of incorporated towns of less than thirty-five hundred inhabitants, according to the last United States census for which population figures are available, to allocate and pay to such towns for maintenance, improvement, construction or reconstruction of streets which are not a part or an extension of the State highway primary system in the corporate limits of such towns,* *the sum of eleven hundred dollars per mile annually*, if such streets and roads or portions thereof be maintained up to a standard satisfactory to the State Highway Commission. However, no such allocation of payment shall be made by the State Highway Commission to any such incorporated town, unless the portion of the street for which said allocation is made has an unrestricted right-of-way width of not less than thirty feet and a hard surface width of not less than twelve feet; and any such street hereafter established shall have a right-of-way width of not less than fifty feet and a hard surface width of not less than twenty feet. Allocations and payments made pursuant to this section to such incorporated towns shall be paid by the State Highway Commission to the governing bodies of such towns from allocations available from secondary funds. Plans and specifications for construction and reconstruction of such streets shall be approved by the State Highway Commissioner.

The funds allocated by the Commission shall be paid in equal sums in such quarter of the fiscal year and no payment shall be made without the approval of the State Highway Commission.

HOUSE JOINT RESOLUTION NO.

Directing the Virginia Advisory Legislative Council to continue its study of problems and needs with respect to highways and streets in urban areas.

Whereas, the Virginia Advisory Legislative Council made a study and report to the Governor and the 1966 Regular Session of the General Assembly on problems and needs with respect to highways and streets in urban areas; and

Whereas, the General Assembly felt it was necessary to continue this study in order to obtain more definite conclusions concerning needs for urban highways and streets and the allocation and distribution of funds therefor; and

Whereas, the Council has made a report to the General Assembly in which it points out the necessity of approaching urban traffic problems on a regional basis without regard to city, town or county boundaries; and

Whereas, it is felt that the Council's urban highway study should be continued in order to study further the regional concept for financing, maintenance, construction and operation of urban highways; and

Whereas, the report of the Council further indicated the need of acquiring rights-of-way for highways at the earliest possible time in order to minimize the cost of such acquisitions; now, therefore, be it

Resolved by the House of Delegates, the Senate of Virginia concurring, That the Virginia Advisory Legislative Council is hereby directed to continue the study of problems and needs with respect to streets and highways in urban areas with emphasis being placed on the regional concept for the development and financing of such highways and the Highway Commission is urged to allocate such additional revenue to the Highway Right-of-

Way Fund in the next biennium as in its opinion will be sufficient to undertake advance acquisition of right of way. The State Highway Department and all other agencies of the State are hereby directed to assist the Council in this study. The Council shall conclude its study and make its report containing its findings and recommendations to the Governor and the General Assembly not later than October one, nineteen hundred and sixty-nine.

APPENDIX B
URBAN STREETS AND HIGHWAYS: BEYOND '75

A Report Of The
Virginia Department of Highways
To The
Virginia Advisory Legislative Council
Douglas B. Fugate
Commissioner
November, 1967

I

A FOREWORD

Virginia's highway construction plans to 1975 are outlined in the nine-year improvement program endorsed by the 1966 General Assembly.

The program's goal is to provide a tolerable highway system for the needs of motorists. It was not designed to satisfy all highway needs for the nine-year period, for funds were not available during this period when the larger part of federal aid was being allotted to the interstate system.

Major improvements must be continued on all systems in the years beyond 1975, and will be especially urgent in the rapidly growing and expanding urban communities.

Invariably, this urbanization will be accompanied by a mounting demand on existing streets and highways. The result is a challenge that must be faced promptly with orderly planning.

The need for planning is as true of street and highway transportation facilities as it is of other aspects of urban growth—those of housing, schools, water and air pollution, recreation, open space.

This report summarizes the findings of studies conducted by the Department of Highways and local governing and planning representatives in 45 urban communities. Traffic needs as they are expected to exist in 1985 have been analyzed, and from the studies have come road and street plans tailored for each town and city of 3,500 population or greater, along with urbanized sections of adjoining counties to serve the traffic needs of that year.

Together, the studies represent the most comprehensive evaluation of urban traffic problems ever undertaken in the Commonwealth.

They have been based on three beliefs:

* Urban transportation planning will permit not only coordinated consideration of traffic requirements, but will also encourage total community and regional planning.

* While urban development itself will determine the efficiency of streets and highways, the planning and location of these facilities will help to shape the growth and expansion of the cities, towns and suburbs.

* The adequacy of a community's transportation facilities will control, to a large degree, the kind of life its people will lead, the productivity and prosperity of its industry and commerce, and the economic foundation of the State itself in the years ahead.

THE BACKGROUND

There are, as in all histories, certain years that tower over others in the story of highway development in Virginia.

In this case, they include:

* 1632, a quarter-century after the Jamestown settlement, when the Legislature enacted the first highway law in the American colonies. Speaking in the manner of the day, the legislators declared—

“Highwayes shall be layd out in such convenient places as are requisite accordinge as the Governor and Counsell or the commissioners for the monthlie corts shall appoynt, or accordinge as the parishioners of every parish shall agree.”

* 1894, when, with highway development still sparse, business groups and bicyclists united to sponsor Virginia’s first “good roads convention.” They said it was time for the State to coordinate the road-building activities of the counties.

* 1906—the General Assembly established the first State Highway Commission, a four-man group set up to advise the counties, which continued to have direct responsibility for roads.

* 1908—the Legislature provided the first state funds for county road construction.

* 1916—a decade after the Commission was established, state funds were provided for maintaining roads, and the General Assembly asked a study commission to consider the establishment of a state highway system, a proposal the study group was to find desirable.

It was also the year when the Congress established the first federal highway aid, and launched a program which has grown today into one of the most successful state-federal partnerships.

* 1918—the General Assembly authorized Virginia’s first state highway system. It included portions of 28 routes totaling 1,500 miles and linked major communities.

* 1919—membership of the Highway Commission was increased from four to five—today it totals nine—and a reorganization gave it the important power to acquire land for public use. The full-time staff, only a handful in 1906, was expanded into the State Highway Department.

* 1923—Virginians in a referendum decided to pay for highways with current funds, instead of by borrowing money through bonds. This decision distinguishes the Commonwealth’s highway program from that of many other states.

* 1932—the General Assembly approved the Secondary Road Act that permitted the counties to turn over to the State the construction, maintenance and control of their local roads.

Quickly, the state highway system grew by 36,000 miles, and today only two counties—Arlington and Henrico—maintain their own roads. With the emergence of the secondary system, the main roads that formerly had been called the state highway system became the primary system.

These dates, then, outline the background of highway development in Virginia. During those years, the foundation was set for the massive construction program of the second half of the 20th century.

For while the Commonwealth was struggling to organize and develop its road system, other states were doing likewise. And at the federal level there was a growing awareness of the need for a system of cross-country highways linking major population centers.

In 1944, after intensive studies, the Congress authorized establishment of the interstate highway system. But the nation was at war, there was no money for an immediate start on such a mammoth undertaking, and even if there had been, manpower and materials were scarce, often unavailable.

So it wasn't until 1956, with the public facing a budding post-war transportation crisis, that Congressional approval and federal funds were provided for interstate construction.

Ninety per cent of the cost is provided through the federal highway trust fund, into which federal road user taxes are paid. The other 10 per cent is financed by the states, and, in the Commonwealth, by road user taxes. Virginia's share of the national system is 1,060 miles, 14th longest among the states. As of October 1, 1967, slightly more than 600 miles—or 57 per cent—were in use by motorists.

The Commonwealth has embarked on development of a 1,738-mile network of arterial highways to supplement the interstate system, and to extend the benefits of four-lane, divided roads to virtually every community having a population of 3,500 or greater.

This network is being formed largely by building a new two-lane roadway parallel to the existing one on major primary routes. In addition, it provides for construction of approximately 50 newly located bypasses of urban communities.

By October 1, 575 miles—or nearly a third—of the network had been brought to four-lane divided standards.

Financing of both the interstate and arterial work is planned for completion by 1975, under provisions of Virginia's nine-year program of highway improvements. This program also envisions basic advances on secondary, regular primary and urban systems, and at least a modest beginning on development of more urban expressways.

Originally, it had been expected that \$2.6 billion would be spent in implementing the nine-year program, which spans the period 1966-75. However, a stretchout of interstate construction beyond the earlier scheduled completion time of 1972 probably means that some \$300 million expected in federal funds for other systems will not be available during this program. This, in turn, will mean that some goals can not be attained as quickly as anticipated.

But in any event, much of the emphasis in the nine-year program, which provides moderate improvements on all systems, is focused upon the interstate and arterial routes—and these are largely rural highways.

III TOWARD URBANIZATION

The Commonwealth's highway program has long been largely rural oriented because Virginia has been largely a rural state.

In 1940, for example, only 35 per cent of the total population was in urban areas.

The trend toward urbanization was evident a decade later, however, when 47 per cent of the people lived in these areas. During the 1950s, the ratio shifted to 56 per cent urban, 44 per cent rural.

Today, approximately 63 per cent of Virginia's citizens live in urban communities, and it is estimated that slightly more than 85 per cent will be urban dwellers by 1985—just 18 years away.

In a span of 15 years, between 1945 and 1960, the Commonwealth's farm population dropped from 831,000 to 467,000. Since 1940, the number of individual farms has decreased from 191,000 to 78,000.

The significance of these trends for the urban areas has been accelerated by a swift increase in overall population, which had climbed moderately in the early decades of this century, but grew from 2,677,773 in 1940 to 3,318,680 in 1950 to 3,954,429 in 1960.

Total population is now estimated at 4,602,100, and is expected to reach 6,065,000 by 1985, an increase of approximately 40 per cent.

Virginians now own about 1,582,600 passenger cars, with 68 per cent registered to urban owners. By 1985, the total number is expected to increase to 2,489,800, with about 83 per cent registered in urban areas.

In that same year, traffic engineers estimate, vehicles will travel more than 76 million miles a day on urban interstate segments and on major urban thoroughfares alone—more than twice the present volume.

It is difficult to measure the impact of these trends.

Sprawling subdivisions, suburban shopping centers, office buildings and industrial complexes are occupying lands once used for farming in a state which once depended largely on an agrarian economy.

While the city will remain the hub of economic, social and cultural life, its problems have become regional in scope. What affects the city affects sprawling areas of neighboring counties, as well.

Nowhere is this more evident than in the problems related to streets and highways.

The family car has induced much of the spreading urbanization now occurring in Virginia, for it provides convenient, flexible mobility. What would have been a house isolated from urban society a few years ago is now a home in the suburbs.

In urban Virginia, traffic moves in all directions, with a multitude of origins and destinations.

All of this is not unique to the Commonwealth, for the magnitude and complexity of urban traffic is causing concern all across the nation.

Indeed, urban Virginia is fortunate because its traffic woes generally have not reached the crisis proportions that have developed in many metropolitan areas. But the problems are apparent, and they will grow in frequency and size in the years ahead.

<i>Year</i>	<i>Population</i>	<i>Urban</i>	<i>Rural</i> <i>(per cent)</i>
1900	1,854,184	18.3	81.7
1910	2,061,612	23.1	76.9
1920	2,309,187	29.2	70.8
1930	2,421,851	32.4	67.6
1940	2,677,773	35.3	64.7
1950	3,318,680	47.0	53.0
1960	3,954,429	55.6	44.4
1967 Estimate	4,602,100	62.4	37.6
1985 Estimate	6,065,000	85.3	14.7

IV

THE URBAN SYSTEM

Reflecting concern for urban traffic needs, the 1964 General Assembly revised the laws governing extensions of the highway system in the 63 towns and cities of more than 3,500 population.

Under the present arrangement, at least 14 per cent of all highway funds—except interstate federal aid—is apportioned to the roads and streets within the boundaries of these municipalities.

The money is used to make annual maintenance payments to the localities at the rate of \$10,000 a mile for primary route extensions and \$1,000 a mile for other local streets meeting certain standards of width and surface, with the balance being apportioned to the localities for construction.

At present, there are 864 miles of primary extensions qualifying for the \$10,000 payments, and 5,564 miles of other roads and streets for which the \$1,000 payments are being made.

However, the Highway Department has found that \$1,000 a mile does not fully cover the cost of maintaining these other municipal streets, and recommends that this payment be increased by 10% to \$1,100 a mile, with this increase applying also to those seven municipalities of less than 3,500 population which maintain their own streets not included in the state system.

The 1964 General Assembly also provided that future financing of construction projects in the towns and cities be matched only 15 per cent by the locality, instead of the 25 per cent formerly required.

This means that when urban federal aid is included, the financing formula is: 50 per cent federal, 35 per cent state, 15 per cent local.

However, since urban federal aid funds account for less than one-fourth of construction funds available for municipal street and highway improvements, the usual financing formula is: 85 per cent state, 15 per cent local.

Since 1950, an urban division has functioned within the Highway Department, assisting localities in developing plans for construction projects. In 1965, an urban design unit was established within the Department's location and design division.

Obviously, the effect of all these steps has been to pledge a greater state commitment to the search for solutions to urban traffic problems.

During the 1966-67 fiscal year, about \$92 million was spent in urban Virginia for streets and highways. The state's share, \$65 million, was approximately 37 per cent of all available state funds, excluding interstate matching allotments.

The total included \$13.8 million for maintenance payments to towns and cities over 3,500 population; \$15.3 million for construction funds to those localities; \$26.6 million spent by cities and towns over 3,500 population for maintenance and construction beyond that paid by the state; \$14.2 million for the primary system within the areas of urban influence, and \$22 million in secondary system funds for subdivision streets and roads in suburban counties. Of the \$55.7 million spent within the corporate limits of cities and towns, 48 per cent was contributed by the localities.

Through the years, the Highway Department has worked with local planning and governing officials to gain uniformity in traffic signals, signs and markings, to assure greater safety and convenience for motorists.

In addition, the Department has offered other traffic engineering aid to localities, seeking improved use of existing streets and highways through such steps as traffic control devices and parking studies and regulations.

These programs must be continued in the years ahead.

Continued consideration should be directed at the extent to which curb parking is feasible on municipal streets which, after all, are intended for the movement, not storage, of motor vehicles.

Thus far, provision of off-street parking facilities has been a responsibility of the municipalities and of private enterprise, and it is hoped that the needs can continue to be met in this manner.

V

IN '85—5.1 MILLION URBAN DWELLERS

In this decade, there have been other steps in the "initial attack" on the growing problem of urban traffic.

These steps have been directed toward re-evaluation and new concepts, and have brought the nature of the problem more sharply into focus.

They began in 1962, when the Congress enacted a federal highway act requiring continuous, comprehensive transportation planning in metropolitan areas with a central city of 50,000 or more population.

In the Commonwealth, this led to studies in the seven most populous regions—

(1) Northern Virginia, including the Cities of Alexandria, Fairfax and Falls Church, the Towns of Herndon, Leesburg, Manassas, Manassas Park and Vienna, and the Counties of Arlington, Fairfax, Loudoun and Prince William.

(2) Southeastern, including the Cities of Norfolk, Portsmouth, Chesapeake, Virginia Beach and Suffolk and Nansemond County.

(3) Richmond, including the central city and Chesterfield and Henrico Counties.

(4) Lower Peninsula, including Newport News, Hampton, Williamsburg, Poquoson and James City and York Counties.

(5) Roanoke Valley, including Roanoke, Salem, Vinton and Roanoke County and part of Botetourt County.

(6) Lynchburg, including that city and portions of Amherst, Bedford and Campbell Counties.

(7) Danville, including that central city and a part of Pittsylvania County.

The continuing transportation planning process now established in the seven regions has formed the basis for forecasting future traffic demands and determining the facilities that will be needed to handle these demands.

But perhaps more important, they have permitted urban highway planning to be initiated with full regard for other aspects of city growth and community values. This way, it is hoped, urban highways will complement—not disrupt—the communities through which they pass.

In a step toward this goal, the transportation planning in all of urban Virginia has involved participation at both the State and local levels.

Mass transit is an important factor in each of the seven continuing studies, although thus far consideration has been limited to operations of buses. This is because no demand has yet appeared in any study area—with one exception—which would require more extensive mass transit accommodations.

The exception is in Northern Virginia, where planning is being coordinated by the Northern Virginia Transportation Commission, in cooperation with Maryland and the District of Columbia. Consideration is being given there to eventual development of rapid rail facilities for mass movement of commuters.

But Virginia's urbanization extends far beyond the major metropolitan regions and, in fact, encompasses virtually every city and town.

This is why the Highway Department undertook, again in cooperation with local governing and planning bodies, the preparation of 38 additional studies to produce a master street and highway plan for the smaller communities.

These additional studies have been made for Abingdon, Bedford, Big Stone Gap, Blacksburg, Blackstone, Bluefield, Bristol, Buena Vista, Charlottesville, Christiansburg, Clifton Forge, Colonial Heights, Covington, Emporia, Farmville, Franklin, Fredericksburg, Front Royal, Galax and Harrisonburg.

Also, Hopewell, Lexington, Luray, Marion, Martinsville, Norton, Petersburg, Pulaski, Radford, Richlands, Rocky Mount, South Boston, Staunton, Tazewell, Warrenton, Waynesboro, Winchester and Wytheville.

Culpeper and South Hill recently became towns of more than 3,500 population, and similar traffic studies will be undertaken in those communities.

Altogether, it means that such a plan—looking to 1985 needs of the motoring public—will be provided for every locality having a population of 3,500 or more, along with urbanized sections of adjacent counties.

During the study period, it was estimated that 2,855,100 Virginians lived in these urban communities. This amounts to more than 62 per cent of the State's 4,602,100 population.

But by 1985, it is estimated that 5,171,869 people—or 85 per cent of the expected 6,065,000 total population—will live in these same areas—on 12 per cent of the State's land.

And this, clearly, is why the Commonwealth can not face the future without adequate preparation for urban traffic needs. That preparation is now well under way.

In none of the new studies has consideration of transportation needs been limited to state and federal highway routes, for there is more to the problem than this. Consideration has also been given to other roads and streets.

Determination of the needs has not been limited to those that can be met from anticipated revenue, for this, too, would meet only part of the problem. A major objective has been to discover the amount of deficiency in construction funds for the years ahead.

As another important phase of Virginia's search for solutions to urban traffic ills, the Virginia Advisory Legislative Council (VALC) was asked by Governor Albertis S. Harrison Jr. in September, 1964, to study the urban highway program, and to evaluate methods of distributing funds for construction and maintenance.

Based on VALC recommendations, the 1966 General Assembly increased from \$800 to \$1,000 a mile the State's annual maintenance payments for local streets and authorized the Highway Department to acquire right-of-way in municipalities on State participating construction projects, if requested.

The General Assembly also directed the VALC to continue its evaluation for two more years, until completion of the Department's series of urban studies.

The studies are now substantially completed, and they have provided an unparalleled store of information to help guide future highway and street development in the urban communities of the Commonwealth.

It should be noted that Virginia's concern for its urban areas is not by any means confined to problems of transportation.

The Virginia Metropolitan Areas Study Commission, established by the 1966 General Assembly, is examining in great depth the full range of problems associated with urban growth, with much of its emphasis directed at governmental structure. The work of this commission could well be of landmark proportions in the field of urban development.

Besides this emphasis by the state government, there has been in the past decade a growing concern on the part of the municipalities themselves to keep up with the challenges of urban growth. This is reflected in the consolidations and annexations which have occurred, and the increasing efforts toward regional cooperation.

The efforts toward cooperation on a regional basis could be of particular significance in facing transportation woes, for the needs of motorists realize no governmental boundaries and must, in fact, be met regionally.

FINDING THE ANSWERS

For too many years, urban street and highway planning in Virginia—as in most states—was conducted on a project-by-project basis.

Frequently, factors such as land use and population trends did not receive sufficient attention, although these are recognized today as basic elements of sound transportation planning.

The new urban studies are intended to assure full consideration of these inter-related factors. Such coordination is imperative in an era when, almost overnight, sprawling new subdivisions can produce huge new demands on existing streets and highways.

Here's how the studies were made:

Land use patterns were considered, and planners recorded information on soil suitability, slope of vacant land, anticipated water and sewerage system locations, industrial expansion plans and new site proposals, and residential development trends.

Stations were established on each highway crossing the periphery of the study areas to gather trip data for a broad sampling of motorists.

In the 21 studies for localities with populations ranging upward from 10,000, occupants of 10 to 20 per cent of the dwelling units were interviewed to obtain information about their travels on a typical day. Truck and taxi owners were interviewed for the same purpose.

Growth trends were outlined for retail sales, employment, population and car ownership, and these were discussed with local officials and, in several instances, with local chambers of commerce representatives.

After all this basic material had been collected, capacities of existing streets and highways were analyzed, as were travel times and accident experience.

Then base year traffic was projected to 1985 and by the use of electronic computers theoretically "loaded" on the existing system to test its adequacy.

This, in turn, has led to recommended improvements where present facilities will be inadequate. These improvements include widening of existing facilities, establishment of one-way street patterns or, where these won't be enough, construction of entirely new facilities.

The proposed network resulting from each study is being discussed with local governing officials, then the local plans are being prepared in final reports for distribution to participating governments, regional planning commissions and the U.S. Bureau of Public Roads.

The final reports indicate the problems, their recommended solutions and estimated construction costs.

Formal adoption of the plans requires approval by regional and local planning commissions and local governing bodies, each of which holds a public hearing, and then by the State Highway Commission.

The plans will permit orderly development of streets and highways as funds become available, and will guide the Commission and local governments in scheduling construction projects in these urban areas.

However, any plan must be evaluated from time to time if it is to be effective. This is particularly true in the fast-growing urban centers, which already have changed dramatically. Thus, the new studies should be reviewed and updated as needed.

VII TO SOLVE THE PROBLEM .

Rigid street patterns in older sections of municipalities often make it difficult to reduce traffic congestion within the framework of existing facilities.

Urban portions of the interstate system and the bypasses being constructed as part of Virginia's arterial network offer unmistakable evidence that sophisticated new facilities, many of them with full control of access, will be required to solve the problem in the years ahead.

Before construction of these urban interstate routes and the limited number of other expressways, for example, many streets were clogged by harried motorists who didn't really want to be there anyway—they were trying to get across town, and had no other way.

Among the most notable illustrations of improved facilities is Interstate 495, the beltway of Washington, D. C., in Virginia and Maryland. Virginia's portion was completed in 1964, and already is serving an average of 48,000 vehicles a mile each day.

It is bewildering to imagine these cars, trucks and buses using other streets and highways in the Northern Virginia area, with no beltway on which to travel.

Present construction programs are beginning to give motorists a choice, and more will be provided in the present nine-year program. But additional choices will be required as urban growth continues in the 1975-85 period.

It has become clear that expressways can save in-town and downtown streets for traffic that belongs there, traffic that sustains the central business district of any city.

It is also clear, however, that these alone won't assure the motoring mobility Virginians will expect and need in the years ahead, and it will be necessary to build other roads with something less than expressway design standards, and to improve many existing city and suburban streets.

For purposes of the studies, each locality's street and highway system was classified according to the following functional definitions:

*Freeway—An expressway with full control of access and used by traffic needing relatively high urban driving speeds. The urban portions of the interstate system have already provided such freeways in some Virginia cities.

*Thoroughfare—A multi-lane highway for through and local traffic, that may include at least partial control of access and generally having grade separations at high volume intersections. Extensions of Virginia's rural arterial and primary networks will be among the main thoroughfares in most urban areas, but in the urban program thoroughfares are not necessarily confined to this major statewide network.

*Local Streets and Secondary Roads—These provide access to residential sections, businesses and other adjacent property, have no control of access other than conventional signals and signs, and are generally two lanes wide.

By 1985, some 270 miles of high-standard freeways, almost 3,120 miles of thoroughfares and 11,150 miles of local streets and secondary roads must be built or improved in Virginia's 45 urban regions.

Today, the 63 cities and towns included in these regions are served by 93 miles of interstate freeways, 864 miles of arterial-primary extensions and 5,564 miles of local streets and roads, for a total of 6,521 miles.

VIII

THE PRICE TAG

Approximately \$3.8 billion will be required for construction and maintenance of urban facilities in the 1975-85 period.

The estimate is based upon present price levels, because it is difficult to forecast construction trends and land costs a decade or more in advance.

Existing state revenue sources and the municipalities' share of urban construction projects will provide approximately \$900 million of the needed funds.

Thus, a gap of about \$2.9 billion must be filled if the urban plans are to be fully implemented.

It is reasonable to assume that a sizeable amount of this will be produced by a federal aid program expected to follow completion of the present interstate system about 1975.

Virginia has participated, along with other states, in appraising future highway needs for the American Association of State Highway Officials (AASHO). Besides the urban needs, Virginia's report to AASHO forecast needs totaling about \$3.1 billion for rural systems during the 1975-85 period.

AASHO has compiled these nation-wide findings, and has given the Senate Subcommittee on Roads a preliminary report to assist in planning the future program.

The preliminary recommendations from AASHO placed substantial emphasis on the future's urban street and highway requirements, proposing a 90 per cent federal, 10 per cent state matching ratio for additional interstate-type expressways and a two-thirds federal, one-third state ratio for other systems.

The federal share would flow through the highway trust fund, and it should be noted again that both this fund and Virginia's income for highways are derived from taxes paid by road users, and are not subsidized by the general fund.

These preliminary recommendations of AASHO, subject to change in the organization's final report, call for federal funds after 1975 to be distributed in the following manner: upgrading and limited extensions of the interstate system, 10 per cent; urban system, 30 per cent; primary system, 40 per cent, and secondary system, 20 per cent.

Besides the AASHO report, the U.S. Department of Transportation is currently preparing its recommendations for an "after interstate" program, and is scheduled to submit these proposals to the Congress early in 1968. There seems little doubt that these, too, will focus considerable emphasis on urban traffic needs.

So with reasonable certainty, the Commonwealth can anticipate a substantial amount from the federal highway program to assist in implementing its urban plans, although the shape of this assistance is yet to be spelled out.

Under the current interstate program, the federal trust fund provides 90 per cent of total construction costs, with this amounting to \$102.8 million for Virginia in the 1967-68 fiscal year. During this year, Virginia is receiving about \$4.3 million in federal funds for the present urban program.

Sophisticated urban expressways, by their very nature, are expensive to build. Land acquisition is considerably more expensive in urban areas than in rural lands, because it is not as plentiful and often is already developed; urban expressways must have more traffic lanes, to serve more vehicles, and for the same reason must have more frequent and larger interchanges.

Under the present interstate program, it is costing an average of about \$1 million a mile to build rural segments, approximately \$3 million a mile to build urban segments—with the cost rising even higher in some cases.

The following chart shows the total costs by system and urban area for the 1975-85 period:

ESTIMATED URBAN NEEDS
CONSTRUCTION AND RIGHT-OF-WAY COST SUMMARY
45 PLACES—POPULATION 3,500 AND OVER
JULY 1, 1975 THROUGH JUNE 30, 1985

URBAN AREAS*	FREEWAY (Millions)	THOROUGHFARE (Millions)	LOCAL STREETS AND ROADS (Millions)	TOTAL COSTS (Millions)
Abingdon	\$ 0.0	\$ 5.6	\$ 3.1	\$ 8.7
Bedford	0.0	6.9	0.9	7.8
Big Stone Gap	0.0	4.1	1.5	5.6
Blacksburg	0.0	5.7	2.4	8.1
Blackstone	0.0	1.6	1.4	3.0
Bluefield	0.0	4.3	1.7	6.0
Bristol	0.0	10.5	7.7	18.2
Buena Vista	0.0	3.8	1.1	4.9
Charlottesville	0.0	34.5	12.0	46.5
Christiansburg	0.0	5.6	0.3	5.9
Clifton Forge	0.0	5.8	0.9	6.7
Colonial Heights	2.4	18.4	6.6	27.4
Covington	0.0	12.5	2.8	15.3
Danville	25.7	18.3	7.5	51.5
Emporia	0.0	1.2	4.6	5.8
Farmville	0.0	1.8	1.4	3.2
Franklin	0.0	3.6	2.1	5.7
Fredericksburg	0.0	26.4	19.0	45.4
Front Royal	0.0	4.2	0.6	4.8
Galax	0.0	9.1	1.1	10.2
Harrisonburg	0.0	4.5	0.5	5.0
Hopewell	0.0	24.2	19.8	44.0
Lexington	0.0	3.3	0.8	4.1
Luray	0.0	4.6	1.5	6.1
Lynchburg	24.6	16.0	45.3	85.9
Marion	0.0	3.4	1.7	5.1
Martinsville	0.0	47.1	29.6	76.7
Northern Virginia	442.7	427.4	363.2	1,233.3
Norton	0.0	11.5	0.5	12.0
Lower Virginia Peninsula	36.5	182.0	57.0	275.5
Petersburg	0.0	22.4	8.3	30.7
Pulaski	0.0	11.7	5.1	16.8
Radford	0.0	9.6	8.2	17.8
Richlands	0.0	3.2	0.8	4.0
Richmond	70.8	165.4	112.1	348.3
Roanoke	6.4	79.8	38.8	125.0
Rocky Mount	0.0	3.7	0.3	4.0
South Boston	0.0	8.6	0.7	9.3
Southeastern Virginia	173.0	177.8	46.2	397.0
Staunton	0.0	33.6	18.9	52.5
Tazewell	0.0	7.3	0.4	7.7
Warrenton	0.0	5.4	1.6	7.0
Waynesboro	0.0	23.0	9.3	32.3
Winchester	0.0	22.4	6.1	28.5
Wytheville	0.0	1.7	1.3	3.0
TOTALS	\$782.1	\$1,483.5	\$856.7	\$3,122.3
DEFICIT FROM NINE YEAR PROGRAM				\$ 204.9
MAINTENANCE 1975-1985				\$ 500.0
TOTAL URBAN NEEDS 1975-1985				\$3,827.3
ESTIMATED REVENUE 1975-1985				\$ 900.0
DEFICIT 1975-1985				\$2,927.2

* Includes core city or town and urbanized section of adjacent county.

IX

A REGIONAL APPROACH

Highway Planning, construction and maintenance must not be restricted by rigid governmental boundaries in the Commonwealth's urban areas, for these limits have little bearing on the public's transportation needs.

Motorists living in the suburbs—where much of the growth is occurring—aren't particularly concerned about these boundaries when they drive downtown or across the metropolitan area to work or shop.

They expect—and properly—the same high standards in travel facilities.

At present, however, the method of financing maintenance and construction is different for cities and towns over 3,500 population, towns under 3,500 population, and counties.

In towns below 3,500 population, for example, the Highway Department maintains primary route extensions, and the locality has an option for its other local streets. It may choose between maintenance by the Department or perform this maintenance itself, with payment made by the State on the basis of what it costs the Department to maintain similar streets in other communities. However, a change to a fixed \$1,100 a mile per year is being recommended.

In addition, the larger localities receive state construction allocations for specific projects, usually on primary system extensions, on the basis of need and the ability of the city to contribute its 15 per cent share of the cost. Other construction is financed either with municipal funds or by subdividers opening new developments.

With the exception of Arlington and Henrico Counties, which maintain their own secondary roads and receive direct payments from state funds for this purpose, streets and roads outside the corporate limits of cities and towns over 3,500 population are the full responsibility of the Highway Department.

Secondary roads and streets to serve new developments must be built to Highway Department standards by the developers to qualify for addition to the secondary system.

While methods of financing vary substantially, however, the physical appearance of the road, the traffic volume and density, the service it provides and the development of adjacent land may well be the same, regardless of governmental jurisdiction.

In the new urban area studies, streets and highways have been classified by functional use, without regard to location and present method of financing.

These studies have pointed up the importance of approaching urban traffic needs on a regional basis, for it is clear that transportation problems are regional in scope.

Thus, because of the multiple governmental jurisdictions which will exist in each of the 45 urban street and highway systems being designed for completion by 1985, it will be necessary to adopt a regional concept for financing, maintenance, construction and operation.

The goal should be identical financing and uniform operation, construction and maintenance for each functional classification of street and

highway throughout each of the 45 urban regions, without regard to city, town or county boundaries.

Between now and 1975, when large additional federal aid financing may be expected for urban highways, existing laws and policies should be gradually adjusted to permit such a regional approach.

Under this arrangement there would be an urban highway system comprised of the three functional classifications (freeways, thoroughfares and local roads and streets) in each of the 45 regions. The rural highway system outside the boundaries of these regions would continue to bear interstate, arterial, primary and secondary designations.

The Highway Department and the Virginia Advisory Legislative Council should be authorized to continue their studies of urban traffic needs, as related to other highway needs, so that these necessary adjustments in laws and policies may be completed by 1975.

This would place the Commonwealth in position to move ahead swiftly with full implementation of the urban transportation plans immediately after the nine-year program and, at the same time, permit Virginia to share promptly in the new federal aid urban program which seems assured.

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THE LAND

The urban studies have underscored a problem that has been of growing concern to those responsible for planning and administering the highway program in Virginia.

It involves the question of how best to reserve right-of-way for future construction projects, which of necessity must be planned well ahead of actual work.

A number of new facilities are now being recommended with the knowledge that it will be a decade or more before most of them can be financed. However, there is no adequate means for reserving land for them.

Unless such a means can be developed, it is logical to assume that commercial, industrial and residential growth in expanding urban areas will consume much of the space proposed for these projects before the roads can be built, thus increasing right-of-way costs enormously. In some cases, recommended highway locations will have to be shifted for this reason.

It is not an easy problem to solve.

The public's future highway investment must be guarded, and should be no greater than absolutely necessary. At the same time, the inherent rights of private property owners must be recognized.

Land values and prices have increased steadily, and it is natural for them to continue increasing in communities that are growing and prospering.

During a period of 18 years preceding World War II, highway right-of-way costs in the Commonwealth amounted to an average of 6.1 per cent of total roadbuilding costs. Since the war, the percentage has climbed substantially, as shown in the averages below:

1945-46—1949-50	7.8 per cent
1950-51—1954-55	12.3 per cent
1955-56—1959-60	14.6 per cent
1960-61—1966-67	19.0 per cent

Consequently, the cost of acquiring the right-of-way now amounts to almost one-fifth of the total cost of construction. In urban areas, where it frequently is necessary to acquire expensive buildings as well as land, it sometimes costs half as much to buy right-of-way as to construct the street or highway.

Generally, the planned street or highway itself boosts the value of the land.

These sometimes startling increases lead to the conclusion that in many cases property owners and land speculators are profiting unduly at public expense. Expected increases in value of the land from planned highway improvements appear to be anticipated in a number of right-of-way condemnation awards. In such instances, the highway user is thus paying the land owner a premium for values his tax dollars will create.

There are two remedies which would ease the condition :

* Many states, including neighboring North Carolina, and the federal government permit anticipated enhancement in the value of the land remaining to the property owner to be considered in determining both the value of the land to be taken and the damage to the remainder.

Virginia law permits enhancement to be considered only in determining damage; it may not be considered in setting payment for the land acquired.

The Highway Department recommends an amendment to the existing law so that enhancement may be considered in determining both land value and damages.

* For some years, the Department has advocated a form of zoning which would to some extent prevent land speculation and costly changes in the character of land and expensive improvements in the path of imminent highway construction.

It is now proposed that, upon conclusion of a public hearing disclosing the details of contemplated highway construction and adoption of the plan by the State Highway Commission, the required right-of-way be given a highway zoning classification for a reasonable period. This would be the length of time required for development of final plans, allocation of funds and actual acquisition.

During this period, a property owner having definite plans for changing the status of his property could require either immediate purchase of the right-of-way or abandonment of the zoning classification.

The Department recommends the enactment of legislation carrying out the objectives of this proposal. Virginia law now permits localities to adopt official maps and thus achieve protection of street and highway locations, and a few communities have used this power effectively.

Advance acquisition of right-of-way is, of course, another means of combatting increases in land values, and is used by the Department to the extent of funds available when future plans are considered final.

The 1964 General Assembly authorized a \$10 million revolving fund for advance purchase of right-of-way, to be financed from year-end surpluses in the highway fund. This method of financing has not proven entirely satisfactory, however, for deficits are just as likely to occur as surpluses.

In three years, the fund has reached a present operating balance of \$3,450,000, and this is being used with good results to buy land in advance for the arterial network bypasses.

An increase to the authorized \$10 million level is desirable, but there seems little prospect of a further increase from year-end surpluses.

Some form of zoning appears to be the most desirable solution to an increasingly urgent problem. Unless an answer can be found, much of the broad urban transportation planning now accomplished may well be nullified.

BRIEFLY . . .

The Highway Department recommends action to:

—Reserve land for future streets and highways, through a zoning concept.

—Permit enhancement in the value of land remaining to a property owner to be considered in paying for right-of-way actually acquired, as well as in paying damages.

—Provide a regional approach to implementing the urban street and highway plans. The goal should be identical financing and uniform operation, construction and maintenance for each functional classification of street and highway throughout each of the 45 urban regions, without regard to city, town or county boundaries.

—Permit the Commonwealth's highways to be grouped in two broad categories—urban and rural—by 1975. Urban roads would be designated as expressways, thoroughfares and local streets and secondary roads, while rural highways would retain their present interstate, arterial, primary and secondary designations.

—Continue studies by the Department and the Virginia Advisory Legislative Council to make these adjustments so that the urban transportation plans can be fully implemented promptly upon completion of the present nine-year program in 1975. This is also when an expanded federal aid urban program is expected to begin.

—Increase from \$1,000 a mile to \$1,100 a mile the annual maintenance payments for local streets other than primary route extensions, to more fully reflect the actual cost.

NOTE

Separate reports are being printed on each of the 45 local urban studies, and are being distributed to local planning and governing officials and released publicly as they are completed. Additional information on the local plans may also be obtained from the Highway Department's traffic and planning division in Richmond. It is hoped that these reports will be carefully studied by the members of the General Assembly, local governing officials and other interested citizens.

