COMPREHENSIVE CITY PLAN

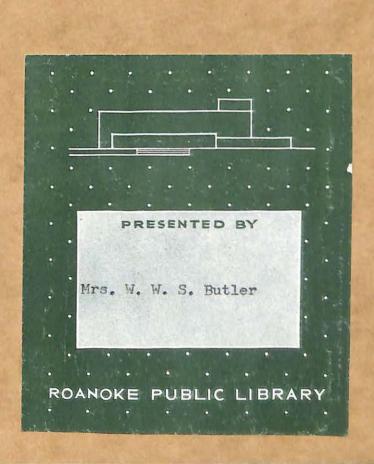
ROANOKE, VIRGINIA

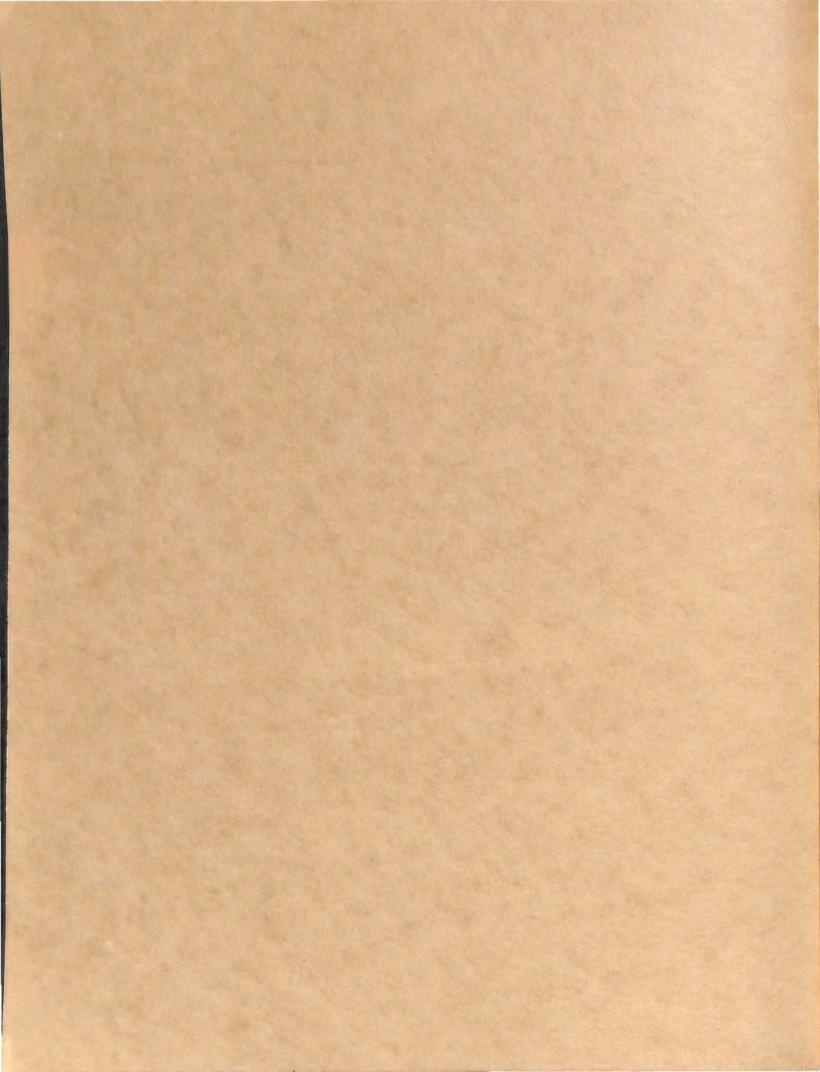
1928



ROANOKE CITY PUBLIC LIBRARY SYSTEM

> Central Library Virginia Room







THE DAWN OF A NEW DAY

Courtesy "The Beckoning Land"

Sunrise Photograph from the top of Mill Mountain, Roanoke, Va. av Will Hennitze

COMPREHENSIVE CITY PLAN

ROANOKE, VIRGINIA

1928

PREPARED UNDER THE DIRECTION OF THE CITY PLANNING AND ZONING COMMISSIONS

EDWARD L. STONE, Chairman

MRS. LUCIAN H. COCKE

D. D. HULL, JR.

B. N. EUBANK

C. SHELBURNE SPINDLE

W. P. HUNTER, City Manager C. L. WATKINS, City Engineer

EUGENE E. ARNOLD, Secretary

Authorized by City Council

CHAS. D. FOX, Mayor

E. W. TINSLEY L. G. STIFF

J. W. COMER E. R. CHICK

P. HILL TUCKER, City Clerk

JOHN NOLEN, City Planner HALE J. WALKER JUSTIN R. HARTZOG HARVARD SQUARE, CAMBRIDGE, MASS.

ROANOKE PUBLIC LIBRARY

"I am a firm believer in city planning as a means of eliminating waste, raising living standards, and achieving higher standards of community life. Good city planning is one of the first obligations which we owe to the future as part payment of our debts to past generations."

Herbert Hoover.

DESIGNED AND PRINTED BY
THE STONE PRINTING AND MANUFACTURING COMPANY
ROANOKE, VIRGINIA, U. S. A.

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CITY PLANNING COMMISSION

EDWARD L. STONE, Chairman
MRS. LUCIAN H. COCKE
D. D. HULL, JR.
C. SHELBURNE SPINDLE
B. N. EUBANK
COMMISSION

CITY PLANNING

COMMISSION

W. P. HUNTER, City Manager C. L. WATKINS, City Engineer

EUGENE E. ARNOLD, Secretary

ZONING COMMISSION

ROOM 2, MUNICIPAL BUILDING TELEPHONE 7177

OFFICE OF THE CHAIRMAN

ROANOKE, VIRGINIA

CITY COUNCIL

CHAS. D. FOX, Mayor
E. W. TINSLEY
J. W. COMER
L. G. STIFF
E. R. CHICK

P. HILL TUCKER, City Clerk

City Planning Engineer
JOHN NOLEN
and Associates
Cambridge, Massachusetts

Eighteenth of January
1929

To Hon. Chas. D. Fox, Mayor
E. R. Chick L. G. Stiff
J. W. Comer E. W. Tinsley
City Council
Roanoke, Virginia

GENTLEMEN:

The City Planning Commission was appointed (under a resolution offered by Councilman C. D. Fox, our present Mayor) by former Mayor Blair J. Fishburn, after a report had been made by a Special Committee composed of W. P. Hunter, City Manager, Dr. George B. Lawson, R. Lee Lynn and D. D. Hull, Jr., which Committee strongly advised the appointment of such a Commission, and also outlined the duties and authority to be vested in it.

The present City Council, with C. D. Fox as Mayor, appointed a Zoning Commission with the same personnel as the City Planning Commission, with City Manager W. P. Hunter and City Engineer C. L. Watkins as additional members. These two Commissions have been acting jointly, and have held many meetings throughout the year.

The City Planning and Zoning Commissions have been charged, in their appointment, with the preparation of a Comprehensive Plan for the city. The Commissions have undertaken enthusiastically this task of making a Comprehensive Plan for the City of Roanoke, looking to the future, and have tried to visualize the coming needs of the city. This Plan has been wide in its scope. It has avoided going into detail in matters which cannot be executed at the present moment, but is suggestive of the line of development necessary to guide future action. The Comprehensive City Plan has been made intentionally elastic, so that as the coming years bring about different conditions, the specific method and means of securing improvements may be adapted to meet the change of environment. The principles of city planning and the general requirements, however, will remain.

The plans presented by the City Planning Consultant have been approved and accepted by the Commissions, and are now presented herewith to the Council for action. The principal recommendations of the City Plan and the Report are made a part thereof, and outline the field of activity pursued by the City Planning Commission during the past year.

In presenting the Comprehensive Plan, which has been officially approved by the City Planning and Zoning Commissions, for adoption by City Council, we feel justified

in saying that the fundamentals on which the Comprehensive Plan is based are sound, and should appeal to Council and all the citizens of our community.

In selecting John Nolen and his associates as the City Planning Engineers, your Commissions felt that they were securing the services and advice of one of the most eminent City Planning Engineers in this country, and it has had no reason to change its opinion. We believe Mr. Nolen and his associates have given us a wonderful plan, or, as Henry G. Shirley, Chairman of the State Highway Commission, described it, "a marvelous plan." Many others have been enthusiastic in expressing approval.

In developing these Plans, first consideration has been given to the proper arrangement and location of new streets, highways, arterial thoroughfares, and circumferential streets or boulevards, and the shortening of routes for traffic and transportation, which will make for greater efficiency and comfort to the citizens of our community.

A street and thoroughfare system is the basis of a Comprehensive Plan.

The City Plan prepared for Roanoke is composed of the following Plans:

- 1. Comprehensive City Plan, which is the general controlling and coördinating plan for all recommendations.
- 2. Major Streets and Highways Plan, which indicates the proposed thoroughfare system.
- 3. Parks and Recreation Areas Plan, which sets forth the park and recreation system suggested for the city.
- 4. Regional Plan, which incorporates the whole of Roanoke County, but lays special emphasis on the region within five miles of the city limits of Roanoke.
- 5. Zone Plan, which districts the city for the purpose of controlling the use of the land and type of building erected thereon.

The principal City Planning Recommendations are included under seventeen headings, as shown on page fifteen of the Report.

A Comprehensive Plan does not deal with the details or specific projects, whether it be the design and construction of a bridge or a building, the exact area or location of a playground or a park, but in the handling of any of these projects the underlying principles of the Plan should be adhered to as closely as possible.

These Plans have not been made simply as a guide for municipal developments for one year, or for ten or twenty years. They are intended to guide the present generation, as well as generations to come. We cannot complete the development of our city in accord with the Plan by any immediate act or activity, but Council can give it immediate effect by its approval and adoption.

We feel that the adoption of the Plan, and the gradual carrying it into effect, will mean more for the future of our city and community than any other single thing that could possibly be done for our community at this time, and such adoption should not be delayed unnecessarily.

We believe that the Plan merits the heartiest approval and enthusiastic cooperation of all our citizens in seeing that it is adopted and carried into effect in an orderly way.

The method of execution depends upon the funds available from year to year to carry out the improvements of the Comprehensive Program. Suggestions of the urgency of improvements and their cost should be made to cover a period of from ten to twenty years, so that there may always be a guide in hand for major improvements. The Plan has the advantage of creating an instrument which may be consulted by everyone concerned, with the result that all persons and bodies may think and talk in the same terms, to the end that a good understanding may be arrived at. It is only by this concerted action that the community requirements for a city of the size of Roanoke can be secured without unnecessarily high expenditure, and without duplicate expenditure for improvements which are uncorrelated.

It is urged that following the approval of the Plan, an Advisory Finance Commission of representative citizens of outstanding ability and unquestionable integrity be appointed, to consider and recommend ways and means of carrying into effect the City Plan over a period of years ample to cover such a comprehensive undertaking.

The City Planning and Zoning Commissions early concurred in the view that no adequate Zoning Rules and Regulations could be adopted until a Comprehensive Plan and Report provides for the principles which should control the Zoning Ordinance.

Final action by the Commissions on the Zoning Ordinance, which has been prepared and is now being studied, will be taken at a later date as a supplementary recommendation by the Commissions. The Zone Map, however, has been approved by the Commissions, and the details of the Zoning Rules and Regulations will be in accord therewith.

The support given to the City Planning and Zoning Commissions has been appreciated, and the Commissions have felt an increasing interest in the duties as a result of the interest and encouragement given by the City Council.

City Council has authorized the Mayor to appoint a Citizens Advisory Commission, and charged it with the preparation of a Long-Term Budget Program, including provision for public improvements to be made during the term of years covered by the Program, and the determination of means for financing each project.

Your Commissions wish to express due appreciation to the Mayor and members of Council, and the other departments of the City Government, for making it possible for Roanoke to have the Comprehensive City and Regional Plan, and to our civic organizations, and many of our citizens, men and women, for their kind words and encouragement during the period of the development of the Plan.

Respectfully submitted,

CITY PLANNING AND ZONING COMMISSIONS

EDWARD L. STONE, Chairman

Mrs. Lucian II. Cocke

C. SHELBURNE SPINDLE

D. D. HULL, JR.

B. N. EUBANK

W. P. Hunter, City Manager

C. L. Watkins, City Engineer



MUNICIPAL BUILDING, ROANOKE, VIRGINIA (From a pencil drawing by Louis Ruyl, of New York City)



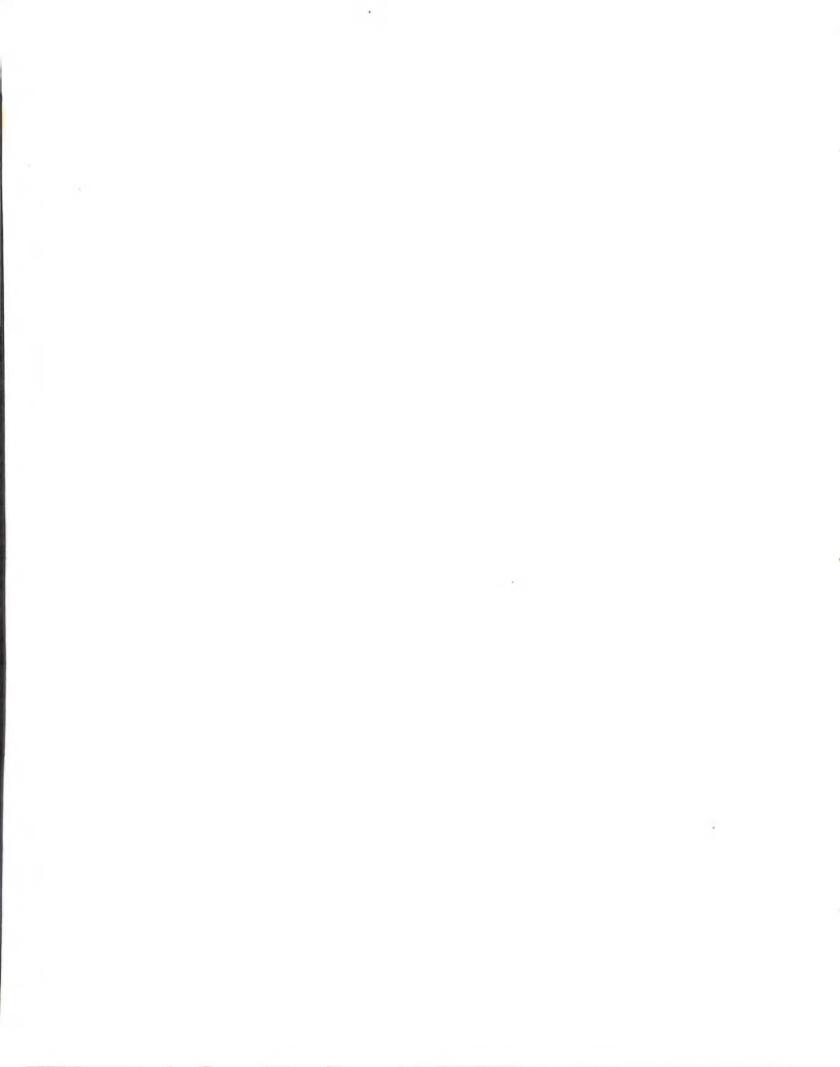
SECTIONAL VIEW OF ROANOKE FROM THE AIR Municipal Building in lower right center. Norfolk and Western Freight Station, 700 feet long, in foreground, fronting on North Commerce Street

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FOREWORD

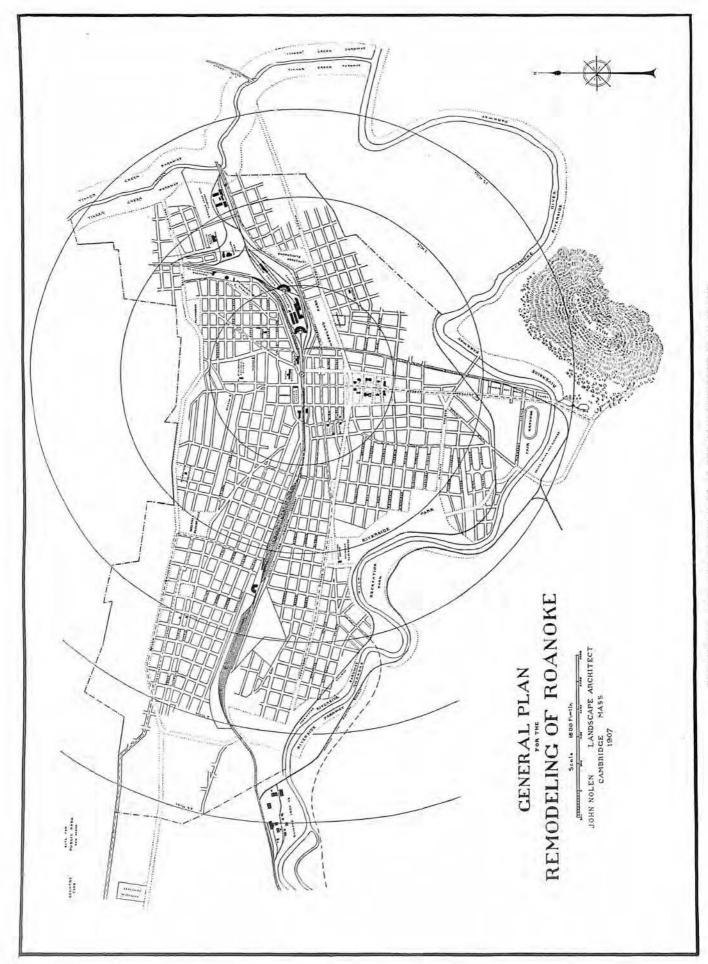
WENTY-ONE years ago a city planning report was made to the Committee on City Improvement, entitled "Remodeling Roanoke." The first paragraph of that report read as follows:

"The problem that confronts the people of Roanoke, in the solution of which you have asked my cooperation, is no less than the remodeling of the existing city and the moulding of the larger area around it so that both may better serve present and future generations. The task is not an easy one. It involves an intimate knowledge of the evolution of the present City of Roanoke and as wise as possible a forecasting of its future; a firm hold upon fundamental principles of city making generally; an acquaintance with the experience and actual achievements of other cities, and a capacity to discriminate—to select from a number of possible courses of action the one that is, all things considered, unquestionably best. Moreover, it demands imagination, courage and public spirit."

The report stated further that Roanoke was one of the first cities of relatively small population, then only 30,000, to plan for its future in a business-like, comprehensive manner. In this it showed its progressiveness. Roanoke was awake then, as it is now, and was in advance of most cities of its class. The plans that accompanied the report proposed changes in major streets and thoroughfares, in parks and parkways and other recreation grounds, and in provision for the business interests of the city. These plans, anticipating the future, incorporated regional planning. The report had no legal authority. It was initiated by the Civic Betterment Club, of which Mrs. Lucian H. Cocke, a member of the present City Planning Commission, was then President. Under that Club's initiative a committee was formed, of which Mr. J. Taylor Gleaves was the chairman, and Mr. Edward L. Stone, the chairman of the present City Planning and Zoning Commissions, a member. Although the city plans and report made in 1907 had no legal sanction nor the backing of any public authority, they exercised a wide influence upon public opinion. The chief proposals have never been forgotten and some of the recommendations of the report were carried out by the city government. It is quite evident now that the Roanoke plans and report of 1907 were ahead of the times, and one more indication of the high quality, public spirit and foresightedness of Roanoke's citizens, both men and women.

The main recommendations of the 1907 report were as follows:

- (1) The improvement of the city plan by the widening of Jefferson Street and Tazewell Avenue, the extension of Patterson Avenue, and the opening up of a space of suitable size and agreeable proportions at their conjunction.
- (2) The grouping of public and semi-public buildings on Jefferson Street or in the neighborhood of Market Square.
- (3) The development of a more rational arrangement of city streets and the establishment of the lines of main thoroughfares within and without the city.
- (4) The preservation of the most available and beautiful of the natural landscape features of the neighborhood as a basis for a system of parks, parkways and reservations, and the construction of such playgrounds as are needed.



REPRODUCED FROM ONE OF THE MAPS OF THE COMPREHENSIVE PLAN OF 1907
Dotted lines indicate the proposals

It would be interesting and profitable to compare these recommendations with those of the present report. The chief proposal of the 1907 plan, namely, the widening from sixty feet to 100 feet of Jefferson Street and of Tazewell Avenue, and the opening up of a public square at the intersection of these two streets is no longer considered practicable. The cost of such changes twenty years ago would have been relatively small; today it is prohibitive, and the loss to Roanoke is incalculable. Fortunately, many of the other proposals are still possible, although the cost involved will be greatly increased.

Interest also attaches to the expansion of the city planning proposals for the present report as compared with twenty years ago, especially the inclusion of important highway entrances to the city, the larger program for the public schools, including the High School Athletic Field and Stadium, the bolder recommendations for grade crossing elimination and bridges, the provision for the parking of automobiles, and the selection and development of a site for an airport. Furthermore, attention should be directed to the fact that the Commission includes not only city planning, but zoning, a subject unknown in the United States at the time when the first Roanoke city planning report was prepared. Moreover, the present planning program for Roanoke has been undertaken, not by a voluntary city improvement committee, but by the city government itself, acting through an official City Planning and Zoning Commission. The cost of the work is to be paid for by public appropriation, and the execution of the plans is in the hands of the municipal authorities. Methods of financing the cost of various improvements endorsed from time to time by the city government are to be adopted, and there is a definite system of public administration for following up the recommendations of the present report.

Finally, attention may be drawn to the following paragraph in the 1907 report:

"The problem is to take this nucleus as it is, remodel it so far as possible, and plan for its extension along sound lines, keeping always in mind the limited size, the peculiar situation, and the unique resources of Roanoke. It can be firmly believed that a conservative, wise, and yet vigorous policy of city development, intelligently applied to Roanoke, will justify itself in the same way that a similar policy justifies itself in private business."

The same statement will bear repetition here, and it has a certain force due to the fact that it was true twenty-one years ago, and is equally true to-day.

It is with pleasure that we acknowledge at this time the whole-hearted support of the city officials, the active assistance of the City Planning and Zoning Commissions, the cordial support of the newspapers and the stimulating interest of all citizens with whom we have come in contact during the period of the Civic Survey and of the preparation of the City Plan of 1928.

John Nolen, City Planner,

December 31, 1928.

Cambridge, Mass.

		-	
•			

PRINCIPAL PLANNING RECOMMENDATIONS OF THE CITY PLAN

- 1. Thoroughfare System. Development and marking of routes.
- 2. Highway Entrances to the City. Development of appropriate routes.

From the East-Lynchburg Road.

From the North—Second Street, Northeast, Extension.

3. Airport. Acquisition of site and development:

Temporary Site.

Permanent Airport.

4. Public Buildings. Development of Civic Groups:

City Hall.

Federal Building and Post Office.

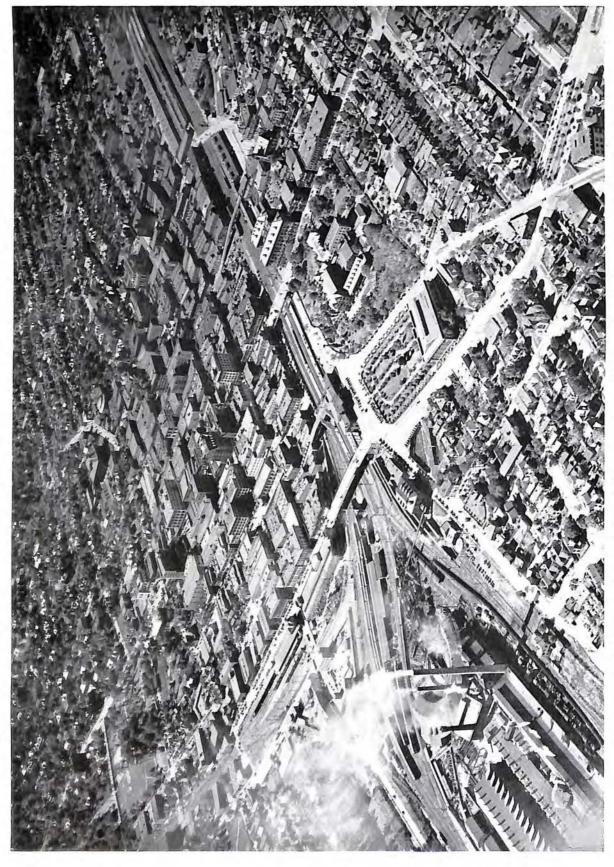
Public Library.

Museum.

Auditorium.

- 5. GRADE CROSSING ELIMINATION PROGRAM.
- Recreation System. Development of grounds and providing recreation instruction.
- Schools. Determination of future sites and expansion of present grounds.
- 8. Park System. Program of land acquisition and development.

- Automobile Parking in Business District. Development of additional facilities to meet future needs.
- Zoning. (Zoning Ordinance will be in separate report.)
- 11. Advisory Finance Commission. Appointment of citizens' group to advise on ways and means for securing public improvements.
- Stadium. Selection of site and development.
- 13. Civic Art Commission. Appointment of citizens' group to advise on matters relating to aesthetic development of the City.
- 14. High School Athletic Field. Provision of adequate athletic facilities for the High School.
- 15. Bridges over Railroads and Streams. Construction of additional structures in coördination with development of thoroughfare system.
- FAIR GROUNDS. Selection of new location and formulation of plan of financing and development.
- Stream Courses. Program for improvement of sanitary conditions and appearance of streams.



LOOKING SOUTHWEST OVER CITY AUDITORIUM, NORFOLK AND WESTERN PASSENGER STATION AND GENERAL OFFICES Roanske's business section is seen in the center

INTRODUCTION

POANOKE enjoys an enviable position among the cities of Virginia and has established a reputation for itself in certain respects which is nation-wide. This position is the result of the energetic ambition and action on the part of citizens who have had vision to analyze the physical situation and to develop the potentialities of location to the advantage of the community.

ence of the two routes was made. This spot was always a meeting ground. Deer and other animals congregated here because of the large salt deposits. The Indians met here because of its central location on the Path and because of the large spring near the convergence of the trails. Later, as the white man absorbed this region, the wagon trails were developed over the same Great Path and still



ROANOKE VALLEY, FROM BENT MOUNTAIN

In geographical position, Roanoke is wisely placed at the junction of two valleys. It was through these same two valleys that the "Great Path" of the Indian days stretched connecting the east and north with the west, and it was at the point where the city now stands that the converg-

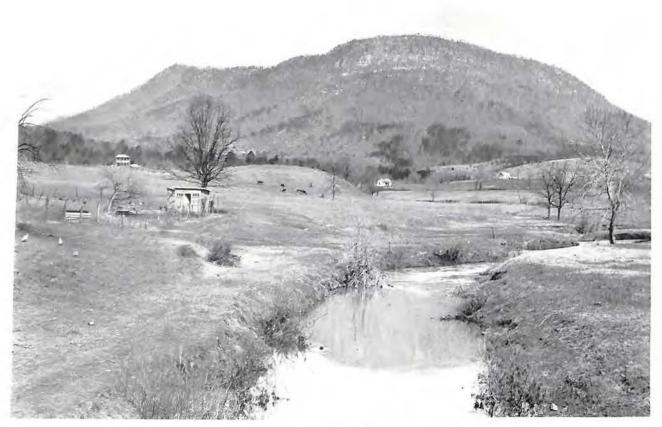
later the railroads found it the most expedient route.

The natural facilities of the spot led to various attempts at settlement. Gainsborough, Prestonville, Big Lick are names connected with the pioneering of the early days. Of this group Big Lick was favored by the location about 1857 of the Virginia and Tennessee Railroad, a link in the Atlantic, Mississippi and Ohio Railroad.

Big Lick passed through the usual vicissitudes of struggling communities but the railroad seemed to have clinched the situation, for shortly afterwards a series of industries of varying magnitude were established and in 1874 the community was incorporated and embraced an area one mile square. The progressive character of the citizens was demonstrated in 1881 when in one day they raised \$10,000 to secure the junction at Big Lick

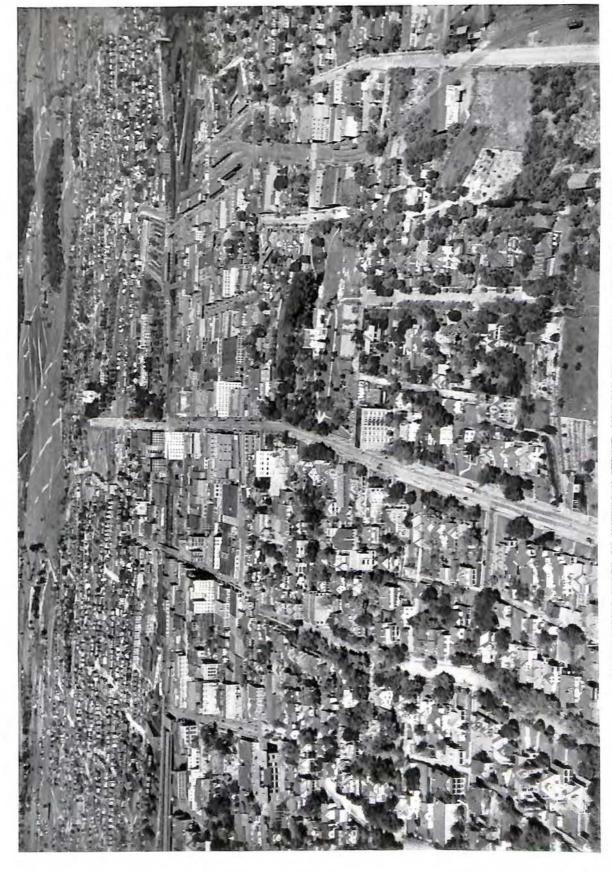
industries and population led to incorporation as a city in 1884 with a population of 5,726 inhabitants.

This period of rapid growth brought several land booms. "Each of these years (1882, 1885 and 1889) marked the beginning of a condition of affairs when land companies were organized almost daily, large tracts laid off into town lots, storehouses and dwellings erected in all parts of the city, with speculation in real estate the dominant feature of all business transactions." Land values during the boom days were inflated beyond all

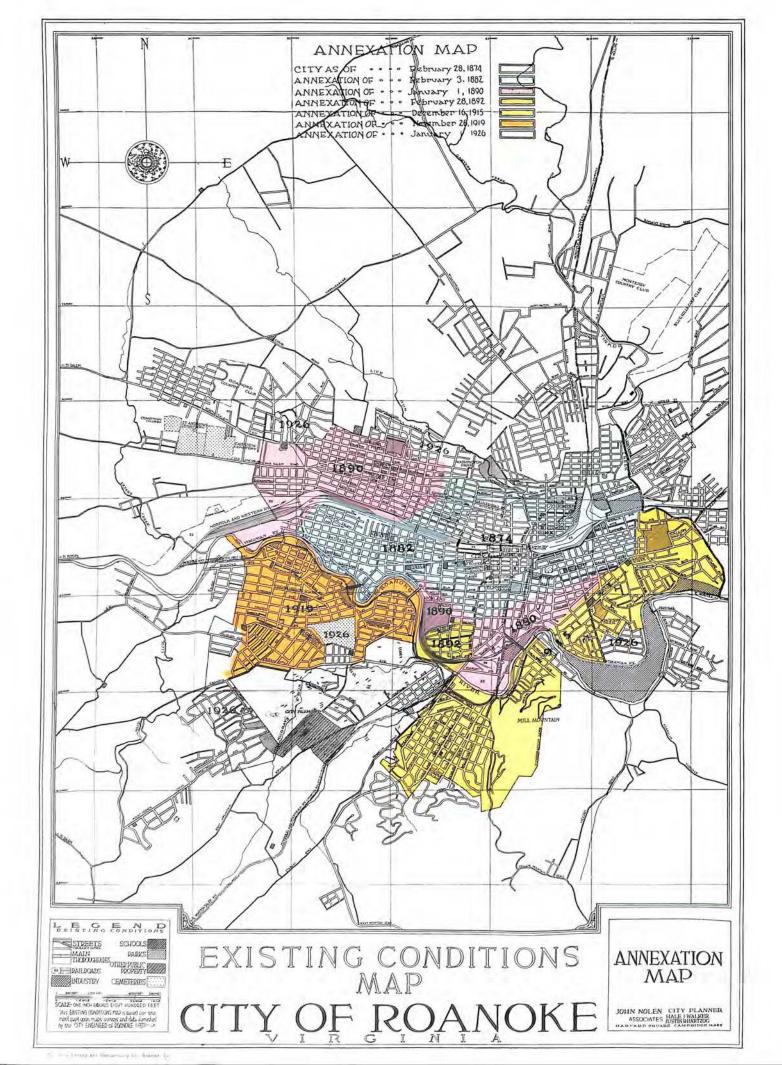


TINKER MOUNTAIN, LOCATED A FEW MILES NORTH OF THE CITY Tinker Creek in foreground

of the Shenandoah Valley Railroad with the Norfolk and Western Railroad (formerly the Virginia and Tennessee Railroad). The result of securing this second railway line was a stimulus to greater development and the name was changed from Big Lick to Roanoke. Rapid expansion in territory. reason, improvement of private property and of the city in general were neglected. With the collapse of the last boom a serious reaction set in. "These serious changes in realty values necessarily affected business conditions during the process of adjustment, and for many years there was a



VIEW LOOKING NORTH ON JEFFERSON STREET, SHOWING THE BUSINESS SECTION OF THE CITY Elimwood Park can be seen a little to the right of the center. The Roanoke Public Library is located in the center of Elimwood Park



feeling of uncertainty and a lack of confidence in the stability of Roanoke institutions that interfered in some degree with the substantial progress of the city. Furthermore, for many years the population of Roanoke was of a migratory character, and the people did not as a rule own their own homes."

Confidence in Roanoke gradually returned and strong industries were established which developed a permanent population. This population was imbued with the idea of home ownership and there grew up an interest in the general improvement of the city. The unpaved streets, the lack of park and recreation facilities, unsatisfactory of the modern trends in transportation; for the best use of lands: the preservation of all those scenic beauties which can still be found in the vicinity and for the welfare of the citizen through facilities for proper and wholesome recreation of all groups.

The plans have not been prepared without a period of study and analysis but have followed days spent upon the ground studying conditions and planning relationships that should exist in the city for the general good. It is not the purpose of the city plan to set forth detailed solutions for minor problems but to meet the problems which confront the city as a unit. The execution of the plan



BACK CREEK, NEAR ROANOKE

school facilities and general unsanitary conditions finally led to a general civic survey and sanitary investigation in 1907. A city plan and report was prepared and from the enthusiasm engendered by this action many beneficial results were secured for Roanoke, although the City Plan was never officially adopted or adequately executed.

The plan of 1928 has been prepared for a still greater Roanoke, for a city of splendid appearance as well as a strong industrial and commercial center. It contemplates the growth of the city and region for a generation ahead; for the meeting

will call for planning in detail to meet each step of the program of development in the light of the then existing finances and conditions. Premature detail plans are but a waste of money until appropriate conditions are brought for the accomplishment. The advantage accruing from a city plan is then that throughout the period planned for there will always be a coördinating agency to suggest and control the measures put forth for the betterment of the city.

A discussion of the plans and recommendations will be found on succeeding pages.

THOROUGHFARES

GENERAL

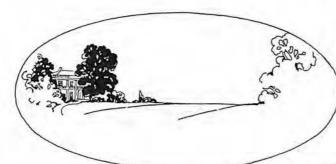
THE traffic channels of our cities are being viewed with alarm on almost every hand, and especially in those cities which have paid little heed to the changes that have been going on in the past ten years. Cities are confronted with the facts, and there is but one way out productive of results—bold and positive adaptation of the city to the needs of modern circulation.

Circulation has as its fundamental basis the smooth and uninterrupted flow of all traffic, no matter what may be the composition of the traffic stream. The city, organized functionally for work, recreation and housing, must be spread over an area, broad in some instances. The elemental parts may in the first place be carefully planned, and the intercommunication from one section to another for the three functions may be easy. However, let the city be of the average type, spreading



CAMPBELL AVENUE, LOOKING WEST In the business section of the city

9 9 9 T R A F F I C 9 9

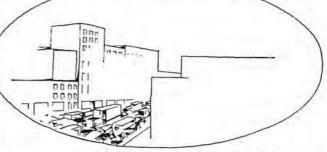


THE STREET THAT LOOKED SO WIDE IN

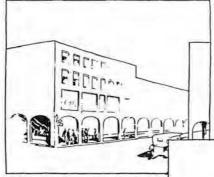
SEEMS TO HAVE SHRUNK UNDER THE DEMANDS OF 1928 TRAFFIC THE MOTOR AGE

A TYPICAL CASE OF RELATIVE INCREASE IN POPULATION AND LICENSED MOTORS

YEAR POPULATION MOTORS 1920 50 842 1725 1924 58 602 5242 1928 66 362 7807



ONE SOLUTION OF TRAFFIC CONGESTION IS THE ARCADED BUILDING ** BY SO TREATING* PROPERTY DAMAGE IS MINIMIZED *EXISTING SIDEWALK SPACE IS THROWN INTO ROADWAY AND AMPLE SPACE IS PROVIDED FOR PARKED AND MOVING VEHICLES

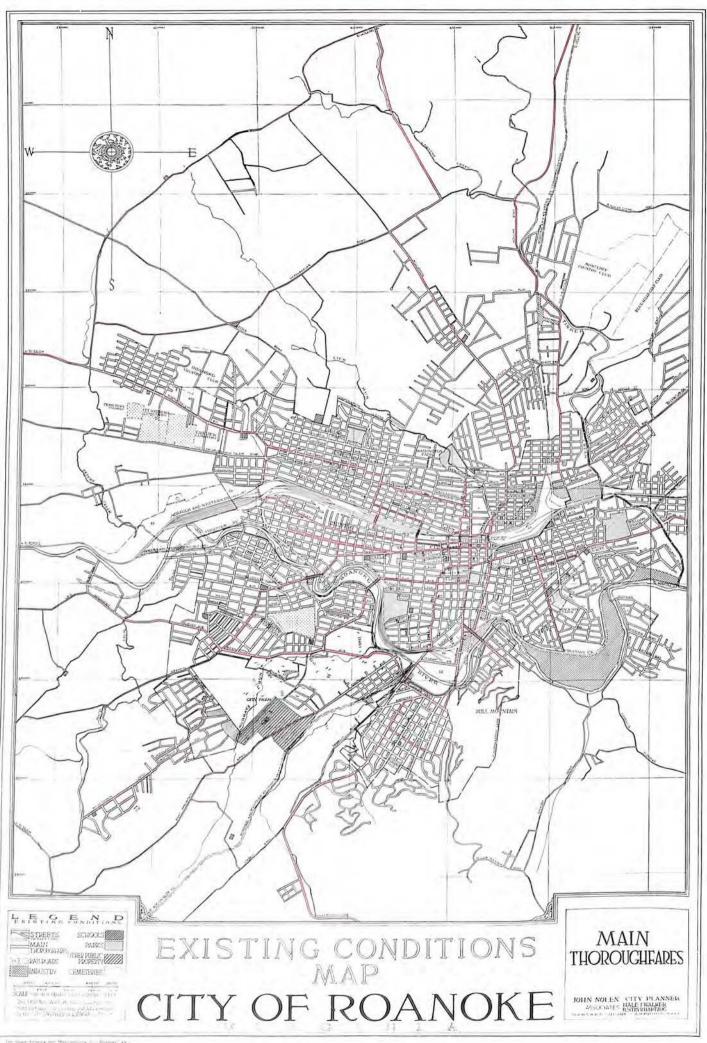


AREAS WITHIN EASY WALKING DISTANCE OF THE MAIN BUSINESS DISTRICT AFFORDING PARKING SPACE AID MATERIALLY IN RELIEVING TRAFFIC STRAIN

ON THE FRINGE OF THE HIGH PRESSURE BUSINESS AREA WITH ITS HEAVY TRAFFIC DEMANDS THE MOTOR MAINT

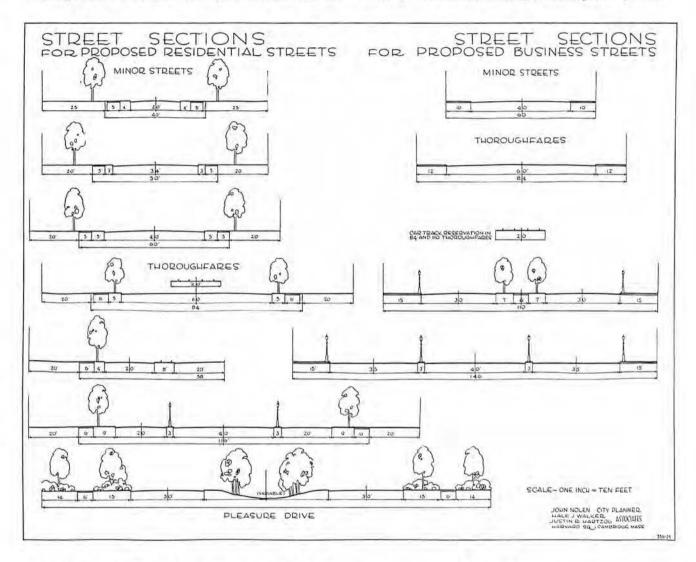
HAS JUSTIFIED ITS USE

CONGESTION LESSENS EFFICIENCY "INEFFICIENCY COSTS MONEY" OVERCOME CONGESTION AND BENEFIT JOHN NOLEN " CITY PLANNER " HALE J. WALKER " JUSTIN R. HARTZOG " ASSOCIATES



out unplanned in the lines of least resistance, then a complexity arises which is disorganized and bewildering. Add annually to such a city a mounting population, and the traffic problems become acute.

Roanoke has the problems, and they are becoming acute. It will be aside from the purpose of according to the importance they bear to the city as a whole: First, Minor Streets; and second, Thoroughfares. With this classification in mind a vast amount of confusion can be avoided in comprehending the planning of streets and in their development through subsequent years.



the report to dwell upon the present situation in main traffic streets, their limitations in number, capacity and in coördination. The main thoroughfares shown on the Existing Conditions Map tell the situation at a glance, and planning for the future, not the past, is the purpose in the City Plan.

CLASSIFICATION OF STREETS

The streets of the city, for ease of understanding, are classified into two simple groups

MINOR STREETS

The first group contains the vast majority of streets. It is composed of those public ways and private ways which are local in character, or to put it plainly, "do not go anywhere," but are primarily for convenience of access to the abutting property. They are classified as Minor Streets. Since they serve such a limited use, these streets do not need much width, and may consistently

have a minimum width of forty feet, if of only one or two blocks in length, but if a longer length, fifty or sixty feet will be necessary. Buildings, however, should be set back from the street lines to compensate for the narrowness of the street right-of-way.

THOROUGHFARES

In the second group the streets, while fewer in number, have a more prominent relationship to the city as a whole. These are the thoroughfaressections, each must be made accessible by its own thoroughfares. The traffic circulation through the thoroughfares pulses back and forth from the central downtown area and, in addition, it flows between these surrounding sections. So there must be a combination of thoroughfare connections to meet these needs.

The proposed thoroughfare system for Roanoke is shown graphically on the Major Streets and Highways Plan, and it will be noticed that it



SECOND STREET, NORTHEAST Proposed for New Highway Entrance from the North

the traffic streets. Their purpose is to provide as direct and quick circulation as possible from one point in the city to some other point. They are the routes connecting the central business area, the neighborhood business centers, the industrial and residential areas, and the region beyond. They must have ample width and appropriately designed roadways to contain the volume of traffic; smooth, easy grades to facilitate the flow; controlled intersections to avoid interruptions; and directness of route to lessen mileage vehicles must travel to get to destination and off the thoroughfares. The minimum width desirable for the thoroughfares is eighty feet, with a hundred feet or more becoming necessary. Traffic lanes of roadways should be allowed ten feet each and parking spaces require from eight to fifteen feet depending on manner of parking.

THOROUGHFARE SYSTEM

Organization of these thoroughfares into a coördinated system is essential. Roanoke has many is composed of certain well defined traffic routes, supplemented by strong connecting links.

EAST AND WEST ROUTES

Lynchburg Road via Staunton Avenue, Orange Avenue, or Melrose Avenue to North Salem Road.

Old Lynchburg and Salem Road via Melrose Avenue, Moorman Avenue, Gilmer Avenue to northeast section; to Lynchburg Road via Commonwealth Avenue and Fourth Street, N. E., or via Sixth Street, N. E.; to downtown Central District via Loudon Avenue to First Street, N. W.

Shenandoah Road via Shenandoah Avenue to Fifth Street, N. W.

Norfolk Arenue, Campbell Avenue, Thirteenth Street, to Virginia Avenue, Maiden Lane, Grandin Road, Auburn Avenue to Lee Highway.

Dale Arenue, Ninth Street, S. E., Tazewell Avenue, Franklin Road, Marshall Avenue, Ferdinand Avenue, Virginia Avenue to Lee Highway. Dale Avenue, Ninth Street, S. E., Highland Avenue, Sixth Street, S. E., Albemarle Avenue, Jefferson Street, Maple Avenue, Franklin Road to Brandon Avenue.

Lee Highway, Auburn Avenue, Brandon Avenue, McClanahan Street to South Roanoke.

city, and open up several connections at Gilmer and Shenandoah Avenues to west and south.

Williamson Road, Old Rock Road to Lynchburg Road.

Grand Arenue Extension, Liberty Road to Old Rock Road.



TINKER CREEK, NEAR THE CITY Hollins Road on the left.

NORTH AND SOUTH ROUTES

Old Fincastle Turnpike, Ninth Street, N. E., to Norfolk Avenue, Thirteenth Street, S. E., via Bridge Avenue, to Hickory Road, thence south and beyond.

Hollins Road, Gillespie Road, Patrick Henry Avenue, Seventh Street, N.E., to Lynchburg Road.

State Highway 33 extended south to Sixth Street, N. E., thence south and over Norfolk and Western Railway tracks to Ninth Street, S.E., and to the Viscose Plant.

State Highway 33 extended south to Princeton Avenue, intersecting Williamson Road approximately at Tenth Street Extension and connecting there with Holliday Street extended. This route will create a direct and attractive approach to the

Core Road, Lynchburg Road to Old Rock Road and beyond.

Greenbriar Avenue, Brandon Avenue to Mud Lick Parkway and beyond.

Bent Mountain, Colonial Avenue, Fifth Street, S. W., to Cave Spring.

Jefferson Street, McClanahan Street, Broadway, Avenham Avenue, Rocky Mount Road.

CIRCUMFERENTIAL

Old Rock Road, State Highway 33 to North Salem Road.

Jefferson Boulerard, Hollins to Rocky Mount Road.

Hershberger Road, Bonsacks Springs Road,

Lafayette Boulevard and extension, Twenty-Fourth Street, N. W., to Patterson Avenue.

Nineteenth Street and extension from old Fincastle Turnpike to connect with Grandin Road at Virginia Avenue, via bridge over Roanoke River and railroad tracks.

Tenth Street and extension from Old Fincastle Turnpike to Ferdinand Avenue, thence south to Jefferson Street.

Fifth Street, Liberty Road and extensions.

The proposed minimum width of each of these thoroughfares is indicated on the Major Street and roads. Complimentary attention is drawn to the Memorial Bridge on Virginia Avenue, and to the Walnut Street and Jefferson Street bridges. These structures materially increase the efficiency of the thoroughfares upon which they are located. The coöperation which has brought about the bridges is commended. The usefulness of the older structures at Wasena, Randolph Street, First, Fifth and Tenth Streets, and the underpasses at Shaffer's Crossing and on Lynchburg Avenue, is also quite apparent. The addition of beauty to the former group of bridges is noticeable, and a great asset to the appearance of the community which is be-

000

"There is not a single thing in this city that you need that you cannot have if you make up your mind that you need it and will have it; you will never establish a city under the feeling that you cannot do things. A way will come, and if your present laws stand in the way, secure the best lawyers and get them busy devising laws that will meet the situation."—George E. Kessler, City Planner.

Highway Plan; also the physical changes necessary to make it a suitable thoroughfare: for example, widening or extending the present right-ofway. In some cases the extensions are of such importance that they are really not extensions, but new locations. It is important that the major thoroughfare locations be established by the acquisition of the necessary rights-of-way at an early date. The existing thoroughfares or streets which are a part of the system should have these necessary widths provided for by setback line to preclude buildings being erected within the proposed street lines, thereby increasing the damages on actual acquisition of the land. In the case of the new locations it is very likely, if past demonstrations are an indication, that the land will be gladly given for the right-of-way to secure these new thoroughfares.

BRIDGES

The natural and artificial barriers now existing play an important part in the establishing of a Thoroughfare System. The city has made notable strides in the matter of bridging these gaps, which are primarily the river, creeks, rayines and railcoming primarily industrial in character. Additional bridges of similar type but of varying size, design and cost will be necessary in the future to make the traffic connections which will have to be developed for the increased circulation needed in a city of greater population. Such bridges are suggested as follows:

Over the Norfolk and Western Railway Tracks (Main Line):

6th Street, N. E., to 9th Street, S. E.

14th Street, N. W., to 13th Street, S. W.

19th Street, N. W., to 19th Street, S. W.

OVER THE ROANOKE RIVER:

19th Street, S. W., to connect with Grandin Road.

5th Street to Colonial Avenue and Bent Mountain Road.

Ivy Street to 6th Street, S. E.

Morgan Street, S. E., to Eastland Road.

Tayloe Avenue and 13th Street, S.E., to Parkway along south bank of Roanoke River.

Tinker Creek Parkway to Parkway along south bank of Roanoke River.



MEMORIAL BRIDGE OVER ROANOKE RIVER

OVER TINKER CREEK:

Greenbriar Avenue.

Wise Avenue.

Norfolk Avenue.

Lynchburg Avenue (replacement).

Liberty Road, extended.

National Avenue to Columbia Street.

Hershberger Road, near junction of Tinker

Creek and Carvins Creek.

Several other bridges on the proposed Tinker

Creek Parkway.

(The need and urgency of these bridges is varied.)

OVER CARVINS CREEK:

Hershberger Road, also a bridge at McAfee Parkway.

Jefferson Boulevard.

Old Rock Road.

OVER LICK RUN:

Lynchburg Avenue

Peach Road.

5th Street.

10th Street.

19th Street.

Lafayette Boulevard.

Hershberger Road.

Jefferson Boulevard.

Old Rock Road.

OVER PETERS CREEK:

North Salem Road.

Old Lynchburg and Salem Roads.

Shenandoah Road.

Hershberger Road.

Over Norfolk and Western Railway Tracks (Winston-Salem Division):

Tazewell Avenue, S. E. (much needed). Brandon Avenue—McClanahan Street. Broadway.

In addition to these already mentioned, other viaducts or underpasses should receive attention:

Lynchburg Avenue Underpass at Norfolk and Western Railway (Shenandoah Division), reconstruction.

Shaffer's Crossing Underpass—approach should be improved.



FRANKLIN ROAD AND FIRST STREET Dangerous jog intersection

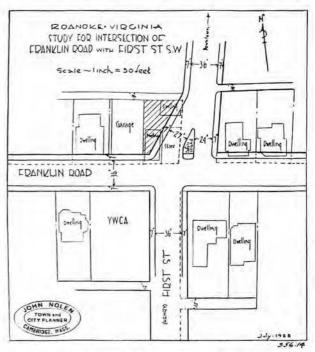
Improvement of Thoroughfare and Street Intersections

It is important that detailed studies to facilitate the flow of traffic and to develop more attractive intersections be undertaken for the improvement of certain street intersections. There are now many jogged street and acute angle intersections that are dangerous and interrupting to traffic use, and do not provide settled and attractive property frontages for business and residence. A sketch for such improvement has been made for the intersection of First Street and Franklin Road, S. W. There are perhaps fifteen other intersections which should be studied and improved.

AUTOMOBILE PARKING

Every effort should be made to bring about a better traffic condition upon the streets of Roanoke by the elimination of dead parking, and the establishment of reasonable parking time limits for live parking. This is particularly true of the main thoroughfares in the downtown business area, including such streets as Jefferson Street, First Street, S. W., Second Street, S. W., Campbell Avenue, Church Street, Tazewell Avenue, Franklin Road, Salem Avenue, First Street, S. E., and Second Street, S. E.

There must always be parking accommodations for customers of business houses, but to bring about such convenience there must, of necessity, be close cooperation between the business houses and the city. The business house must eliminate much parking of its own automobiles and those of its employees, and the city must provide facilities to keep the traffic moving. Quite evidently there must be additional parking space off of streets, and low rates for day storage. Practically all unbuilt-upon areas should be converted into open day storage. In addition, there is a growing need for more garage space of low rental in the downtown area, in locations which are not primarily desirable for but are adjacent to retail business, office buildings and other such uses. It would seem that Norfolk Avenue facing on the Norfolk and Western tracks opposite the Passenger Station would provide such location. The frontage on the street is practically what it was twenty years ago. A widening of about eight feet and the develop-



Proposed plan for eliminating jog

ment of storage garages here would give the approach to the city by rail a decidedly improved appearance. This suggestion should not be interpreted as expressing the opinion of entire concentration of such business in a single location. The distribution should follow closely the requirements of business houses.

STREET VISTAS

As previously pointed out, the latest bridges in Roanoke are outstanding features which not only



SHOWING NEW TYPE OF WHITE-WAY LIGHTS AND NEW STREET NAME SIGNS

facilitate traffic flow and reduce traffic hazards, but also add effectively to the æsthetic quality of the streets upon which they are located. They exemplify what we would urge under the heading of street vistas. Practically every street in Roanoke can have an attractive view by crystallizing certain physical features and developing them in an appropriate manner. Here again there should be close coöperation between property

owner and developer and the city. On the part of the city the appointment of a Civic Art Commission would undoubtedly bring about an increased interest in such matters.

STREET EQUIPMENT

It is inevitable that there must be a certain amount of equipment connected with streets—to identify them, to assist in their proper use and to beautify them. All of these features should be decorative, and it is not beyond possibility that they can be made so, it being a matter of design and coördination, inasmuch as necessity will demand their installation in one form or another.

The identification of streets by their proper names is of prime importance, and we are glad to call attention to the recent installation in the downtown districts of appropriate street name signs, which show in readable letters the names of streets concerned at the location. A careful survey of existing street names should be made, and duplications eliminated in the present list, and avoided in the future.

The question of the equipment to assist in the proper use of a street involves very wide classification, from the paving material of the roadway



WASENA TERRACE Well planted with trees

to the traffic control devices. The matter of underground installations does not relate directly except in the possibility of placing more of certain public utilities under the surface.

Paving of roadways and sidewalks should depend upon the type and intensity of use of the street, the profiles or grades, cost and appearance. It is highly important, as the thoroughfare system is developed and its network broadened, that

streets be brought to the best minimum grades, both for the placing of a suitable pavement and for the establishment of a permanent building grade for adjoining property. Beyond doubt Roanoke will have to undergo at some near future date a general reëstablishment of grades for the streets, for just such purposes.

Poles for light, power and communication should be reduced to the minimum on all streets, and in the intensively used downtown section, conlocations, would give tremendous impetus to the movements which start up and lose momentum because the factors do not exist to guide control and continue.

Routing signs and traffic direction signs should be systematized in accordance with U. S. standard signs, and their locations controlled for the good of all concerned.

To the end that all of these routing and traffic signs may serve their expressed purpose, street

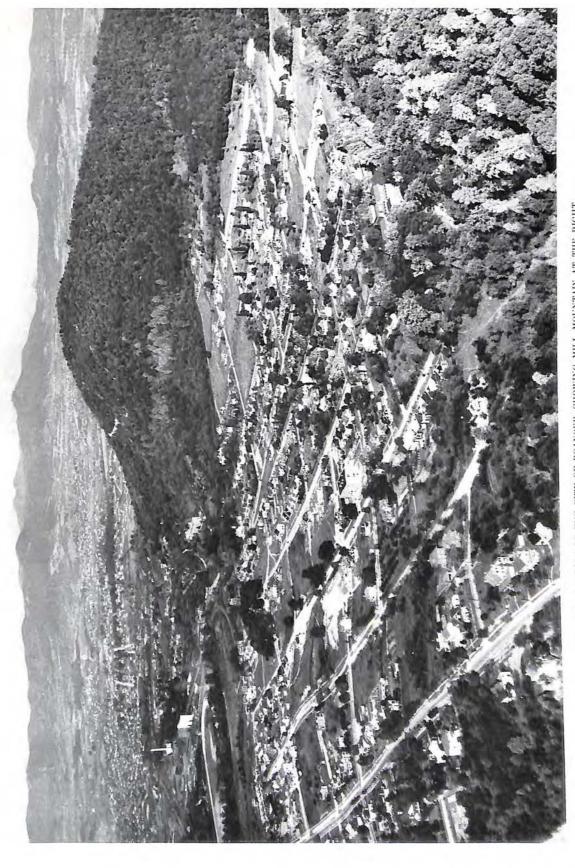


BACK CREEK, IN THE MOUNTAINS NEAR THE CITY

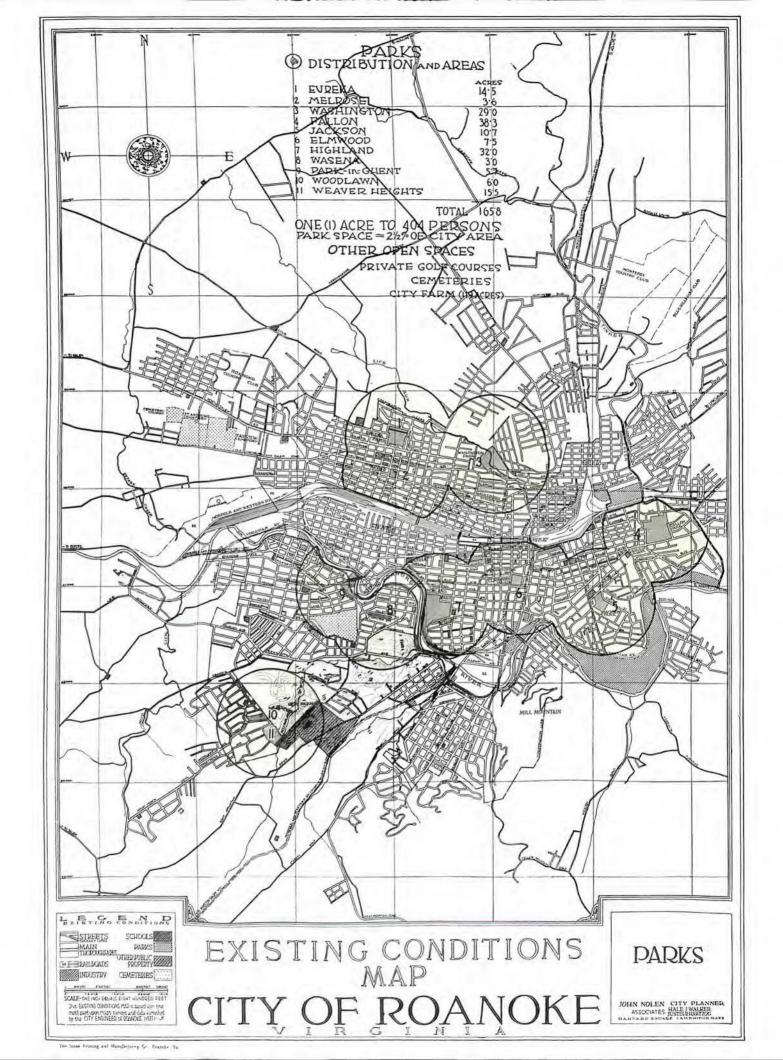
ductors should be placed underground. Utilities companies will as a rule be willing to coöperate with the city in bringing about such improvements at the economical stage.

A program of street tree planting should be established and put into operation. The peculiar and varying planting strips along streets in Roanoke make it almost impossible for the property owners to act independently in the matter of tree planting without confusion. A plan specifying the types of trees for certain streets and the planting regulations should be inaugurated and enforced against all signs which are so placed or are of such a nature that they interfere with the full performance of the official signs.

Lighting standards should be simple in design, and large clusters of lights should be avoided. The traffic control lights should utilize other standards where possible, and in general should be located at the corners rather than suspended over the middle of street intersections.



THEW OF A PORTION OF THE CITY OF ROANOKE, SHOWING MILL MOUNTAIN AT THE RIGHT MILL MOUNTAIN IS Within the city limits and towers about 800 foot above the city proper. Spurs of the Blue Ridge and Alleghany Mountains in the background



PARKS AND PARKWAYS

THE value of open spaces is a factor in modern urban life that is demanding more and more attention from American cities. This is particularly so in those cities where the population growth is showing a steady increase with an occasional impetus from some special cause. It is likely that during such periods of special growth more additions to the open spaces will be made, for people are then prone to think more closely in allied channels.

Naturally, there is reluctance among people in general to acquire and create definite open spaces when there is ample space about them for recreation; but in the case of Roanoke there is now an increasing shortage of opportunities to visit an attractive stream, grove or woodland without trespassing upon private property.

Conditions are changing, and there is a growing opinion everywhere that certain outstanding physical features should be made part of the public property, always available for public use, for



ROANOKE RIVER, WEST OF FRANKLIN ROAD BRIDGE

example, the water fronts. While the possibility in Roanoke of securing a notable river front parkway system of a uniform character through the city is gone, the loss should be a stimulus to development in other directions, such as the creek bottoms and certain outstanding lands favorably situated for this purpose, and less desirable for other uses.

The standard for parks in cities of the size of Roanoke is a minimum of ten per cent. of the municipal area. Roanoke now has two and one-half per cent. of its area devoted to such use. In looking about almost any city it is seen that easily ten per cent. of the land is being used improperly for housing, to the double detriment of withholding the land from recreation, and in allowing people to



POND IN ELMWOOD PARK

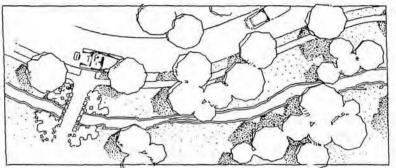
live in unsatisfactory if not unsanitary conditions. The truth of this situation probably will be only too evident in Roanoke, upon even a casual inspection.

The present parks, as indicated on the Existing Conditions Map, have an area of about 165 acres. Too much cannot be said in praise of the efforts of those who have made these open spaces possible. The use made of these parks has justified their place in the city's make-up. Taking the city as a whole, there is a population density of nine persons per acre; but people should not be deceived by these figures. There are large areas of land not available for living or housing purposes such as that occupied by business and industry. It is only by systematically analyzing the City of Roanoke, and providing for the needs as they are shown by this analysis, that results commensurate with its growing population can be obtained.

To this end there has been prepared the Parks and Recreation Areas Plan, which emphasizes the

PARKS A-N-D PARKWAYS

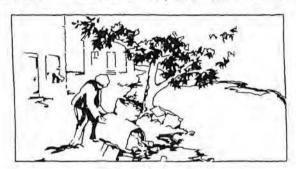
TREE BORDERED IS A DELIGHT AND ACQUISITION OF LAND ALONG NATURAL STREAMWAYS SHOULD BE

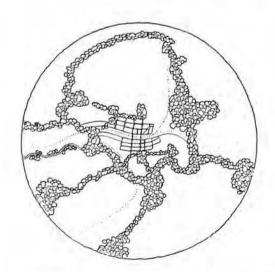


A COMMUNITY

NO UNLESS PROTECTED N DWELLINGS OFTEN BACK

ON THE STREAMS BRINGING ABOUT UNSIGHTLY AND UNSANITARY CONDITIONS





PARK UNITS SHOULD BE PART OF A SYSTEM **A REGION POSSESSING WELL DEFINED DRAIN-AGE LINES HAS THE RAW MATERIAL AT HAND TO BUILD THE SYSTEM ** THE PARK WAYS PROVE TO BE NOT ONLY BEAUTY LINES BUT IMPORTANT CIRCULATION ARTERIES

JOHN NOLEN & CITY DLANNER & HALE J. WALKER & JUSTIN R. HARTZOG & ASSOCIATES

needs in this direction. On this plan will be found the various types of parks or open spaces necessary for the Roanoke of the future—not in any sense a "dream city," but the city that will come about as the result of the present rate of growth.

There are two types of parks that Roanoke stands especially in need of to-day. First, the sary for Roanoke is the so-called Large Park—still within convenient access, but far larger in area. Such parks are specialized in their character, and oftentimes are the most economical means of preserving an interesting section of woodland, striking topography, a lake, or even potential lake country. Parks of this type are suggested on the



MASON CREEK, NEAR CATAWBA VALLEY

This is the type of stream along which Parkway Drives are proposed

Neighborhood Park, of which it has examples—Fallon, Jackson, Highland, Elmwood, Washington and the like. It should have more of them, and they should be developed for intensive use along modern lines for the largest number of people. The true function of this type of park is to be frequently and easily accessible to the local district which it naturally serves.

The other outstanding type of park so neces-

plan in the vicinity of the City Farm and in the Mill Mountain section.

Connecting these large parks, utilizing the natural and necessary drainage channels, should be parkways, so that not only is pleasant access to and from the parks provided, but that Roanoke will have an appropriate means of displaying in an interesting and attractive way the recreational system, and her varied topography. Tinker Creek,

Mud Lick, Murray's Run, Tyler Creek, creek along Hickory Road, and portions of the Roanoke River, form the basic course of the parkways.

The Neighborhood Parks can be brought together and related to the parkway system by the introduction of a series of parked streets. The classification of a street as a parked street means that because of its location it should be a tree bordered street of more than ordinary quality, but it does not require that there be a planting space for trees or shrubs in the center of the street, such as it may be interpreted.

In addition to all of these types of park properties, there are certain small open spaces often at street intersections distributed about the city which are often unsightly if left undesigned in a permanent character. They are usually best treated in a formal manner, and may in some instances become suitable locations for monuments.

There should be a definite policy adopted by the City of Roanoke in relation to parks—their acquisition and development. It is only through an established method of procedure that lands will be acquired in advance of subdivision by coöperation with real estate developments. Property owners, if assured of the public having proper access to the land, will often be glad to make gifts of property to the city. Preparation of development plans for the land now owned should be undertaken, and all improvements made in an organized sequence, as funds are available. The wisdom of such a policy is most evident, for example, in securing the proper planting of trees over a long period.

The park system of the city should bear a definite relation to the park developments and reservations of the state. With the coming of the automobile, the securing and holding of outstanding bits of scenery not within a municipal border has been raised to new importance, and the state and county should be supported by the general public in such acquisition for the general welfare. Recommendations on parks are continued in connection with the Regional Plan of Roanoke County.



POAGE'S MILL, ON BACK CREEK, FIVE MILES SOUTHWEST OF CITY

RECREATION

In planning for the recreation facilities of Roanoke, the purpose has been to provide for people of all ages, to recognize their natural preferences, and to initiate means of encouraging them to enter into some form of proper exercise.

NEIGHBORHOOD PLAYFIELDS

In the various neighborhoods there is a growing need for a special area devoted to the use of small children, where they may go or be taken for play, and be assured of protection. Areas fully designed and equipped for their use would be an important factor in the development of children organized activity, such as team play and other athletic sports which cannot be indulged in when in the midst of younger children. The fields should include facilities for baseball, basket ball, football, tennis, swimming and similar sports. There should be such fields in the following locations:

Fallon Park-in eastern section.

Wasena Park—proposed park under the Wasena Bridge, centrally located.

Sherwood Park—proposed park in the west

Washington Park—for negroes in the northeast section.



PLAYGROUND IN ELMWOOD PARK

as better citizens and exponents of civic life. These fields should be supervised during certain hours of the day, and the children taught to develop initiative and self-reliance. The emphasis in these small neighborhood playgrounds for children is upon good instruction and not upon elaborate equipment. These playgrounds should be, preferably, at or near the grade schools which the children attend. The number of playgrounds will be determined by the number and distribution of the children. In some cases it may be desirable to place there playfields in the neighborhood parks.

ATHLETIC FIELDS

As the boys and girls become older there should be spaces where they can engage in a still more



PLAY DAY, MAHER FIELD, MAY 12, 1928 Sponsored by the Playground and Recreation Association of Roanoke

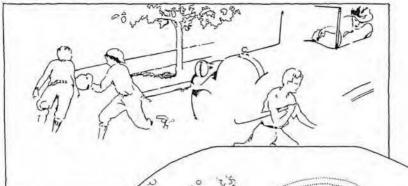
Again it is emphasized that the equipment of the fields is not so essential at first as the instruction and conduct of the play.

GENERAL MUNICIPAL ATHLETIC FIELD

In addition to the four athletic fields above mentioned, there should be one general field for major athletic activities, developing out of the local athletic fields, the High Schools, and for those events played in Roanoke by outside teams, such as the annual V. M. I.-V. P. I. football game. The City Farm area has been made the nucleus of a General Park, the boundaries of which have been suggested to include areas of varied topography,



CHILDREN CAN AND DO PLAY ANYWHERE **
BUT NOT WITHOUT DANGER AND NOT WITH
THE BEST RESULTS PHYSICALLY AND MORALLY



FIVE ACRES OF LAND PROPER-LY DEVELOPED WILL AFFORD AMPLE PROVISION FOR ORGANIZED AND OPEN PLAY



SWIMMING OPEN PLAY AREAS FOR SMALLER AREAS FOR SMALLER



8000 DERMITS FOR USE OF TENNIS COURTS WITH ABOUT 30,000 USERS A MAN CAN ENJOY IN LEISURE TIME ABOUT 1750 HOURS A YEAR «THIS FIGURE INCREASES YEARLY ONE FOURTH OF THAT OR 435... HOURS CAN BE WISELY USED ON CITY RECREATION AREAS

GIVEN SUNSHINE & SUPPLY ADEQUATE SHADE & RESULT THE PERFECT PLAYCROUND

JOHN NOLEN & CITY PLANNER OF HALE J-WALKER & JUSTIN R. HARTZOG ASSOCIATES



PLAYGROUND IN MELROSE PARK, LOCATED IN NORTHWEST SECTION OF CITY



CHILDREN'S PLAYGROUND IN HIGHLAND PARK

and bounded on the north by Greenbriar Avenue extension, and on the south by Bent Mountain Road and the Norfolk and Western Railway, (Winston-Salem Division). Within this proposed park are areas that are naturally suited for large athletic games, and here a stadium might be built



PLAYGROUND UNDER MEMORIAL BRIDGE A safe place for small children to play

which would be fitted into the terrain in such manner as to effectively reduce the cost of construction. In conjunction with the stadium there should be ample parking space for automobiles, so that the streets will be left open for traffic during games. The area known as the Trout Field, while it has been also suggested as the site for the Temporary Airport, possesses many qualifications for a municipal stadium which would be more of a commercial nature, on the order of the league teams' ball parks. This site has advantages in location due to a more central location in relation to population distribution and the proposed thoroughfare system.

Maher Field, which is now the center of these major athletic activities, is the property of the Norfolk and Western Railway Company. Through the courtesy of the Company it has been available for public use, but a field under such private ownership cannot be expected to provide all the facilities needed.

MUNICIPAL GOLF COURSES AND SWIMMING POOLS

It would be wise for the city to have a municipal golf course in one of the public parks. Many municipal golf courses are self-supporting, and are held in high repute. Golf has an appeal to many who do not care to subscribe to all the activities customary in a country club. The proposed park suggested by the extension of the present City Farm would provide a most interesting location for a public course. Until that can be brought about, a portion of Fallon Park would be adaptable.

The increasing pollution of streams makes the establishment of artificial swimming pools a modern necessity, where the water may be purified and changed to keep the pools in a strictly sanitary condition. Three or four such pools are needed to meet the requirements at the present time of the different sections of the city—at Fallon Park, the City Farm, Lafayette Park and Washington Park. A suggestion for the development of a swimming



WASHINGTON PARK PROVIDES AN EXCELLENT RECREA-TION AREA FOR THE COLORED CITIZENS

pool in the City Farm region is incorporated in this report.

In connection with these recommendations on Recreation we want to call attention to the reports made during the year by the Welfare Group and the Playground and Recreation Association of America.

PLAYGROUNDS

"City streets are unsatisfactory playgrounds for children, because of the danger, because most good games are against the law, because they are too hot in summer, and because in crowded sections of the city they are apt to be schools of crime. In view of these facts, cities should secure available spaces at once so that they may not need to demolish blocks of buildings in order to make playgrounds, as New York has had to do at a cost of nearly a million dollars an acre."—President Roosevelt.



SCHOOLS

THE survey of the grade schools of Roanoke discloses in general very efficient locations for serving the present school population. These locations and general data concerning schools have been shown on the School Statistics of the Existing Conditions Map. The graphic study made shows each school in relation to a one-half mile radius, which circumscribes the area from which each school normally draws its attendance. Comparis-

gestion and inadequate all-around training for the children. On the plan various additions to the area of the present school grounds are suggested, and new sites pointed out. These are listed below for convenience.

ELEMENTARY SCHOOLS

Northwest (area of grounds, 1.86 acres). This is a new school, and should have an area at least



PARK SCHOOL, FACING HIGHLAND PARK

sons of the map with the Built-Up Areas Map show the efficiency of school districts in relation to the occupied areas of the city.

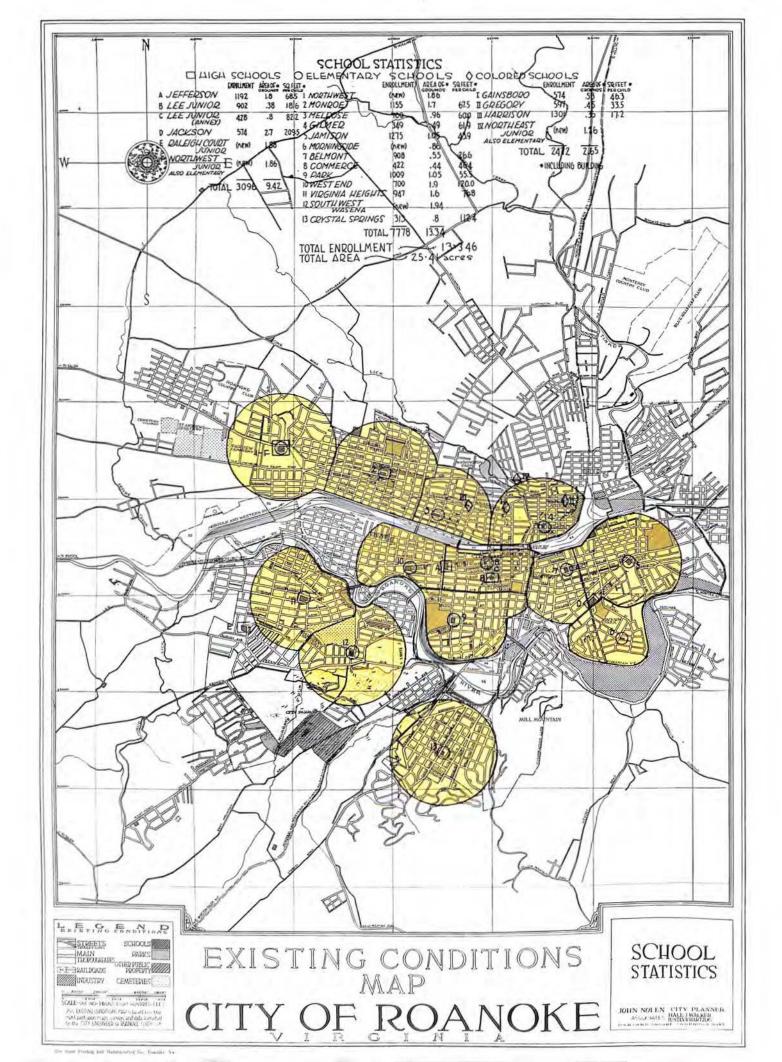
While these schools are in general geographically well located, we feel that in practically all instances the grounds are too restricted in area to provide adequate play space or expansion area for the building. The inclusion of modern playgrounds with the grade school buildings sets up a minimum standard of lot area of about four acres, below which accommodation there is a tendency to con-

three times the size recently provided. The proposed Lafayette Park adjacent, if acquired, would solve the difficulties of area for play.

Monroe (area of grounds, 1.7 acres). It is suggested that this school plot be increased in size to include the whole block between Melrose and Orange Avenues.

Melrose (area of grounds, .96 acres). This school also should occupy the whole block between Loudon and Gilmer Avenues.

Gilmer (area of grounds, .49 acres). The area of

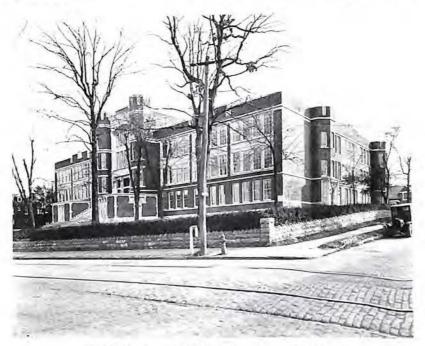


this school property is ridiculously small, and the whole block should be acquired for school use—Gilmer Avenue to East Avenue and Third Street to Fourth Street.

Jamison (area of grounds, 1.05 acres). This school is located in a section of the city which will see quite solid growth, and needs rounding out to at least a full block as shown.

Park, for, undoubtedly, the building will need expansion, which will reduce the grounds considerably.

West End (area of grounds, 1.9 acres). A very attractive school building somewhat misplaced and limited in size. A small addition is suggested on the south side to extend the property to Marshall Avenue. A proposed street on the east side



JEFFERSON HIGH SCHOOL, ON CAMPBELL AVENUE

Morningside (area of grounds, .86 acres). A new school with an area of about one-fifth of the normal minimum area requirements, well located geographically in advance of city development, but not yet adequately prepared to meet the coming population density.

Belmont (area of grounds, .55 acres). This is one of the older schools needing expansion. Lot should be doubled in size.

Commerce (area of grounds, .44 acres). This school location is obsolete, and the area is included with that suggested for the Administrative Center for the city. The facilities might be transferred to the West End or Park School areas.

Park (area of grounds, 1.05 acres). A fine school plant on a small area. This area has not been shown increased on account of the proximity to Highland Park. It would be wise, however, not to depend too extensively upon the facilities of the

of the property will set the grounds off definitely and increase the general appearance of the school.

Virginia Heights (area of grounds, 1.6 acres). A commanding location for a public building. The lot occupies all but a small portion of the triangle between Virginia Avenue, Denniston Avenue and Amherst Street. It would be desirable that this smaller triangular plot be added at some future date.

Southwest Wasena (area of grounds, 1.94 acres). A new school property, well located, but again restricted in size for a modern grade school plant. It is suggested that the property be extended west to Canterbury Road.

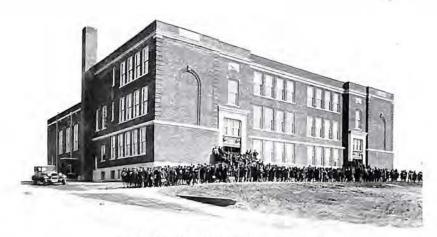
Crystal Springs (area of grounds, .8 acres). It is suggested that these grounds be expanded to include the area within Fifth and Sixth Streets, Carolina and Rosalind Avenues.

HIGH SCHOOLS

Jefferson (area of grounds, 1.8 acres). This school is so situated from point of view of land and location that it is distinctly handicapped in its activities. The modern high school requires as a minimum twenty acres of land for adequate development of its functions. It is recommended that when the circumstances permit a new High

location, adjacent to Jackson Park, which has been recommended to be extended, should be adequate for the present period of planning.

Raleigh Court Junior (area of grounds, 1.88 acres). There has been recommended a park adjacent to this school, both for general neighborhood purposes and for the benefit of this school; also, it is suggested that the school grounds proper be



LUCY ADDISON HIGH SCHOOL (COLORED) (Facing Washington Park, for colored people)

School be located in some commanding site, with from twenty to fifty acres of land about it to provide athletic facilities. This does not mean that the present plant should be scrapped, for it can be made to serve very valuable uses to the city by performing some specialized service, such as junior high, trade school or community building.

Lee Junior and Annex (area of grounds, .38 acres and .8 acres), are downtown schools, being surrounded by the business district. The redistribution of school population will suggest their diversion to other uses, such as the Administrative Center, other public use or private business, in which case the junior high school population of this section of the city could well be centered at what is now the Jefferson High School, and the High School relocated to a more suitable site.

Jackson Junior (area of grounds, 2.7 acres). This school recently has been enlarged in plant, and its expanded to include an area generally bounded by Lincoln Avenue, Sherwood Avenue extended, and a north and south street near the present city limits.

Northwest Junior (area of grounds, 1.86 acres). This school is adjacent to the proposed Lafayette Park. If the park site is not acquired for such purposes, it is highly desirable that the school site be tripled in area.

COLORED SCHOOLS

Gainsboro (area of grounds, .58 acres). This school is placed in a very difficult position topographically, and the physical limitations do not suggest any very great increase in the use of this school.

Gregory (area of grounds, .45 acres). Somewhat the same situation surrounds this school as Gainsboro.

Harrison (area of grounds, .36 acres). It is suggested that this school be augmented in area by the remainder of the block east of the line of Sixth Street extended.

Northeast Junior High (area of grounds, 1.26 acres). It is recommended that this school be made the best possible for negroes in all respects, and that the area be increased to five or ten acres in the near future.

In addition to these proposals for existing schools, there are recommendations for other schools in the large regional territory surrounding the present city area. These proposed sites average about four acres in size. The purpose of suggesting these sites in advance of the growth of Roanoke is to secure sites for the School Board in advance of rise in prices, to get the schools located where needed, to preclude the necessity of establishing schools on leftover ground, to assist in the development of the areas by having a substantial nucleus about which to center residential activities, to have the schools accessible without being on main thoroughfares, and to be so distributed as to be within walking distance of children's homes.

Coördination of policy in regard to schools, recreation and parks is highly desirable in any city, to avoid duplication of both effort and expenditures, and to bring about the best results for the physical and industrial development of the city.



HARVEY HALL POOL, ON CARVIN CREEK

PUBLIC BUILDINGS AND PUBLIC AREAS

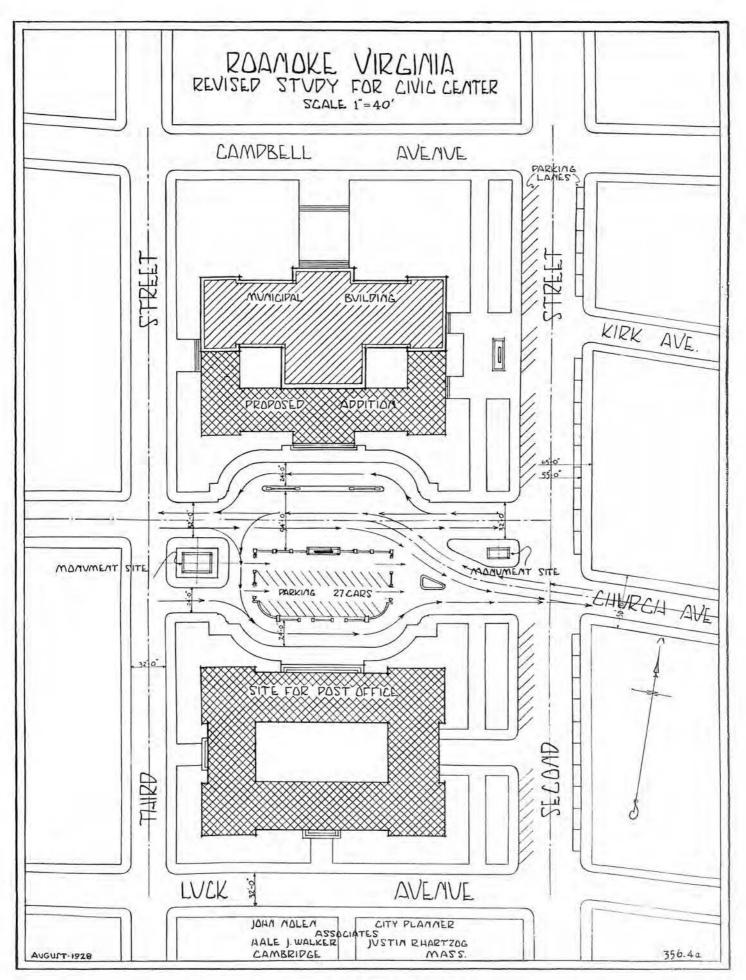
DISTRIBUTION OF BUILDINGS IMPORTANT TO THE PUBLIC

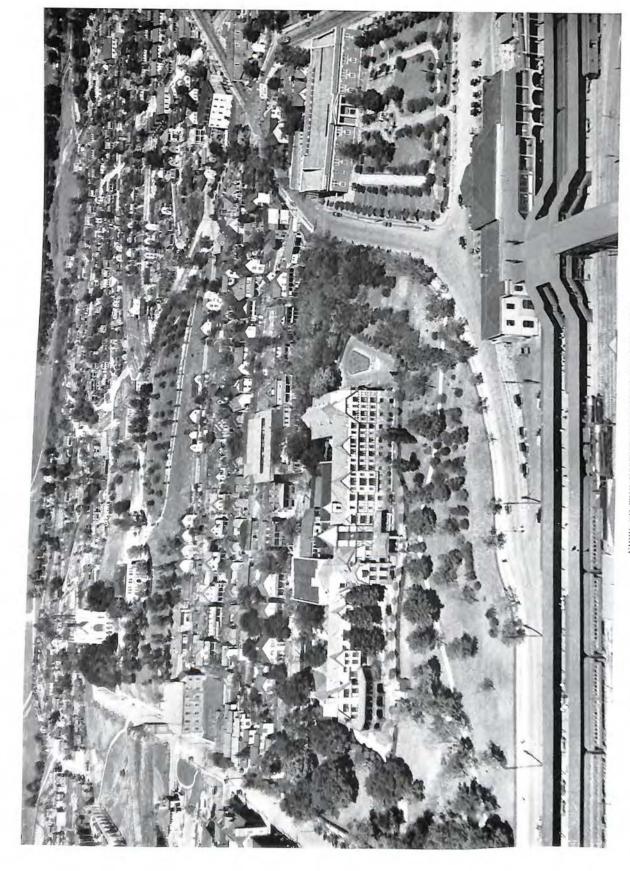
THE public buildings of a city are important elements in the city plan. This importance may be in relation to the city as a whole or to a specific section of the city through a form of decentralization. We are finding now-a-days best results in a central Administrative Center located in or on the edge of the business section with other centers or groups devoted to cultural or social advancement, recreation and the like disposed about

the city in appropriate locations in relation to the thoroughfare system and in keeping with the character of the neighborhood. All of these groups must be thought of in relation to the future growth of the city. Certain isolated public buildings have certain very specific uses and these should be located at the points most effective for their use. This is the case with fire stations. It has been demonstrated in Roanoke that fire stations can be built in residence districts in harmony with surroundings.



MUNICIPAL BUILDING





VHEW OF THE NORTHEAST SECTION OF THE CITY
Showing the Norfolk and Western Passenger Station, with "umbrella" sheds, Hotel Roanoke and Roanoke Auditorium in mid-foreground.
North Jefferson Street to the left with St. Andrew's Church in the left background

ADVANTAGES OF GROUPING PUBLIC BUILDINGS

There are certain concrete advantages accruing from bringing together public buildings of an allied character in a well located group.

- The convenience in transaction of public and private business.
- Reduction to a minimum of interference of public buildings with private property and business interests.
- More permanence of the municipal center and therefore greater stability of land values.
- Economy in the original purchase of the land, that is by larger quantity at lower rates on one site.
- Better use of the same amount of land in skillful arrangement of the buildings and their architectural design, than if scattered in many locations.
- If the site has been large enough at the start to meet the probable demands for such use, the periodic unsettled condition of the public mind over the location of each new building is avoided.
- 7. These groups, if appropriately designed, will tend to raise the standard of all property in adjacent blocks and thus improve the financial situation of the city.
- Suitable opportunities for the combination of the civic arts, or architecture, sculpture, and landscape architecture in the development of locations.
- The civic group stimulates civic pride, it gives form to the community effort and heartens and inspires and guides development of private property.

THE ADMINISTRATIVE CENTER FOR ROANOKE

This group would consist of the present Municipal Building and the proposed Federal Building and Post Office with a plaza between. The group would be located on the blocks bounded by Campbell Avenue, Second and Third Streets, S. W., and Luck Avenue and bisected by Church Street. The plan proposes that the block north of Church Street be given over to the Municipal Building, thus providing for its future expansion. The entire block south of Church Street would be set aside for the Federal Building. In the space be-

tween would be developed a plaza in such a manner that traffic on Church Street would be carried through but would not interfere with the prime purpose of forming a decorative court between the two buildings. Second Street, Third Street and Luck Avenue should all be widened to allow greater facility in traffic circulation about the two blocks.

OTHER PUBLIC BUILDINGS

Roanoke has a growing Public Library. The congestion of the building is becoming acute and a new structure will be needed in the near future for the library and one for a museum at a somewhat later date. A Municipal Auditorium and Music Hall is still a third structure that will be needed by the growing Roanoke. No specific location for this cultural group is shown on the plan but it is suggested that the linking up of this group with the educational system of the city would be the best means of extending the benefits to the whole city. The physical location of such a group might be made about the West End school as a nucleus.

AIRPORT

The matter of the Airport for Roanoke is one of first importance and as such has been made the subject of a special report (April 25, 1928) which is given here in full.

GENERAL SITUATION

Roanoke is prominent among a group of nineteen cities which have identified themselves with an energetic state-wide movement to secure for Virginia a system of airports. This is in the nature of a cooperative effort between the municipalities and the state, the latter offering its assistance through the State Highway Commission. The geographical location of Roanoke makes an airport a particularly valuable adjunct to the city. Its position at the southern extremity of the Shenandoah Valley which is continually increasing in popularity as a tourist region and its industrial activity are sources of traffic for air service in passengers, freight, mail and express. These possibilities cannot be capitalized until facilities exist to put them on a sound basis. No one should get the impression that creating business by air service is an overnight development. It is one of those peculiar things which require a first experience and that first trial is often times difficult to sell but having weathered the pioneering period, it is certain to become sound and profitable.

GENERAL QUALIFICATIONS FOR AN AIRPORT

In the survey of the Roanoke region the following qualifications have been kept in mind as the basis for selection:

- a. Safe flying conditions.
- Proper relation to the city and regional development.
 - c. Adequate area.
 - d. Good drainage.
 - e. Possibilities of expansion.
 - f. Accessibility from Roanoke.
 - g. Low land cost.
 - h. Low cost of development.
 - i. Proximity to light, power and water.

It is obvious to all who have interested themselves in the Airport that the ideal in all of the above items cannot be hoped for. Roanoke's region is not level. It was necessary to examine all sites with the viewpoint that the rating of the selection made might be low in regard to some items, but that certain conditions must be satisfied to the greatest degree. These are—safe flying conditions, proper relation to the city and regional development, and adequate area. With these requirements met, the other qualifications are under control.

SITES INVESTIGATED

In the survey all sites were investigated that had been suggested by the public up to April 20th. Also the region was searched from the air, by automobile and on foot for other possibilities. The following sites were investigated:

- 1. Cook, on the Lee Highway.
- 2. Obenchain, on Roanoke-Salem Road.
- 3. Viscose, east of plants.
- 4. Trout, on Salem-Lynchburg Road.
- Cannaday, between Old Rock Road and Hershberger Road.
- Albert and Kinzey, three miles west of Salem.
- 7. Strickland, Salem.

- 8. Nininger, near Williamson Road.
- 9. Andrews, Cove Road.
- 10. Andrews, Hershberger Road.
- Tract on Roanoke River in section known as Eastover.
- Tract near N. & W. Railway in southeast Salem.
- Tract west of and adjoining Mason's Creek.
- Tract south of Roanoke River, two miles west of Salem.
- Tract immediately east of Mason's Creek, north of old Roanoke-Salem Road.

The study of the region for the City Planning and Zoning Commissions has progressed to the stage where uses of land in the region have been generally determined. The region immediately north of the Lynchburg-Salem Road is being developed as general residential property, while north of this portion is a very rich farm section. This region is Roanoke's great resource of general residential property and should not have intrusions which are incompatible with this type of development.

The adjacent territory to the east and south are topographically unsuited to development which requires level areas of large expanse, and consequently lends itself in a large measure to use as residential property of fairly large dimensions, such as estates.

The industrial development will continue to expand along the railroads which traverse the bottom lands along the Roanoke River, between Roanoke and Salem, with off-shoots to the north along the Norfolk and Western Railway (Shenandoah Division) and to the south along the Winston-Salem Division of the same railroad. Sites for industries of large scale are somewhat limited and should not be encroached upon by other uses but should be held free for such opportunities as may arise for bringing new plants to the region.

It is in the industrial classification that airports are more and more being considered, because of this coming recognition as commercial transfer points, as adjuncts of aircraft manufacturing, and as a nuisance to residential property from the standpoint of noise and traffic.

With this background of sequence of development for the Roanoke region, it is wise to plan the Airport so that it will be located in the best possible harmony and cooperation with the future. The general residential areas to the north, the estate type of area to the east and south must be eliminated as unsuitable locations, resulting in the inclusion of the Airport in or near the general areas most adapted for industrial purposes. The distance from Roanoke and also Salem to an airport should not be excessive, otherwise the great value of the air service will be minimized. With these restrictions thrown about the location, it seems apparent that the best location will be in the section lying between Roanoke and Salem and between the Washington Avenue—Poplar Avenue line and the Lee Highway. In this section lies most of the potential industrial property, but certain large areas are unsuitable for this use and it is these that have been carefully investigated as to their value as sites for the airport.

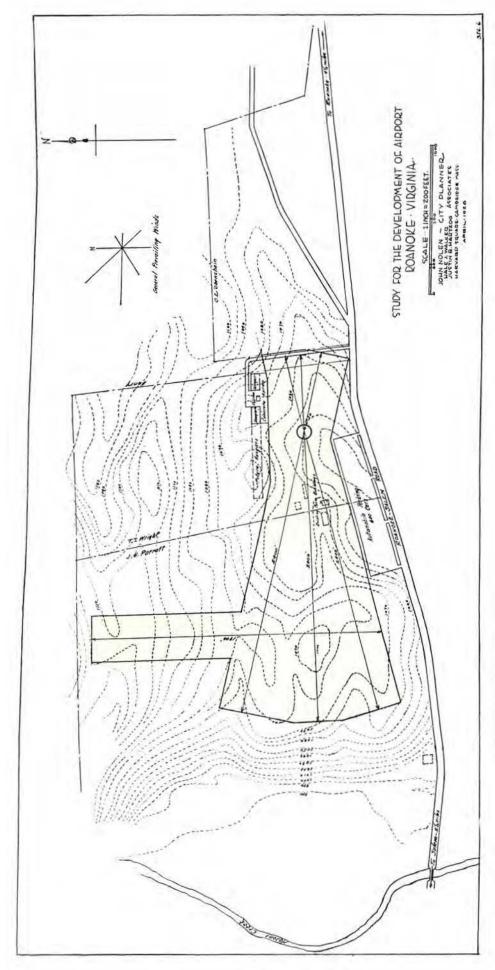
RECOMMENDATIONS

We have not been informed of the financial method by which the city will develop an airport beyond the fact that the finances are in such a position that the permanent Airport cannot be attempted immediately. This need not preclude Roanoke from developing an area which will answer the needs of the city until such time as ways and means can be found to own the Airport. We concur in the decision that a field be leased for a short period while the financial problem is being solved. In view of this situation, we make the following recommendations.

1. Temporary Leased Field. For this use we consider that the location, area, road connections, utilities, and the general flying qualifications of the tract known as the Trout Field will best serve the requirements of the city until such time as the city may undertake the development of a municipally owned field.

This field has been in operation as a flying field at intervals for the past ten years, during which time we understand it has generally met aviation requirements. Its close proximity to the city, being immediately adjacent to the city limits on the west, makes it quick of access and easy of connection with utilities. A small expenditure for grading, hangars and servicing facilities will make it immediately available for use.

2. Permanent Airport. A selection has been made of a site for the permanent Airport. The site suggested is located on the Old Roanoke-Salem Road, about one mile beyond the Trout Field on land owned by J. H. Parrott, T. S. Wright, and J. F. Henry containing approximately 125 acres, with the possible extension of 25 to 30 acres on adjacent property. A study has been made of the possible development of the area and incorporated as a part of this report. In this site, there seems to be the highest average of favorable characteristics. The prevailing winds are generally southwest, west, and northwest and in these directions runways can be constructed 2,400 feet long, requiring some grading. To secure a north and south runway considerable grading will be necessary, but from local sources we have been informed that this orientation of wind is very seldom met with in the region. In the study the operating buildings, such as hangars, office, servicing equipment are located on the north side of the field and to the east end of the runway, to facilitate operaation of planes and separate them from the highway. A road is shown at the extreme eastern end of the field connecting the service group with the Roanoke-Salem Road. In addition, there is designed a large parking area for automobiles on the south side of the flying areas, directly accessible from the highway. This space will accommodate at least 600 cars. Airports are becoming more and more a popular point of congregation, and can be made attractive through various methods, as places of recreation and entertainment. The Roanoke-Salem Highway should be revived and made one of the direct routes to Salem from Roanoke. Consideration should be invited to the possibilities of securing, in conjunction with the airport, of park lands between the flying field and Mason's Creek, just to the west, as a part of the regional planning.



PROPOSED DEVELOPMENT OF SITE FOR AIRPORT WHICH IS EASH, ACCESSIBLE FROM BOTH SALEM AND ROANORE

SEMI-PUBLIC FACILITIES

In addition to the above-mentioned public buildings and public areas there are other activities which are public in use and character but private in control which should be governed by similar principles in the matter of location and development. These are hotels of a residential or tourist

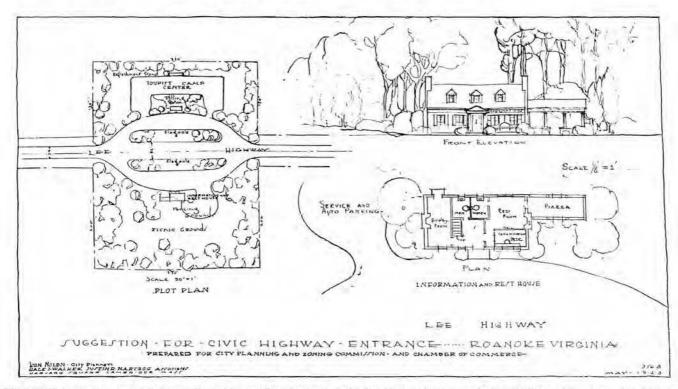


PUBLIC LIBRARY Roanoke needs a New Public Library Building

type, clubs and hospitals. Their locations should be such as to not interfere with the business district nor the apartment house district as a whole and if coördinated in relation to the thoroughfare system and to the city plan in general they will aid and increase the general efficiency of the city. Railroad stations also should be considered in a similar light. The present fairgrounds seem to be no longer logically located and a new location has been suggested on the proposed Mason's Creek Parkway between the Salem Road and the extension of the Old Rock Road. The factors leading to the selection of this site were a suitable topographical and geographical location, good highway accessibility, railroad connection and the proximity of electric car transportation.

CIVIC ART COMMISSION

In connection with the future development of Roanoke, we believe that great good can result from the adoption of a method of coördinating all of the efforts of both the municipality and the public at large toward the general appearance of the city. The establishment of a Civic Art Commission is recommended whose duty should be to bring about appropriateness and harmony in architecture, sculpture, landscape architecture and related arts throughout the city.



PROPOSED PLAN FOR AN INFORMATION STATION AND TOURIST CAMP TO BE LOCATED ON MAIN HIGHWAY ENTRANCES TO THE CITY

BUSINESS DISTRICTS

CONGESTION

M UCH may be said of the trade development of central business districts, but the person who should be most progressive in the settlement of any difficulties is the business man himself. He is in business to make money, and it is part of his business to locate where business will develop. It is known that traffic up to a certain point brings trade, and after reaching a certain density it will seek outlets and new routes which divert trade. Enormous expenditures may be made and strict regulations may be invoked, but until business is willing to meet the new conditions imposed on a community by motor car transportation, there will be no adequate relief in street traffic congestion.



SIGNS ON EAST CAMPBELL AVENUE CREATE AN UNSIGHTLY APPEARANCE

One of the most important measures of relief from congestion is the high development of the thoroughfare system. If traffic can avoid the central downtown district and other congested points where it has no concern, then there exists a semilocal problem that it is possible to control by coördination between the capacity of the streets, building bulk and artificial regulation of flow. The Zone Plan will aid effectively in securing this coördination between property use and capacity of the streets.

Automobile Parking

Parking of cars in the downtown district should be taken care of by judicious use of street space,



CAMPBELL AVENUE IS GRADUALLY BEING WIDENED

utilization of unbuilt-upon areas, and the development of storage garages of the ramped type. The large department stores and others will find it good business to provide parking facilities for their patrons.

ADVERTISING SIGNS

Signs showing the name of the store and an indication of the type of business are very useful, but it is recommended that these be carried flat on the wall of the building. Also it is recommended that the multitude of small signs overhanging the sidewalks be prohibited in the interest of public safety.

Miscellaneous

Throughout the report various recommendations have been made which have to do with the general appearance of the streets through the use



OLD TAVERY ON LYNCHBURG AVENUE Built about 1770

of well designed street names, lighting, and traffic control standards.

NEIGHBORHOOD BUSINESS CENTERS

The natural course of modern city development is leading to decentralization. The size of the city, its arrangement and topography, has built up neighborhoods of more or less definite boundaries and of varying distances from the downtown business center. It is natural that at some central and accessible point there should develop a small local business group which will supply the neighborhood with groceries, meats, drugs, personal service, and perhaps automobile service. These groups are composed of two classes usually: the small individually owned store and the chain store.

These local store centers perform two outstanding functions: first, as a convenience to the neighborhood; and second, in relieving the thoroughfare system of a considerable amount of traffic that would otherwise have to utilize the central business district. The important factor to be watched in these subsidiary centers is their location and arrangement, so that they grow in such a manner that the congested downtown conditions will not be reproduced. Careful attention should be paid to their location on streets of adequate width. The stores should be set back from the street line to allow parking of automobiles off the street, and buildings should be of a character designed to harmonize with the character of the neighborhood.



JEFFERSON STREET, LOOKING SOUTH In the business section of the city

DEVELOPMENT OF WATERFRONT

THE waterfronts of Roanoke have been mentioned under the heading of Parks and Parkways but here it is desired to emphasize the waterfronts from the point of view of general appearance and safety regardless of use or ownership. It is of value to the city from two angles that these stream courses should be cleared of debris, shaped up and kept in a sanitary manner:

- The general effect of a clean, sanitary appearance of the streams and banks upon the city at large and upon visitors.
- 2. The keeping of the flow of streams unobstructed to prevent the flooding of adjacent areas.

Unwise filling or dumping of refuse into these streams tends to restrict the normal flow and increase the hazards from floods.

All routine improvements of these streams should look toward the ultimate aim of securing a permanent character to the stream so that as changes in property adjustments are effected there need be no disrupting of the course or banks. Especially in industrial zones the stream should be walled in to allow maximum use of the land and convenience in maintenance. Other sections along the railroads could be planted advantageously with trees to protect the banks.



MASON CREEK Natural beauty spots such as these should be preserved



ROANOKE RIVER River banks being used as dumps



 ${\bf ROANOKE\ RIVER,\ NEAR\ SALEM}$ The picture above is an illustration of what can happen to this beautiful scene if neglected



RESERVOIR, NEAR VINTON, ROANOKE WATER WORKS One of the sources of Roanoke's water supply

TRANSPORTATION

THE matter of transportation in Roanoke is a very outstanding one for study, since so much of the city's welfare is linked with it. The subject is a large one, but one that can be handled from a city-planning point of view in a broad way.

Roanoke is a railroad center, and owes much to the railroads, and it is fortunate that the railroads take such an active interest in the welfare of the city from both the physical and economic viewpoints. At first inspection it might seem that the



NORFOLK AND WESTERN RAILROAD YARDS

railroad rights-of-way interfere very seriously with the city in its development. As a matter of fact, with a few exceptions, the location and concentration of the rights-of-way make the problem comparatively simple, and one which is more favorable potentially in the future with the coming of electrification. There are no serious problems of tracks interfering with the best use of land, and there are few streets with tracks in them. They have to some considerable extent preëmpted the banks of the Roanoke River, but not entirely so, nor have they destroyed all other possible chances of development. The main problem for Roanoke and the railroads is that of adequate and safe crossings. The past has indicated successful accomplishments and willingness on the part of the railroads to meet this situation. Bridges over the rights-of-way are necessary, and in almost all cases there are clean-cut solutions to be had. Typical

illustrations of improvements needed in the next development period of twenty or twenty-five years are as follows:

Elimination of the Tazewell Avenue grade crossing over the Winston-Salem Division of the Norfolk and Western Railway tracks. This is a current necessity.

Bridges over the wide belt of the Main Line of the Norfolk and Western Railway tracks.

6th Street, N. E .- 9th Street, S. E.

14th Street, N. W.-13th Street, S. W.

19th Street, N. W.-19th Street, S. W.

Jefferson Boulevard (proposed) near Peters Creek.

Other changes will be required for the welfare of both railroads and the city, such as—

Shaffer's Crossing Underpass, primarily the matter of improvement in approaches at both entrances.

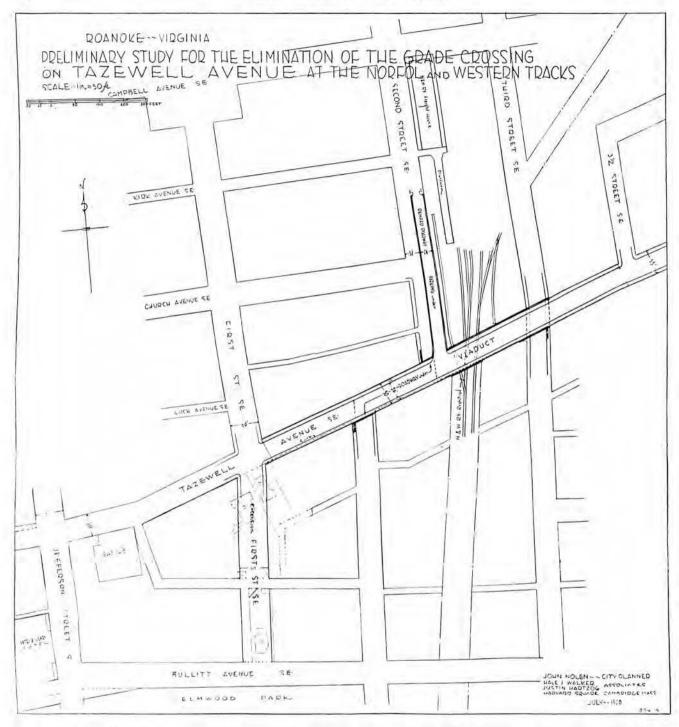
Ninth Street Crossing, connecting the Old Fincastle Road with Norfolk Avenue and possibly Thirteenth Street, S. E.

Jefferson Street. This problem is a major one. It is quite apparent that a separated crossing is most desirable for the public welfare, and that the solution is one which cannot be arrived at except by detailed study of business as conducted in the downtown area, and the policy of the railroads regarding future operating methods. The question of a new station is also closely allied to this problem.

On the Shenandoah Division and Winston-Salem Division of the Norfolk and Western Railway the following points need improvement:

Underpass of Lynchburg Road.

Grade crossing on Jefferson Avenue, South, near the Roanoke River. The tracks here make an acute angle with the street, and with the increase of traffic on both street



and railroad, a very unsafe condition will arise.

Brandon Avenue—Franklin Road intersection with Belt Line and Winston-Salem Division.

Natural physical barriers and railroads at other

points make bridges and grade separation necessary at future dates.

Fifth Street, S. W.—Colonial Avenue bridge over the Virginian Railway, Roanoke River and Belt Line.

Nineteenth Street, S. W., bridge over Virginian

Railway, Roanoke River and Belt Line to connect with Grandin Road.

Franklin Road at Virginian Railway and Winston-Salem Division track.

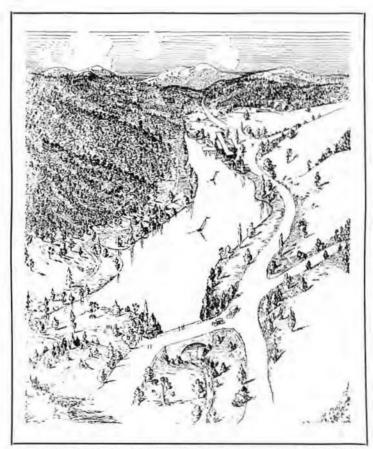
Ivy Street bridge over Virginian Railway and Roanoke River.

Eastland Road bridge over Virginian Railway and Roanoke River.

Other grade regulations to the north in the undeveloped sections at Locust Avenue, Liberty Road, Hershberger Road extended and Jefferson Boulevard extended. It would be highly desirable if the rights-ofway could be kept in as attractive a condition as possible compatible with the circumstances. This is particularly true where the railroads operate along the river, and in industrial sections.

It is not thought that a Union Station is a feasible proposition to urge upon the railroads under the present circumstances.

The industrial development upon sound lines as indicated under "Industry" is essential to the welfare of Roanoke. The two railroads are well situated to both assist in and to benefit from such development.



PROPOSED LAKE IN WEAVER HEIGHTS SECTION WITH SWIMMING POOL JUST BEYOND

(From drawing contributed by Mr. E. E. Dobbins, with Eubank & Caldwell, Architects)

INDUSTRY

THE Chamber of Commerce has had prepared an Industrial Survey* of Roanoke, which has examined exhaustively into the many aspects of industrial affairs. This report has been published, and is available for reference to any one interested.

The City Plan has considered industrial matters broadly from the following three angles:

- The types of industries most suited for Roanoke.
- 2. The best locations for industries.
- The factors influencing industries in selecting locations for new or additional plants.

Types of Industries

Roanoke to a large extent is a railroad city, for the Norfolk and Western Railway has large shops and offices located here. The employees are men who are largely permanent in their work, and so have built up homes and families. It is this substantial family population which is looking for opportunity in some form of industrial activity. It is highly desirable to Roanoke that this population be provided employment and not be allowed to drift away to other cities. The large artificial silk plant is a splendid type of industry, and it furnishes employment to the girls of these families. What is needed now is a diversified list of industries that will absorb the male population which does not find opportunity in the railroad shops. The geographical location of Roanoke and her railroad connections indicate a favorable center for branch or secondary plants of established industries. It would seem desirable that several such plants of medium size and type would be of most value in the industrial field, since there are now two very commanding industries located here.

Locations for Industries. In addition to the smaller unbuilt-upon industrial tracts about the

*Industrial Survey of Roanoke, by Technical Advisory Corporation. city there are two outstanding locations for industry:

- North of the city along the Shenandoah Division of the Norfolk and Western Railway.
- West of the city close by the Virginian Railway and the Norfolk and Western Railway.

In addition to these two areas, there is another location southwest of the city toward Starkey. The Winston-Salem Division of the Norfolk and Western Railway offers railroad connections in this area.

FACTORS INFLUENCING INDUSTRIES IN MAKING SELECTION OF SITES

The following factors are not to be construed as an established formula, but include those most generally rated high when a survey for selection is being made:

- 1. Climate.
- 2. Labor-character and supply.
- 3. Raw material.
- Proximity to the established markets and commercial centers.
- 5. Power.
- 6. Transportation facilities.
- 7. Taxes.
- Living conditions within means of the employees.
- Educational system of the city.
- Possibilities for recreation—social and physical.
- General policy of city toward traffic circulation, housing and zoning—namely, city planning.

AREAS FOR COLORED POPULATION

ROANOKE has shown inclination to include the negroes of the city when making improvements for the betterment of the city as a whole. The planning for improved recreation facilities has brought parks and equipment; the expansion of the school system has brought new school buildings, both grade and high. The programs for extension of the thoroughfare system will include such thoroughfares for all parts of the city.

The areas at present occupied by negroes is

shown on the Built-Up Areas of the Existing Conditions Map and a comparison of this map with the Comprehensive City Plan will indicate the great extent to which planning includes these areas. Zoning will protect their homes from the encroachment of business and industry in the same manner as in all other sections of the city. General expansion coördinating with that of the whole city will be an important part of the city planning program.



CARVIN CREEK, NEAR HOLLINS ROAD

SAFEGUARDING CITY DEVELOPMENT

UNDER this heading comes one of the most valuable instruments for carrying out many of the city planning proposals for Roanoke. The city now has the power to control the subdivision of land for a distance of five miles from the corporate limits. The practice of the past in the platting of land for city use has ignored conformance, beyond the personal wishes of the developers, to adjacent property and the general circulation needs of the community. This situation has given rise to



MOUNTAIN AVENUE AND FRANKLIN ROAD Showing jog intersection

many irregularities, such as jogged or dead-end streets. Many of them are daily commented upon by both pedestrians and motor car drivers. The correction of these details which in many cases are positively dangerous to life and property, is an expensive proposition. With the power to control the platting of land, it is hoped to secure the coöperation of all land developers to the end that platting will meet two important aims:

- To arrange land in conformity with the major street and highway plan.
- To eliminate all structural irregularities which perpetuate indefinitely charges for correction.

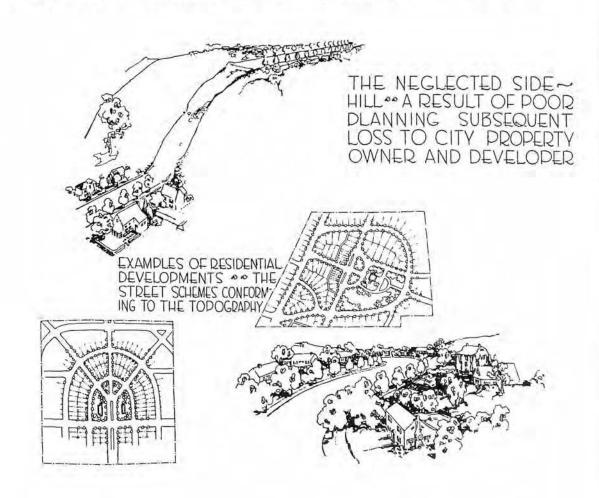
The approval of plats for acceptance in filing should be based upon the satisfaction of the two following principles:

- The conformity of the addition to the main thoroughfare system, park and recreation system, and the other factors of the city plan which concern the residents of the city at large.
- 2. The suitability of the land for the proposed use, the securing of good street arrangement, including circulation within the property, and orderly connection with any existing street layout. The obtaining of blocks of sufficient size and shape to prevent an unnecessary number of street intersections, and the division of blocks into lots of adequate size and shape.

The City Planning Commission has already prepared Rules and Regulations for Platting of Subdivisions within the area subject to the legal jurisdiction of the city and these will be available as guides to all desiring them.

"City planning in itself doesn't cost anything. It means at the most that the funds that would have been spent upon public enterprises for the wrong kind of thing will be spent in no greater degree upon the right kind, and the right kind won't cost more; the right kind, when you consider that the elements of waste and of mistake are eliminated, will cost less. The saving to any city government through common sense planning and through the articulation of all of its physical, all of its public functions in a common scheme, must be incalculable."—George McAneny.

PROPERTY DEVELOPMENT



JOHN NOLEN . CITY DLANNER . HALE J. WALKER . JUSTIN R. HARTZOG . ASSOCIATES

ZONING

GENERAL

HE purpose of zoning is to secure for both the city and the individual the best development of property. There are three broad uses made of property, namely, residence, business and industry, and the requirements and use of land differ in each of these classifications. Land left uncontrolled takes on as many adaptations of these three uses as there are individuals, and these property developments quite often do not take place in right relationship to the adjacent property, so that properly established uses of land may be injured and values destroyed. It is in the orderly arrangement and distribution of land uses and the protection of the property owner in a systematic manner that zoning has its great value. The existing uses of property are not disturbed in general by zoning, for it is entirely the future development that it is proposed to control for the general welfare of the public.

Use Districts

The following is the classification of uses of the Zone Plan for Roanoke:

General Residence. This is the district of the single family house, but it provides for certain other public or semi-public uses, such as clubs, public buildings, parks, educational institutions and similar agencies.

Special Residence. This district is primarily a district for multiple dwellings, apartment buildings and hotels, but, of course, permits of the uses of the single family district.

Business. This districting includes the downtown area and all of the suburban business centers, and provides location for retail stores, office buildings, and certain incidental manufacturing, and permits the uses of both general and special residence districts.

Light Industry. Certain industries, because of the character of their manufacturing, may be carried on in close proximity to the Business District and the Residence Districts, and be located adjacent to these sections without inconvenience or injury. Heavy Industry. The districts for heavy industry are located primarily in relation to the railroads, and include all forms of manufacturing which are not offensive or detrimental owing to odors, noise or dirt.

HEIGHT DISTRICTS

The principle involved in regulating the height is that the height of structures shall bear close relationship to the width of the street or open spaces upon which they are erected.

In the General Residence Districts no building shall exceed sixty feet in height.

In the Special Residence and Business Districts no building shall exceed the width of the street, except that it meet certain requirements in setback of building line to obtain additional height.

In the Industrial District, sixty feet has been established as the height limit, except for certain portions of building required for the conduct of special processes.

In all cases the height of unoccupied towers and spires is unrestricted.

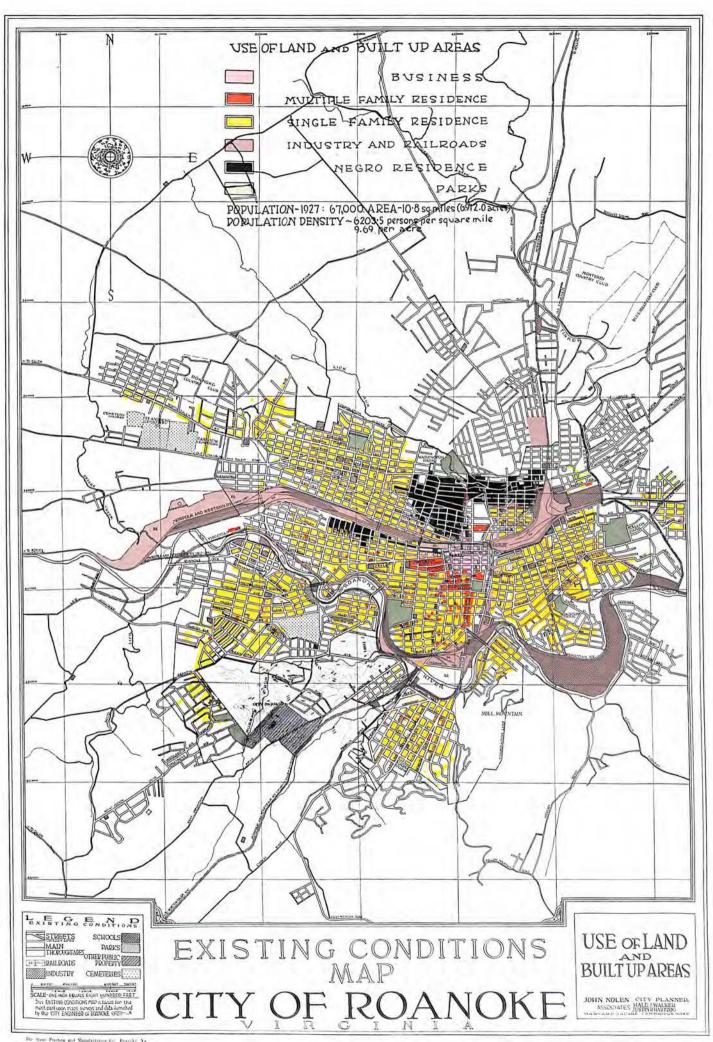
Area Districts

The restrictions on the area of lot to be occupied depends upon the use made of the land. In the General and Special Residence Districts, which are primarily for living quarters, the area varies from thirty per cent. in the General Residence District to seventy-five per cent. in the Special Residence District. In the Business District ninety per cent. of the lot area may be occupied, while in the two Industrial Districts the total area that may be built upon is seventy-five per cent.

General Provisions

Provision is made in the Zoning Ordinance for the establishment of building lines, for changes in building and land uses, for the classification of future annexed territory; for enforcement of the regulations for the appeal by aggrieved persons; the appointment of a Board of Zoning Appeals, and for amendment from time to time.

Zoning Rules and Regulations will be recommended in a separate report as quickly as they can be completed.



REGIONAL PLAN

ROANOKE is not a segregated area. It bears a very integral relationship to its adjoining territory, and the factors which influence the region influence also the city. There has come a mutual understanding of this situation, and along with this understanding has come the knowledge that there should be mutual effort to solve any of these common problems. It is the province of the regional plan to meet just such a situation, applying the principles of broad planning which are utilized in general city planning. Regional planning involves three broad considerations of an area. These considerations are circulation, use of land, and the reservation of open spaces. A regional plan has been prepared for Roanoke County under these principles. The concentration of planning has been centered in the valley areas, which coincide with the region over which the City of Roanoke has been delegated power of control; that is, a region five miles from the present city limits, excepting the territory of any incorporated town. In the regional plan the circulation and use of land have been studied to bring about conditions which will prevent unsatisfactory municipal development when at some future date the city limits of Roanoke have been extended. In other words, it attacks the root of the evils, for the highway system of the region of to-day becomes the city thoroughfare system of to-morrow. Highway routes are shown coming into Roanoke in a radial fashion, and also surrounding the city in a circumferential manner. These highways should be at least 100 feet wide to meet the ever-increasing traffic. They are so arranged that traffic need not pass through the center of the city, but may bypass on one of several routes, depending upon the section destination in the city.

RAILROAD RIGHTS-OF-WAY

In general, the railroads have followed such locations that they do not cause difficulty in planning beyond the securing of adequate and safe crossings. To a large extent, however, they have located along the Roanoke River, and so forestall an organized river front development. They do, however, serve very well the areas available and suitable for industry.

ELECTRIC TROLLEY CAR SYSTEM

Transportation is furnished in this region between Roanoke and Salem, and the line is so located that it serves a region of diversified use. Sites along its route should be desirable for certain institutions requiring public transportation.

MINOR ROADS

The system of major highways of the region does not include many of the minor roads, inasmuch as they serve only small portions of the district, and the planning of such a large area must necessarily preclude some of the details of a road system.

AIRWAYS

It is hoped that the development of an airport will secure for Roanoke and the surrounding region its location upon an established airway, so that it may be brought into closer contact and connection with the business centers of the east and south. The development of the permanent airport should be undertaken as soon as practicable, before the airways have been too completely established for cities to gain consideration.

USE OF LAND

The development of areas throughout the region should be in line with the following characteristics: Topography; drainage; transportation facilities; and relationship to already established conditions. The main uses, of course, will be the same uses generally found within the city area; namely, residence, business, industrial (including agriculture), and recreation. The large area for general residence expansion will be north of the city, and in this area of probably densest population, the greatest attention has been paid to the planning of future requirements. The thoroughfare system,

the development of parks and recreation areas, the selection of sites for schools, with adequate playgrounds, and the distribution of business locations—all have been thought of with the idea of reducing complications of the coming days. The regions of the south and southwest are topographically more suited to residential character based on larger land units, so that in the ordinary course of events we may expect to find the hill regions occupied by residences of this type. Business will be distributed throughout the region at strategic

with few structures thereupon may be divided into two classes: The public uses and the private uses.

Public Uses. It is highly important from the standpoint of drainage, preservation of natural resources and scenery, and for recreation, that certain areas be reserved in the region for public use. The stream courses are important, since they function either as a decided asset to the city's appearance and control its layout, or else they become disreputable and unsightly open sewers. The



MOOMAW SPRINGS, JUST NORTH OF VILLA HEIGHTS, NEAR COVE ROAD, HAVE A FLOW OF SEVERAL MILLION GALLONS DAILY Round Hill in the right background

thoroughfare intersections and at varying intervals, depending upon the density of population and distance from the city proper. Industry will occupy certain well defined areas adjacent to the present railroad rights-of-way, and the locations to the north along the Shenandoah Division of the Norfolk and Western and along the main line of the Norfolk and Western and the Virginian Railways also have suitable large areas in the western portion of the city. For lighter manufacturing certain areas within the city limits have the necessary qualifications.

OPEN SPACES

The open spaces, or tracts of land primarily

regional plan proposes the reservation of portions of the Roanoke River, Tinker Creek, Mason's Creek, Mud Lick, Murray's Run, Tyler Creek, Back Creek, and several other streams. The present natural condition of some of these streams is extremely attractive, and little would be needed in the way of development, beyond accessibility, to make them a unit of an organized park system. In addition to these parkways, there should be areas reserved as open spaces which may be called either park lands or forest reservations. These areas should be of considerable size, and form an objective for automobile drives within comparatively short distance of the city. The proposed reservation on Poor Mountain is of this type, and is

within fifteen miles of the city. Other areas of similar character are suitable, and might be acquired at a very reasonable figure. Already a tract of 8,000 acres has been offered at a price of four dollars an acre, in the Fort Lewis Mountain district. Tracts of this type would be left in their natural condition, beyond the necessary minor clearing for fire protection. The importance is emphasized of connecting as far as practicable the various types of parks and open spaces by the parkways, so that the fullest advantage may accrue to the city in appearance as well as in the utility of the areas for recreation. The school

grounds will also count as open spaces, inasmuch as the minimum of four acres has been used in the designation of sites. This will provide adequate playground space for the school, as well as area for the building and its setting.

Private Uses. In contrast to the public uses of land for open spaces, the general topographical and climatic characteristics of the region are such that it is an admirable location for private institutions and colleges, for stimulation of interest in country clubs and the development of country estates. The fullest encouragement should be extended to developments of these types.

"The great need for regional planning to-day arises from the fact that as urban regions expand you have, not small intensive areas of bad growth, but widely extended areas, suffering from congestion and unhealthy social conditions."

—Selected

"If people are sufficiently interested and determined as a whole to plan and regulate city growth according to a decent order and pattern, there will in all probability be available the technical means to do so."—Albert W. Atwood.



A VIEW OF MILL MOUNTAIN FROM THE BUSINESS SECTION

MAKING CITY PLANNING EFFECTIVE

CITY PLANNING COMMISSION

S has been pointed out, the City Planning As has been pointed on.

Commission is a coordinating agency, and in no way supersedes the activities or functions of any existing agency. The City Planning Commission acts as a clearing house and advisory board on general problems. It plans for the city as a unit far in advance of the immediate needs. The Commission's work is the securing for the public and the private citizens the best physical, social and economic results for Roanoke. At the start it must be under the handicap of assembling a large amount of detail information upon which to build the future Roanoke, The building of Roanoke remains the problem of each city administration, and rightly so, as the representative body of the people elected for that purpose.

CIVIC INTEREST

We be peak far greater interest in civic affairs on the part of the public at large. There is need for sound support in the programs of social, physical and economic development such as are now necessary for the general welfare of Roanoke. Adherence to such programs does not mean extravagant expenditures, but only making necessary and proper expenditures at the most favorable time.

It would be a great step in advance if the interest displayed in the recent national election could be aroused to a corresponding standard in municipal elections. Municipal administration is being well conducted in Roanoke, and for the general public good. To make the administration still more efficient and satisfactory, there must be adequate expression of public opinion through successive periods. Extremes in most cases are misleading, and only over a period of years can the real tenor of a community be expressed.

Difficulties may arise from time to time in voting if the interest taken in elections fluctuates greatly, but whenever possible, the mechanics connected with voting should be simplified.

Adjusted Tax Assessments

It is necessary that from time to time readjustment of tax valuation be made, and Roanoke is to be congratulated on boldly taking this in hand for settlement in 1929.

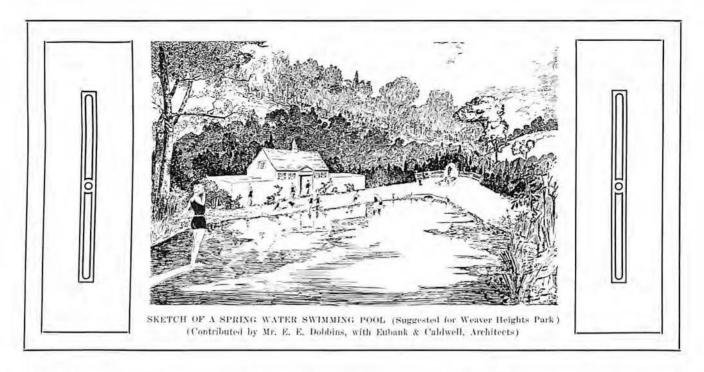
There is a strong disposition in cities throughout the United States to assess the cost of municipal improvements upon the abutting property owners in proportion to the benefits secured thereby, thus securing to the citizens at large a more equitable distribution in the tax assessments. Roanoke would do well to take the leadership in developing this progressive method in Virginia.

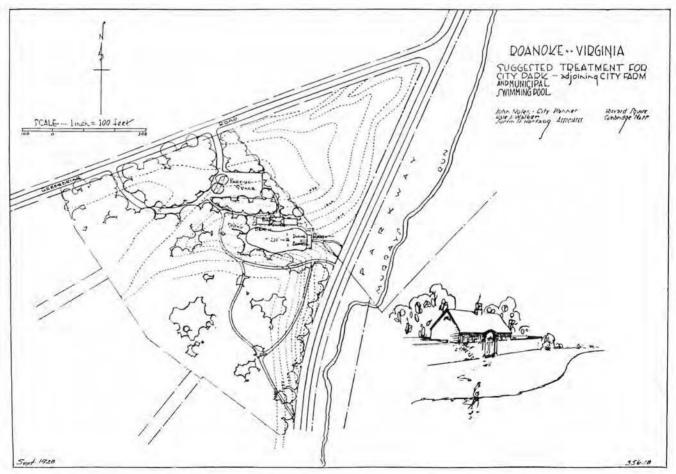
Planning for the Financing of Major Improvements

There has been prepared a list of principal recommendations, and from this list it would be well to prepare a plan for financing over a long term period. This finance plan should show the cost of these improvements, give priority to the various projects, and establish ways and means of obtaining the funds.

The proposal has been made, and we concur, that it would be advantageous to the city to have an advisory board on finances to study questions relating to the long-term financing of major improvements. Such a citizens' board would not in any way affect the legislative power of the Council, but would place at the Council's disposal competent financial advice on questions involving special and prolonged study.

In order that this movement for the development of Roanoke may become effective it is essential that the city government and the City Planning Commission should have the hearty cooperation of an aroused public interest in civic affairs, supported by the substantial business interests, working under a systematic budget for financing major public improvements under an economical and well considered plan.





LOCATION OF THE PROPOSED SWIMMING POOL SHOWN IN THE ABOVE SKETCH, IN WEAVER HEIGHTS PARK

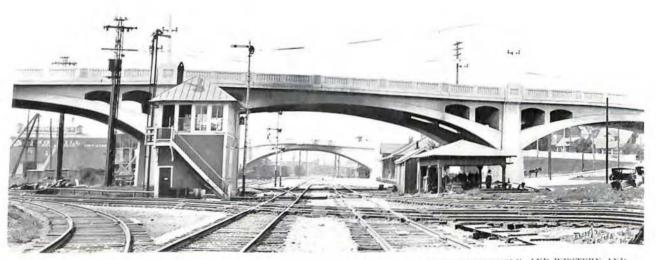
ROANOKE, VIRGINIA

Résumé of Recent Progress in Civic Development

- 1. Appointment of the Citizens' Advisory Finance Commission.
- 2. The City Engineering Department instructed to prepare a new tax map and card index system of real estate holdings for purposes of reappraisal and equalization of taxation values.
- 3. Widespread increase in civic pride by community clubs and organizations and by the public at large.
- Active steps toward the promotion of adequate and appropriate highway entrances to the city, with state coöperation assured.
 - 5. Consideration of an ordinance creating a Municipal Art Commission.
- 6. Development of Civic Center idea by placing the new Federal Building near the present Municipal Building.
 - 7. Study is being made of the ways and means of acquiring a Municipal Airport.
- 8. Traffic circulation is being facilitated and improved by eliminating grades, widening pavements, realignment of streets, and the designation of streets by appropriate name plates.
 - 9. More elimination of grade crossings of streets and railroads.
 - 10. Splendid increase in school facilities.
 - 11. Coöperation of various developers in land subdivision.
- Additional coöperation between City Council and Public and Private Welfare Agencies.
- 13. Public parks and playgrounds are being further equipped and activities directed to meet the growing needs of the public in recreation.



 $\begin{array}{c} \text{APPROACHES TO THE TWO NEW BRIDGES ON WALNUT AVENUE, LEFT, AND JEFFERSON STREET, RIGHT, OVER THE NORFOLK \\ \text{AND WESTERN AND VIRGINIAN RAHLWAYS} \end{array}$



SIDE VIEW OF THE NEW WALNUT AVENUE AND JEFFERSON STREET BRIDGES OVER THE NORFOLK AND WESTERN AND VIRGINIAN RAILWAYS

ROANOKE AND ENVIRONS EXISTING CONDITIONS MAP

Issued January 1st, 1929, by City Engineer's Office C. L. WATKINS, City Engineer



