III. POTENTIAL FOR RETAIL DEVELOPMENT

A thorough economic evaluation has been conducted of Reston's potential as a major retail center to serve not only its own resident population but also the population living within a ten-mile radius of Reston's planned urban center.

First we examined growth trends in Fairfax County, translating them into space requirements for major types of shopping facilities. We then interpreted these findings in terms of Reston's opportunity to serve as a regional shopping center for a population that may reach 280,000 by 1980.

Trends in Fairfax County

As shown in Figure 2, retail sales in Fairfax County are expected to continue to increase at a greater rate than for the metropolitan area as a whole or the Maryland portion thereof. This rate of growth is in part a reflection of the rapid rise in population anticipated for that County in the next two decades. It is important to note, however, that retail sales are outstripping population growth trends. Between 1948 and 1958, for example, retail sales rose by almost 500%, while population figures registered only a 170% increase. Our projections to 1980 indicate that retail sales will take another 600% leap over 1958, while population during the same period will grow by a mere 200%.

This spectacular increase in retail sales is attributable to the following factors:

- Per-capita disposable income in Fairfax County will rise from \$2680 in 1958 to approximately \$3835 in 1980, on the basis of a constant dollar. This increase will enable the housewife to devote a larger share of available funds to the purchase of non-food items.
- 2. The Fairfax County resident is spending a rapidly growing share of his retail disposable income within the County, i.e., within convenient access of his home. In 1948, the average resident spent only 21% of his retail disposable income here; by 1958, this proportion had risen to 43%. We are projecting further increases to 61% by 1970 and 75% by 1980 on the basis of recent sales trends in some of the more "mature" suburban areas of Washington, D. C., and other eastern metropolitan areas.

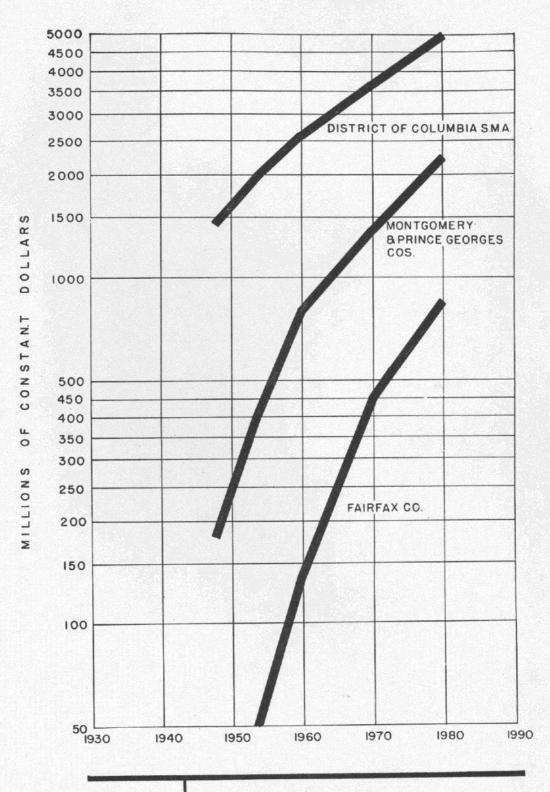


FIGURE 2 RETAIL SALES
IN MILLIONS OF CONSTANT 1954 DOLLARS
WITH ESTIMATES TO 1980

3. The most spectacular increases in Fairfax County retail sales between 1954 and 1958 were attributable to the so-called GAF (general merchandise, apparel, and furniture) stores (see Table 5). In our projection to 1980, the GAF stores continue to claim between 17% and 20% of all retail expenditures in Fairfax County, while the category of "other" retail stores, which includes the full range of specialty shops, is slated to double its share of the County's retail sales (see Table 9).

These trends point clearly to the opportunity for diversified, high-quality shopping centers to serve the growth areas of Fairfax County.

The Opportunity at Reston

A major shopping center at Reston would expect to serve the local community as well as the population living within convenient time-distance of the new facility. It would be meaningless at this time to attempt to delineate the shopping center's trade area because of uncertainties surrounding the ultimate circulation pattern and the future movements of population in the rural areas of Fairfax and Loudoun Counties. However, by extrapolating recent population shifts and assuming that the future shoppers at the Reston center will have at their disposal the same per-capita income as that projected for Fairfax County as a whole, the following estimates are obtained:

		Population		Total Re	tail Sales
	At Reston 000	Within 5 miles, ex- clusive of Reston 000	Within 10 miles 000	Reston + 5-mile zone (in const.	
1958 1970 1980	0 35 75	7.8 15-17 24-36	132 180-200 255-280	10 110+ 280+	166 300+ 500+

The following shopping-center floor-area requirements were then calculated on the assumption that:

(a) About 38% of total retail sales are accounted for by the so-called shopping-center-oriented establishments (see Table 9 for general merchandise, apparel, furniture, drug, and "other" retail store categories);

- (b) Between one-half and three-quarters of the sales attributed to the above categories would in fact be transacted in stores located in a shopping center (on the basis of 1954-58 construction trends in Fairfax County);
- (c) Sales average \$50 per net square foot.

1970

Shopping Center

1980

Trade Area	Sa	les	Sales-Area Requirements				
Reston + 5-mile Reston + 10-mile				420,000- 1,100,000-1			

Reston + 5-mile zone \$55-80 million 1,100,000-1,600,000 sq ft Reston + 10-mile zone 95-150 million 1,900,000-3,000,000 sq ft

This tabulation suggests that by 1970 Reston and the near-by environs will provide an adequate retail market for a "regional" type of shopping center. Such a center is described by the Community Builders Council as one having a minimum of 400,000 square feet of gross leasable area with a minimum population support (i.e., trade area) of 100,000 people. The prime tenants of such a center would include one or two full-line department stores as well as other units in the GAF group of retail stores.

Our calculation suggests further that by 1980 the floor-area requirements within the trade area will have grown to the point where a second shopping center may be warranted. The current trend in shopping-center construction suggests that the optimum size remains below 1,000,000 square feet of gross leasable area.

Not included in the shopping center estimates is the need for convenience-goods stores which, according to the physical plan for Reston, will be clustered in six or seven neighborhood shopping areas, each serving a population of about 10,000.

The following tables provide the quantitative background for our estimates of retail trade opportunities in Fairfax County and at Reston. Each table is preceded by a short interpretation of its most significant implications.

List of Tables

- Table 1 Retail Sales and Population in the Washington S.M.S.A., 1948-1958
- Table 2 Percentage Change in Retail Sales and Population in the Washington S.M.S.A., 1948-1958
- Table 3 Change in Per-Capita Retail Sales, 1948-1958
- Table 4 Percentage Distribution of Retail Sales within the Washington S.M.S.A.
- Table 5 Percentage Change in Retail Sales in the Washington S.M.S.A., 1954-1958
- Table 6 Number of Retail Establishments in the Washington SiM.S.A.

 1954 and 1958
- Table 7 Retail Sales per Establishment in the Washington S.M.S.A., 1954-1958
- Table 8 Projected Retail Sales for the Washington S.M.S.A., 1958-1980
- Table 9 Composition of Retail Sales in Fairfax County, 1954-1980
- Table 10- Space Requirements for Retail Activities in Fairfax County, 1954-1980
- Table 11- Estimated Increase in Square Feet of Retail Space to be Provided in Fairfax County
- Table 12- Percentage of Disposable Income Spent for Retail Purchases in Fairfax County, 1948-1970

The major factor influencing retail sales trends is the growth of an area's population. During the period 1948-1958, Fairfax County's share of the Washington Metropolitan Area's population doubled while its share of retail sales quadrupled. No other sub-area of the Metropolitan Area showed a comparable proportional increase in either population or retail sales. The District, in fact, experienced a relative decrease in both population and retail sales during this decade. Arlington County's share of population also decreased while that for Falls Church remained stationary.

While Fairfax County has shown an extraordinary growth pattern over the entire period 1948-1958, it also is worthwhile examining growth patterns for the two periods 1948-54 and 1954-58. Between 1948 and 1954, Fairfax County doubled its share of Metropolitan Area retail sales. During this same period, Falls Church tripled its share. During the subsequent four-year period, on the other hand, while Fairfax County again doubled its share of retail sales, Falls Church's share remained constant and Alexandria's and the District's decreased.

Note: The abbreviation "SMSA" used in the tables refers to the Standard Metropolitan Statistical Area, a term introduced by the Bureau of the Census for the Census of 1960. The SMSA consists of the sub-areas shown in Table I. For the sake of clarity, we refer to the SMSA as the Washington Metropolitan Area.

TABLE 1

RETAIL SALES AND POPULATION IN THE WASHINGTON S.M.S.A., 1948-1958

	(\$1,			PERCEI OF SMS	
	Actual	Adjusted to 1954 \$	Population	Sales	Pop. (c)
1948 ^(b)					
Fairfax County Arlington County Alexandria Falls Church Northern Virginia Maryland D.C.	\$ 19,846 93,441 67,201 7,277 187,765 180,745 1,102,716	\$ 21,113 99,405 71,490 7,741 199,749 192,282 1,173,102	85,000 118,000 56,000 6,500 266,000 324,000 770,000	1.3 6.4 4.6 0.5 12.8 12.3 75.0	6.3 8.7 4.1 0.5 19.6 23.8 56.6
S.M.S.A.	1,471,226	1,565,133	1,360,000	100,0	100.0
1954					
Fairfax County Arlington County Alexandria Falls Church Northern Virginia Maryland D.C.	\$ 54,458 181,306 120,271 30,064 386,099 425,292 1,193,955		160,000 147,000 73,000 8,500 389,000 496,000 790,000	2.7 9.0 6.0 1.5 19.3 21.2 59.5	9.6 8.8 4.4 0.5 23.2 29.5 47.2
S.M.S.A.	2,005,346		1,675,000	100.0	100.0
1958					
Fairfax County Arlington County Alexandria Falls Church Northern Virginia Maryland D.C.	\$ 131,949 242,406 135,987 36,363 546,705 651,044 1,304,135	\$ 124,363 228,470 128,169 34,272 515,275 613,615 1,229,160	230,000 160,000 85,000 9,500 485,000 635,000 770,000	5.3 9.7 5.4 1.5 21.9 26.0 52.1	12.2 8.5 4.5 0.5 25.7 33.6 40.7
S.M.S.A.	2,501,884	2,358,050	1,890,000	100.0	100.0

⁽a) Montgomery and Prince Georges Counties

⁽b) Figures for 1948 as given in the 1954 Census of Business, Vol. II, Part 2. Data in this source differ from those which appeared in the 1948 Census of Retail Trade.

⁽c) Arthur D. Little, Inc., estimates.

Fairfax County experienced the greatest relative increase in both retail sales and population in the Metropolitan Area during the decade 1948-1958. Falls Church was a close second to Fairfax County in the relative growth of retail sales but ranked only fifth in population increase. The District, which showed no change in population over the ten-year period, also registered the smallest percent increase in retail sales.

Once again, it is instructive to compare growth patterns for the two periods 1948-54 and 1954-58. Falls Church experienced its most spectacular growth in retail sales during the earlier period; its 1954-58 increase was limited to 14%. Fairfax County, on the other hand, shows a sustained growth pattern throughout the decade with some acceleration in the later years. The table demonstrates the well-known fact that retail sales follow population growth.

TABLE 2

PERCENTAGE CHANGE IN RETAIL SALES AND POPULATION IN THE WASHINGTON S.M.S.A., 1948-1958

(PERCENT)

			and the same of th				
	1948-1954			-1953	1948-1958		
	Retail Sales	Population	Retail Sales	Population	Retail Sales	Population	
Fairfax County	157.9%	88.2%	128.4%	43.8%	489.0%	170.6%	
Arlington County	82.4	24.6	26.0	8.8	129.8	35.6	
Alexandria	68.2	30.4	6.6	16.4	79.3	51.8	
Falls Church	283.4	30.8	14.0	11.3	342.7	46.2	
Northern Virginia	93.3	46.2	33.5	24.7	158.0	82.3	
Maryland (b)	121.2	53.1	44.3	28.0	219.1	96.0	
D.C.	1.8	2.6	2.9	-2.5	4.8	- 1	
s.M.S.A.	28.1	23.2	17.6	12.8	50.7	39.0	

⁽a) In constant 1954 dollars.

⁽b) Montgomery and Prince Georges Counties.

Fairfax County had the lowest per capita retail sales in the Metropolitan Area in both 1948 and 1958. This is due in part to the fact that most of the residents' non-convenience purchases are made outside the County. The percentage increase in per capita retail sales however was second only to that of Falls Church. Since per capita figures are independent of population growth, the rapid increase over the decade is a sure sign of expanding non-convenience goods sales in Fairfax County. It is worth noting that per capita sales in the suburban Maryland counties are still almost twice as large as Fairfax per capita sales—a clear indication of Fairfax's retail potential.

TABLE 3
CHANGE IN PER CAPITA RETAIL SALES, 1948-1958.

PER CAPITA RETAIL SALES (In constant 1954 Dollars)

	1948	1958	Percentage Increase
Fairfax County	\$ 248	\$ 541	118.1
Arlington County	842	1,428	69.6
Alexandria	1,277	1,508	18.1
Falls Church	1,191	3,608	202.9
Northern Virginia	751	1,062	41.4
Maryland ^(a)	593	966	62.9
D. C.	1,524	1,596	4.7
S.M.S.A.	1,151	1,248	8.4

⁽a) Montgomery and Prince Georges Counties.

Two categories--general merchandise and apparel--have substantially increased their share of total retail sales within Fairfax County between 1954 and 1958. The share of total retail sales spent for general merchandise almost quadrupled, whereas apparel, another shopping-center oriented category, more than tripled during the same period. General merchandise and apparel, as percentages of total retail sales in othersub-areas of the Metropolitan Area, registered only modest, if any, growth during these four years.

Furniture, also a shopping-center oriented category, more than doubled its share of total retail sales between 1954 and 1958 in Fairfax County; no other sub-area equalled this growth.

TABLE 4

PERCENTAGE DISTRIBUTION OF RETAIL SALES WITHIN THE WASHINGTON S.M.S.A.

	FAIR COUN 1954	TY	COUI	THE RESERVE AND ADDRESS OF THE PARTY OF THE	ALEX 1	NDRIA 1958	FALLS 1954	CHURCH 1958	NORT VIRG 1954		MARY 1954	LAND (b) 1958	D. 1954		S.M. 1954	S.A. 1958
CATEGORY																
Lumber	11.0%	6.8%	4.7%	4.0%	5.7%	4.3%	3.6%	4.9%	5.8%	4.8%	8.8%	5.3%	2.6%	2.5%	4.5%	3.9%
General Mer- chandise	2.7	10.1	19.2	19.1	7.8	8.1	3.3	1.0	12.1	13.0	7.9	9.5	14.9	14.1	12.9	12.7
Food	29.3	29.8	24.2	19.5	32.3	30.3	45.3	42.2	29.1	26.2	30.5	33.7	13.8	18.1	23.3	23.9
Automotive	18.8	10.2	16.0	18.7	23.3	21.4	16.5	14.9	13.7	17.1	18.5	16.1	14.9	14.1	16.4	15.3
Gas Stations	13.5	13.0	5.7	6.1	5.7	6.2	8.2	7.4	7.0	7.9	7.9	8.1	4.7	4.8	5.8	6.4
Appare1	2.1	7.3	6.5	4.3	5.2	6.1	5.2	7.8	5.4	5.7	4.0	4.5	8.8	9.1	7.2	7.2
Furniture	1.3	3.2	4.3	5.4	3.2	5.5	2.4	3.6	3.4	4.8	2.1	3.2	6.0	6.8	4.4	5.4
Eating	6.8	5.6	7.8	8.8	4.9	5.5	2.2	3.1	6.3	6.8	6.3	5.5	9.3	9.6	8.1	7.9
Drug	4.8	6.2	5.3	5.4	4.2	5.1	4.9	5.0	4.8	5.5	4.3	5.1	4.7	4.7	4.7	5.0
Other	7.2	6.2	5.9	7.9	6.4	6.4	7.2		5.3	7.1	6.7	6.2	13.1	14.1	10.7	10.5
Non-Store Retailing	2.4	1.6	0.4	0.9	1.2	1.1	1.1) ^{10,1} }	1.0	1.1	3.0	2.3	2.1	2.0	2.1	1.9
Total Sales (a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

⁽a) Components may not add to total because of rounding error.

⁽b) Montgomery and Prince Georges Counties

With the exception of two categories, Lumber and Automotive, Fairfax County registered a greater percentage increase in each retail sales category than any other subarea of the Metropolitan Area between 1954 and 1958.

Fairfax County's percentage increase in the five most important non-convenience sales categories--general mer-chandise, apparel, furniture, drugs, and "other"--far out-distanced the other sub-areas. It is indicative of the shopping-center explosion in this area.

TABLE 5

PERCENTAGE CHANGE IN RETAIL SALES (a) IN THE WASHINGTON S.M.S.A., 1954-1958

	FAIRFAX COUNTY	ARLINGTON COUNTY	ALEXANDRIA	FALLS CHURCH	NORTHERN VIRGINIA	MARY LAND (b)	D.C.	S.M.S.A.
CATEGORY								
Lumber	42.5%	5.3%	-20.3%	52 .4%	9.6%	-5.2%	1.3%	0.7%
General Merchandise	751.4	25.9	10.7	-64.3	44.0	73.4	-2.6	15.7
Food	131.8	1.4	.04	6.1	20.0	59.4	-1.2	20.8
Automotive	23.9	46.9	-2.0	2.6	21.6	26.0	-2.8	9.4
Gas Stations	118.8	35.4	15.8	2.3	50.1	48.0	6.8	28.8
Apparel	688.2	-16.5	26.1	71.6	42.2	61,6	6.2	17.9
Furniture	458.7	56.5	80.4	73.4	86.2	116,4	18.0	46.3
Eating	87.6	41.6	18.3	65.4	43.6	25,2	6.2	14.9
Drug	194.8	28.5	29.5	16.5	51.0	70.7	2.8	25.7
Other	94.9	68.5	6.0)		50,5	33,7	10.3	15.0
Non-Store Retailing	50.5	220.9	-2.4)	37.3	57.3	12.8	-2.7	7.3
TOTAL SALES	128.4%	26.0%	6.6%	14.0%	33.5%	44.3%	2.9%	17.6%

⁽a) In constant 1954 dollars

⁽b) Montgomery and Prince Georges Counties