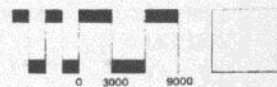




PRIMARY TRADE AREAS

- Town Center
- Reston Trade Area
- Remaining Trade Area
- 10 Minute Driving Time Distance
- 20 Minute

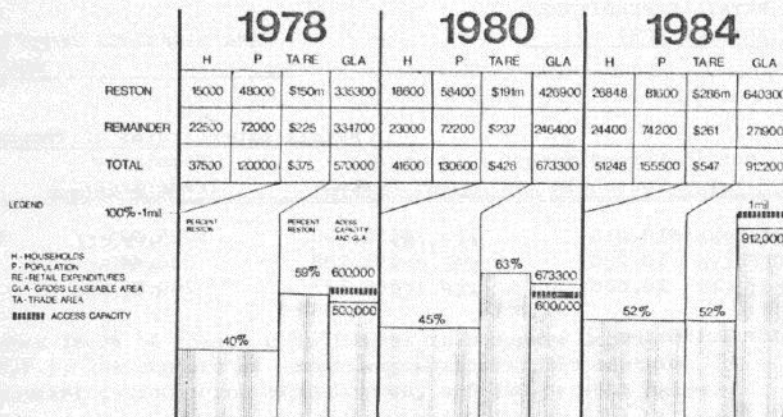


Reston Town Center

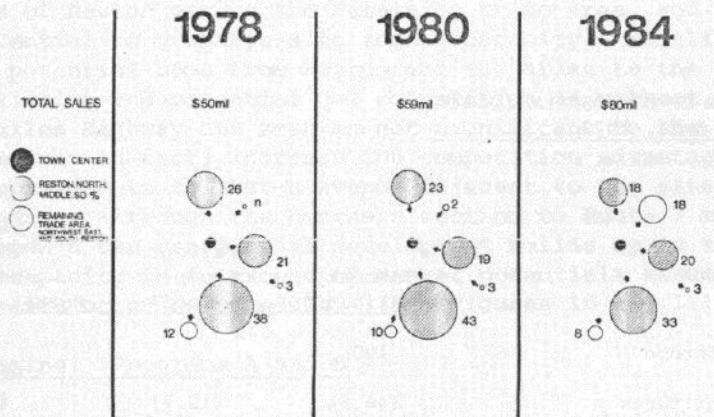
FIG. 10

DAVID A. CRANE AND PARTNERS
 ARCHITECTURE URBAN DESIGN PLANNING
 PHILADELPHIA HOUSTON BOSTON

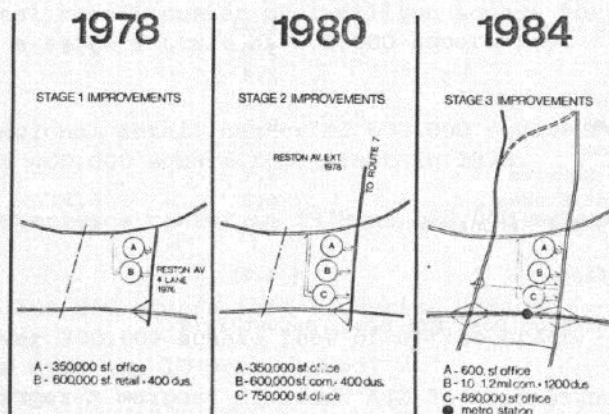
RETAIL POTENTIALS



SOURCE OF RETAIL SALES



TRANSPORTATION ACCESS



RETAIL MARKET POTENTIALS

Reston Town Center

FIG. 11



DAVID A. CRANE AND PARTNERS
ARCHITECTURE URBAN DESIGN PLANNING
PHILADELPHIA HOUSTON BOSTON

TABLE 3

TRADE AREA RETAIL EXPENDITURES
(1973 CONSTANT DOLLARS)

Year	Retail Expenditures Per Household	Retail Expenditures (\$ Thousands)		
		Reston	Remaining Trade Area	Total
1978	\$10,010	\$150,150	\$225,225	\$375,375
1980	10,280	191,208	236,440	427,648
1984	10,680	286,737	260,952	547,329

Source: DACP Estimates

In the Washington SMSA, companion goods consisting of those that would be found in a regional center total 12.7% of the disposable income in 1973 (Furniture 2.3%, Apparel 2.9%, and General Merchandise 7.5%). These in turn constituted 26.2% of all retail sales. (See Table 4).

TABLE 4

DISTRIBUTION OF DISPOSABLE INCOME,
WASHINGTON, SMSA, 1973

	Percent Distribution	Percent Shoppers Goods	Shoppers Goods as a Percent of Retail Expenditures
Disposable Income	100		
Retail Expenditures	(48.5)	(12.7)	(26.2)
Durable Goods	(12.8)		
Automotive	9.0		
Furniture	2.3	2.3	4.7
Building Materials	1.5		
Non-Durable Goods	(31.3)		
Apparel	2.9	2.9	6.0
Drug	2.4		
Eating and Drinking	4.2		
Supermarkets	9.6		
Other Food	1.0		
Gasoline Service	3.7		
Department Stores	6.3	6.3	13.0
Other General Merchandise	1.2	1.2	2.5
Not Classified	(4.4)		

Source: Washington Post FYI Memo, August 1974

The 1 million square feet of GLA shown in Program A represents an overall 56% capture rate of the illustrated trade area GAF expenditure in 1984. Within Reston itself, this capture may reasonably be as high as 75% or more, while in the remaining trade area a 35% penetration would be required depending on this level of sales to Reston residents. (See Table 5).

TABLE 5

SUPPORTABLE GROSS LEASEABLE AREA,
SHOPPERS GOODS

Year	Reston GLA	Trade Area Outside Reston GLA	Total GLA
1978	335,278	234,694	569,972
1980	426,958	246,381	673,339
1984	640,270	271,923	912,193

NOTE: Assumes 26.2% of retail expenditures in Shoppers Goods (G.A.F.), 75% capture of Reston expenditures, 35% capture of remaining trade area expenditures, and \$88 per GLA sales.

Source: DACP Estimates

Figures 10 and 11 show the trade area, the portions of the projected sales coming from various parts of Reston versus the remaining trade area, and the relation of retail potential to probable site access capacity. Significant portions of the sales potential come from Reston and the areas to the north and northwest where existing and potential new competition is weakest. Improvements to the Dulles Highway are seen as not significant to the potential of the center, and may in fact, increase the competition advantage of Tyson's Corner. Improvements to Reston Avenue adjacent to the site and to the north are important, although the northern section to Route 7 may not be essential until Reston's own residential development builds up in this area. General access capacity is in excess of market potentials assuming that probable improvements occur on schedule. (See Figures 10 and 11).

Parcellization and Staging: Programs A and B

Figures 12 and 13 and Tables 6-9 document in detail program square footages, acreages, timing, and location as shown in the plans for programs A and B. The main program elements of this documentation are:

1. In Program A, a regional retail center of 1 million square feet in 1984, growing from a stage 1 start of 600,000 square feet in 1978.
2. In Program B, a sub-regional retail center of 600,000 square feet in 1980 growing from a 400,000 square foot start in 1978.
3. In both programs a convenience center in 1978 of 100,000 square feet.
4. In both schemes three 150,000 square foot high-rise office structures and just over 300,000 square feet of office space in low-rise structures over the 10-year period.
5. A broad range of other uses held constant in both schemes and integrated into the Town Center.

The 634.1 acre study area has been broadly parcellized into five zones. These are exclusive of rights-of-way.

- A. The 124.5-acre area north of the Dulles Access Road and west of the proposed internal north/south road. Residential, general industrial park, and optional residential or industrial uses are proposed in this area.
- B. The 44.1 acre (50 acres gross) county site proposed for various county facilities including open space, and in the southern portion, joint use between the library and elements of the office and retail program.
- C. The 168.1-acre spine area encompassing the retail center, office, and a variety of other program elements bounded by the new north/south road, Reston Avenue, the Dulles Access Road, and Route 606.
- D. The 16.6-acre sports center for ice hockey, swimming, tennis and 3000 spectators, bridging the new spine road.
- E. The 92.4-acre area east of Reston Avenue programmed primarily for open space and residential development.
- F. The 141.7-acre area south of the Dulles Access Road programmed for prime office-industrial and general industrial use.

The following figures and tables indicate parcels, acreages, numbered references to specific structures on the plan, stage, use, square footage, density, parking spaces, and the estimated number of spaces requiring structured parking. (See Table 6, Figure 12, Table 7, Table 8, Figure 13, and Table 9).

TABLE 6

PROGRAM STAGING

	Core Program Targets			Remainder of Town Center Area and Post 1984	Parcel or Structure
	1978	1978-80	1980-84		
1.0 Retail GLA					
1.1 Regional Ctr.	600,000		400,000		11,13,4, C15-16
1.2 Convenience Ctr.	100,000				10,11
1.3 Extensive (AC)		3.7			C14
2.0 Office GLA					
2.1 HR Office	150,000	150,000	150,000		5,24,26
2.2 LR Office	120,000	90,000	100,000		9,7,25,26
2.3 Support Commercial	20,000	20,000			7,25
3.0 Hotel Rooms					
3.1 Conference		400			
3.2 General			300		
4.0 Leisure Time					
4.1 Education		20,000	50,000		22
4.2 Arts	5,000				12
4.3 Library	25,000		12,500		4
4.4 Ecumenical Ctr.		20,000			22
4.5 Cinema		12,000			12
4.6 Entertainment		20,000			12
4.7 Sports Ctr. (AC)		16.6			D1-4
4.8 RHOA Ctr. (AC)	40,000				C3
4.9 Museum	6,000				30
4.10 Tivoli (AC)	6.5				
5.0 Residential DU					
5.1 20/Acre				300	E7
5.2 30/Acre	300		504		A1,E1
5.3 40/Acre	200	232	464		C6,C13,E3, E6
6.0 Transportation Ctr. (AC)					
6.1 METRO		19.9			C23,F12
6.2 Bus Terminal		1.2			L23
7.0 Open Space AC					
7.1 Parks	20.8	1.2	5.5		A2,B1,C4, C7,C18,E4-5
7.2 Regional Trail		9.4			7,8
7.3 Road R.O.W.				36.5	R1-6,R9-13
8.0 Public Facilities SF					
8.1 Access Hospital	10,000		200,000		1,3
8.2 Human Resources		14,500			2
8.3 Gov't. Ctr.		23,000			2
8.4 Mental Health		16,500			2
8.5 Day Care	10,000	10,000			7,25
9.0 Industrial (AC)					
9.1 General				116.0	A5-7,F1
9.2 Prime Sites				149.2	C19, C21-22, C24,F2-4
9.3 General/Res. Alternative				29.7	A3-4, E8-9

TABLE 7

KEY TO FIGURE 12, DEVELOPMENT PROGRAM PARCELLIZATION
AND PROGRAM PACKAGES, PROGRAM A

Parcel	Acres	Bldg.		Prime Use	Units/ SF	Density	Parking Spaces	
		Key	Year				Surface	Struc- tured
A 1	16.8			Residential	504	30	430	430
A 2	5.5			Open Space				
A 3	20.5			Industrial or				
				Residential	178,500	.20	480	
A 4	9.2			Industrial or				
				Residential	80,000	.20	216	
A 5	28.9			Industrial	252,000	.20	680	
A 6	13.1			Industrial	114,000	.20	310	
A 7	30.5			Industrial	266,000	.20	720	
B 1	3.1		1978	Open Space				
B 2	35.5	1	1978	Access Facility	10,000	.17	50	
		2	1980	Human Resources	14,500			
				Mental Health	23,000			
				Gov't. Center	16,500		120	
		3	1984	Hospital	200,000		350	
B 3	5.5	4	1978	Library	25,000		150	
				Regional Retail/ Library Expansion	50,000	.31	250	
C 1	32.5	11	1978	Regional Retail	430,000	.35	2,050	290
		12		Convenience Retail	20,000		100	
				Cinema	8,000			
				Art Center	12,000			
				Entertainment	20,000			
C 2	8.5	10	1978	Convenience Retail	80,000	.20	400	
C 3	6.5		1978	Tivoli				
C 4	6.9		1978	Open Space				
C 5	1.5	9	1978	LR Office	30,000	.50	40	
C 6	3.6	8	1984	Residential	200	.40	200	
C 7	1.3		1978	Open Space				
C 8	6.5	7	1978	LR Office	90,000	.42	140	
				Convenience Retail	20,000		60	
				Day Care	10,000			
C 9	2.2	6	1984	Hotel	300	1.20	200	124
C10	6.1	5	1978	HR Office	150,000	.56	310	
C11	12.8	13	1984	Regional Retail	310,000	.58	1,220	330
C12	5.2	15	1980	Hotel 400 Rooms	272,000	1.20	340	92
C13	3.1	16	1974	Signature				
				Residential	200	65	113	226
C14	3.7	78	1984	TBA	25,000	.15	125	
C15	4.5	19	1984	Regional Retail	45,000	.23	225	
C16	3.2	20	1984	Regional Retail	45,000	.32	225	
C18	2.0		1980	Open Space				
C19	6.8			Prime Office	59,000	1.20	160	
C20	22.1	24	1980	HR Office	150,000	.64	195	210
		25	1980	LR Office	90,000		100	140
				Support Retail	20,000		30	30
				Day Care	10,000		27	
		26	1984	HR Office	150,000		195	210
		27	1984	LR Office	100,000		165	105
		22	1980	Education	20,000		80	40
				Ecumenical Cntr.	20,000			
		23	1984	Education	50,000		90	60
C21	6.6			Prime Office	80,000	.32	220	
C22	4.6			Prime Office	56,000	.32	150	
C23	6.0	28	1980	Transportation Cntr.	20,000		150	
C24	11.0			Prime Office	156,000	.32	420	
D 1	9.8	17	1980	Sports Center	70,000		420	
D 2	1.5		1980	Sports Center				
D 3	5.3		1980	Sports Center			650	
E 1	9.9	32	1978	Signature				
				Residential	300	30	250	250
E 2	6.4	30	1978	Museum	6,000		30	
		31	1978	RHOA/Open Space	10,000		120	
E 3	11.6		1984	Residential	464	.40	260	520
E 4	5.4		1978	Open Space				
E 5	5.0		1978	Open Space				
E 6	5.1	29	1980	Signature				
				Residential	190	.40	108	216
E 7	14.9			Residential	300	.20	506	
E 8	8.4			LR Office	47,000	.20	127	
E 9	25.7			LR Office	224,000	.20	604	
F 1	43.5			Industrial	378,000	.20	1,020	
F 2	19.0			Prime Office	165,000	.20	445	
F 3	39.7			Prime Office	346,000	.20	930	
F 4	27.2			Prime Office	237,000	.20	640	
F 5	12.3			METRO Parking			1,330	



LR LOW RISE
HR HIGH RISE
OFF OFFICE
IND IND
S.C. SPORTS CENTER
OS OPEN SPACE

0.0A PARCEL NET ACRES
0 SUB PARCEL NUMBER
00A STRUCTURE KEY AND STAGE
A 1976-78
B 1979-80
C 1981-84

MAJOR PARCELS
A GENERAL IND/RES AREA
B COUNTY SITE
C TOWN CENTER SPINE
D SPORTS CENTER
E EAST OF RESTON AVE
F SOUTH OF DULLES RD

ROW ACRES
1 3.3
2 8
3 9.0
4 3.0
5 3.3
6 3.1
7 4.6
8 4.8
9 3.9
10 4.1
11 6
12 3.2
13 3.0

PARCELIZATION AND PROGRAM PACKAGES Reston Town Center

PROGRAM **A**  

DAVID A. CRANE AND PARTNERS
ARCHITECTURE URBAN DESIGN PLANNING
PHILADELPHIA HOUSTON BOSTON

TABLE 8

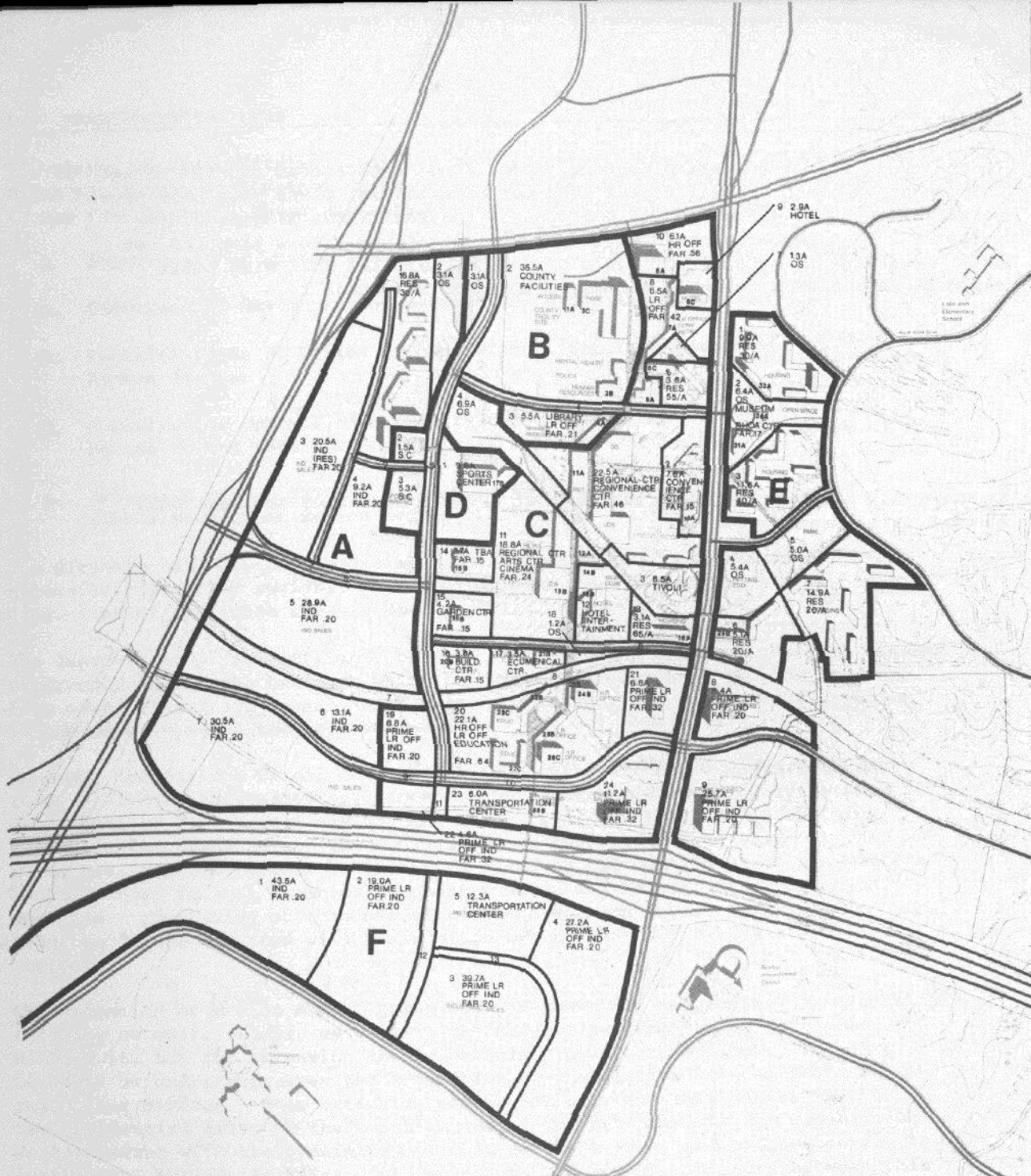
STAGING SCHEME B

		Core Program Targets		1980-84	Remainder of Town Center Area and Post 1984	Parcel or Structure
		1978	1978-80			
1.0	Retail GLA					
1.1	Regional Ctr.	400,000	200,000			11,13
1.2	Convenience Ctr.	100,000				10,11
1.3	Extensive (AC)		14.0			C14-16
2.0	Office GLA					
2.1	HR Office	150,000	150,000	150,000		5,24,26
2.2	LR Office	95,000	90,000	137,500		4,9,7, 25,26
2.3	Support Commercial	20,000	20,000			7,25
3.0	Hotel Rooms					
3.1	Conference		400			
3.2	General			300		
4.0	Leisure Time					
4.1	Education		40,000	50,000		22
4.2	Arts	8,000				12
4.3	Library	25,000		12,500		4
4.4	Ecumenical Ctr.		20,000			21
4.5	Cinema		12,000			12
4.6	Entertainment		37,000			14
4.7	Sports Ctr. (AC)		16.6			D1-4
4.8	RHOA Ctr. (AC)	40,000				C3
4.9	Museum	6,000				30
4.10	Tivoli	6.5				
5.0	Residential DU					
5.1	20/Acre				300	E7
5.2	30/Acre	300		504		A1,E1
5.3	40+/Acre	200	232	464		C6,C13,E3, E6
6.0	Transportation Ctr.					
6.1	Metro		19.9			C23,F12
6.2	Bus Terminal		1.2			C23
7.0	Open Space AC					
7.1	Parks (AC)	20.8	1.2	5.5		A2,B1,C4, C7,C18,E4-5
7.2	Regional Trail		9.4			
7.3	Road R.O.W.				37.3	R.O.W.1-6, 11-13
8.0	Public Facilities SF					
8.1	Access Hospital	10,000		200,000		1,3
8.2	Human Resources		14,500			2
8.3	Gov't. Ctr.		23,000			2
8.4	Mental Health		16,500			2
8.5	Day Care	10,000	10,000			4,25
9.0	Industrial (AC)					
9.1	General				116.0	A5-7,F1
9.2	Prime Sites				149.2	C19, C21-22, C24,F2-4
9.3	General/Res. Alternative				29.7	A3-4, E8-9

TABLE 9

KEY TO FIGURE 13, DEVELOPMENT PROGRAM PARCELLIZATION
AND PROGRAM PACKAGES, PROGRAM B

Parcel	Acres	Bldg.		Prime Use	Units/ SF	Density	Parking Spaces	
		Key	Year				Surface	Struc- tured
A 1	16.8		1984	Residential	504	30	430	430
A 2	5.5		1984	Open Space				
A 3	20.5			Industrial or Residential	178,000	.20	480	
A 4	9.2			"	80,000	.20	216	
A 5	28.9			Industrial	252,000	.20	680	
A 6	13.1			Industrial	114,000	.20	310	
A 7	30.5			Industrial	266,000	.20	720	
B 1	3.1		1978	Open Space				
B 2	35.5	1	1978	Access Facility	10,000	.17	50	
		2	1980	Human Resources	14,500			
				Mental Health	23,000			
				Gov't. Center	16,500		120	
		3	1984	Hospital	200,000		350	
B 3	5.5	4	1978	Library	25,000	.21		
				LR Office/Library				
				Expansion	15,000			
				Day Care	10,000			
				Shared Parking			410	
C 1	22.5	11	1978	Regional Retail	400,000	.46	1,635	175
				Convenience Retail	50,000		250	
C 2	7.6	10	1978	Convenience Retail	40,000	.15	200	
				Bank	10,000		50	
C 3	6.5		1978	Tivoli				
C 4	6.9		1978	Open Space				
C 5	1.5	9	1978	LR Office	30,000	.50	40	
C 6	3.6	8	1984	Residential	200	.56	200	
C 7	1.3		1978	Open Space				
C 8	6.5	7	1978	LR Office	50,000	.42	140	
				Convenience Retail	20,000		60	
			1984	LR Office	50,000			130
C 9	2.9	6	1984	Hotel	300	1.20	200	124
C10	6.1	5	1978	HR Office	150,000	.56	310	
C11	18.8	12	1978	Arts Center	8,000	.24		
		13	1980	Regional Retail	200,000		1,810	200
		12	1978	Cinema	12,000			
C12	7.1	15	1980	Hotel 400 Rms.	272,000	1.00	150	382
		14	1980	Entertainment	17,000			50
		14	1980	Clubs	20,000			50
C13	3.1	16	1978	Signature Residential	200Units	.65	200	140
C14	3.7	18	1980	TBA	25,000	.15		
C15	4.2	19	1980	Garden Center	27,000	.15		
C16	3.8	20	1980	Bldg.Mtr. Cntr.	25,000	.15		
C17	3.5	21	1980	Ecumenical Cntr.	20,000	.13	200	
C18	1.2		1980	Open Space				
C19	6.8			Prime Office	59,000	.20	160	
C20	22.1	24	1980	HR Office	150,000	.64	195	210
		25	1980	LR Office	90,000		100	140
				Support Retail	20,000		30	30
				Day Care	10,000		27	
		26	1984	HR Office	150,000		195	210
		27	1984	LR Office	100,000		165	105
		22	1980	Education	40,000		86	40
		23	1984	Education	50,000		90	60
C21	6.6			Prime Office	80,000	.28	220	
C22	4.6			Prime Office	56,000	.28	150	
C23	6.0	28	1980	Transportation Cntr.	20,000		150	
				Metro Parking			676	
C24	11.2			Prime Office	156,000	.32	420	
D 1	9.8	17	1980	Sports Center	70,000		420	
D 2	1.5		1980	Sports Center				
D 3	5.3		1980	Sports Center			650	
E 1	9.9	32	1978	Signature Residential	300	30	250	250
E 2	6.4	30	1978	Museum	6,000		30	
		31	1978	RHQA/Open Space	40,000		120	
E 3	11.6		1984	Residential	464	40	260	520
E 4	5.4		1978	Open Space				
E 5	5.0		1978	Open Space				
E 6	5.1	29	1980	Signature Residential	190	40	108	216
E 7	14.9			Residential	300	20	506	
E 8	8.4			Prime Office	47,000	.20	127	
E 9	25.7			Prime Office	224,000	.20	604	
F 1	43.5			Industrial	378,000	.20	1,020	
F 2	19.0			Prime Office	165,000	.20	435	
F 3	39.7			Prime Office	346,000	.20	930	
F 4	27.2			Prime Office	237,000	.20	640	
F 5	12.3			METRO Parking			1,330	



LR LOW RISE
HR HIGH RISE
OFF OFFICE
IND INDUSTRIAL
SC SPORTS CENTER
OS OPEN SPACE

0.0A PARCEL NET ACRES
SUB PARCEL NUMBER
STRUCTURE KEY AND STAGE
A 1976-78
B 1979-80
C 1981-84

MAJOR PARCELS
A GENERAL IND/RES AREA
B COUNTY SITE
C TOWN CENTER SPINE
D SPORTS CENTER
E EAST OF RESTON AVE
F SOUTH OF DULLES RD

ROW	ACRES	6	4.8
1	5.3	8	4.8
2	8	9	3.9
3	9.0	10	4.1
4	3.0	11	5
5	3.3	12	3.2
6	3.1	13	3.0
7	4.6		

PARCELIZATION AND PROGRAM PACKAGES Reston Town Center

PROGRAM B



DAVID A. CRANE AND PARTNERS
ARCHITECTURE URBAN DESIGN PLANNING
PHILADELPHIA HOUSTON BOSTON

Optional Stage II for Program B

In the event that the western boundary road is not constructed and the market for expansion of the retail center does not materialize, plans have been prepared illustrating dispersion of portions of the facilities programmed for parcel C21 into the area north of the B&OD right-of-way. This plan has not been programmed in detail, but would broadly contain the following basic elements in addition to those already programmed for Stage I.

Convenience Retail	100,000
High-Rise Office	300,000
Low-Rise Office	200,000
Other Program Elements as in Programs A and B	

In general, this program would be built at reduced densities and have only minimal structured parts.

IV. TRANSPORTATION PLAN

The timing of transportation facility improvements is one of the major variables which ultimately will determine the size and scale of facilities to be located in the Town Center. These variable elements include the following:

- a. Improvement of Reston Avenue between Route 606 and Dulles Highway.
- b. Extension of Reston Avenue between Route 606 and Route 7.
- c. Parallel roads at Dulles Highway with a full interchange at Reston Avenue.
- d. A limited or controlled access roadway between Route 7 and Routes 50 and I-66 forming the west boundary of the site.
- e. Extension of the METRO line between Washington and Dulles Airport with a station at Reston Avenue.

The ultimate size of the commercial retail program will be determined by the accessibility to the regional market within the Town Center Trade area. (See discussion of the trade area in Section III).

The improvement of Reston Avenue between Route 606 and Dulles Highway is already programmed and is the basis on which the Stage I development program for both Plan A and Plan B are based. With this improvement, the site access capacity is adequate to serve the proposed uses.

However, the maximum retail development is contingent on the western boundary road. Without this additional access, the capacity of the highway network is inadequate to meet travel demand, and there is no viable means of reaching the potential trade area. The decision as to how big (beyond Stage I) the commercial program becomes is therefore based on the commitment of the western boundary road in that location by County, State and Federal Transportation agencies. The timing of this decision cannot go much beyond 1976-1977 in order to insure the road will be in place by the end of the 10-year build-out period.

The extension of Reston Avenue north between Route 606 and Route 7 is a critical facility as well. Again, we believe the Stage I program can be developed without it, but the extension should certainly be programmed now. Ideally, it would be undertaken upon the completion of the section between Route 606 and Dulles Highway. This extension serves not only the Town Center, but the residential areas to the north as well. The extension is now visualized as coinciding with the opening up of this northern area, and perhaps on an incremental basis. At this point, we see no particular conflicts between this approach and the Town Center's need for access to Route 7 so long as the timing of the opening of the extension does not go beyond 1980.

The parallel roads on Dulles Highway are a mixed blessing. They are no doubt desirable, and do improve the access capacity to the site particularly from the east. However, they also serve the "competition" at Tyson's Corner and other centers. We anticipate that only about 5% of the automobile arrivals at the Town Center site will ultimately come via this facility. The METRO line and station at Reston Avenue is a far more important facility.

We expect that METRO might be built as early as 1980 or could be as late as 1990. Its primary benefit will be the access it provides to employment opportunities and to office related uses. It is of marginal benefit directly to the retail commercial uses in that they are primarily automobile related. In all likelihood, all of the decisions as to the timing and size of the retail program will be made before the METRO line is built. The plan therefore allows for major increases in the office program in the event METRO is built. These increases occur in two ways:

- 1) The office center near the METRO station can become a high density office center with FAR's above 1.0 or 2.0. The use of air rights at the METRO station are another possibility.
- 2) Within the commercial center and the office center on the northern parcel, sites can be selectively infilled by building office towers on surface parking lots and replacing the parking in structures.

Reston Avenue is ultimately going to be a very heavily traveled road. A preliminary analysis of anticipated volumes in the most critical hour, the "P.M. Peak Period", are illustrated in Figure 14. One of the objectives of the staff is to keep this roadway at a maximum of 4 lanes. To achieve this, an internal north-south roadway or boulevard parallel to Reston Avenue is proposed. This road intersects Route 606 near the county site. It will serve to balance the entrances to the site and provide access to parking on the west side of the multi-use spine. It will ultimately serve as the principal entrance to the county site, and will extend north of Route 606 to tie the northern residential development to the Town Center.

Reston Avenue at Dulles Highway, however, will be severely congested at 4 lanes. Analysis shows it will be congested even at six lanes in the peak period. A six-lane bridge over Dulles Highway creates severe problems so far as prior commitments are concerned.

One of the choices or alternatives is to extend the north-south internal road across Dulles Highway to Sunrise Valley Drive. The easement for this extension is illustrated in the plan drawings. In other words, six lanes of capacity are required to serve traffic in this southern sector and this can be provided either by a 6-lane bridge at Reston Avenue or by building a 2-lane bridge across Dulles Highway to connect the internal north-south road with Sunrise Valley Drive.

All of this analysis is judgmental at this point and should be further tested, but it does indicate that in order to achieve the maximum development program, the transportation network is going to be substantial and, in peak periods, congested.

Parking

Throughout the plan the concept of shared parking is utilized and the mix of activities at any given center is created in part by those uses which can most easily share parking. Remote parking lots on areas outside the multi-use spine are also planned and can be programmed as "overflow" parking so long as they are tied via the transit system to the activity centers. The parking standards utilized in generating parking requirements are contained in a

previously prepared transportation working paper. The commercial center is the element most "sensitive" to parking. The plan is organized such that adjacent parking serves both levels of the center directly. Parking standards are consistent with the current acceptable ratio of 5 spaces per 1000 gross square feet of space. Additional overflow and peak day parking is accommodated in remote lots.

The sports center, with its spectator facilities, will create parking problems if located too close to the retail center. Evening parking for the hockey rink requires about 1000 spaces at a time when commercial retail parking is also in demand. The two cannot easily share parking for this reason. The plan illustrates separate sections of the major west parking area for each facility.

For the commercial center about 620 spaces of the total 5000 (or 12 percent) are structured under the commercial structure. For office uses, the parking will initially be surface parking. As office towers and other high rise uses are later built into the plan, these surface lots will be replaced as necessary with parking structures.

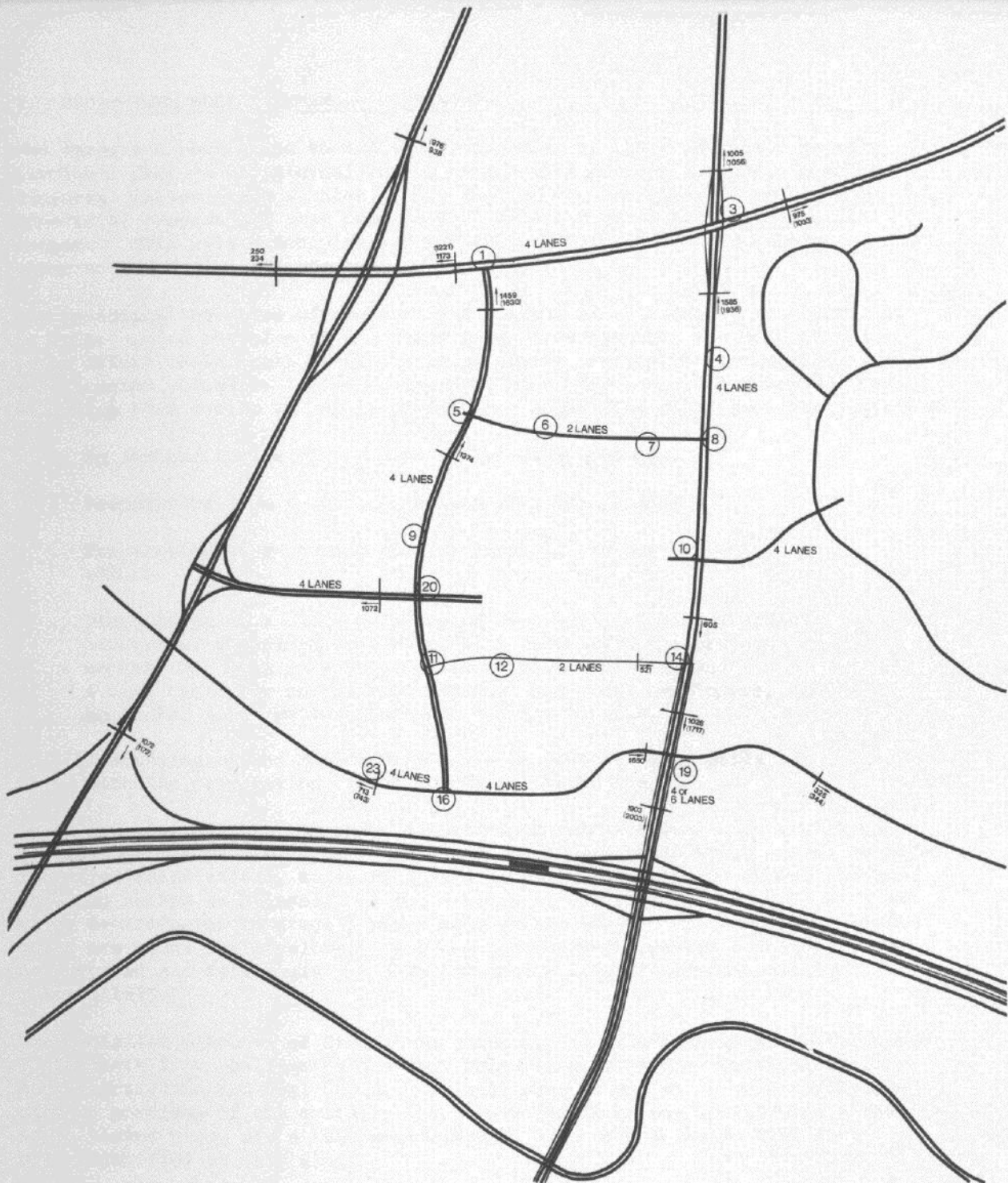
For residential uses, those units in the Town Center proper would require structured parking except for the elderly housing near the hospital. Residential sites peripheral to the major spine would in general have surface parking for low-and mid-rise units and structured parking for high rise and very high density housing types.

Transit

Because of the extremely long distances involved in the ultimate development plan, an internal transit system, operating on the pedestrian spine is proposed. This is visualized as a series of small 15-20 passenger bus vehicles, electrically powered, operating at 5-minute frequencies. These mini buses would operate at an overall speed of about 5 mph and could thus be an integral part of the internal pedestrian spine system. The retail shopping center is designed to allow two-way operation at the lower level of the mall. Preliminary analysis indicates that the cost per ride for such a system would be about 10¢ to 15¢, and if these operating costs were recovered through a rent premium to office and commercial uses, these costs would be 12¢ to 24¢ per square foot for office uses (varying with the size of the office program and METRO) and 10¢ per square foot for commercial uses.

The system is a necessity in the maximum development scheme and highly desirable at Stage I (at a reduced level of service). It can and should be designed and operated in a manner which creates excitement and utility within a very exciting environment.

One other transit possibility would be an "amusement type" cable car or similar device operating the length of the major open space system. This "ride" could connect the petting zoo side of the park east of Reston Avenue with the entertainment activities at "Tivoli" and the restaurants open air markets and botanical gardens in the pergola. Although no analysis of such a system has been undertaken as part of this study, it is a concept entirely in keeping with the fun-like nature of the activities within the major open space.



TRAFFIC ASSIGNMENT
PM PEAK PERIOD

(000) MAXIMUM PLAN VOLUMES
(000) MINIMUM PLAN VOLUMES



Reston Town Center

FIG. 14

DAVID A. CRANE AND PARTNERS
ARCHITECTURE URBAN DESIGN PLANNING
PHILADELPHIA HOUSTON BOSTON

V. SHORT-TERM WORK PROGRAM -- NEXT STEPS

The immediate next steps toward the realization of the Town Center broadly involve a process of internal review of the plan concept including a rough financial analysis and a sales effort testing the realities of the retail commercial program and plan concept with selected developers and possibly tenants. This will quickly narrow the program before the next round of planning and design is undertaken.

The principal objective of the next 4-5 months, as illustrated in Figure 15, is to determine the size of the first stage development. The bulk of the sales effort would begin after the first of the year, with conclusions and work program judgments following in early March 1975. During November, the following plan review and sales preparation activities would occur concurrently:

- . An in-house review of the plan and program concepts.
- . Preparation of a rough costing and financial analysis.
- . Preparation of an action plan as input to the county PLUS effort.
- . Preparation of a sales package and strategy including graphics conceptually defining the plan, text describing the project context but with no conclusion as to marketability, and a time table for review with regional and local developers, potential joint venture partners and key tenants.
- . Initiation of the Master Plan Revision process to coincide with the preparation of the County District Plan.

It is anticipated that the above effort might take 4-6 weeks and that "pre-testing" of the plan with key users and developers could occur during December. The major sales effort, however, should probably not be begun during the peak shopping season in December but could begin at the first of the year with the major decisions as to Stage I start made within 60-90 days. Once these judgments are made, the development program and the work program for Stage I can be prepared and full scale planning and design efforts undertaken about 1 April 1975.

When detailed planning of Stage I is underway, it will be necessary to respond to feedback from the internal review, sales efforts, and concurrent development negotiation and deal making. It will also be useful to selectively re-examine portions of the overall concept plan as it is now constituted. The items listed below are a "shopping list" of such work elements that have been identified at this time.

- . Selective plan reorganization for better utilization of shared parking.
- . Re-examination of residential and industrial/office parcels west of the multi-use spine to create a more integrated working/living kind of environment. Examination of open space connections from this area to the multi-use spine.
- . Examination of the north/south interval boulevard, its connection to Route 606 and the county site, and the creation of the small lake. Examination of alignment to create a larger retail commercial site.

- . Definition of the program for Tivoli Garden.
- . Exploration of financing and operating concepts for Tivoli and other community facilities.
- . Further investigation of transit options including both the system "hardware" and its routing. Examination of routes which tie more directly to remote parking areas. Examination of interface with transit service to Herndon and other areas outside Reston.
- . Examination of the METRO Station, transportation terminal and the possible use of air rights at Dulles Highway.
- . Re-evaluation and testing of highway networks based on the development program.
- . Detailed planning and evaluation of residential building types including terrace houses, "stepped" units, and structured parking.
- . Tightening up of the connecting links between major nodes.
- . Examination of environmental impacts, air quality, and noise concerns, better utilization of transit system including alternate routing concepts, remote parking areas, and transit service to residential areas.
- . Exploration of potential development controls arising out of the choices as to how development will occur over time.

Town Center Short Term Work Process -- Next Steps

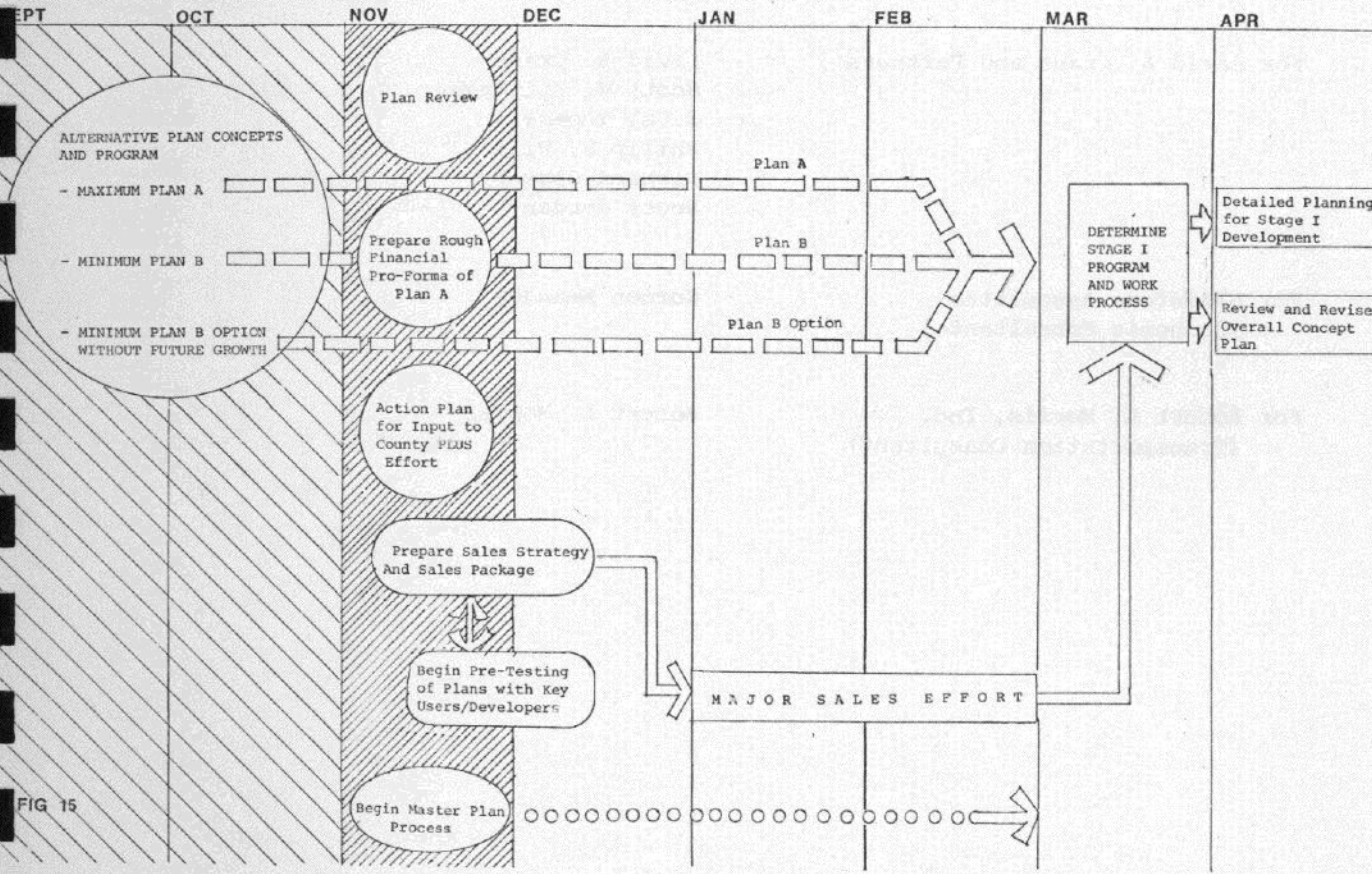


FIG 15

David A. Crane and Partners gratefully acknowledges the assistance and the cooperation of the Planning Team in the preparation of this material. The working relationships with the Reston Staff and the associated consultants were a vital and effective part of the work effort.

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