

FEBRUARY 1987

419 FRONTAGE DEVELOPMENT PLAN

ROANOKE COUNTY
DEPARTMENT OF PLANNING & ZONING
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ACKNOWLEDGMENTS

This plan acknowledges the participation of Roanoke County citizens who attended the 419 community planning meeting, work sessions of the Planning Commission, and public hearings and contributed their thoughts, aspirations, and recommendations on the corridor.

This plan also acknowledges the contributions of staff principals, James E. Lehe, AICP, Planner and Lydia L. Johnson, Planning Intern from Penn State University, and the support they received from the Departments of Planning and Zoning, Development Review, and Engineering.

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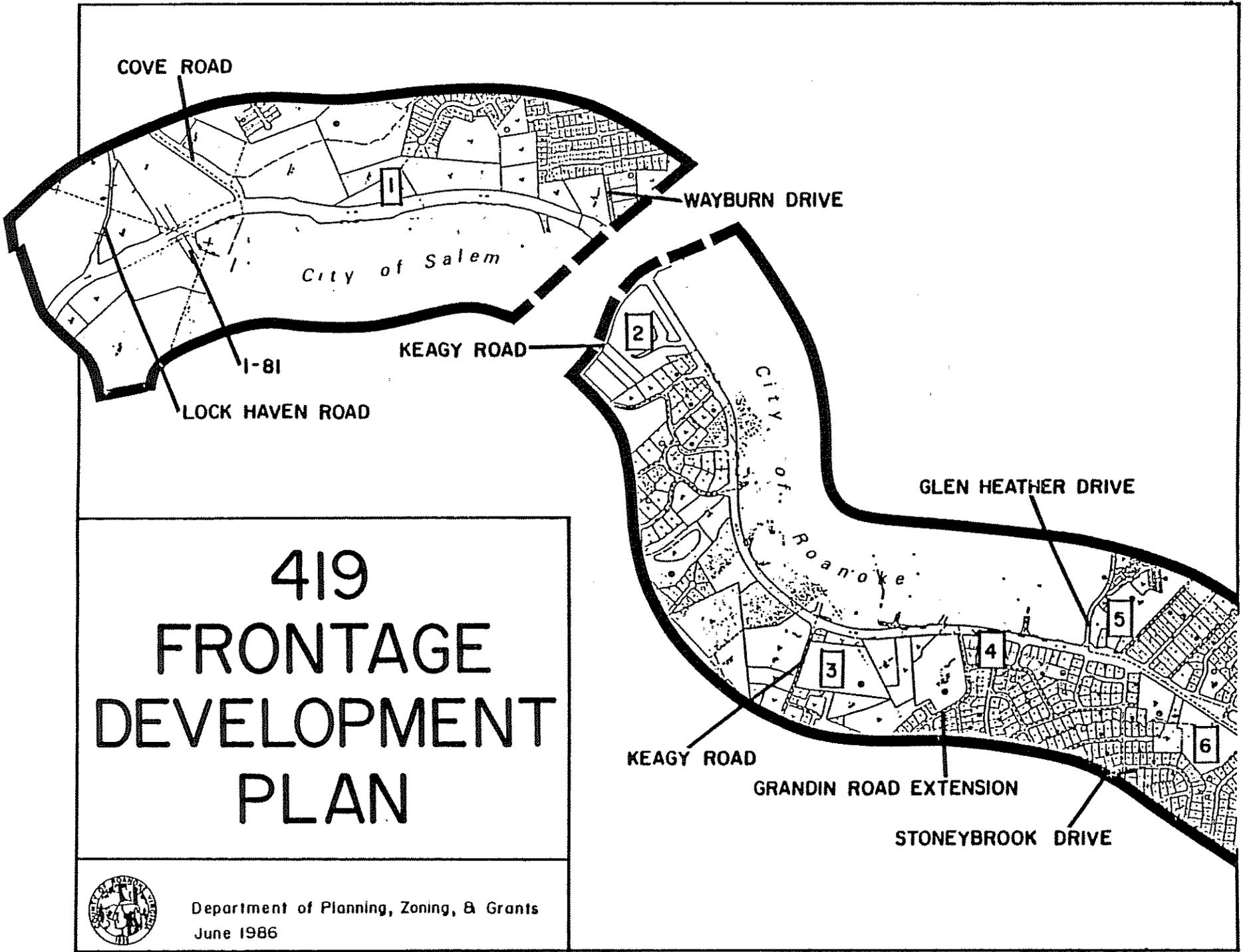
PREFACE

Roanoke County is a panorama of diverse land uses. Wide open agricultural fields and pastures run into suburban subdivisions that, in turn, run into prosperous commercial centers. Each land use is an integral part of the County's overall development framework, and each property requires protection and nurturing to insure a successful presence among other properties. Part of that success involves the compatible coexistence of diverse land uses.

Virginia Route 419 is one area of the County which exemplifies the need for the various land uses to function together harmoniously, rather than as separate entities. This heavily traveled highway passes through agricultural, residential, and commercial areas as it makes its way through the County.

As the County grows, residential and commercial areas expand to meet housing demands and provide needed jobs and services to the population. One type of land use can only expand so far, though, without encroaching upon another. In the case of 419, the highway is highly visible and easily accessed. Open parcels of land which front 419 are prime locations for new residential, office, and commercial developments. However, these open parcels of land are surrounded by established homes, schools, and businesses. Any new development taking place should respect these existing uses and take measures to insure compatibility.

The 419 Frontage Development Plan attempts to provide a framework for future development along the highway, allowing new expansion of the various land uses while protecting existing land uses. The study area is referred to as the "419 Corridor" and encompasses only that area that lies within the County boundaries. The west sector begins at the intersection of Route 419 and Route 311 and continues to the County line approximately at Wayburn Drive. The east sector begins outside the Salem City limits at Keagy Road and continues to the intersection of Route 419 and Route 220/581 at the Roanoke City limits. The width of the corridor includes the depth of all frontage parcels and the surrounding parcels of land.



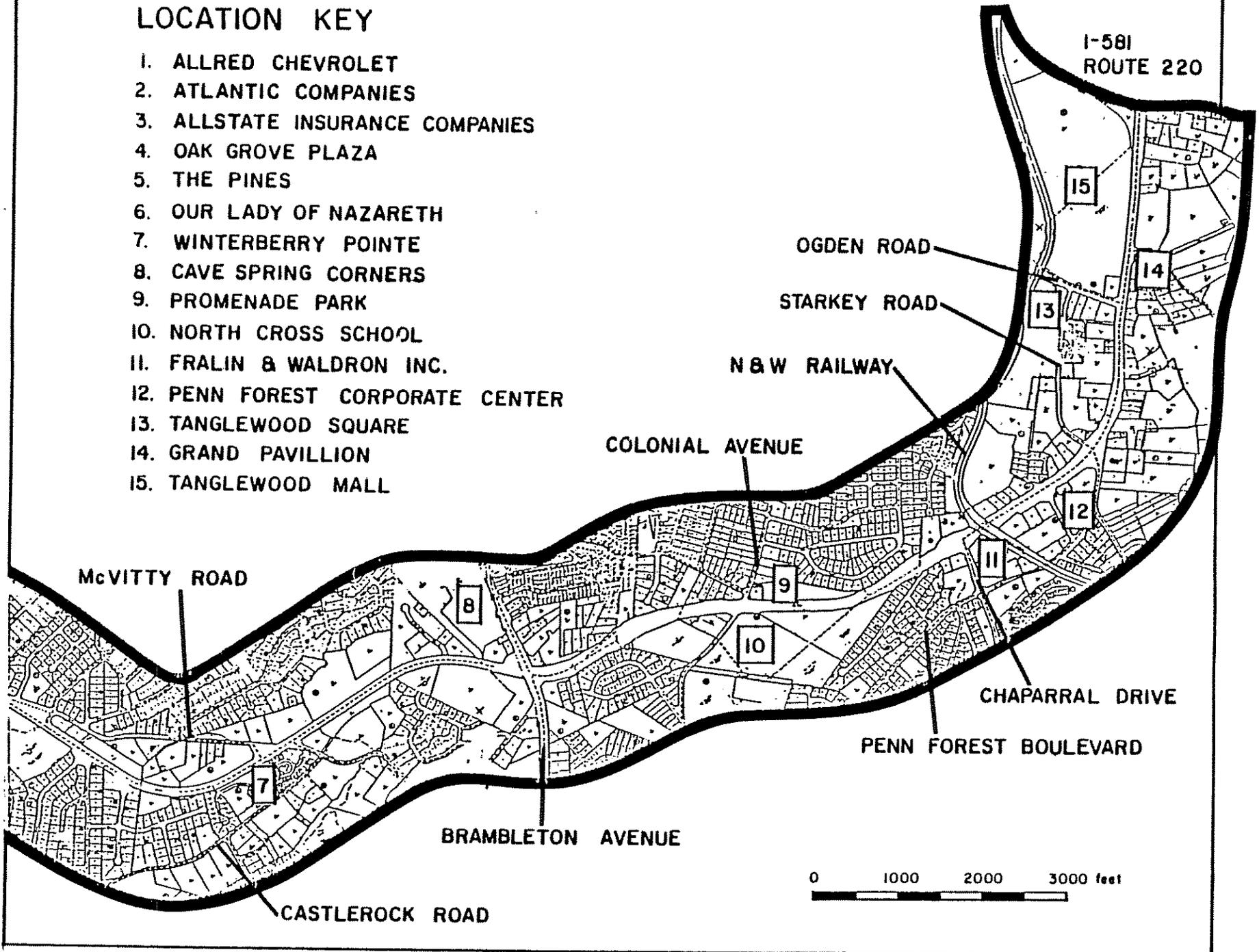
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Department of Planning, Zoning, & Grants
June 1986

LOCATION KEY

1. ALLRED CHEVROLET
2. ATLANTIC COMPANIES
3. ALLSTATE INSURANCE COMPANIES
4. OAK GROVE PLAZA
5. THE PINES
6. OUR LADY OF NAZARETH
7. WINTERBERRY POINTE
8. CAVE SPRING CORNERS
9. PROMENADE PARK
10. NORTH CROSS SCHOOL
11. FRALIN & WALDRON INC.
12. PENN FOREST CORPORATE CENTER
13. TANGLEWOOD SQUARE
14. GRAND PAVILLION
15. TANGLEWOOD MALL



This plan examines the existing conditions in the 419 corridor area and identifies concerns that County residents and officials have expressed over development activities. In response, this plan provides policy guidance for new development along the frontage. By planning now, perhaps we can prevent the blight of the commercial strip so common to suburban corridors.

GOALS

GOALS

The goals for the 419 Frontage Development Plan are based on an analysis of existing conditions in the corridor and on comments from local officials and citizens. These goals serve as a general framework for future frontage development.

LAND USE

- Encourage quality economic development along 419 in park-like settings to prevent haphazard strip development.
- Discourage further single family residential development on parcels fronting 419 and accessed by 419.
- Where possible, reserve 419 frontage parcels for office and commercial development, in support of the County's "75/25" economic development policy. (See Appendix A.)
- Preserve established residential neighborhoods and protect them from encroachment of land uses conflicting with the existing pattern of development.
- Availability and adequacy of public services should keep up with the increasing demands brought on by development.
- Frontage land on 419 should be developed so that the revenue generated covers the expense of public services.

URBAN DESIGN

- Increase compatibility of conflicting land uses through design:
 - screening and buffering
 - building orientation and location
 - architectural scale
- Enhance visual quality and reduce visual clutter of development along 419 through design:
 - architectural scale
 - sign design
 - landscaping

ENVIRONMENTAL QUALITY

- Identify natural areas which constrain development:
 - floodplains
 - steep slopes
 - mature tree coverand maintain these as open spaces, either incorporated into site design or left as conservation areas.
- Protect natural scenic features, including views, to the maximum extent possible and recognize these as amenities to development.
- Manage stormwater runoff brought on by increased development of frontage properties.

TRANSPORTATION

- Maintain a safe and efficient flow of traffic along 419 and its collector roads.

ANALYSIS

ANALYSIS

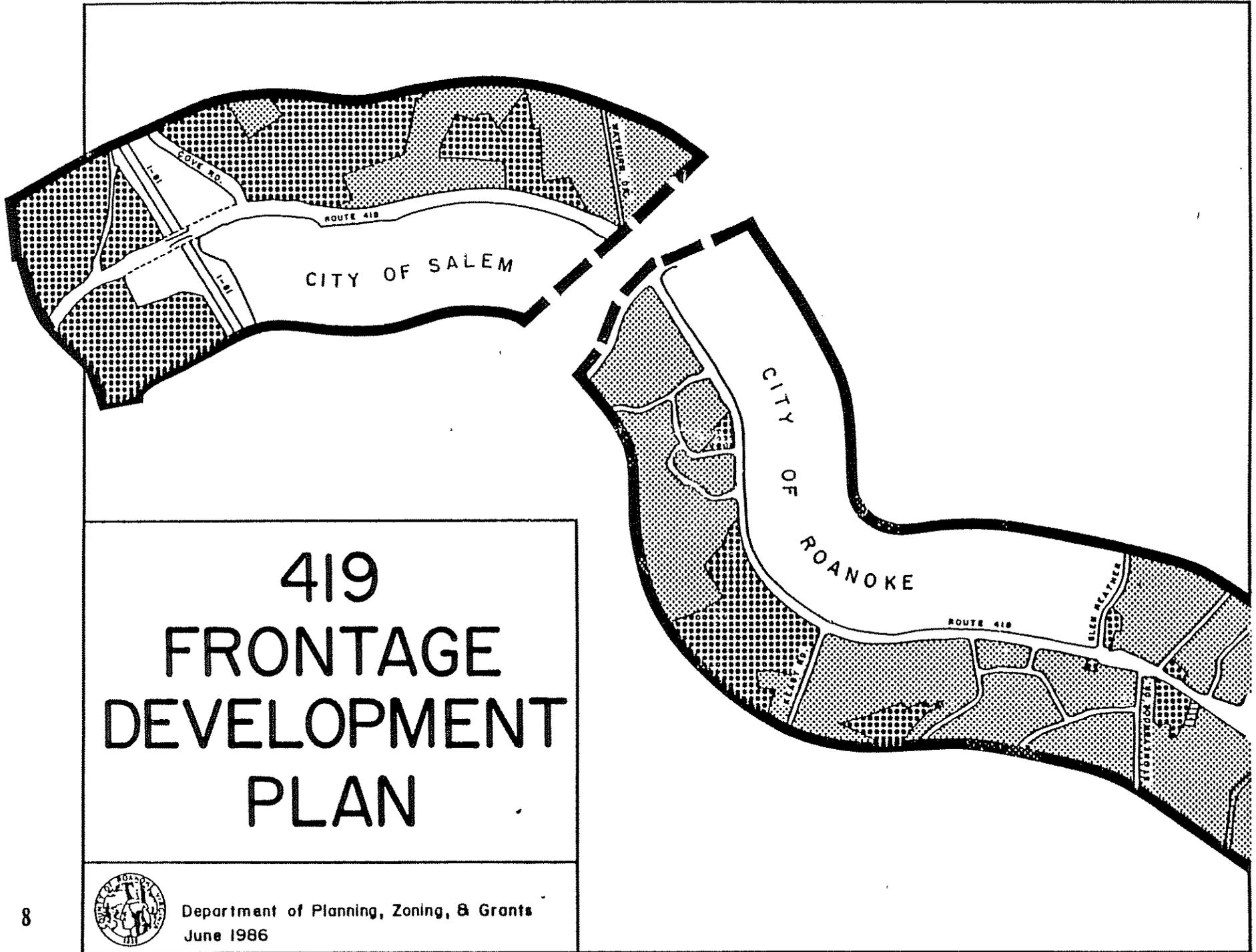
The analysis is derived from a comprehensive inventory of existing conditions within the corridor. These conditions have major influence over future development activities.

EXISTING LAND USE

The parcels of land along Route 419 are developed in a variety of uses. The most intensely developed stretch is the Tanglewood Core area between the railroad tracks and Route 220, where approximately 80% of the fifty-nine frontage parcels are developed commercially. Another heavily developed area is the intersection at Brambleton Avenue. Commercial land uses lining Brambleton Avenue are beginning to spread out from the intersection in both directions along 419. Smaller pockets of commercial development can be found at the Colonial Avenue intersection and in the Oak Grove area.

The majority of the corridor is filled in with residential land uses. Approximately 29% of the 194 parcels with 419 frontage are single family houses, although only five of these have direct access from 419. Open space, including agricultural and undeveloped land, occupies about 24% of the frontage parcels in the corridor. In many cases, these open parcels abut residential areas on at least one side. The existing land use map illustrates the distribution of the existing land use along the corridor.

The Development areas map on the following pages further illustrates the areas in the corridor that can still be developed and areas with potential for redevelopment.

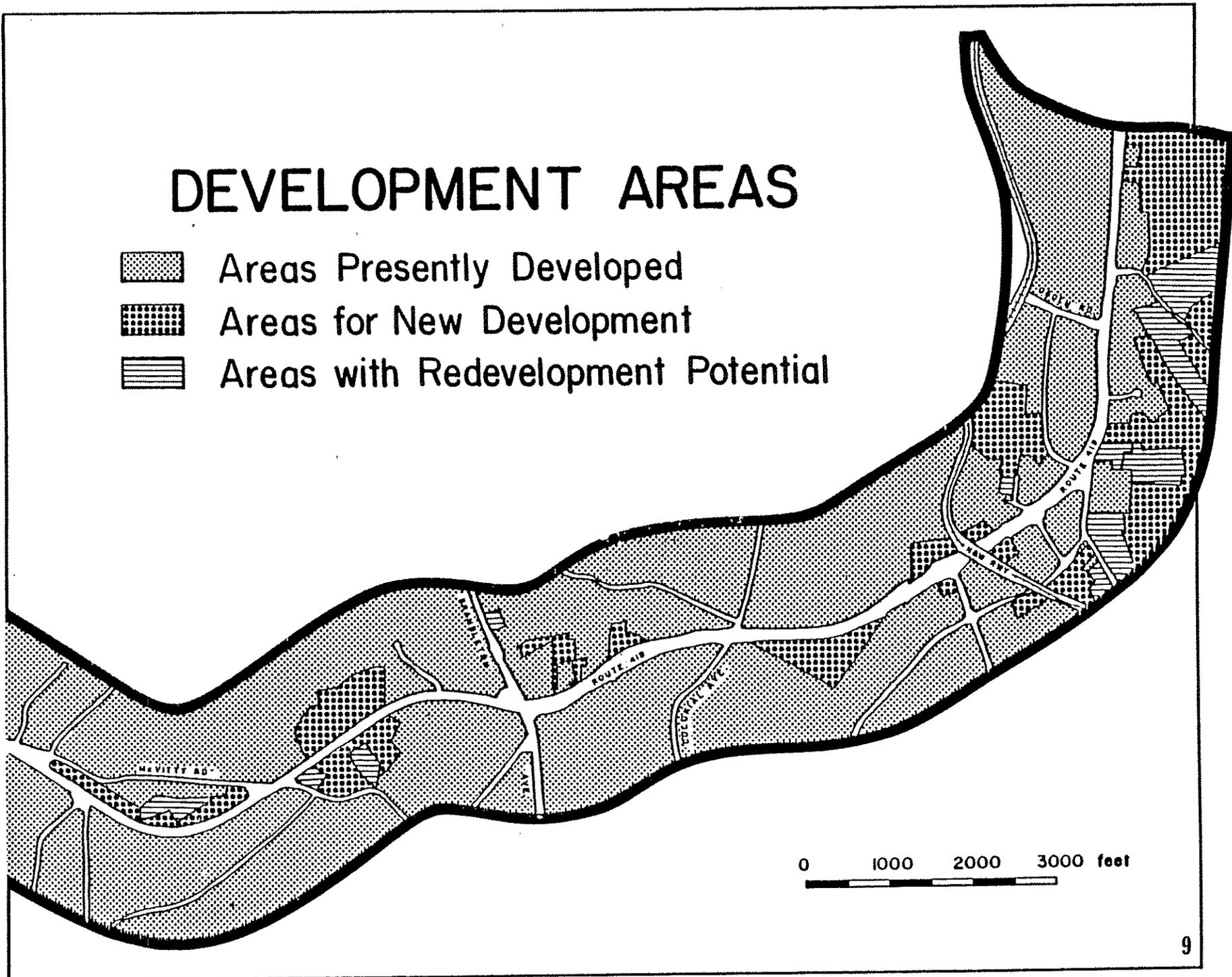


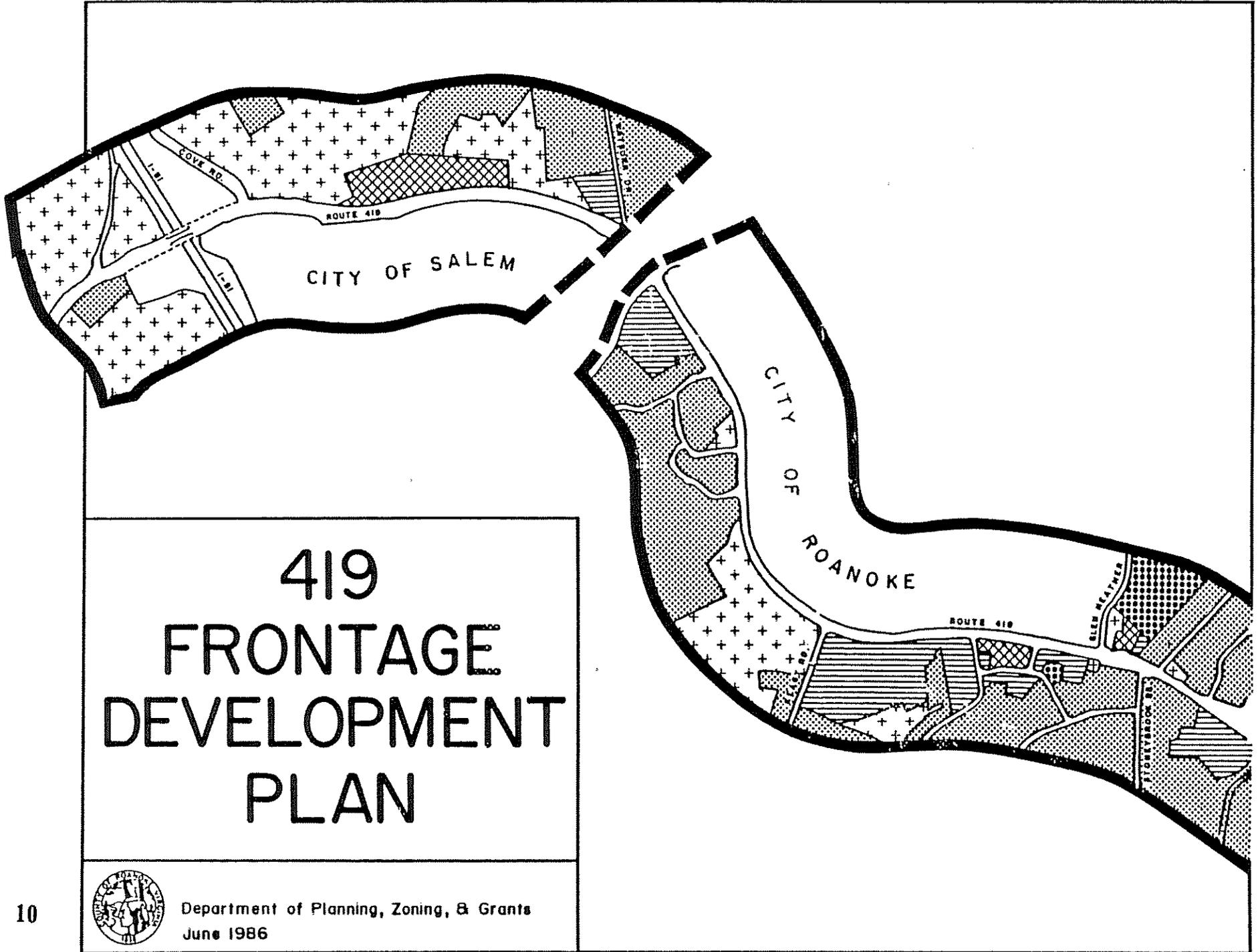
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DEVELOPMENT AREAS

-  Areas Presently Developed
-  Areas for New Development
-  Areas with Redevelopment Potential





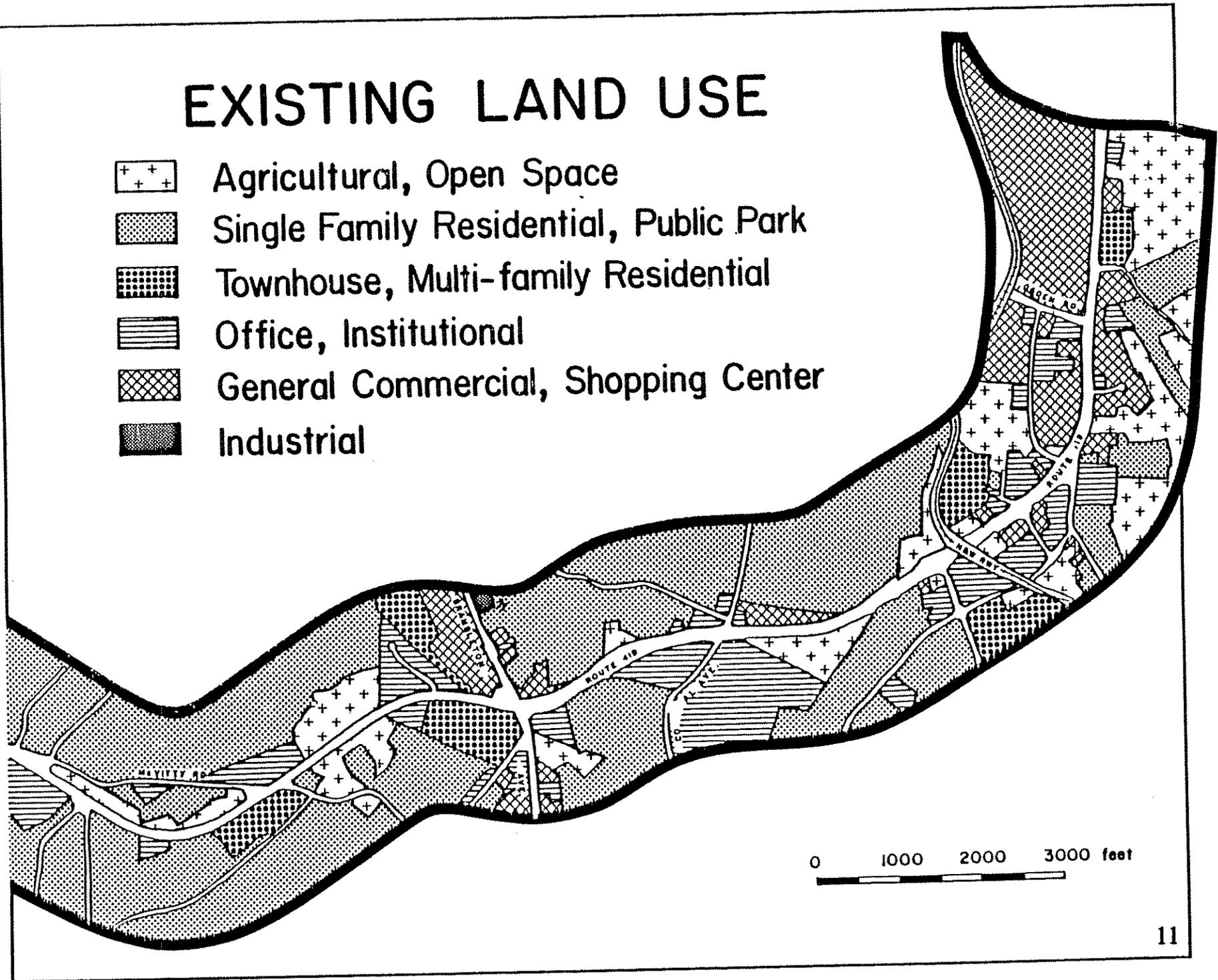
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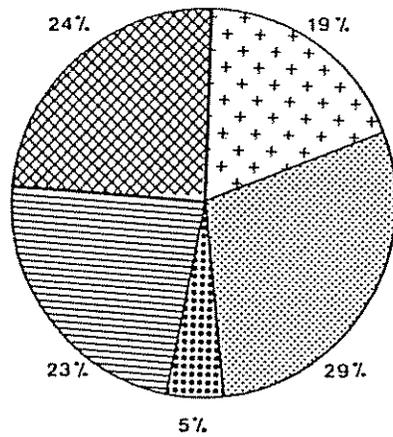
EXISTING LAND USE

-  Agricultural, Open Space
-  Single Family Residential, Public Park
-  Townhouse, Multi-family Residential
-  Office, Institutional
-  General Commercial, Shopping Center
-  Industrial



0 1000 2000 3000 feet

DISTRIBUTION OF
EXISTING LAND USE
OF FRONTAGE PARCELS



-  Open Space, Agricultural
-  Single Family Residential, Public Park
-  Multi-Family Residential, Townhouse
-  Office, Institutional
-  General Commercial, Shopping Center

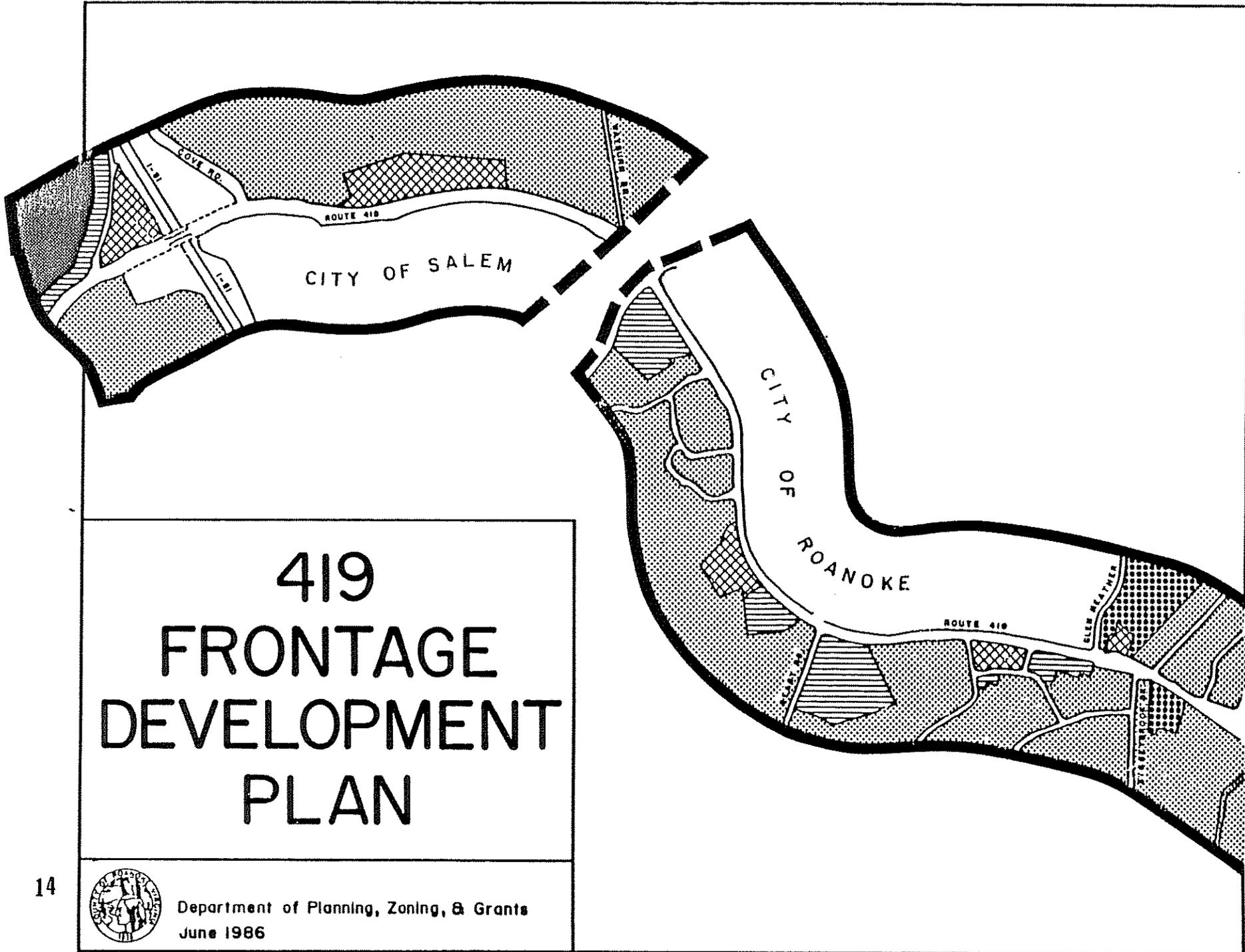
EXISTING ZONING

The following map shows the existing zoning of all parcels lying in the corridor. The majority of the land is zoned for single family residential. Of the thirty-seven parcels of open land fronting on 419, seventeen are zoned R-1 Single Family Residential, eight are zoned for commercial uses, eight for office uses, three for multifamily residential, and one for industrial use.

TABLE 1. ZONING DISTRICT DESIGNATIONS

A-1	Agricultural District
R-E	Residential Estate District
R-1	Single Family Residential District
R-2	Duplex Residential District
R-3	Multifamily Residential District
R-MH	Manufactured Housing Combining District
R-5	Townhouse District
R-6	Multifamily Condominium District
B-1	Office District
B-2	General Commercial District
B-3	Special Commercial District
M-1	Light Industrial District
M-2	General Industrial District
M-3	Special Industrial District
C	Conditional Zoning

Many of the R-1 zoned properties may be involved in rezoning requests in the future. Since 1976, sixty-one rezoning requests on 419 have been submitted. Of these, forty-two were requests to rezone residential land (R-1, R-3, RE) to business and industrial zones, and four were from agricultural zoning to business. The Board of Supervisors denied eight of the residential rezonings. Table 2 contains a complete inventory of zoning actions since 1976.

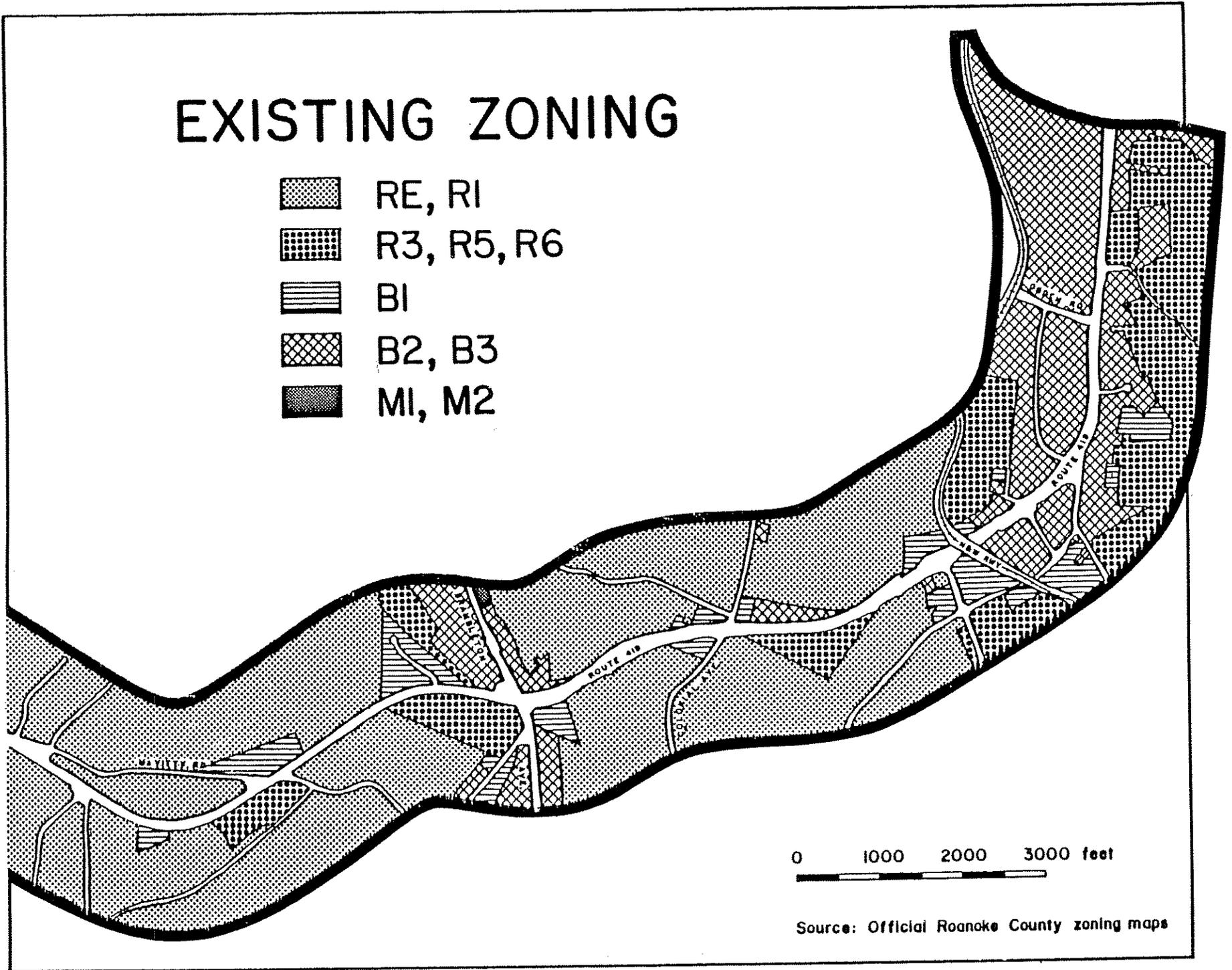


419 FRONTAGE DEVELOPMENT PLAN



EXISTING ZONING

-  RE, RI
-  R3, R5, R6
-  BI
-  B2, B3
-  MI, M2



0 1000 2000 3000 feet

Source: Official Roanoke County zoning maps

TABLE 2. 1976-1986 ZONING ACTIONS

APPLICANTS	REQUEST	PURPOSE	ACREAGE	PLANNING COMMISSION RECOMMENDATION	BOARD OF SUPERVISORS ACTION/DATE
1986:					
1. Bruce Hobart	R-1 to B-1C	To construct office complex	7.6	Approved	Approved 7/22/86
2. Ambra Development Co.	R-3 to B-3	To construct a Texaco gas bar, mini-convenience store and automobile wash	0.79	Denied	Denied 7/22/86
3. W. Earle Spruill, Jr.	B-2 to B-3C	To construct and operate an automotive lube facility	0.763	Approved	Approved 4/22/86
4. *John Lee Davenport	B-1 to B-2C	To operate an advertising agency; to rent and sell video-movie cassettes	0.266	Approved	Approved 2/25/86
5. Roanoke & Wellness & Fitness Center, Inc.	R-3 to B-2C	To permit expansion of the Roanoke Athletic Club	5.66	Approved	Approved 1/28/86
6. Appalachian Power Co.	RE to B-1C and M-2C	To permit construction of its General Office Transmission and Distribution Service Center	47.0	Approved	Approved 1/28/86
7. Hong Ki Min	R-1 to B-1C	To construct office building	1.83	Approved	Approved 12/10/85
8. Fralin & Waldron Inc.	R-3 to B-1C	To construct a professional office	3.9	Approved	Approved 8/13/85
9. Bank of Virginia	Amended proffered conditions	To allow ingress-egress on Route 419 and allow placement of sign		Approved	Approved 7/9/85
10. *Fralin & Waldron Inc.	R-1 to B-1C	To construct a parking lot	0.106	Approved	Approved 6/11/85
1985:					
11. *K. Bruce Hobart	B-3 to B-2	To construct a retail facility	0.935	Approved	Approved 5/15/85
12. Robert C. Bell	R-3 to B-2C	To construct and operate a new car dealership	2.05	Approved	Approved 4/19/85
1984:					
13. Robert and Barbara Chewning	R-1 to B-2	To construct a miniature golf course & batting cage	2.27	Denied	Never carried forth
14. Ronald S. Thompson	B-1 to B-2	To construct & operate an office building with rental space	0.51	Approved	Approved 11/84
15. *James D. Cox and AFW Investment Corp.	A-1 to B-1	To permit rental of the existing structure for general uses	0.62	Denied	Approved 11/84

APPLICANTS	REQUEST	PURPOSE	PLANNING COMMISSION		BOARD OF SUPERVISORS
			ACREAGE	RECOMMENDATION	ACTION/DATE
16. Lite Apetite Inc.	R-3 to B-2	To construct a restaurant	Portion of 2.65A parcel	Approved	Approved 11/84
17. Otey L. Kingery	R-3 to B-2	To operate a carpet shop	1.34	Approved	Approved 9/84
18. Springwood Associates	R-1 to B-2C	To construct office building	2.33	Approved	Approved 6/84
19. Ronald C. Willard	B-1 to B-2	To make the property more desirable for leasing	1.37	Approved	Approved 6/84
1983:					
20. Allred Chevrolet	R-1 to B-2C	To construct and operate a new car dealership	18.566	Approved	Approved 1983
21. John M. Oakey, Inc.	R-1 to R-5C and R-6C	To construct single family homes, townhouses & condominiums	9.7	Approved	Approved 1983
22. H&B Associates	R-3 to B-2C	To construct building for retail and office uses	4.467	Approved	Approved 1983
23. 419 Developers, Inc.	R-1 to B-1C	To construct office building	5.967	Denied	Approved 1983
24. Nelson Repair Service Inc.	R-3 to B-2C	To construct buildings for retail and office uses	1.365	Approved	Approved 1983
25. 419 Developers, Inc.	R-1 to B-1	To construct office complex	7.956	Denied	Denied 1/83
1982:					
26. Branch-Shivers	R-3 to B-3	To construct and operate a restaurant	2.3	Approved	Approved 11/82
27. Samuel L. Lionberger & Donald Perry	R-1 to R-3C	To construct townhouses	4.75	Approved	Approved 6/82
28. Fralin & Waldron Inc.	R-1 & R-3 to B-1	To construct office building	2.728	Approved	Approved 5/82
29. Horace G. Fralin	B-2 to B-3	To operate a restaurant	1.574	Approved	Approved 5/82
1981:					
30. Ralph Mables and Maury Strauss	R-1 to B-1C	To establish office park	12.26	Approved	Approved 12/81
31. Sidney St. Clair & Dixie St. Clair	R-3 to B-1	To construct office building	5.35	Approved	Approved 9/81
32. Commonwealth Holding Co., Billy H. Branch	B-2 to B-3	To establish a restaurant	0.739	Approved	Approved 8/81
33. *John Lee Davenport	A-1 to B-1C	To establish an office for an advertising agency	0.30	Approved	Approved 8/81
34. Carben Corp.	R-3 to B-2	To construct shopping center	5.57	Approved	Approved 7/81
35. Northview Corp.	R-1 to R-3	To construct townhouse condominiums	1.149	Denied	Denied 5/81

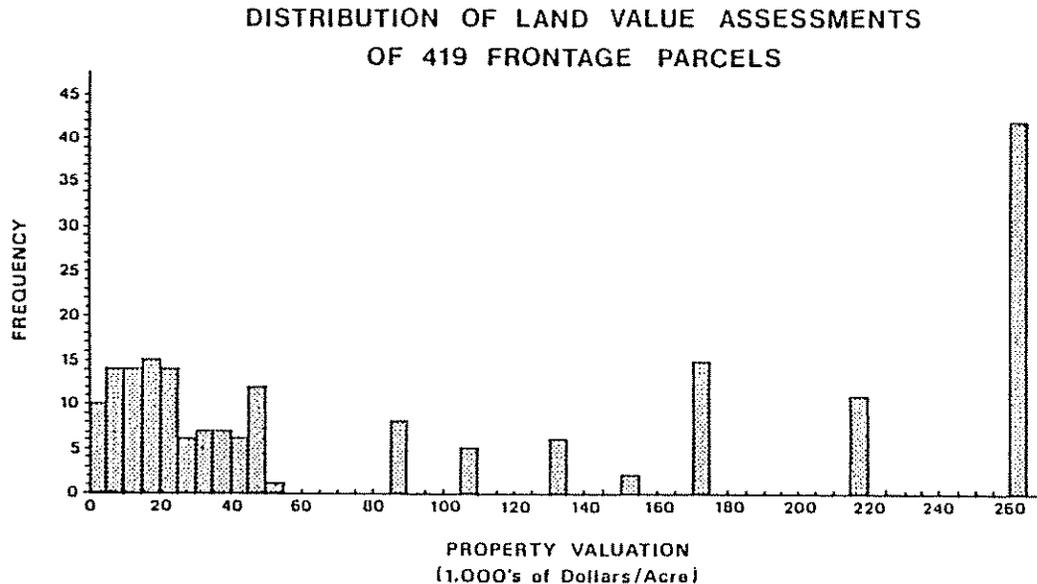
APPLICANTS	REQUEST	PURPOSE	PLANNING COMMISSION		BOARD OF SUPERVISORS
			ACREAGE	RECOMMENDATION	ACTION/DATE
1979:					
36. Tanglewood Mall Inc.	B-2 to B-3	To construct shopping center	3.232	Approved	Approved 9/79
37. *Fralin & Waldron Inc.	R-3 to B-1	To construct office building	0.816	Approved	Approved 10/79
38. SALCO, Inc.	R-1 to B-1	To construct office building	1.15	Denied	Denied 9/79
39. Ralph & Kala Jones	R-3 to B-2	To operate a florist shop	1.325	Withdrawn	
40. Aylett Coleman & Fred Bullington Cartledge & Steele		To extend Starkey Road		Approved	Approved 7/79
41. George & M. Cartledge	R-3 to B-2	To construct building complex w/retail stores & office spaces	2.36	Approved	Approved 3/79
42. David E. Bittel	R-1 to B-1C	To construct office building	0.43	Approved	Approved 2/79
43. 419 Associates	R-1 to B-1C	To construct office building	13.925	Approved	Approved 2/79
1978:					
44. Beulah Bernard, First Nat. Exchange Bank of VA and Salem Assoc.	B-1 to B-2C	To construct shopping center	12.57	Approved	Approved 11/78
45. Aylett Coleman and Fred Bullington	A-1 to B-2	For commercial development	14.67	Approved	Approved 6/78
46. Willard & Robinson	M-1 to B-1	To construct office building	0.54	Approved	Approved 3/78
47. *Young World Child Care Centers	B-1 to B-2	To construct a child care center	1.873	Approved	Approved 3/78
1977:					
48. John M. Oakey Inc.	R-1 to B-2	To construct a funeral home	14.32	Denied	Denied 12/77
49. International Funeral Services Inc.	R-1 to B-2	To operate a funeral home	12.25	Denied	Denied 12/77
50. Donald R. Alouf	R-1 to B-1	To construct office building	2.345	Denied	Denied 11/77
51. Steak & Ale	R-3 to B-3	To construct a restaurant	3.525	Approved	Approved 10/77
52. Lewis Rest. Corp.	B-2 & R-3 to B-3	To construct a restaurant	1.14	Approved	Approved 10/77
53. Coleman & Bullington	A-1 to B-2	To construct a studio and office for a radio station	0.98	Approved	Approved 7/77
54. R. S. Thompson	B-1 to B-2		.829	Approved	Approved 5/77
55. Dr. Michael Becker	R-1 to B-1	To construct office building		Denied	Denied 4/77
56. Valley Properties	M-1 to B-1	To construct office building	0.83	Approved	Approved 12/77
1976:					
57. Rudy Cox Inc. Realtors	R-1 to B-1	To construct office building	0.4461	Approved	Approved 12/76
58. F&W	R-1 to B-1	To construct office building	14.0	Approved	Approved 7/76
59. F&W	R-3 to B-1	To construct office building	4.48	Approved	Approved 7/76
60. Board of Supervisors	M-2 to B-1	To better conform with surrounding use of land	9.0	Approved	Approved 3/76

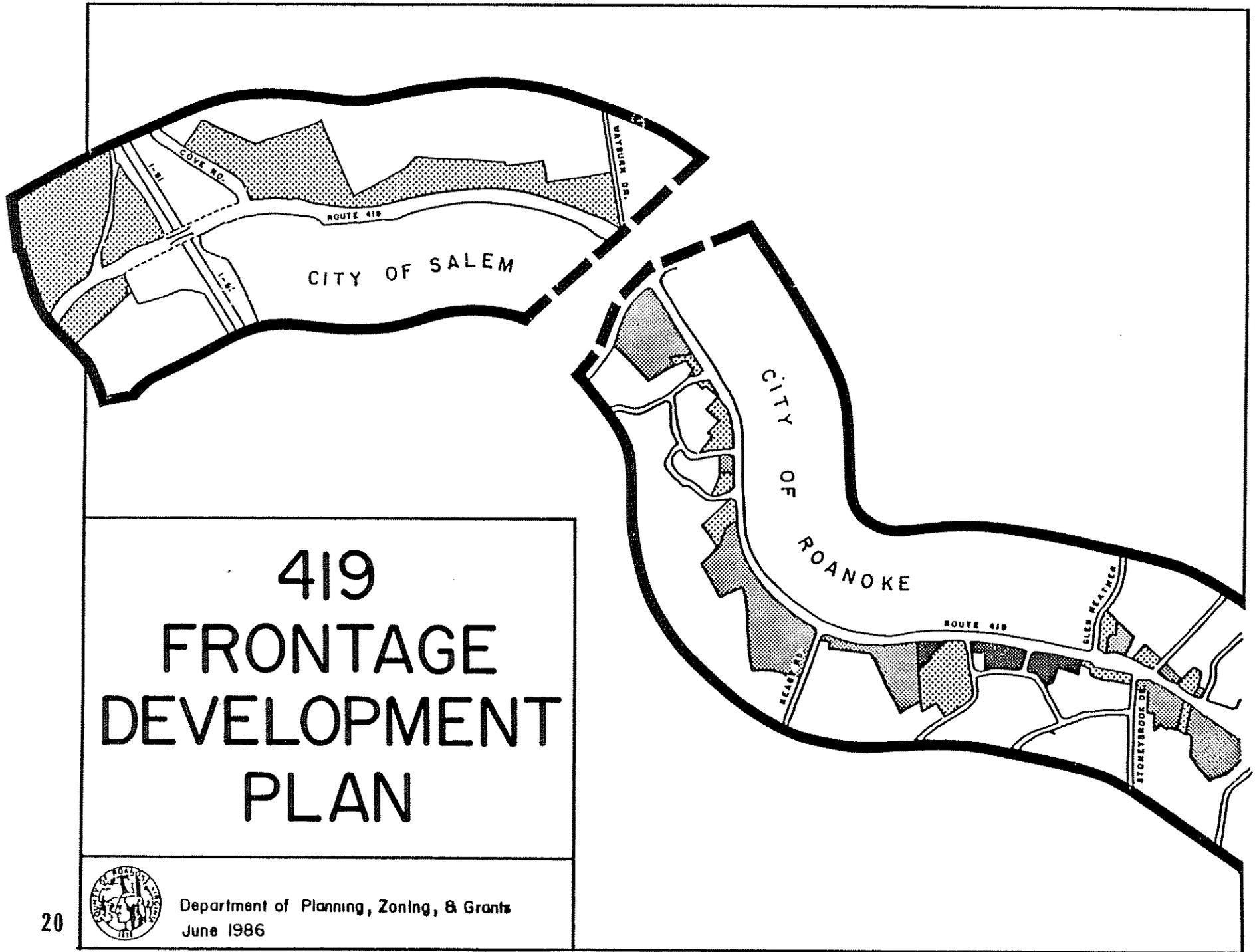
*Located directly off of Route 419

PROPERTY VALUATION

The property valuation map illustrates the land value assessment (June 1986) of each frontage parcel along 419. These values tend to increase around major intersections on 419 where accessibility and visibility from traffic raise the commercial demand for those parcels of land. The highest land values are found in the Tanglewood Core between the railroad tracks and Route 220.

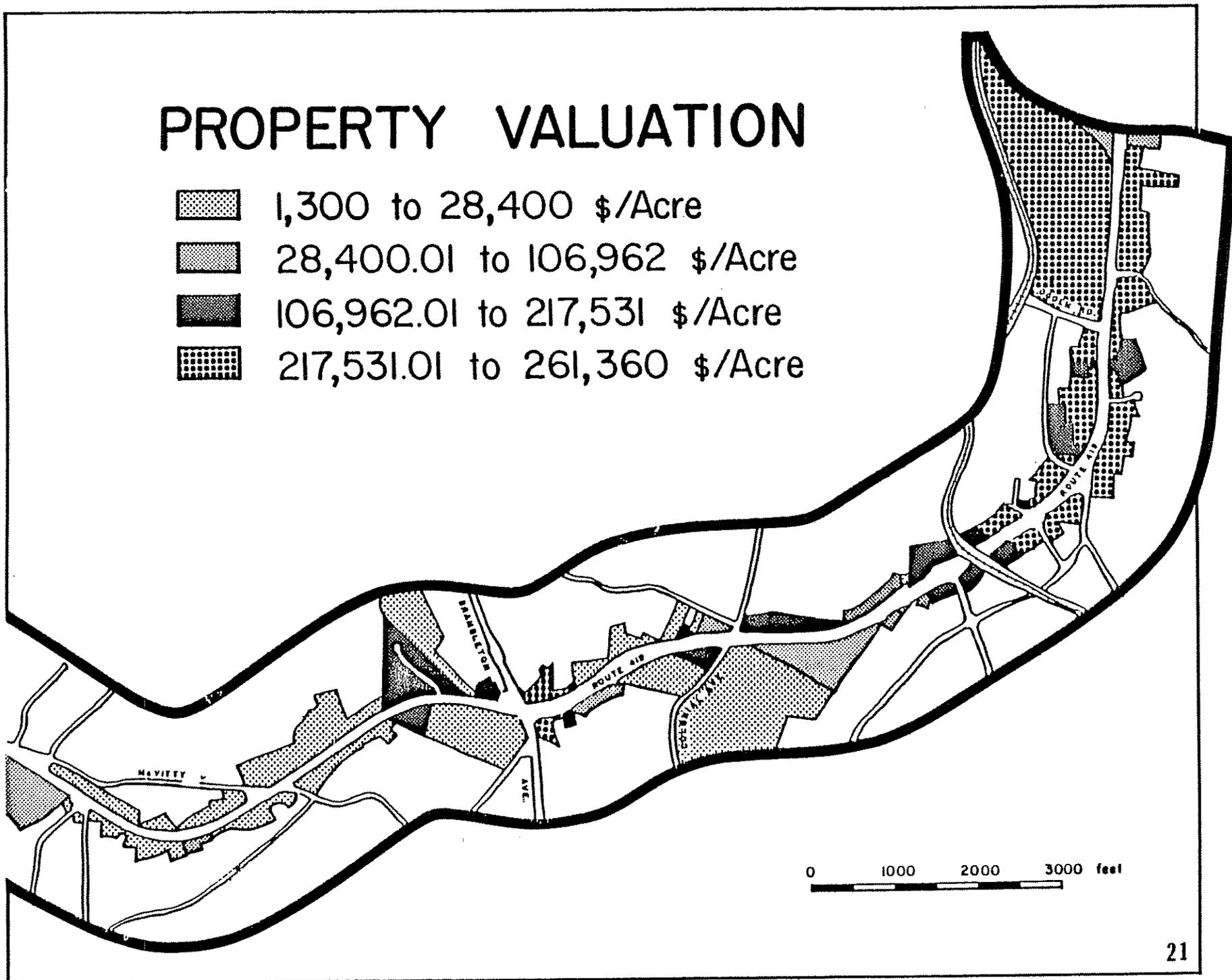
The total assessed value (1986) of all developed office, commercial, and institutional parcels which front 419, including Tanglewood Mall, is approximately \$68,900,800. Excluding Tanglewood Mall, the total is approximately \$44,794,400 with an average value of \$699,912 per development.





PROPERTY VALUATION

-  1,300 to 28,400 \$/Acre
-  28,400.01 to 106,962 \$/Acre
-  106,962.01 to 217,531 \$/Acre
-  217,531.01 to 261,360 \$/Acre



PUBLIC SERVICES

The capacities of public services provided by the county--schools, police, fire, and rescue services, and libraries-- expand to meet the increased demand brought on by development. Presently, all services either meet the capacities required or are being improved in response to the demands placed on them.

Some public schools serving the corridor are taking measures to alleviate overcrowding. Cave Spring High School currently has seven classrooms, a multipurpose room, and an industrial arts facility under construction, while Northside High School is adding a multipurpose room. In the elementary schools, a kindergarten classroom addition is planned for Cave Spring Elementary within the next five years, and Green Valley Elementary plans to expand the library.

The public library system in the county presently meets the needs of the residents of the corridor area, although there is a space deficit at the Headquarters branch on 419. An expansion of the site is planned within the next five years.

Most of the corridor lies within the acceptable service areas of the fire and rescue services. Fire services try to attain a five minute or less travel time to fire calls, and rescue services try to attain a four minute or less travel time to rescue calls. The stretch of 419 between the County line at Wayburn Drive and the intersection of 419 and Route 311 falls outside of this service standard for both fire and rescue services. The Roanoke County Community Facilities Plan includes a recommendation in the ten year plan to locate a new fire and rescue station in the area to bring it to an acceptable level of service. Also, the Tanglewood area does not lie within the less-than-four minutes range for rescue services. The rescue responses are being studied in an attempt to improve the service.

SEWER AND WATER SERVICES

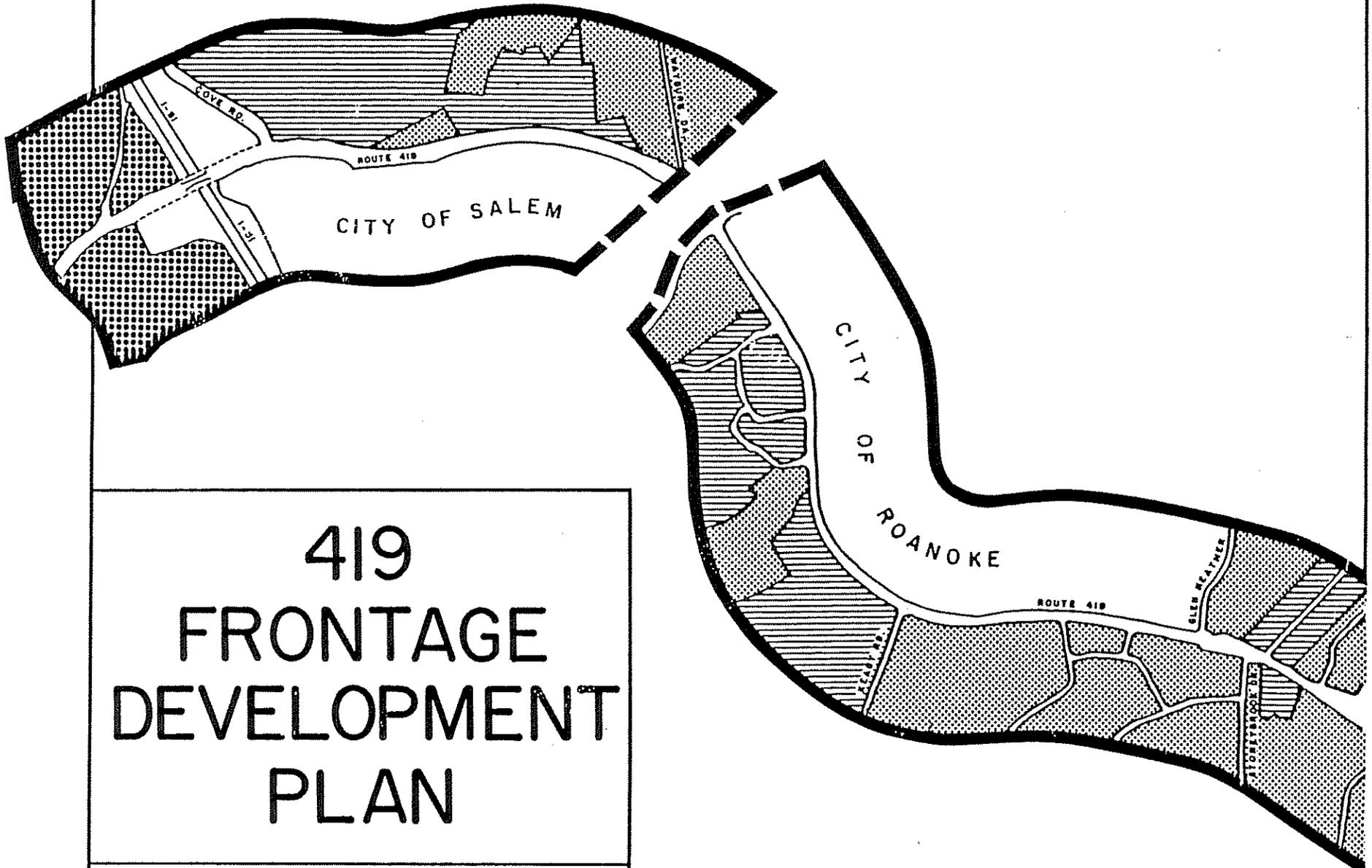
The availability of sewer and water services is a crucial factor in land development. Presently most areas of the 419 Corridor either have public water and sewer services or can have access to the services as the land is developed. Some areas, though, are served by private wells and septic systems.

The overall sewer system in the county is designed according to the "reasonable ultimate development" standard. However, some areas do experience wet-weather capacity problems due to infiltration. Infiltration is the introduction of stormwater runoff into the sanitary sewer system from cracks in the lines, illegal connections, and leaky manhole covers in the floodplains.

The existing water lines in most places are adequate for domestic flow, the water needed to serve homes and businesses everyday. However, some lines cannot provide the flow of water needed for fire protection. These lines are now being replaced in order to better serve the development that is occurring.

In the densely developed Tanglewood area, there is a capacity problem with the existing pump station. A new pump station is being built to relieve this problem.

The map on the following pages shows the availability of sewer and water services to corridor residents. Some categories indicate that sewer and/or water service is proposed. On undeveloped land, this means that the sewer or water lines may be extended as development occurs. On developed land, such as the older subdivisions along Bower Road and Castle Rock Road, "proposed" indicates the lines may be extended in the future.



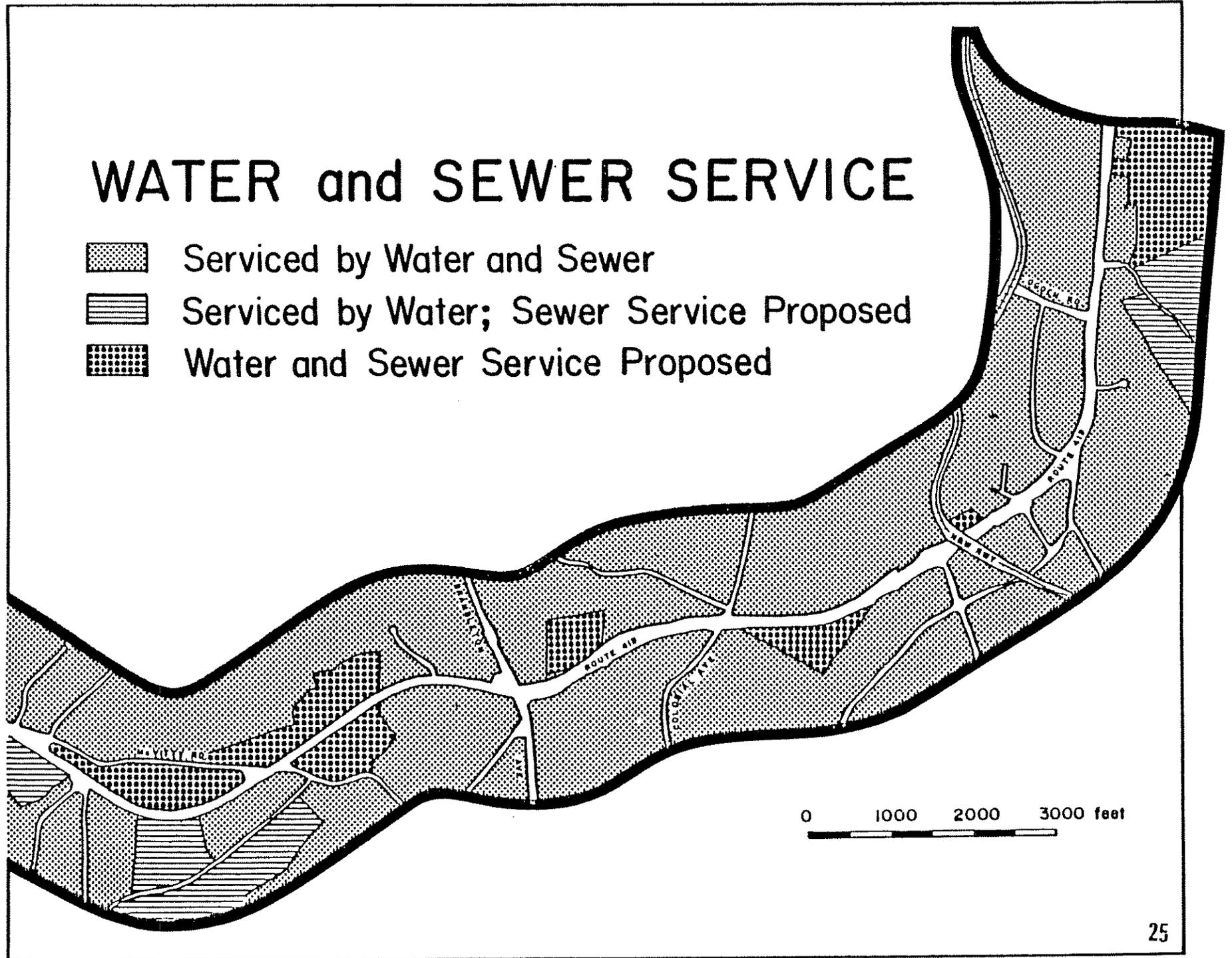
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WATER and SEWER SERVICE

-  Serviced by Water and Sewer
-  Serviced by Water; Sewer Service Proposed
-  Water and Sewer Service Proposed



DRAINAGE AND FLOODING

Several areas of the corridor occasionally experience problems with drainage and flooding. Five of these areas, including one large residential subdivision around Mudlick Creek, are designated as lying in the Federal Emergency Management Agency's floodplain area. These and other areas also suffer from the effects of stormwater runoff within the drainage basins. Even if new developments provide stormwater runoff controls for storm conditions greater than the two year storms that the state requires, the effects on the downstream locations are unknown. According to the Fifth Planning District Commission's Feasibility Study for a Roanoke Valley Comprehensive Stormwater Management Program, only a watershed-wide approach to stormwater runoff will be an effective method of controlling the drainage problems.

The drainage map shows the approximate boundaries of the drainage area basins and sub-basins that affect the corridor and illustrates the relationship between the density of development of a parcel of land and the amount of stormwater runoff. Generally, as the density of development increases, the area of the lot that is covered in impervious surfaces increases. Impervious surfaces are those surfaces, such as pavement and roofs, that do not allow the absorption of precipitation into the ground. The water that cannot be absorbed into the ground runs off the surface as stormwater runoff. Table 3 below lists coefficients of runoff for varying densities of development. To illustrate the runoff coefficients, a 0.00 coefficient means no stormwater runs off a site, and a 1.00 coefficient means 100% of the stormwater runs off a site.

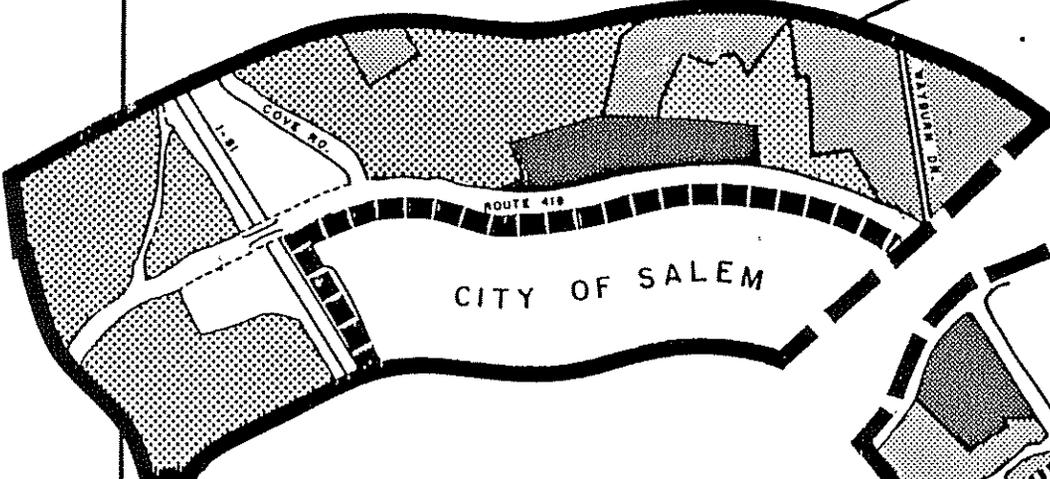
TABLE 3. RUNOFF COEFFICIENTS

<u>Description of Area</u>	<u>Runoff Coefficient</u>
Apartments	0.65 to 0.75
Schools	0.50 to 0.60
Residential - lots 10,000 sq. ft.	0.40 to 0.50
- lots 12,000 sq. ft.	0.40 to 0.45
- lots 17,000 sq. ft.	0.35 to 0.45
- lots 1/2 acre or more	0.30 to 0.40
Parks, cemeteries, and unimproved areas	0.20 to 0.35
Paved and roof areas	0.90
Cultivated areas	0.50 to 0.70
Pasture	0.35 to 0.45
Forest	0.20 to 0.30
Steep grass (2:1)	0.70
Shoulder and ditch areas	0.50
Lawns	0.20

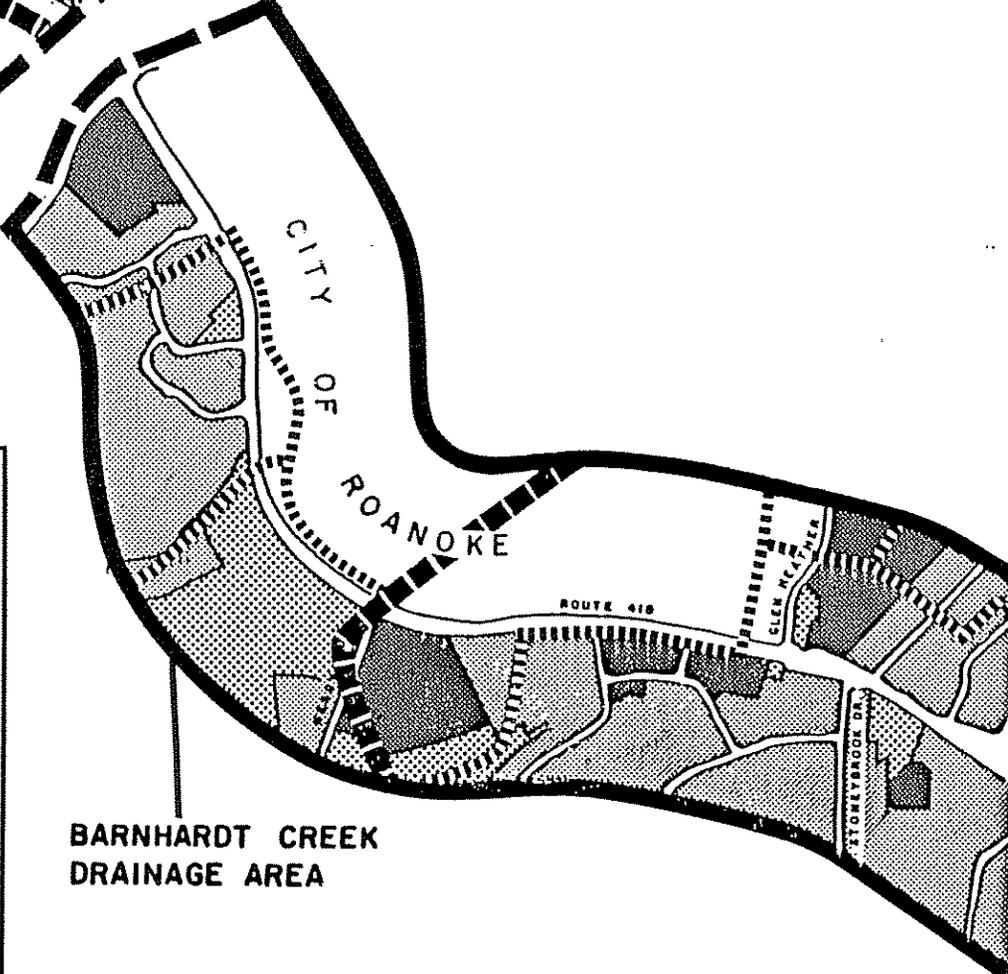
The land uses along the corridor were assigned a runoff coefficient according to the table. The coefficients were then grouped into the following three categories for mapping:

- Low (0.00 to 0.35): public parks, open space, agricultural, large-lot single family residential.
- Middle (0.35 to 0.65): single family residential subdivision, townhouse, institutional.
- High (0.65 to 0.90): multifamily residential, office, general commercial, shopping center, industrial.

PETERS CREEK DRAINAGE AREA



CITY OF SALEM



CITY OF ROANOKE

BARNHARDT CREEK DRAINAGE AREA

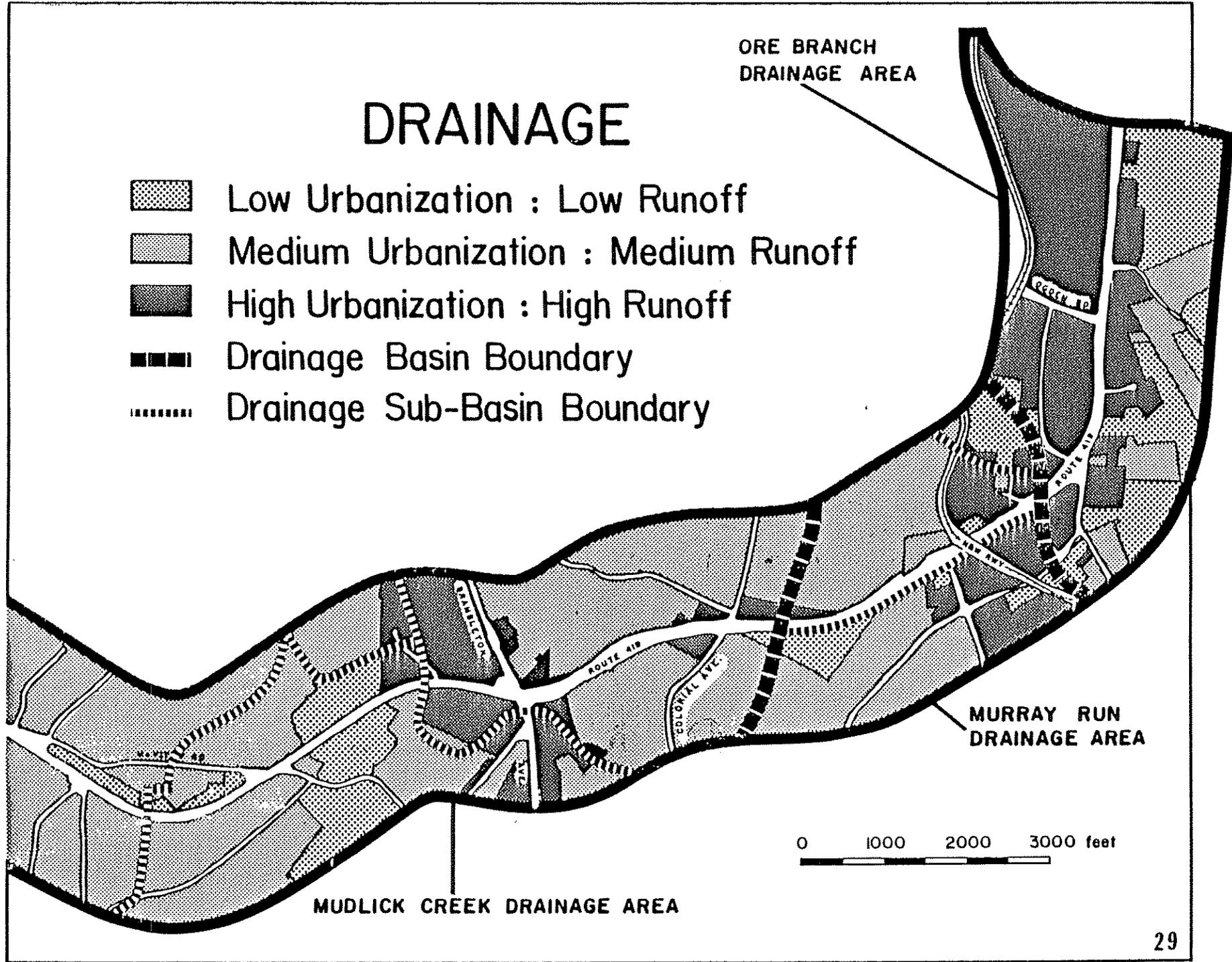
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DRAINAGE

-  Low Urbanization : Low Runoff
-  Medium Urbanization : Medium Runoff
-  High Urbanization : High Runoff
-  Drainage Basin Boundary
-  Drainage Sub-Basin Boundary



URBAN DESIGN

There are small stretches of the 419 Corridor that have begun to take on the appearance of a commercial strip. Little attention is paid to the outward appearance of the buildings or to their compatibility with surrounding land uses. Within these strips, driveways are spaced close together and no access to adjacent parcels is allowed. Circulation of traffic on some sites is not controlled at all, while on others, the controlled circulation pattern is too tight to be efficient.

Some businesses along the strip overwhelm the area with advertising signs that are cluttered together. Poorly designed signs can distract the motorist and conceal or confuse the information on other signs. The primary functions of a sign are to 1) clearly identify the business, 2) enhance the business image of the community, 3) create a pleasant shopping environment, and 4) stimulate business activity through advertising. Some signs in the corridor are designed to follow these functions. They are simply designed, carry a minimum of wording, and often complement the design of the buildings they are advertising.

In other stretches of the corridor (outside of the business cores), commercial development does not resemble the haphazard sprawl of the strip. The designs of the buildings reduce the contrasts between land uses of different intensities. In these commercial stretches, the size of the buildings usually respect the scale of adjacent land forms and buildings. Building materials and architectural style often complement the surrounding structures, which are generally single family houses.

Some development exemplifies good site design. Buildings are set toward the front of the lots, emphasizing the building design, landscaping and hiding the parking areas from the street view. The landscaped front yards and parking lots add character to the sites and reduce the visual monotony of pavement along the highway.

Screening and buffering on a business site can shield adjacent land uses of differing intensities. Some businesses simply use fences for this, while others plant rows of tall trees or a combination of plants and trees. The Roanoke County Screening and Buffering Ordinance assures protection of buffer yards between commercial or office land uses and residential land uses.

The traffic circulations on business sites outside of the core areas are often more controlled and efficient than those found in a strip development. Frontage roads eliminate frequent driveway cuts on the highway and make traveling from one site to the next much easier. Also, the elimination of solid barriers between sites reduces the motorists' needs to pull out onto the highway to reach the next site.

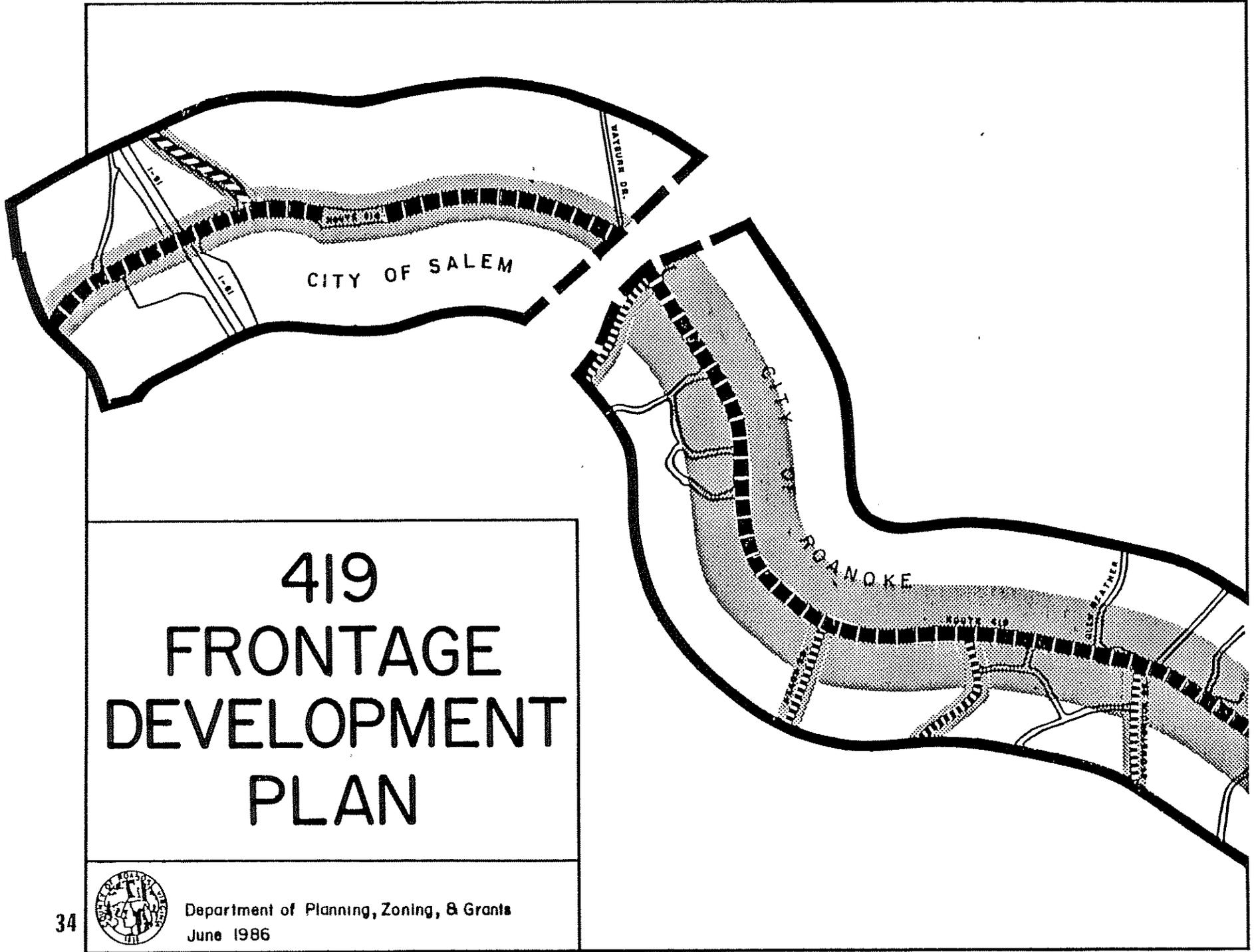
TRANSPORTATION

The plan limits itself to identifying street classifications, traffic volumes, and actual traffic counts of major streets in the corridor area. Transportation issues are addressed in more detail by the Fifth Planning District Commission's study of the 419 Corridor.

Route 419 is a major arterial, a street primarily designed to carry traffic. It takes traffic to and from two freeways and links major traffic-generating commercial areas. According to the Roanoke County Transportation Plan, a major arterial is a high mobility street with minimal land access. Route 419 does carry a high volume of traffic, yet it directly serves most commercial uses that front on it. The traffic volumes on 419 range from about 10,000 vehicles per day (VPD) in the sparsely developed stretch between Wayburn Drive and Route 311, to over 35,000 VPD in the densely developed Tanglewood area. Brambleton Avenue is another major arterial in the corridor area that carries a high volume of traffic and directly serves individual commercial establishments.

Other streets meeting and intersecting 419 may be classified as minor arterials, major collectors, and minor collectors. A minor arterial is also predominantly a traffic-carrying street, usually carrying 3,000 to 15,000 VPD and directly serving some commercial sites. Collectors are service streets that link arterial and local streets, carrying traffic and serving adjacent land uses. In urban areas, such as the 419 corridor, major collectors may carry 3,000 to 5,000 VPD and minor collectors may carry 1,000 to 3,000 VPD.

In relating these classifications to land use, the more intense development usually occurs in high volume traffic areas. Commercial establishments tend to locate where the traffic volume provides high visibility for the business, and the area around the intersection of two high traffic volume streets provides a prime location. For example, at the intersection of a freeway, Route 220/581, and a major arterial, Route 419, a regional shopping area has developed. In the Cave Spring Corners area, two major arterials intersect (Brambleton Avenue and Route 419) and a less densely developed community shopping area has developed. As the level of street classifications that intersect decrease, the density of the development around the intersections also decreases.

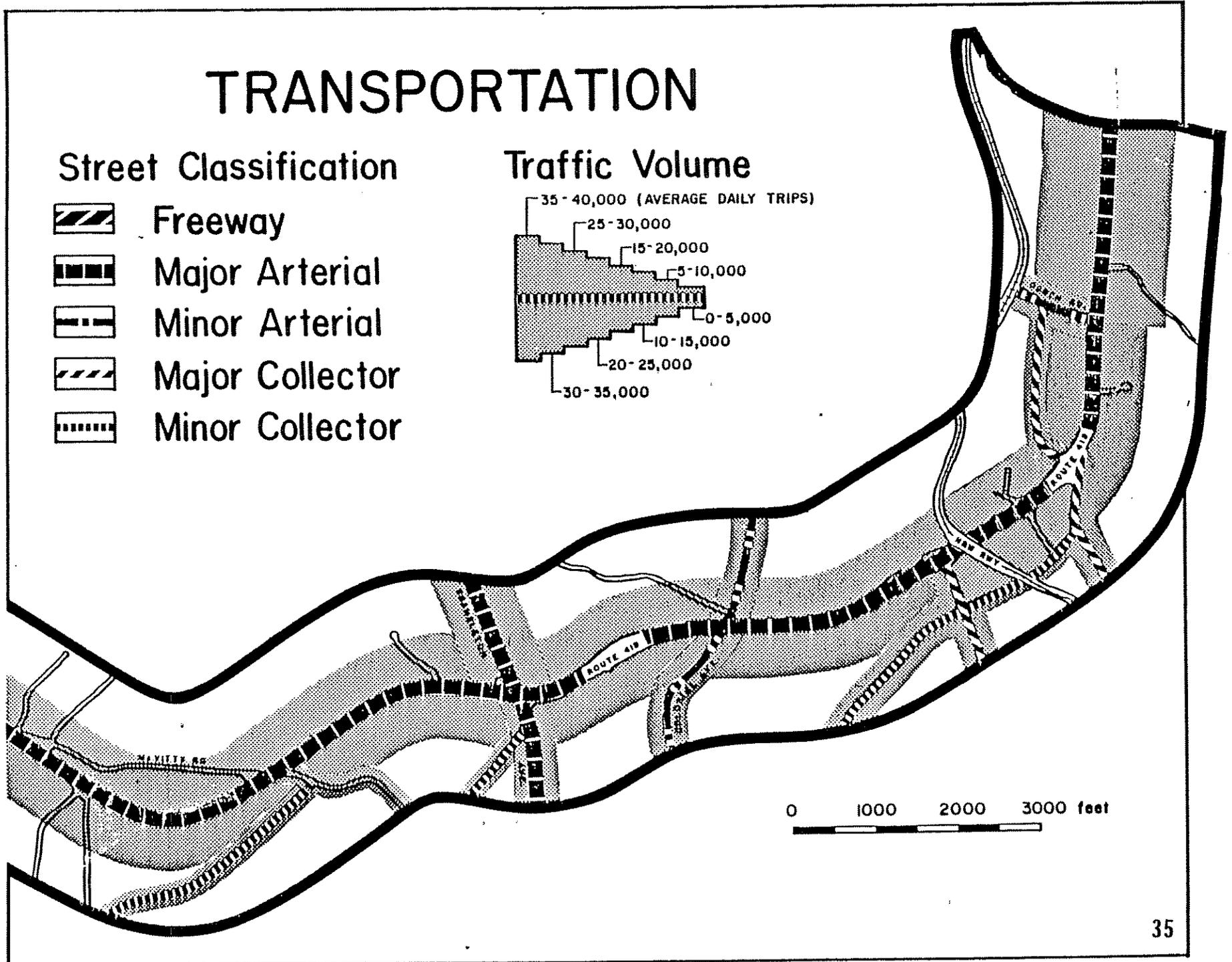
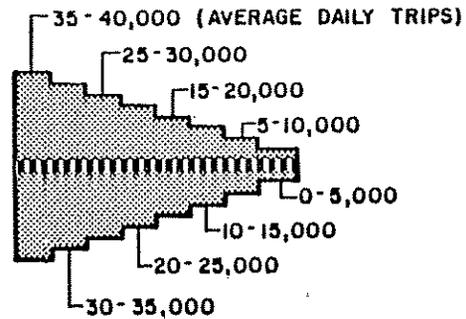


TRANSPORTATION

Street Classification

-  Freeway
-  Major Arterial
-  Minor Arterial
-  Major Collector
-  Minor Collector

Traffic Volume



**COMMUNITY
PARTICIPATION**

COMMUNITY PARTICIPATION

Community participation was critical to the success of the 419 Corridor Study. Residents were asked their opinions, reactions, and concerns and given the opportunity to express these in the planning process through one-to-one discussions with members of the staff, a community meeting, a questionnaire, and public hearings by the Planning Commission and Board of Supervisors.

MEDIA COVERAGE

The local news media facilitated the successful community involvement in the 419 planning process. Reporters from NBC affiliate WSLs TV-10, CBS affiliates WDBJ TV-7 and WFIR Radio 96, ABC affiliate WSET TV-13, and the Roanoke Times and World-News, continuously maintained the public interest through their comprehensive coverage of the planning process.

Roanoke Times & World-News, Thursday, July 10, 1986

87

100 residents turn out for planners' hearing on future of Va. 419

By MARK LAYMAN
Staff writer

Traffic congestion, inadequate drainage, noise and clutter were among the complaints expressed by 100 Roanoke County residents Wednesday at a community meeting to talk about development on Virginia 419.

The meeting was sponsored by the county's planning staff, which is doing a detailed study of current and future development on the busy highway.

"They don't give a damn — they're going to do what they want to do," Barbara Hansel, a resident of the Eton Hills subdivision, said as she left the meeting.

But county planners said they really do want public comment on 419 development before they make their recommendations to the Planning Commission and the Board of Supervisors later this month.

The county's future land use

map gives only general guidelines for development on 419. A new map is being prepared that will show the desired land use for each parcel on the highway. Information about slope, drainage, tree cover and other factors related to development also is being collected on each open parcel.

The new information is supposed to help the county make better decisions about what development to allow on 419.

The county is trying to balance the need for commercial development with the concerns of residents who live on and near the highway, county planning and zoning director Rob Stalzer said.

To avoid raising real estate tax rates, the county recently set a goal of having a 75 percent-to-25 percent ratio between residential and commercial tax revenues by the year 2000. Now, only 16 percent of the county's tax revenues come from businesses and industries.

By comparison, the ratio be-

tween residential and commercial tax revenues in the city of Roanoke is 65 percent-to-35 percent, Stalzer said.

The highway, which runs from Virginia 311 north of Salem to U.S. 220 south of Roanoke, is a hot spot for the commercial development the county needs. In the past three years, there have been 15 rezoning requests on land along 419. But the county doesn't want what Stalzer called "schlock development."

To assure that, the study's recommendations include design standards for new buildings, new sign regulations, construction of frontage roads, conservation of scenic land and landscaping of parking lots and highway median strips.

Further residential development — which increases demands on public facilities such as roads and schools — will be discouraged on 419. Commercial development that meets the strict new standards and that is compatible with established residential neighborhoods will be en-

couraged.

"We're talking about well-planned growth," Windsor Hills Supervisor Lee Garrett said. "It won't be a gasoline alley."

Two solutions have been raised to the problem of traffic congestion on 419: widening the four-lane highway to six lanes or building a bypass from Salem to U.S. 220.

The residents at Wednesday's meeting seemed to prefer the bypass, although it will be costly and it won't be easy to find land flat enough for it west of 419. Widening the highway "is just going to create more traffic and congestion," former Planning Commission member Mabel Smith said.

Smith, in fact, said she thought there should be a moratorium on new development on 419 until plans for a bypass "that would relieve traffic in Southwest Roanoke County" can be drawn up.

The Planning Commission will consider the proposed land use map for 419 at a public hearing Tuesday.

Detailed development studies also will be done on Peters Creek Road and Williamson Road near the

airport and on U.S. 460 east in Bon-sack and 460 west in Glenvar — all targeted for future growth.

Commercial growth on 419 expected to be encouraged

By MARK LAYMAN
Staff writer

The Roanoke County Planning Commission's recommendation last month to deny a rezoning request for an office complex on Virginia 419 has spurred a detailed study of current and future development along the busy highway.

As a result of the study, residential development probably will be discouraged on the few remaining open tracts on 419. Commercial and office development — with design, setback, landscaping and screening and buffering requirements — probably will be encouraged.

The county's future land-use map now gives only general guidelines for development on 419. A new map is being prepared that will show the desired land use for each open tract. Information about slope, drainage, tree cover and other factors relevant to development also will be collected on each open tract.

When the land-use guidelines are complete, future development on 419 will be more predictable. Then a traffic study will be done. Options that have been suggested include widening the highway from four lanes to six and building a bypass from Salem to U.S. 220 south of Tanglewood Mall. The suggested bypass would loop outside, or to the west, of 419.

County residents will have a chance to comment on 419 development at a meeting on July 9 at the Roanoke County administration building on Brambleton Avenue.

In the past three years, there have been 15 rezoning requests on land along 419, said Rob Stalzer, the county's planning and zoning director. There have been three rezoning requests in the past three months, each of them hotly debated, "and we've got more coming in," he said.

There had been talk of the need for a detailed study of development on 419 for some time. Last month, after the Planning Commission recommended denial of a rezoning request for an office complex across the highway from Winterberry Pointe, the county's planning staff got to work on it.

The would-be developer in that rezoning, Bruce Hobart, has a reputation for quality work in the county. Lee Eddy seemed to be speaking for the others on the commission when he said he thought the office complex

was well-designed. But, he continued, if built it would "open up the door ... and it will be only a short time before 419 is completely developed."

In the study, the county is trying to balance the need for economic development with concerns over traffic congestion and unsightly urban sprawl on 419.

"I don't think anybody has a magic answer," Stalzer said. "We want to try to get a feel for what the community wants."

No doubt, some who live near 419 want no more development of any kind on the highway.

"I don't know how realistic that is," said Supervisor Bob Johnson, who used to be on the Planning Commission. "There has to be a happy medium."

If Roanoke County residents don't want any more commercial development on 419, "Somebody is going to have to run for the board of supervisors on that platform ... and say it's OK to have a real estate tax rate of \$1.50 or \$1.60," Planning Commission member Wayland Winstead said.

To keep real estate tax rates low, the county is seeking a 75 percent-to-25 percent ratio between residential and business tax revenues. The ratio now is 84 percent-to-16 percent.

With that in mind, Winstead said, the county probably will discourage further residential development on 419 but will encourage commercial and office development. "Otherwise we're not going to make" the 75-to-25 ratio, he said.

Johnson agreed. "I think we've reached the limit on multifamily housing out there. I don't know how many more kids you're going to cram into Cave Spring High School. Office and commercial development puts less strain on water, sewer, roads and schools than residential development does, he pointed out."

Now, 419 — especially between Oak Grove Plaza and Cave Spring Corners and at the Interstate 81 interchange — is the county's hot spot. But detailed studies of future development also are needed on Peters Creek Road and Williamson Road near Woodrum Field and on U.S. 460 in Bonsack and Glenvar, Stalzer said.

At the Board of Supervisors' request, the Planning Commission is scheduled to reconsider the Hobart rezoning at its July 15 meeting.



County of Roanoke Virginia

ROUTE 419 LAND USE POLICIES

The Roanoke County Planning Commission and county planning staff will hold a community meeting to discuss the existing and proposed land uses along Route 419 from I-81 to U.S. 220. The findings of a Route 419 corridor study will be discussed as well as proposed recommendations by both the Planning Commission and staff. The meeting will be held Wednesday, July 9, 1986 in the Community Room of the Roanoke County Administration Center, 3738 Brambleton Avenue at 7:00 p.m.

All county residents are encouraged to attend and express their opinions. For more information, contact the planning staff at 772-2094.



County of Roanoke

DEPARTMENT OF DEVELOPMENT

PLANNING COMMISSION
BOARD OF ZONING APPEALS

June 24, 1986

Dear Roanoke County Resident:

How do you envision Route 419 in the year 2000? Prestigious shops and homes? Lusciously landscaped office developments? A wild asphalt jungle?

The Roanoke County Planning Commission and county planning staff will host a community meeting on July 9, 1986, at 7:00 p.m. to discuss the findings of a Route 419 corridor study. The meeting will take place in the Community Room of the Roanoke County Administration Center, 3738 Brambleton Avenue.

At their April 22, 1986 public hearing, the Board of Supervisors requested that the Planning Commission and staff members make recommendations concerning the land use policies of Route 419. The commission and staff have since analyzed such aspects as existing land use, zoning, topography, developable areas, adequacy of sewer and water, traffic issues, and land and building valuation. The commission and staff will discuss their findings, proposed land use plan amendments, and recommendations at the community meeting.

Land use policies, and proposed land use plan amendments are available for review in Room 600 of the Roanoke County Administration Center.

You are invited to attend the meeting and voice your concerns. If you have any questions, please contact the planning staff at 772-2068.

Sincerely yours,

Donald R. Witt, Chairman
Roanoke County Planning Commission

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PUBLIC ANNOUNCEMENTS

On July 9, 1986 at 7 p.m., the planning staff of Roanoke County publicly presented the to-date findings of the 419 Corridor Study. The public presentation was held at a community meeting in the Community Room at the Roanoke County Administration Center. Prior to this date, 339 letters announcing the meeting and inviting residents to come in to the planning office to discuss the study with staff were mailed to: (1) citizens who attended the Windsor Hills and Cave Spring community meetings for the comprehensive development plan of Roanoke County, (2) citizens who attended Roanoke County Planning Commission public hearings on Route 419 rezonings for the last three years, and (3) area civic leagues.

Seven hundred fifty letters were distributed within neighborhoods along 419 and another 250 copies were taken to a 419 area business, Movie Time Video, to distribute to its customers. Radio stations WROV, WFIR-WPVR, WSLC-WSLQ, WXLK, and television station WDBJ carried public service announcements, and the Roanoke Times and World-News carried a block ad encouraging County residents to attend the meeting. Announcements were also displayed on the marques at Springwood Park and Tanglewood Mall, and on a portable sign near the intersection of 419 and Starkey Road.

THE COMMUNITY MEETING

A record number, 120 residents, turned out at this community meeting to voice their concerns on the future plans for Route 419 development. The meeting began with a presentation of the 419 Corridor Study findings by the planning staff. The staff first introduced the scope of the project to the citizens and then elaborated on its different components. For each component of the study--Land Use, Urban Design, Environmental Quality, Transportation and Public Facilities--an analysis and the staff recommendations were explained.

After the presentation, the residents divided into four groups to discuss the study in more detail and present their reactions to the study and their concerns for the development of the corridor. Staff members representing the various components of the study rotated among the groups as facilitators to aid in the discussions and answer any questions. Each group's comments and opinions on the main issues confronting development on 419 were recorded on flip charts.

Once the groups had had ample time to discuss Land Use, Urban Design Environmental Quality, Transportation, and Public Facilities, a spokesman from each group presented his group's main concerns and recommendations to the rest of the citizens. Time was given at the end of the group presentations for anyone who felt a concern had not been addressed, to speak to the meeting.

COMMUNITY QUESTIONNAIRE

Everyone in attendance was given a further opportunity to express his thoughts on development in general and in relation to specific sites along the 419 corridor in the form of a questionnaire. This questionnaire was designed to address the topics of Land Use, Urban Design, Environmental Quality, Transportation, and Public Facilities. Fifty-one (51) questionnaires were returned to the planning department. A copy of the questionnaire follows, with the actual numbers of responses noted next to each question and the predominant responses circled.

The study does not consider the results of this questionnaire to be the opinions of all of the residents as a whole. Since the questionnaire was completed by residents who attended the 419 community meeting out of personal concern for the corridor development, the results of this survey represent only those opinions of a portion of the residents in attendance. Therefore, the questionnaire and results are included in an attempt to present a complete record of community participation at the meeting but do not represent the opinions of County residents as a whole.

COMMUNITY QUESTIONNAIRE

1. Where do you live in relation to Route 419?
35 a. Neighboring resident. Where? _____
14 b. Other. Where? _____

2. Do you (check one or more):
45 a. Live in Roanoke County?
41 b. Do most of your shopping in Roanoke County?
13 c. Work in Roanoke County?
7 d. Other _____

3. Do you own property which fronts on Route 419?
14 a. Yes.
33 b. No.

4. To the maximum extent possible, 419 frontage properties should be developed for (check one):
3 a. Shopping Centers
10 b. Individual Businesses
26 c. Offices
22 d. Residences
10 e. Other _____

5. Where appropriate, residential development of 419 frontage properties should be limited to (check one):
7 a. Multifamily apartments and condos
5 b. Townhouses
12 c. Single family detached houses
25 d. A combination of housing types within a planned development
2 e. Other _____

6. Are you in favor of (check one):
16 a. Increasing commercial and office development to offset the tax burden on residential property owners
26 b. Limiting commercial and office development, regardless of the effect on residential property tax rates
6 c. Other _____

7. Where in Roanoke County should new commercial and office developments locate? (check one or more):
- 17 a. Route 419 corridor
 - 25 b. Route 460 east of Roanoke (Bonsack)
 - 24 c. Route 460 west of Salem (Glenvar)
 - 21 d. Peters Creek Road corridor (airport vicinity)
 - 6 e. Plantation Road corridor (Hollins)
 - 16 f. Route 24, east of Vinton
 - 10 g. Other _____
8. Which measures could keep office and commercial developments compatible with adjacent residential neighborhoods? (check one or more):
- 24 a. Use of fences, trees, hedges, etc. to screen office and commercial developments from residences
 - 23 b. Facing office and commercial buildings and lighting away from residences
 - 25 c. Setting office and commercial buildings away from residential property lines
 - 38 d. Designing of office and commercial buildings in architectural styles which blend with residential neighborhoods
 - 5 e. Other _____
9. Which measures could enhance the visual quality of development along Route 419? (check one or more)
- 30 a. Improving architectural style of buildings
 - 32 b. Tightening sign controls
 - 28 c. Landscaping of front yards and parking areas
 - 29 d. Placing parking to the side or rear of buildings
 - 30 e. Planting trees and flowers in median strips and in areas along the highway
 - 5 f. Placing public artworks in front of buildings and in visible public areas
 - 5 g. Other _____

10. Which natural features along Route 419 should be preserved?
(check one or more)
- 43 a. Mountain scenery
 - 27 b. Steep hillsides and ravines
 - 46 c. Trees
 - 30 d. Streams and floodplains
 - 2 e. Other _____
11. Which measures could improve traffic circulation along Route 419? (check one or more)
- 8 a. Six-laning segments of Route 419
 - 37 b. Constructing a south beltway to take traffic off of Route 419
 - 18 c. Constructing frontage roads along Route 419
 - 28 d. Controlling the number, location and spacing of driveways along Route 419
 - 2 e. Other _____
12. What is the most important issue facing development along Route 419?
- 20 Traffic Flow and Capacity: Congestion along 419, and the difficulty residents have entering 419 from adjacent residential subdivisions.
 - 8 Decline of Visual Quality: Sign congestion, inadequate landscaping, power lines above ground.
 - 6 Need for Planned Development: Blending the various areas into a homogeneous development, prevent strip-like development, planned residential and office developments.
 - 6 Overdevelopment of the Corridor: Restrict further development to the area between N&W Railroad tracks and Tanglewood, and preserve the quality of the rest, leaving existing homes alone.

- 4 Drainage and Flooding: Help for existing problems and controls to lessen impact of future development.
- 3 Zoning: Eliminate spot zoning.
- 3 Quality of Development: Development suitable to land and blending with existing architecture.
- 2 Quality of Residential Living: Light glare from businesses into residential areas and noise pollution from traffic and businesses.
- 1 Resource Preservation.

13. How did you find out about this community meeting?

<u>16</u>	a. Letter	<u>13</u>	d. Newspaper
<u>2</u>	b. Television	<u>18</u>	e. Word of mouth
<u>1</u>	c. Radio	<u>7</u>	f. Other _____

COMMUNITY CONCERNS AND RECOMMENDATIONS

The following list summarizes the concerns and recommendations expressed through the group session at the community meeting and in the community questionnaire.

LAND USE

Concerns: The disturbance of the existing residential area by conversion of single family homes into business uses, the expansion of the business districts into the residential areas, and the subsequent lack of controls to protect the residential neighborhoods.

The protection of property values of the existing residential homes when office and commercial development takes place on nearby and adjoining parcels.

The desire to see large tracts of land developed either by major companies, with expansive lawns and landscaping, or into business park settings, rather than small parcels developing individually and creating a commercial strip.

The ability of public services, especially public schools, to meet increased demands brought on by increased development.

The increasing drainage problems brought on by new developments.

Recommendations:

Keep residential areas as they are and protect them from encroachment of office and commercial development through stricter zoning laws.

Limit further development in the corridor to the Oak Grove area and between Tanglewood Mall and the N&W Railroad tracks, and preserve the quality of the remainder of the corridor.

Carefully plan future development along the corridor to prevent strip development, blend areas into homogeneous developments, and to include planned residential and office developments.

Enact stricter measures to ease drainage problems.

Complete a regional drainage study and establish a public storm water management system.

URBAN DESIGN

Concerns: The decline of the visual quality along the corridor due to distracting signs and billboards, overhead utility lines, inadequate landscaping and inconsistency of architectural styles.

The lack of adequate building and site design controls to make conflicting land uses more compatible.

Recommendations:

Strengthen screening, buffering and sign ordinances, and increase enforcement of these.

Establish review boards made up of citizens to review architecture, landscaping, and site plans of new developments.

Establish citizen groups to talk with owners of existing office and commercial developments about site improvements.

Prepare a corridor beautification plan to include landscaping of median strips and highway rights-of-way.

ENVIRONMENTAL QUALITY

Concerns: The devastation of the natural beauty of the corridor through the overgrading of mountainsides and the subsequent removal of existing trees.

The obliteration of scenic views by signage and overhead utility lines.

The infiltration of noise pollution and bright lights into residential areas from adjacent office and commercial developments.

Recommendations:

Development should be planned according to the topography of the land--develop the level areas, minimize grading of steep slopes, and protect the existing tree cover.

Restore scenic views by removing billboards and placing utility lines underground.

TRANSPORTATION

Concerns: The increased amount of traffic going through subdivision streets in an attempt to avoid congestion on 419.

The difficulty of exiting residential subdivisions onto 419, especially at peak traffic hours.

The need for a reduction in the number of entrances off of 419 into office and commercial developments.

The need for improvement of street capacities before more development takes place on them.

The increasing congestion of traffic and interrupted traffic flow caused by new developments.

Recommendations:

Completion of a thorough study to determine the best means of correcting traffic flow and capacity problems along 419.

A study to determine the possibility of a countywide bike plan.

Reduce the number of entrances allowed on 419 and encourage frontage roads for new development.

FUTURE LAND USE GUIDE ADOPTION

At a public hearing of the Planning Commission on July 15, comments were received on the Future Land Use Guide map for 419 and on rezoning policies. Citizen comments were generally supportive. Special concerns were the need to stick to the guidelines and follow through with strong zoning enforcement actions. The Board of Supervisors subsequently, on July 22, adopted the recommended map to serve as a guide for future rezonings along the corridor.

ISSUES

ISSUES

The major issues concerning development in the 419 corridor were identified through the analysis of existing conditions and from the concerns expressed by citizens at the community meeting. This plan addresses issues regarding land use, urban design, environmental quality, and transportation.

LAND USE

The 419 Corridor is a conglomerate of various land uses from agricultural land to residential housing developments to a regional shopping center. The few remaining frontage properties are especially in demand for development, given their location on a heavily traveled highway. Office and commercial developments tend to locate on these frontage properties because of the high visibility and easy access for motorists. The same locations are generally undesirable for single family detached housing because of the noise and air pollution from the heavy traffic, the light glare from cars and businesses at night, and the difficulty entering and exiting the property in heavy traffic.

Countywide residential growth exceeds commercial growth. This imbalance places a strain on the County's cost of providing public services; the revenues generated from residential land uses do not meet the cost of public services provided. On the other hand, commercial land use revenues help support public services to residents. Route 419 presents an opportunity for commercial growth to balance the public service demands of residential growth.

Commercial development of vacant lots and the conversion of single family detached houses fronting 419 into business uses cause concern to adjacent residential neighborhoods. Residents of the neighborhoods behind the frontage lots are concerned about the values of their properties as the business area encroaches upon the established neighborhoods.

Frontage lots are, in some cases, suitable for multifamily housing developments. However, excessive high density residential development of 419 frontage parcels creates demands on the capacity of police, fire, and rescue services, public schools, and libraries serving the corridor area. The existing sewer and water lines in most areas are adequate to service current demands and reasonable ultimate development. Some wet-weather capacity problems are due to inflow and infiltration of rainwater into sewer pipes through illegal connections and cracks in the lines.

URBAN DESIGN

Conventional strip development is undesirable. It brings about decreased efficiency in the highway traffic flow due to frequent driveway cuts and traffic circulation barriers between parking areas on adjacent frontage lots. Often, little attention is given to the appearance of buildings from the street, building compatibility with adjacent homes, landscaping, or the design relationships among adjacent frontage developments. Therefore, it is practical for large tracts of land to be developed into business park settings, rather than small parcels developing individually. Planned development of large tracts avoids the haphazard sprawl of the conventional commercial strip.

The visual quality along the corridor is declining due to distracting signs and billboards, overhead utility lines, inadequate landscaping, and inconsistency of architectural scale among differing land uses. Urban design methods can make conflicting land uses more compatible. Building height, bulk, materials, and design can make new developments harmonize with existing buildings. Landscaping, screening, and buffering can also ease the transition from residential to commercial areas.

ENVIRONMENTAL QUALITY

Residents of the corridor area perceive the environmental quality of the area as declining. Noise pollution and light glare are infiltrating residential areas from adjacent office and commercial developments, and the natural beauty of the corridor is being diminished through the grading of hillsides and the extensive removal of trees. Lessening the grade of hillside slopes and disturbing natural drainage channels yield more buildable area and less severe conditions for laying sewer and water lines. Grading also results in changes in the natural drainage patterns, including the volume and rate of runoff, increased erosion, less stable ground for building foundations, and a monotonous landscape. Mature woodlands reduce noise, filter pollutants in the air, act as a windbreak, provide shade, stabilize steep slopes, and control erosion and runoff. Trees also serve as visual screening between differing land uses and contribute to the visual quality of the community.

A major concern of many corridor residents is drainage and flooding. Development anywhere in a drainage basin has a cumulative effect on locations at the foot of the basin where corridor development occurs.

TRANSPORTATION

A road is a major public investment with the primary function of carrying traffic. This function is hampered by frequent driveway cuts and poorly planned egress and ingress circulation layouts.

The public perceives the traffic volume on 419 at peak hours as above carrying capacity at most places between Keagy Road and Tanglewood. This volume is increasing due to development directly on 419 and from development along other roads which feed into 419. Motorists are detouring through residential subdivision streets in an effort to avoid the traffic congestion on 419. Residents along the corridor are having difficulty exiting their subdivisions onto 419, especially at peak hours.

GUIDELINES

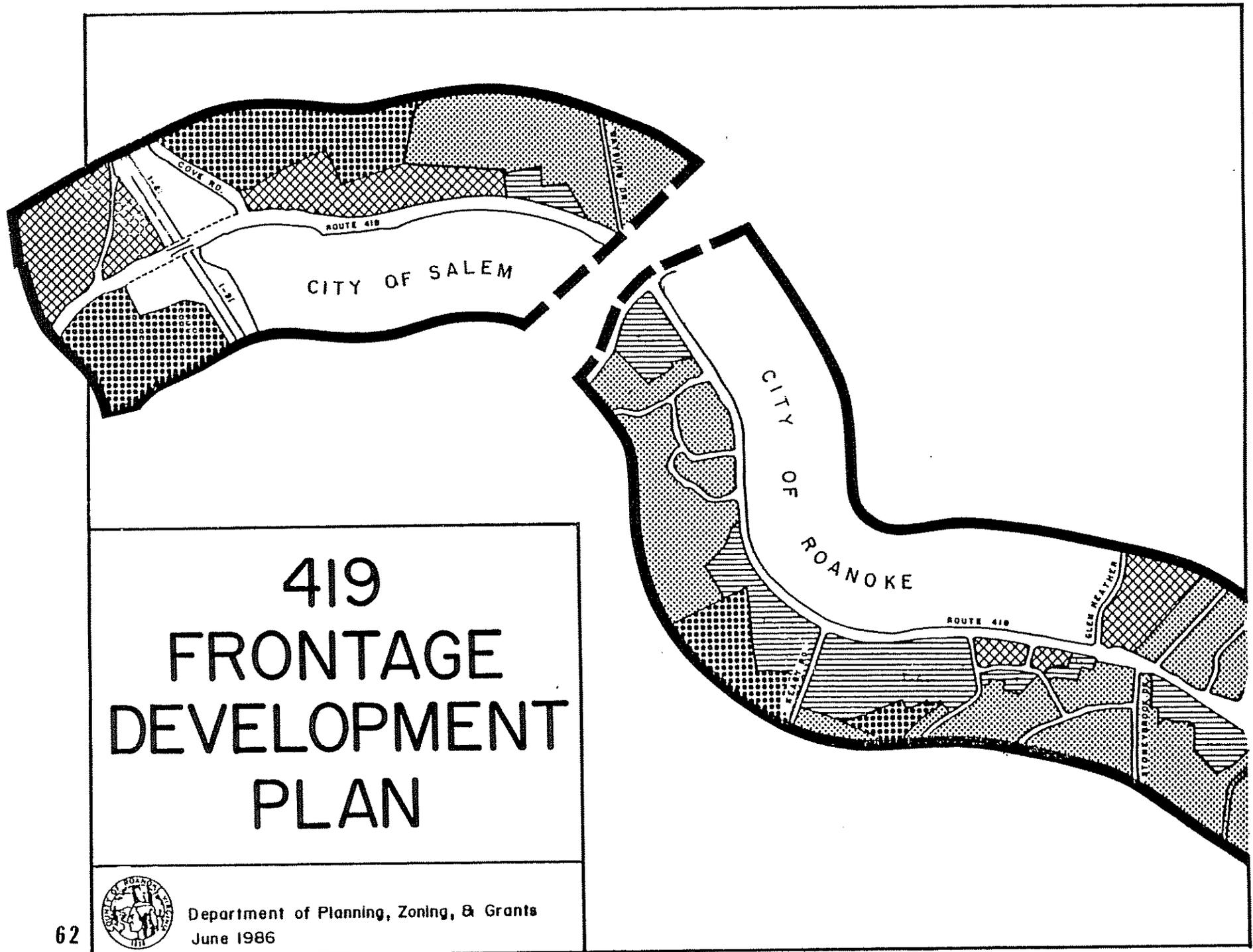
GUIDELINES

The guidelines that follow have been developed in response to the issues identified through the community planning process. They serve as a guide for the future development of frontage parcels along Route 419.

LAND USE

FUTURE LAND USE MAP

The map on the following page serves as a guide for the future land use of frontage properties. Each of the designations shown on the map are land use policy areas contained in the Roanoke County Land Use Plan.



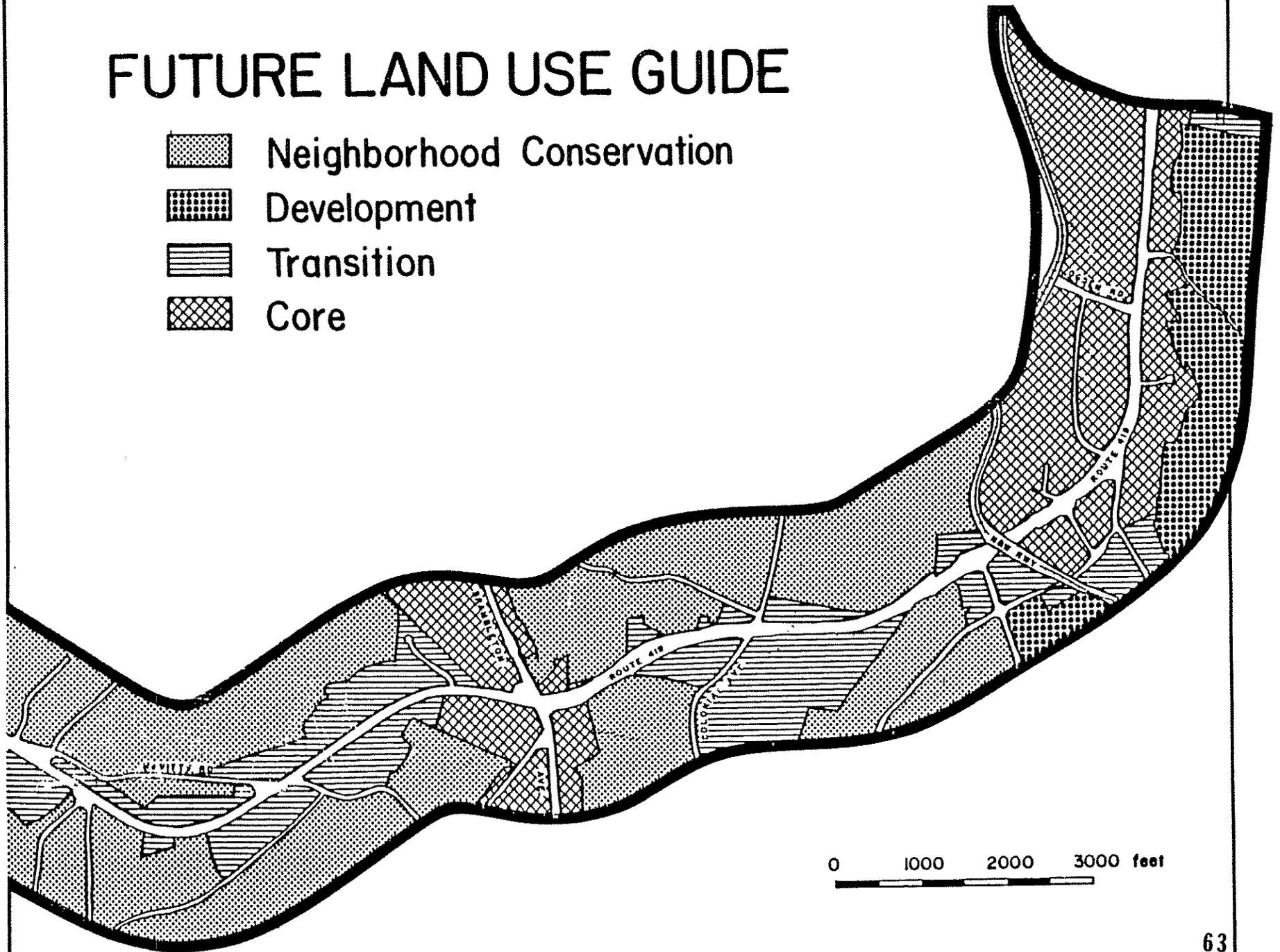
419 FRONTAGE DEVELOPMENT PLAN



Department of Planning, Zoning, & Grants
June 1986

FUTURE LAND USE GUIDE

-  Neighborhood Conservation
-  Development
-  Transition
-  Core



LAND USE DESIGNATIONS

A description of the land use plan designations follows.

- Neighborhood Conservation. A future land use area where established single family neighborhoods are delineated and the conservation of the existing development pattern is encouraged.
- Development. A future land use area where most new neighborhood development may occur, including large-scale planned developments which mix residential with retail and office uses. Innovation in housing design and site development is a key objective.
- Transition. A future land use area where orderly development of highway frontage strips and land use buffers between high and low intensity development may occur. Management of commercial sprawl is essential.
- Core. A future land use area where suburban centers of high intensity urban development may be directed. Land use functions may complement the central business districts of Roanoke, Salem, and Vinton downtowns.

LAND USE PLAN EXCERPTS

The following excerpts are land use guidelines for each of the designations on the Future Land Use map for 419. These guidelines were adopted by the Roanoke County Board of Supervisors in June, 1985, as part of the Roanoke County Land Use Plan.

NEIGHBORHOOD CONSERVATION.

Land Use Types. Compatible land use types include:

Single Family Attached and Detached Housing at a density that is not markedly higher than the status quo.

Neighborhood Activity Centers of non-residential uses that serve the neighborhood residents' needs, such as parks, schools, churches, recreational facilities, and community clubs.

Land Use Guidelines. Policies to guide the use and development of land include:

- Protect residential neighborhoods from disruptive impacts of land use changes.
- Provide screening and buffering of adjacent land use changes along the neighborhood perimeter.
- Encourage housing rehabilitation in declining neighborhoods.
- Maintain open space, yards, and grounds in residential neighborhoods.
- Encourage infill of vacant lots in residential neighborhoods.

- Develop neighborhood activity centers within convenient distance to existing housing.
- Avoid residential development that has a significantly different density, size, height, or scale from adjacent development.
- Permit limited density attached residential development, provided exceptional housing design and site planning techniques are employed to achieve compatibility.

DEVELOPMENT

Land Use Types. Compatible land use types include:

Conventional Residential Development of single family detached housing on conventional lots (e.g. 7,200 square feet or greater). There is no minimum tract size for a conventional subdivision.

Cluster Residential Development of single family detached housing. The same gross density of the conventional subdivision (e.g. 7,200 square feet per unit) is maintained, but individual lot sizes may be reduced to as little as 5,000 square feet or less. The difference in lot area (e.g. 2,200 square feet) is allocated in common open space. The minimum tract size is sufficiently large (e.g. 3 acres or more).

Zero Lot-Line Development of single family detached housing within cluster or conventional residential subdivisions of small lots. A side yard on each lot is eliminated to permit flexibility in siting houses on the smaller lots. The minimum tract size is sufficiently large (e.g. 3 acres or more).

Single Family Attached and Multifamily Development of middle-high density (e.g. 6-12 units per acre) and where clustering of buildings preserves natural amenities in common open space. Direct access to a major street and a sufficiently large tract of land are required (e.g. 3 acres or more).

Planned Residential Development of mixed housing types at a moderate gross density range of 4-8 units per acre. However, net density within various portions of the development may be high (e.g. 16 units per acre). Further, the development may include a combination of conventional housing, cluster housing, zero lot-line housing, townhouses, and garden apartments. This development requires a large tract of land (e.g. 10 acres or more).

Planned Community Development of middle density residential development and to a limited degree, office parks, neighborhood shopping centers, and supporting retail development. A very large tract size of 25 acres or more is usually required, and a maximum amount of retail land use is set (e.g. 10 percent of the total tract).

Community Activity Centers which serve the neighboring residents' needs, such as parks, schools, churches, recreational facilities, and community clubs.

Land Use Guidelines. Policies to guide the use and development of land include:

- Manage the rate, location and amount of new residential growth according to the capacity and availability of public services and facilities, particularly water, sewer, streets, and schools.
- Encourage innovation in residential land development and building design.

- Encourage clustering of lots in single family detached housing developments in order to preserve open space.
- Provide bonuses in density and housing type for large-scale residential projects that provide common open space and recreational facilities and that achieve environmental design objectives; promote clustering of attached and multifamily housing units.
- Encourage diverse housing types in large-scale residential projects.
- Provide a maximum degree of land use mix in very large-scale developments; combine living areas with working and shopping areas.
- Provide activity centers of schools, churches, parks, and recreation facilities that benefit new community residents.
- Permit attached and multifamily development, provided exceptional housing design and site planning techniques are employed to achieve compatibility.
- Where a residential project has a significant increase in density from a surrounding neighborhood, the project should provide direct access to a collector or arterial street, rather than share the local street network of an adjoining neighborhood.

TRANSITION

Land Use Types. Compatible land use types include:

Office and Institutional Uses - particularly planned office parks and large independent facilities in park-like surroundings.

Retail Uses - to a limited degree if clustered or within a planned shopping center.

Multifamily Residential - planned garden apartments at a very high density of up to 24 units per acre.

Single-Family Attached Residential - planned townhouse communities of six or more units per acre.

Parks - public facilities and private, outdoor recreational activities, such as golf courses, tennis courts, and swimming pools.

Land Use Guidelines. Policies to guide the use and development of land include:

- Prevent haphazard commercial sprawl along major highway strips.
- Encourage new retail uses to develop in planned shopping centers or in planned groupings of independent buildings.
- Where opportunity exists, reserve frontage strips for major office facilities.
- Encourage the development of planned residential projects with controlled, common access to major frontage streets; conversely, discourage the subdivision of individual frontage lots for single family housing.
- Limit the conversion of detached housing units into retail and office uses, unless sites are combined to create unified development projects.
- Permit, to a very limited extent, the development of light industrial parks provided exceptional design measures would assure compatibility with adjacent properties.

- Coordinate vehicular and pedestrian movement among adjacent sites; provide shared access and parking agreements where possible, limit the frequency of driveway openings, and establish minimum frontage lot widths.
- Enhance the quality of highway frontage development, particularly with respect to the following items:
 - Signs should be kept to a minimum and not distract passing motorists.
 - Front yards should be landscaped and maintained.
 - Outstanding vistas should be protected.
 - Natural site features should be conserved as amenities to development.
 - Building facades should be prominent from street view, rather than signs, parking lots, and driveways.
- Provide strict screening and buffering standards along the rear property lines where frontage development backs up to less intensive residential uses.

CORE

Land Use Types. Compatible land use types include:

Shopping Centers, as generally defined here:

	<u>Neighborhood Center</u>	<u>Community Center</u>	<u>Regional Center</u>
Leading Tenant	Supermarket or drugstore	Variety store or small department store	One or more major department stores
Total No. of Stores	5-15	15-40	40+
Service Area	½-2 mile radius	2-4 mile radius	4+ mile radius
Population Support Needed	2,500- 35,000 persons	35,000- 150,000 persons	150,000+ persons
Gross Floor Area	30,000- 100,000 sq. ft.	100,000- 300,000 sq. ft.	300,000+ sq. ft.
Site Area	3-10 acres	10-30 acres	30+ acres

General Retail Shops and Personal Services that are not within a planned shopping center are encouraged to cluster within Core areas.

Office and Institutional Uses.

Multifamily Residential Uses at a high density of 12-24+ units per acre (garden apartments) and to a limited extent, mid-rise apartments (more than three stories).

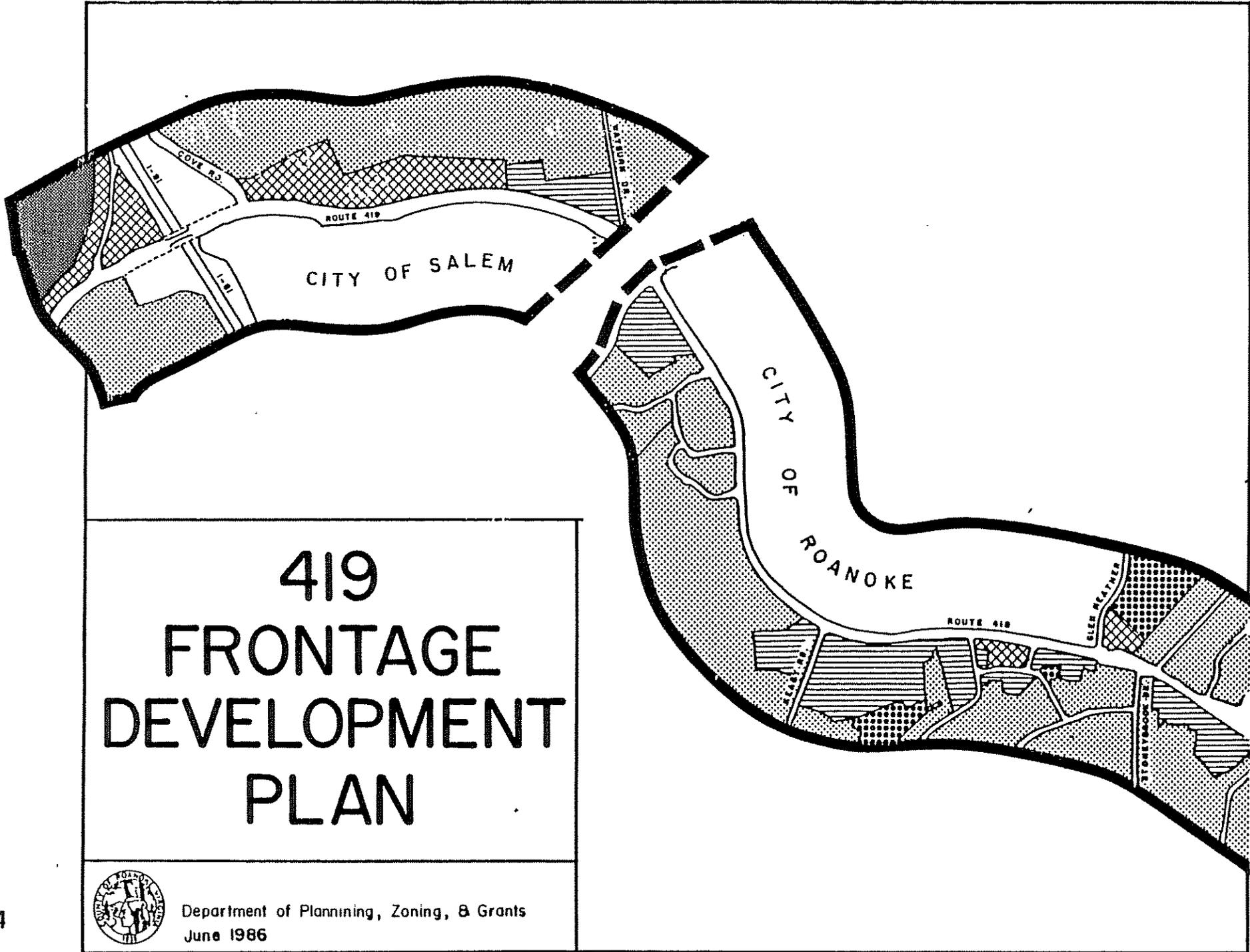
Single Family Attached Residential at a middle to high density of 6+ units per acre (townhouses and patio homes).

Land Use Guidelines. Policies to guide the use and development of land include:

- Encourage the development of intensive, mixed-use urban development in designated Core areas.
- Service each Core area by an arterial or higher grade street.
- Link the County Cores with the cities of Roanoke and Salem, and the Town of Vinton by public transit service.
- Coordinate the design of commercial sites, particularly in regards to the following items:
 - site to site movement for vehicles, pedestrian, and bicycles should be easy;
 - vehicular access points to public streets should be kept to a minimum and if feasible, shared among sites;
 - building size, shape, height, and materials should complement adjacent buildings;
 - signs should enhance the overall character of the Core district and not be a visual distraction for motorists;
 - natural site amenities, especially slope and trees, should be conserved to the maximum practical extent.
- Provide separation, screening, and buffering along the edge of Core areas for the purpose of reducing nuisances with less intensive development, particularly single family detached residential.
- Encourage the development of high density residential in Core areas, yet provide protective safeguards from adjoining commercial land use disturbances.
- Establish landmarks--public buildings, monuments, squares, mini-parks, etc.--that would strengthen the identity of community Core areas.

FUTURE DEVELOPMENT CONCEPT

The map which follows illustrates one of many alternative land use patterns which could occur, provided future development follows the land use goals, the future land use map, and the land use guidelines for 419.



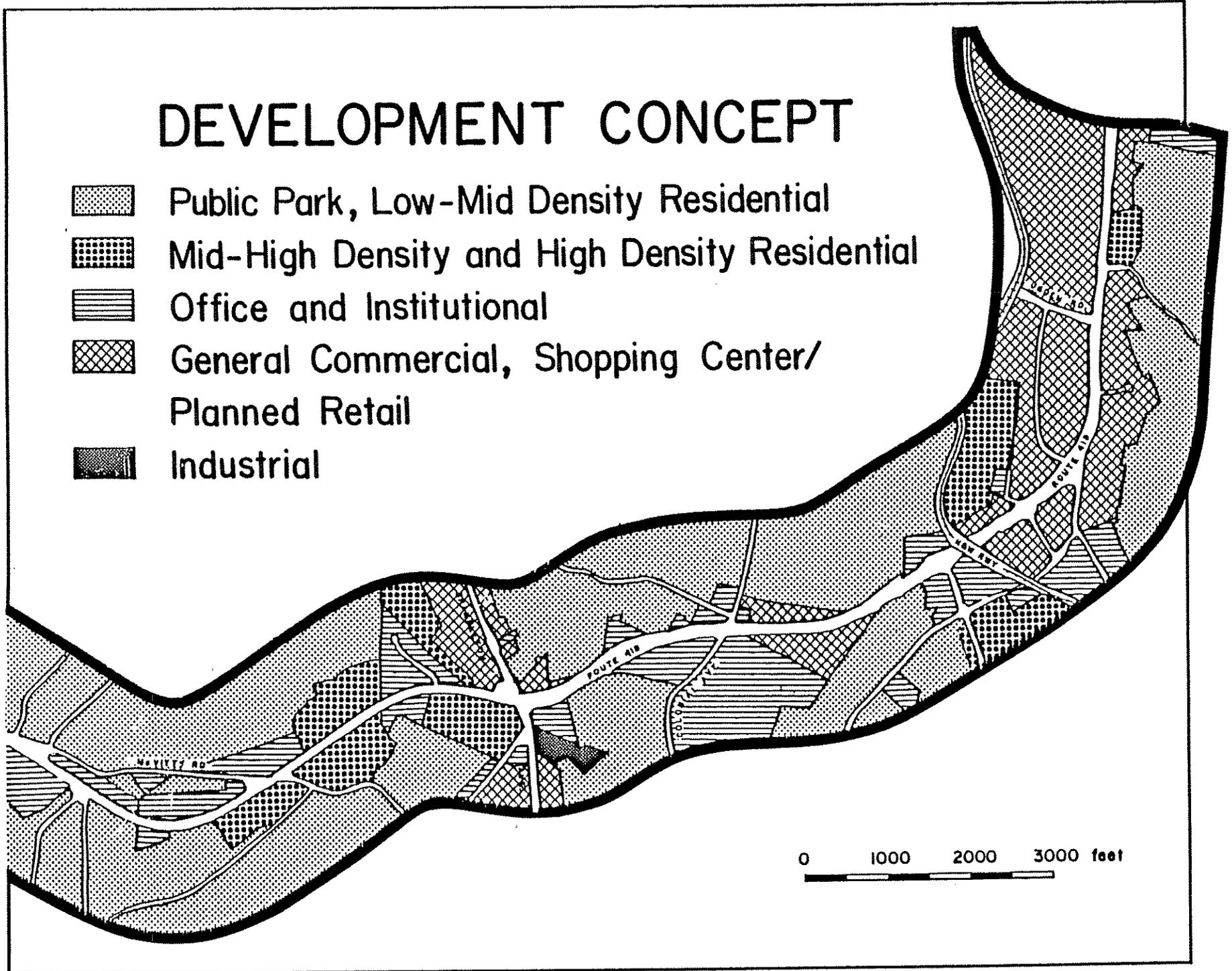
419
FRONTAGE
DEVELOPMENT
PLAN



Department of Planning, Zoning, & Grants
June 1986

DEVELOPMENT CONCEPT

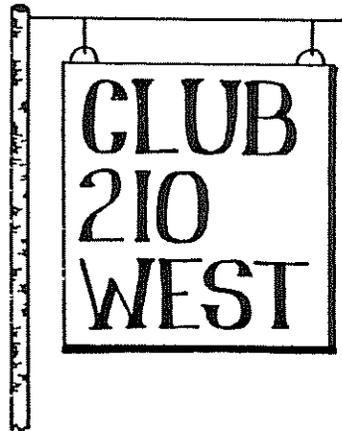
-  Public Park, Low-Mid Density Residential
-  Mid-High Density and High Density Residential
-  Office and Institutional
-  General Commercial, Shopping Center/
Planned Retail
-  Industrial



DESIGN OF SIGNS



Proposed Design



Alternative

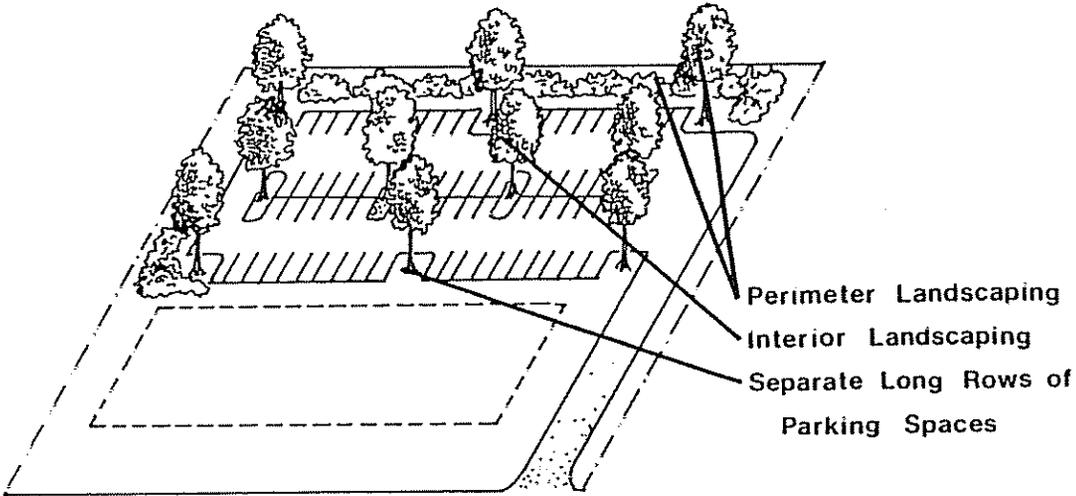
Limited Message
Simple Geometric Shape
Consistency of Lettering Style
Adequate Spacing

URBAN DESIGN

SIGNAGE

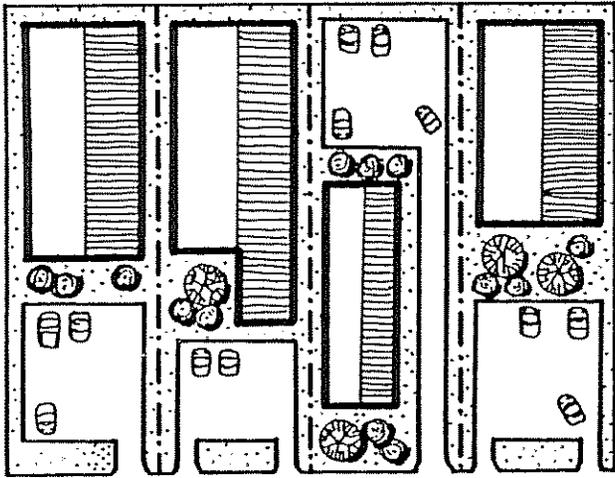
- Message. Limit the length of the message so that a passing motorist can read the sign within three to four seconds.
- Shape. Use simple geometric shapes or combination of shapes.
- Size. Use the minimum size necessary to accommodate the message.
- Layout. Reflect good taste and aesthetics, paying attention to:
 - consistency of lettering style,
 - adequate spacing of letters, words, and lines,
 - effective use of contrasts,
 - use of logos and symbols,
 - compatible coloring, and
 - complementary style with building architecture.
- Illumination. Illuminate for the sole purpose of making the sign visible at night, when nighttime business hours require advertisement.

PARKING LOT LANDSCAPING

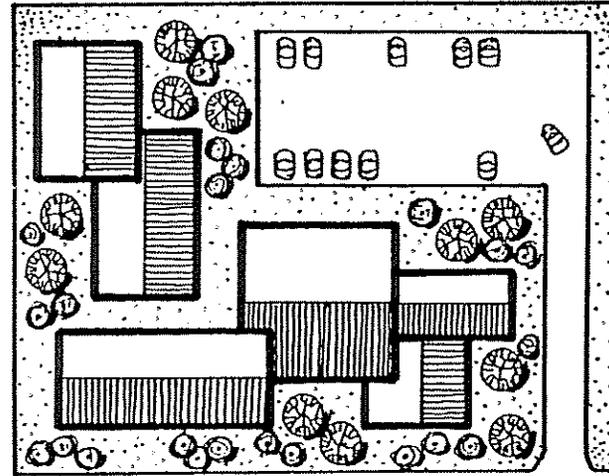


PARKING LOTS

- Landscaping
Screen parking lots from street view. Landscape the perimeters and interiors of parking lots. Separate long rows of spaces with planting islands. The heights of plantings should not interfere with sight distances at driveway openings and street intersections.
- Location
Encourage businesses to locate parking to the rear and sides of buildings. Street frontage should be devoted to building architecture and landscaping.
- Lighting
Parking lot lighting should be directed to the interior of the lot and not project glare onto the street or adjacent properties. Height of lighting should be consistent with the scale of adjacent buildings.
- Shared Parking
Encourage adjacent businesses to share parking and access. Discourage access barriers in parking lots of adjacent businesses.



Individual Development
of Small Sites



Planned Building Group

SITE LAYOUT

Building Orientation and Setback

- Buildings should be prominent from the public street view, using the building architecture as a means of business advertisement.
- Setbacks should be determined according to the ultimate right-of-way, accounting for any future street widenings.

Building Scale

- Tall buildings should be limited to Core locations except in Transition areas where additional landscaped yards are maintained on large properties.
- Size of buildings on small parcels should approach a residential scale.

Lot Coverage

- Total lot coverage should be far less in Transition areas than in Core areas.

Planned Building Groups

- Encourage the development of unified groupings of small scale buildings for retail and office uses rather than piecemeal development of small business and office sites.

SCREENING AND BUFFERING

Encourage the protection of single family neighborhoods from intensive development of frontage parcels in accordance with the County's zoning requirements for screening and buffering. A summary of those requirements follows:

<u>Frontage Development</u>	<u>Screening and Buffering Protection to Single Family Residences</u>
1. Duplex, townhouse, multifamily residential	<ul style="list-style-type: none">● 4 foot high screening, within a 7 foot wide buffer yard, planted with small evergreen trees; or● 15 foot wide buffer yard, planted with small evergreen trees and one row of evergreen shrubs
2. Office and Institutional	<ul style="list-style-type: none">● 6 foot high screening, within a 15 foot wide buffer yard, planted with small evergreen trees; or● 25 foot wide buffer yard, planted with small evergreen trees and one row of evergreen shrubs
3. Retail	<ul style="list-style-type: none">● 6 foot high screening, within a 25 foot wide buffer yard, planted with large evergreen trees; or● 35 foot wide buffer yard, planted with large evergreen trees and small evergreen trees

BEAUTIFICATION

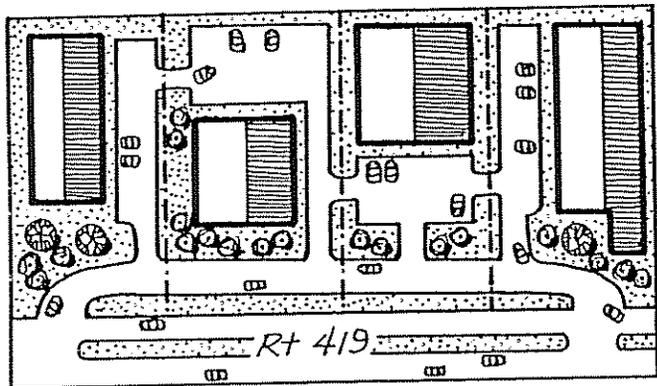
Public Landscaping

- Create a landscaped entryway into Roanoke County at the Tanglewood Core.

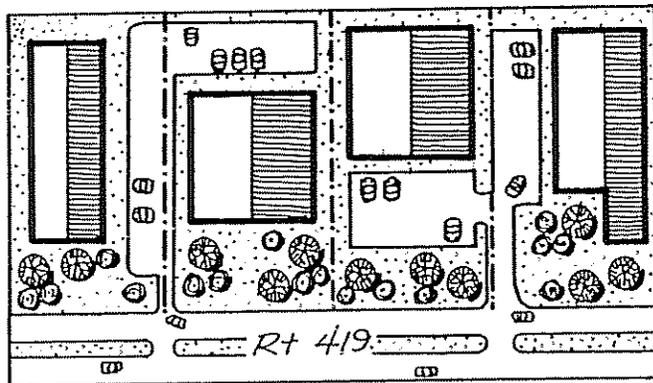
Private Initiatives

- Encourage private sector initiatives to beautify individual properties.

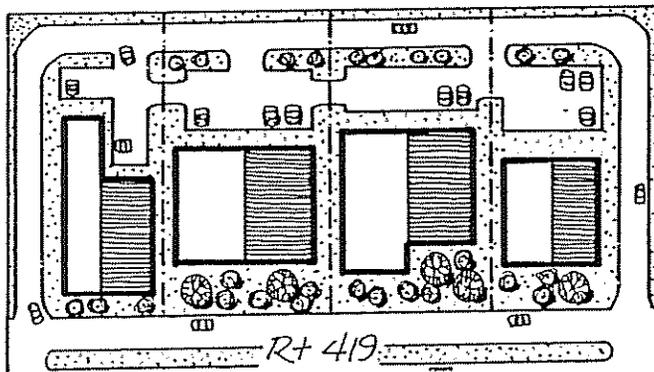
ACCESS CONTROLS



a. Parallel Frontage Road



b. Shared Access



c. Reverse Frontage Road

TRANSPORTATION

ACCESS

Frequency of Driveways

- Access should be limited to one ingress/egress per 300 feet of lot frontage.

Driveway Spacing

- Spacing of driveways should approach 300 feet where feasible.
- Re-subdivision of wide frontage properties to lots of less than 300 feet width should be avoided unless all properties share access among private drives or dedicated public frontage roads.

Access Controls

- Control access to small individual parcels by use of:
parallel frontage road access,
shared access, and
reverse frontage access.

TRAFFIC IMPACT

Evaluate the traffic impact of frontage developments and take measures to decrease the flow into adjacent residential neighborhoods.

ENVIRONMENTAL QUALITY

SLOPE PROTECTION

- Restrict development on large land areas of steep slopes.
- Use areas of steep slope as natural amenities to development.
- Preserve natural swales to assist drainage.

TREE PROTECTION

- Restrict development on large land areas of mature tree cover.
- Use mature tree cover as natural amenities to development.
- Preserve mature tree cover to control the rate of stormwater runoff.

FLOODPLAIN AND STREAM PROTECTION

- Restrict development of floodplains and streams.
- Use floodplains and streams as natural amenities to development.
- Preserve floodplains and streams to assist drainage.

IMPLEMENTATION

IMPLEMENTATION

The implementation recommendations of the plan are necessary to achieve the goals established for 419 frontage development. These actions should implement the guidelines for the future development.

REZONING PROCEDURES

- Maintain consistency of rezoning actions with the adopted Future Land Use Guide Map for the 419 Corridor.
- Encourage petitioners for rezoning to proffer conditions which address:
 - land use,
 - signage,
 - parking lots,
 - site layout,
 - environment protection,
 - access,all in accord with the adopted guidelines of this plan.
- Encourage petitioners to supplement conditional rezoning applications with sufficient data necessary to assess consistency with the guidelines of this plan.

ZONING ORDINANCE

- Enact new zoning performance standards to implement the guidelines of the plan as they relate to major highway corridors.

STORMWATER MANAGEMENT

- Enact new drainage standards that are more stringent than the minimum state requirements.
- Install public stormwater management facilities in cooperation with the cities of Roanoke and Salem.

CODE ENFORCEMENT

- Decriminalize sign ordinance violations so that a zoning ticket--the equivalent of a traffic ticket--may be issued by zoning enforcement officials.
- Continue to support the strengthened zoning enforcement program that was recently initiated.
- Continue to apply the adopted zoning performance standards for screening and buffering.

BEAUTIFICATION

- Fund the landscaped entryway at Tanglewood through the Sesquicentennial 419 Beautification Project.
- Establish the Appearance Improvement Commission as recommended by the Planning Commission.
- Recognize outstanding private initiatives through a beautification awards program.

TRAFFIC MANAGEMENT

- Support the continued study of transportation issues in the 419 Corridor.
- Use the transportation planning services of the Fifth Planning District Commission to evaluate the traffic impact of rezoning proposals along 419.

APPENDICES

APPENDIX A. 75/25 BALANCE PLAN

AT A REGULAR MEETING OF THE BOARD OF SUPERVISORS OF ROANOKE COUNTY, VIRGINIA HELD AT THE ROANOKE COUNTY ADMINISTRATION CENTER IN ROANOKE, VA., ON TUESDAY,

MEETING DATE: July 8, 1986

SUBJECT: 75/25 Balance Plan

COUNTY ADMINISTRATOR'S COMMENTS:

Recommend approval

SUMMARY OF INFORMATION:

On June 17, 1986, the Board of Supervisors and the Planning Commission members attended a presentation on the 75/25 concept. It was shown that the present residential/commercial-industrial ratio of 83.4/16.6 reflects an imbalance in the tax base ratio. The suggested ratio of 75% residential and 25% commercial and industrial parcels would provide a more stable and balanced mix. This 75/25 ratio would more appropriately support the public services rendered to the respective benefactors while lessening the tax load on both residential and commercial-industrial parties.

Growth is likely to occur in both residential and commercial-industrial areas in Roanoke County. Our recent trends indicate that residential development has grown at a very rapid pace from about 27,000 parcels in 1982, to over 28,000 parcels in 1985. Commercial-industrial development has also grown but at a much slower pace gaining only 109 parcels for the same period (1,225 parcels in 1982 to 1,334 parcels in 1985). These trends suggest increasingly disproportionate growth between both areas.

Growth of both residential and commercial-industrial sectors should be supported, yet it is vital to the future economic health of Roanoke County that this growth be balanced.

In order to ensure that a balanced mix between residential and commercial/industrial parcels is generated, stated public policy, the Comprehensive Plan, financing, zoning, and capital improvements must be taken into consideration and new policies developed. Both the Board of Supervisors and the Planning Commission will be requested to implement the tools required to encourage future approaches to meeting the 75/25 objective.

FISCAL IMPACT:

A 75/25 balance would allow for thousands of dollars of revenue generation for Roanoke County while lessening the proportional tax load for residents.

RECOMMENDATION:

It is recommended that the Board adopt the 75/25 ratio as a target goal and that Roanoke County's policy will be to achieve a target ratio of 80/20 by 1990 and 75/25 by the year 2000. Actions of the Board and staff should reflect this goal. Particular emphasis on fiscal management, comprehensive planning and capital improvement programming will be used to implement the policy. A formal economic development strategy will be prepared to detail the tools and evaluation criteria by the end of August 1986.

SUBMITTED BY:


 Brent D. Sheffler
 Economic Development Specialist


 Elmer C. Hodge, Jr.
 County Administrator

		ACTION	VOTE		
			No	Yes	Abs
Approved (X)	Motion by:BJ to concur w/staff				
Denied ()	recommendation w/the establish-	Brittle		X	
Received ()	ment of the appropriate commit-	Garrett		X	
Referred	tee (PC Chairman, BOS Chairman	Johnson		X	
To _____	ECH, TWG, RAS, and Brent	McGraw		X	
_____	Sheffler)/LG	Nickens		X	

07/10/86

APPENDIX B. TANGLEWOOD AREA SIGN ENFORCEMENT STUDY

The staff examined the sign situation in the Tanglewood Core area to get an idea of the extent of sign violations in a densely developed office and commercial area, and to estimate the work involved for the staff in enforcing the sign ordinance. Two staff members viewed each parcel within the Core area boundaries and recorded the dimensions and location of each sign on the property. The allowable sign area was calculated from the linear street frontage of each business and compared with the actual sign area on the property. The dimensions and location of each sign were evaluated with the sign ordinance regulations to identify any violations. Sign permits for these signs were not checked, but once a filing system for the permits is established, little time will be involved in checking for valid permits.

Findings

The existing signs in the Tanglewood Core area combine to present a visually cluttered appearance to motorists, and the problem doesn't seem to be related to a high number of sign violations. Out of approximately 224 signs examined in 65 businesses and 4 shopping centers, 16 sign violations were identified in 11 businesses. These violations involved: eight temporary signs--one not allowed in the zoning district, five located less than 15 feet off of the right-of-way and two businesses with pennants; two businesses with logos painted directly on the walls, four freestanding permanent signs less than 15 feet off of the right-of-way; and one business with two freestanding signs on less than 150 feet of street frontage. Only one business possibly exceeded the allowed sign area, and that was due to its location on a pipe stem lot with only 25 linear feet of street frontage.

The square feet of sign area allowed for a business is calculated per linear foot of street frontage. This method generally allows an unnecessarily high amount of sign area. For example, the Tanglewood West frontage on Starkey Road, is allowed over 2200 square feet of sign area (B-2 zoning is allowed 3 square feet per linear foot of frontage). The wall signs they have on both sides of the building add up to approximately 250 square feet.

Recommendations

The existing sign ordinance can be enforced in a relatively simple but very time-consuming process. An estimate of the total time required to cover an area the size of the Tanglewood Core area follows:

<u>Procedure</u>	<u>Man-hours</u>
a. Examine signs in the field	6 (2 staff members at 3 hours each)
b. Calculate allowable sign area and compare sign information with the ordinance	2-3
c. Research sign permits (under new file system)	2-3
d. Send letters to property owners notifying them of sign violations	No estimate--depends on number of sign violations
e. Process of correcting violations	

Correcting the existing violations may be costly to businesses and bring challenges from property owners whose signs have been in place for many years. This may also accomplish little else for the community; the character and appearance of the area will most likely remain unchanged.

If time is going to be spent enforcing a sign ordinance, it may best be spent enforcing a stricter ordinance than the existing one. Approximately the same amount of time would be spent on the initial field inspections, but the time allowed for paperwork would increase as more existing signs would be in violation of the new ordinance. The ordinance should also require businesses to comply with the regulations by the end of a period of time--10 years, for example. During this time, new signs should be carefully checked with the ordinance regulations before a permit is issued, and a follow-up inspection should be made once the sign is in place. Approximately five to ten sign permits are issued each month, and this inspection should take no more than 1 to 1½ hours per business. Field time and paperwork would increase drastically at the end of this period of time in order to inspect all signs for compliance with the ordinance. Again, moving and changing signs may be costly to the businesses in violation, but the end result will be a noticeable reduction in the cluttered and confusing assembly of signs in the area.

Recommendations for a new sign ordinance include:

1. Reduce the allowed square feet of sign area. There should be a set limit to the maximum sign area allowed for businesses on a property, not a varying limit based on street frontage. While very few businesses come close to the allowable limit under the present ordinance, many businesses have so much signage that it is difficult for a motorist to decipher it all.
2. Limit the number of signs allowed on a property. When many signs are spread over a business's building and grounds, the information is difficult to read. This also contributes to the cluttered appearance of an area.
3. Reduce the height of freestanding signs. At the allowable heights now in existence, signs from several businesses come together in a confusing conglomeration at eye level to the motorist. Lowering the signs would open up the area and give it a less crowded appearance. Motorists can still read signs such as those in front of K-92 and Boone and Company at a distance. When located at the proper setbacks, these signs do not interfere with the motorists' ability to see cars pulling out of driveways.

Table I shows the permitted and actual sign area of each business located in the Tanglewood Core area. The figures reported for permitted and actual sign areas do not include temporary or off-site general advertising signs.

Tanglewood Core Area

Key to Sites

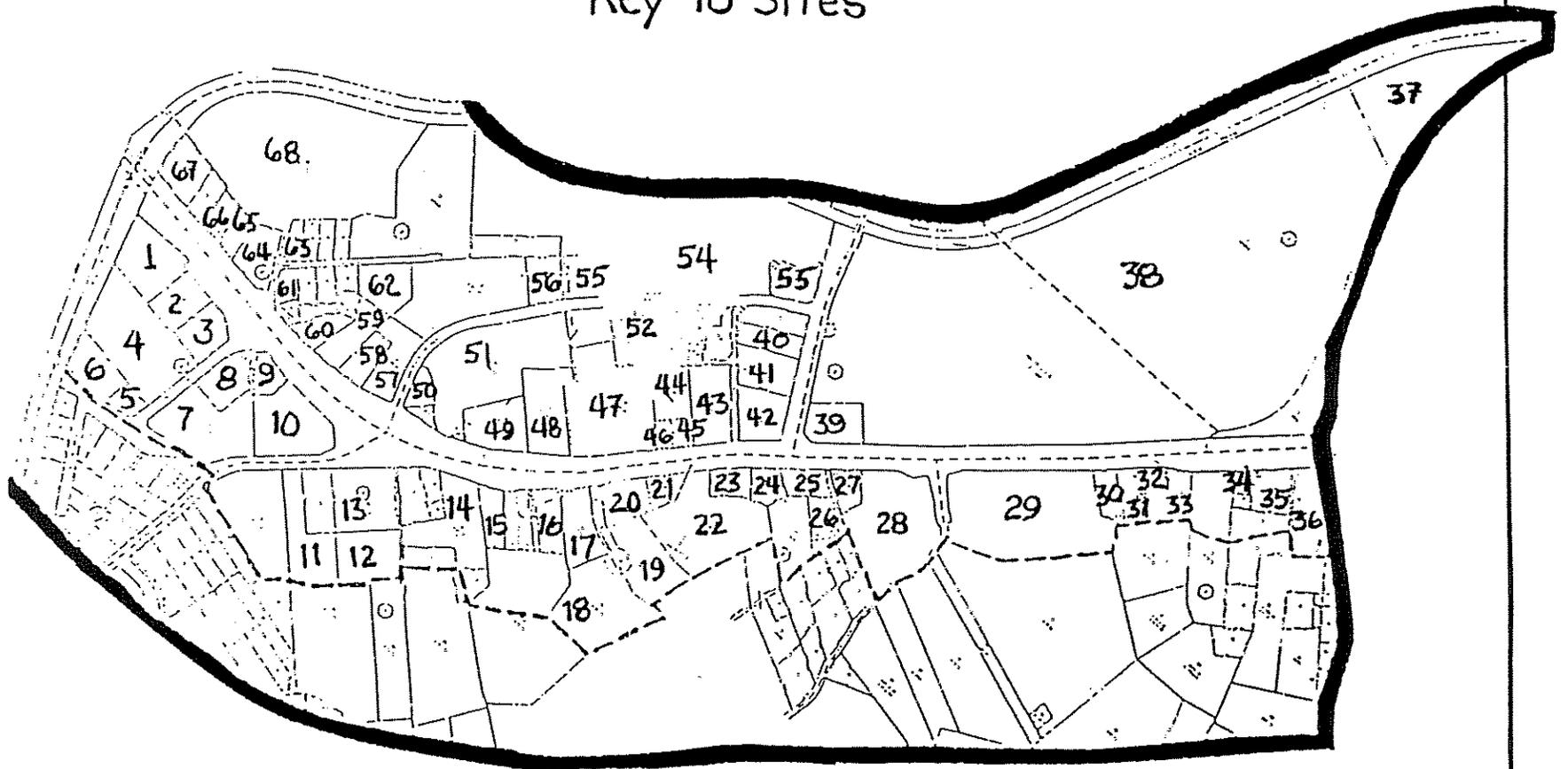


TABLE I. SIGN AREA COMPARISON (PERMITTED V. ACTUAL)

SITE # ¹	ZONING	LAND USE	BUSINESS	PERMITTED ² SIGN AREA (SQ.FT.)	ACTUAL ³ SIGN AREA (SQ.FT.)
1	B2	Open	---		Billboard
2	B3	Spec. Comm.	Golden Corral	700	70
3	B3	Spec. Comm.	Shoney's	757	75
4	B2	Office	Travelers	876	50
5	B2	Office	Strauss Construction Co.	698	10
6	B2	Office	Law Offices	690	30
7	B2	Office	Penn Forest Corp. Cent.	2430	12
8	B3	Shop. Cen.	The Corners	1181	90
9	B3	Spec. Comm.	ETNA	801	90+Billboard
10	B2	Office	Tanglewood West	2256	250
11	B2	Inst.	Roanoke Ath. Club	255	15
12	B1	Office	Southpark	255	20
13	B2	Office	Professional Park	1701	15
14	B2	Comm.	Bob Bell Nissan	805	75
15	B2	Open	(Sale of land)	665	72
16	B2	Comm.	Bojangles	348	120
17	B3	Spec. Comm.	Ground Round	1782	41+Gen.Ad.
18	B3	Spec. Comm.	Show Biz	420	80+Temp.
19	B3	Spec. Comm.	McDonalds	1088	45
20	B2	Vacant Bldg.		600	0
21	B2	Comm.	Automotive 1	560	100+Temp.+Billboard
22	B3	Spec. Comm.	Steak-N-Ale	382	48
23	B2	Comm.	Air Lee/Mr. Formalwear	542	63
24	B2	Comm.	Famous Anthony's	375	47+Temps.+Billboard
25	B3	Spec. Comm.	Exxon	800	62+Temp.

SITE # ¹	ZONING	LAND USE	BUSINESS	PERMITTED ² SIGN AREA (SQ.FT.)	ACTUAL ³ SIGN AREA (SQ.FT.)
26	B2	Office	Cypress Park	62	48
27	B2	Comm.	Grand Interiors	417	18
28	B2	Shop. Cen.	Grand Pavillion	3030	175
29	R3	Multifamily	Avenham Manor	16	10
30	B2	Comm.	Fan City/Color Tile	300	96
31	B3	Spec. Comm.	Wendys	390	48
32	B2	Comm.	Photo USA	240	74
33	B2	Comm.	Pearle Vision	311	105
34	B2	Comm.	Woodmaster	150	12+Chair+Temp.
35	B2	Office	Dominion Fed.	558	45
36	B2	Open			
37	B2	Shop. Cen.	Tanglewood	2100	222
38	B2	Shop. Cen.	Tanglewood	12975	1592
39	B3	Spec. Comm.	Mac-N-Maggies	1680	99
40	B2	Comm.	Snappys	298	81+Temp.
41	B2	Office	Colonial American Bank	525	23
42	B2	Office	Charter Federal	1140	132
43	B2	Comm.	Ethan Allen	510	45
44	B2	Comm. Inst.	Living Well	75	90+Temp.
45	B2	Office	National Optical	210	33
46	B2	Office	Lewis Gale Clinic	210	33
47	B2	Comm.	Winn Dixie/Revco	1035	308
48	B3	Spec. Comm.	Hardees	728	55
49	B3	Spec. Comm.	Jiffy Lube/Hot Z	800	23
50	B2	Open		General Advertising	
51	B2	Comm.	Holiday Inn	2010	100

SITE # ¹	ZONING	LAND USE	BUSINESS	PERMITTED ² SIGN AREA (SQ.FT.)	ACTUAL ³ SIGN AREA (SQ.FT.)
52	B2	Office	Tanglewood Prof. Ctr.	1896	60
53	B2	Office	First Virginia	1051	36
54	B2	Shop. Cen.	Tanglewood Square	2610	640
55	B2	Office	Under construction		Temp.
56	B2	Office	Dr. and Law Offices	450	20
57	B2	Office	Sovran Bank	1410	46
58	B2	Comm.	Step Above/Circuit City	386	101
59	B2	Office	K92	420	81
60	B2	Office	Boone & Co.	450	30
61	B2	Comm.	Dom. Bank Drive Thru	693	4
62	B2	Inst.	Rke. Acad. of Gym.	720	9
63	B2	Office	The Phoenix Group	817	2
64	B2	Office	Dominion Bank	1459	50
65	B2	Comm.	Glidden Paints	311	93
66	B2	Comm.	Entre Computer Center	287	28
67	B1	Open			Billboard
68	R3	Multifamily	Windy Hill Key	<u>16</u>	<u>30</u>
TOTAL				63,713	6,177

¹Site # is keyed to Tanglewood Core Area Map

²Permitted sign area is calculated: B1 1.5 sq.ft. sign area per linear foot of street frontage; B2 3 sq.ft./linear foot; B3 4 sq.ft./linear foot

³Actual sign area is estimated

Tables II and III show a distribution of the permitted and actual sign areas per business. The sixty businesses included in these tables are those businesses who sign areas are computed by the linear street frontage of the lot. The eight locations from Table I that are not included in Tables II and III are: four parcels of open land with billboards on them; two multifamily residential developments; one vacant building; and one building under construction.

TABLE II. DISTRIBUTION OF PERMITTED SIGN AREAS

SIGN AREA (SQ. FT.)	FREQUENCY (NUMBER OF BUSINESSES)	APPROXIMATE PERCENTAGE OF TOTAL
LT/E ¹ 100	2	3%
LT/E 250	6	10%
LT/E 500	23	38%
LT/E 750	35	58%
LT/E 1000	42	70%
GT ² 1000	18	---

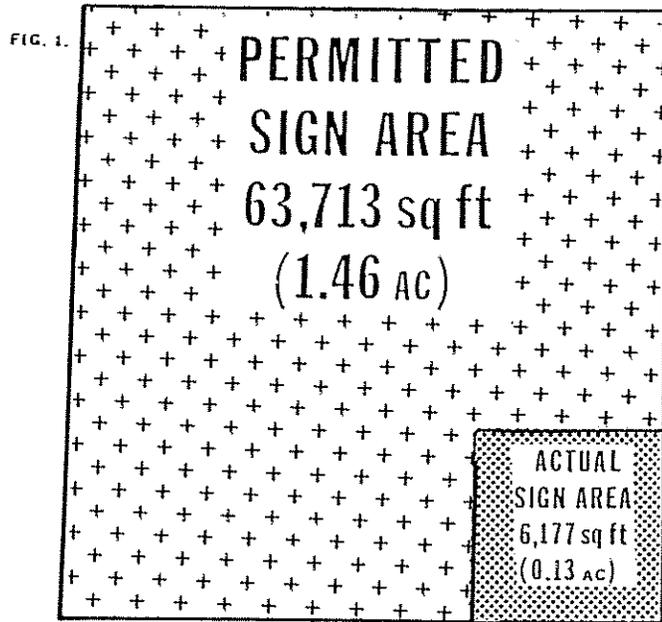
TABLE III. DISTRIBUTION OF ACTUAL SIGN AREAS

SIGN AREA (SQ. FT.)	FREQUENCY (NUMBER OF BUSINESSES)	APPROXIMATE PERCENTAGE OF TOTAL
LT/E 25	13	22%
LT/E 50	30	50%
LT/E 75	39	65%
LT/E 100	50	83%
GT 100	10	---

¹Less than or equal to.

²Greater than.

Figure 1 illustrates the actual square feet of signage in the study area compared with the permitted feet of signage.



The actual sign area in the Tanglewood Core area is approximately 9.7% of the total permitted sign area, indicating an unnecessarily loose sign ordinance. Table IV shows that if the regulations in the existing ordinance were reduced by as much as 90%, over one-half of the businesses would be in compliance with the new standards.

TABLE IV. REDUCTIONS IN SIGN REGULATIONS & SUBSEQUENT COMPLIANCE

REDUCTION IN EXISTING REGULATIONS	BUSINESSES STILL IN COMPLIANCE
95%	18
90%	34
85%	44
80%	49