

Final Report

**ANALYSIS OF
MARKET POTENTIALS FOR
OFFICE AND RETAIL SPACE
EISENHOWER EAST CORRIDOR**

Prepared for

**City of Alexandria
Department of Planning & Zoning**

Prepared by

Whitney & Whitney, Inc.

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I. INTRODUCTION

The following report provides an analysis of the market potential for the development of office and retail space in the Eisenhower East Corridor, an important district of the City of Alexandria that is currently undergoing significant change from largely vacant land to a high-density urban district. The purpose of the study is to determine the overall magnitude of the development opportunity and to assist the master planning team in its consideration of the most appropriate mix of uses and how these uses should be allocated over the planning area in an economically effective manner.

II. SUMMARY OF FINDINGS

The major findings of the Eisenhower East Corridor office and retail office space analysis are as follows:

1. The City of Alexandria's competitive market for office space consists of the Washington, D.C. region, encompassing the District of Columbia, Suburban Maryland, and Northern Virginia. As of September 2002, this region had 324.9 million square feet of office space and is considered to be the second largest office space market in the United States. Of this total, 44% of the total market supply is located in Northern Virginia.
2. Over the 32-year period 1970-2002, the supply of office space in the Washington, D.C. regional market area has grown at an average annual rate of 8 million square feet. During the peak construction years between 1985 and 1990 the development rate accelerated to 16 million square feet annually.
3. Spurred on by the market stimulus provided by the "dot.com" industries, the Washington region saw an office development boom in the late 1990s and first two years of the 21st Century. The recent decline of this industry has led to office space vacancy rates in some suburban Virginia sub-markets that range as high as 30%. However, on balance the Washington office space market enjoys a healthy current occupancy rate of about 93%, and should enjoy future annual growth that should average at least six to seven million square feet of space.
4. The City of Alexandria has an existing inventory of 13.0 million square feet of office space. Its annual growth, including the Patent and Trademark Office (PTO) project under construction, has averaged 420 thousand square feet annually over the last 30+ years. Effectively, the City has been able to capture a regional market share of 5.2%. Similar to other inner Beltway sub-markets, Alexandria currently enjoys an office space occupancy rate that exceeds 91%, and has not been severely impacted by the recent collapse of the "dot.com" industries.

5. In addition to its prime location in the City of Alexandria the major strengths of the Eisenhower East Corridor as an office site are the following:

- Immediate proximity to the existing Eisenhower Avenue Metro Station. As demonstrated by Arlington County and numerous other metropolitan areas throughout the United States, a transit station can serve as a lynchpin for a successful high density, live-work environment. It is also a favored location by employers seeking access to a large regional labor pool.
- Access and visibility from the I-95/I-495 Beltway, a roadway that is currently undergoing substantial improvements such as the expansion of the Wilson Bridge across the Potomac River; the addition of travel lanes to the I-95/I-495 Beltway at the Springfield Interchange; and improvements to the on- and off-ramp systems that provide linkages to the Eisenhower East site.
- Proximity to office centers in Arlington and Washington, D.C. by either transit or automobile;
- Proximity to the Ronald Reagan Washington National Airport;
- Proximity to the cultural and commercial recreation opportunities found in Old Town Alexandria;
- Potential synergistic benefits associated with a master-planned, mixed-use, pedestrian environment that affords the opportunity to both live and work in the Eisenhower East Corridor;
- Cost advantages associated with a near-central location that is outside the District of Columbia boundary – realtors indicate that annual operational costs for office buildings are from \$4.00 to \$7.00 per foot lower in Alexandria than in Washington, D.C.;
- A proven market location that is proximate to the primary generator of jobs requiring office space, the Federal Government, and satisfies the GSA requirement for contractors to locate within 2,500 feet of a metro station;
- Potential “spillover” of additional office tenants that are generated by the presence of the Federal Court Buildings and the PTO office.

6. The major weaknesses or deficiencies of the Eisenhower East Corridor as an office location area as follows:

- Local access via the arterial street system is deficient in a number of important respects due to the historical “spoke” pattern of regional arterial roads focusing on Old Town; the absence of a

north-south grid pattern of streets westerly of U.S. 1; and the southerly barrier condition presented by Cameron Run and the I-95/I-495 Beltway. Significant road improvements will be needed to accommodate future traffic generated by both residents and employees, including the widening of Eisenhower Avenue; enhancement of Telegraph Road ingress/egress to the corridor; and creation of additional road linkages between the Eisenhower East Corridor and Duke Street.

- While not a current issue, in the future it will be important to augment the public transit systems serving the immediate Eisenhower East Corridor, such as providing the Metro Station with expanded platforms, feeder buses, and improved pedestrian and automobile ingress and egress.
- The proposed urban character of the Eisenhower East Corridor may not appeal to certain companies that favor the lower density suburban environment that is provided at locations near Dulles International Airport.
- The proposed limitation on parking to 2.0 spaces per 1,000 square feet of office space will not be acceptable to some of the larger space users who prefer the 3.5 to 4.0 space per 1,000 square foot ratios available in suburban locations.
- The relative scarcity of lower-density residential opportunities to serve senior and junior executives will be considered as a problem by some firms considering the location.
- The “entitlement process” in the City of Alexandria is a concern to some developers and real estate brokers. There was a general feeling expressed that currently there was too much uncertainty in the entitlement process; as a result, some developers have been unwilling to pursue opportunities on a speculative basis given the risks that they perceive are associated with obtaining such approvals.

7. Given its strategic position in the Washington, D.C. metropolitan area, the likely continuation of the Federal Government as the primary generator of office employment in the region and the completion of the proposed improvements to the regional road system in the immediate vicinity, the City of Alexandria should continue to serve as a prime location for new office development in the region. Accordingly, the City of Alexandria should be able to capture a four to five percent market share of the Washington, D.C. Regional Market Area office space demand, the equivalent of 250,00 to 350,000 square feet per year, for

the next 10 to 15 years in addition to the space that is currently committed for development at PTO. The majority of the future space—between 200,000 and 250,000 square feet annually—should be captured at various Eisenhower East Corridor office projects.

8. In order to achieve this level of market penetration it will be necessary for the City to ensure that developers provide the amenities and conveniences that are commonly associated with a highly urbanized “town center” location. In addition to providing office space, Eisenhower East Corridor developments should offer a range of nearby residential choices that encourage a “live-work” life style and a range of shopping and entertainment experiences that are accessible on a pedestrian basis.

9. The retail analysis has considered two types of retail development opportunity in the planning area:

- The market potential for a “town center” retail experience offering a diverse mix of retail, restaurant and services uses that serves the larger regional population; and
- The market potential for convenience retail and services activities that provide for the immediate needs of residents, employees and visitors located in the Eisenhower East Corridor planning area.

10. Market areas for a potential “town center” type of retail development have been derived from: (1) application of appropriate geographic and mileage standards for town centers and urban entertainment/retail complexes; and (2) direct observation of current customer visitation patterns to the existing cinema complex within the planning area. The PRIMARY MARKET AREA (PMA) includes the City of Alexandria and a “pac-man” shaped configuration that extends for a 10-mile radius in the westerly, southerly and easterly directions from the existing Hoffman cinema complex site. The SECONDARY MARKET AREA (SMA) includes Arlington County; District of Columbia; Prince William County, Virginia; and portions of Fairfax County, Virginia and Prince George's County, Maryland that lie more than 10 miles from the existing cinema complex site.

11. The Primary Market Area (PMA) for the Eisenhower East town center is currently estimated at 761.1 thousand persons. The PMA is growing at a rate of 1.1% per year, and by 2007 should exceed 804

thousand persons. About 18% of the PMA population or 133.1 thousand persons resides within the City of Alexandria.

12. In terms of per capita incomes, the PMA's current average is estimated at \$37,144. The PMA is dominated by the City of Alexandria, where average per capita incomes are currently estimated at \$46,613. By 2007, average annual per capita incomes for PMA residents should approach \$40,000. Aggregate retail spending by PMA residents should approach \$9.6 billion in 2002 and \$11.0 billion in 2007.

13. While SMA residents have lower per capita incomes than PMA residents, their retail spending should approach \$35 billion by 2007. An SMA typically contributes from 15% to 20% of the potential market support to a major urban center.

14. Two sets of retail sales market capture rates were developed in the analysis of market support generated by PMA and SMA residents: a "baseline" capture rate and an "optimistic" capture rate, with the latter representing the market potential if a major retail developer were introduced to the Eisenhower East development program. Application of the sales capture rates to retail categories considered appropriate for a town center produces a retail sales capture projection for the proposed Eisenhower East town center of \$80.9 million in 2002 and \$92.9 million in 2007 per the Baseline Scenario; under the Optimistic Scenario the capture projection is \$130.3 million in 2002 and \$149.3 million in 2007.

15. The table below summarizes the potential supportable retail space at an Eisenhower East from existing PMA and SMA residents under the Baseline and Optimistic Scenario assumption structures for the periods 2002 and 2007. The projections indicate that there is potential market support for a town center with between 200,000 and 300,000 square feet of retail space from the existing and projected PMA and SMA resident market before consideration of the additional demand that will be generated by the build-out of the Eisenhower East master plan.

**SUPPORTABLE RETAIL SPACE AT EISENHOWER EAST TOWN CENTER
PMA AND SMA RESIDENTS**

	2002	2007
Baseline Scenario	210,669	241,992
Optimistic Scenario	356,409	408,338

Source: Whitney & Whitney

16. Based upon current approval status and best estimates of future entitlements, the Eisenhower East Corridor could ultimately be developed with over 17 million square feet of residential, office, retail, hotel and related space. In turn, with this magnitude of development the Corridor will generate three major sources of new retail demand: (1) the resident population, projected at 11,206 persons at build-out and allowing for a 4.8% vacancy rate; (2) an anticipated work force projected at 31,954 employees at build-out, with a vacancy allowance in office space at 10%; and (3) visitors to the Corridor hotels, projected to represent 454,973 visitor days at build-out. After consideration of their likely retail expenditures, at full build-out locally generated demand should support an additional 237,400 square feet of retail space in the Eisenhower East Corridor.

17. Regional market support is combined with local market support to produce a summary supportable retail space projection under both the Baseline and Optimistic scenarios. Per the more conservative Baseline forecast, the current 2002 demand for retail space in the Eisenhower Corridor master plan area is projected at 210,700 square feet; this increases over the 20-year forecast period to 479,200 square feet, distributed by major retail space category as follows:

Baseline Forecast: Supportable Space in Square Feet					
	<u>2002</u>	<u>2007</u>	<u>2012</u>	<u>2017</u>	<u>2022</u>
Shopper Goods	114,856	151,529	166,357	178,714	190,429
Eating and Drinking	38,170	75,063	98,472	117,980	136,474
Convenience Goods	<u>38,492</u>	<u>66,065</u>	<u>82,373</u>	<u>95,963</u>	<u>108,846</u>
Total Retail	191,518	292,657	347,203	392,657	435,749
Services 10.00%	<u>19,152</u>	<u>29,266</u>	<u>34,720</u>	<u>39,266</u>	<u>43,575</u>
Grand Total	210,670	321,923	381,923	431,923	479,324

Source: Whitney & Whitney

Under the Optimistic projection, the total supportable retail space is projected currently projected at 356,000 square feet, and this amount increases to over 645,700 square feet at build-out.

Optimistic Forecast: Supportable Space in Square Feet

	<u>2002</u>	<u>2007</u>	<u>2012</u>	<u>2017</u>	<u>2022</u>
Shopper Goods	219,876	271,568	286,396	298,753	310,468
Eating and Drinking	61,436	101,424	124,833	144,341	162,835
Convenience Goods	<u>42,696</u>	<u>70,951</u>	<u>87,259</u>	<u>100,849</u>	<u>113,732</u>
Total Retail	324,008	443,943	498,489	543,943	587,035
Services 10.00%	<u>32,401</u>	<u>44,394</u>	<u>49,849</u>	<u>54,394</u>	<u>58,704</u>
Grand Total	356,409	488,338	548,338	598,338	645,739

Source: Whitney & Whitney

19. As an overall planning parameter, the master plan allocation of almost 600,000 square feet of retail space for the Eisenhower East Corridor lies between the Baseline projection of 496,300 square feet and the Optimistic projection of 662,700 square feet that were considered sustainable at build-out from the combined regional and local sources of demand. While slightly aggressive, this scale is consistent with the larger objective of developing a major town center that would serve as a focal point for the region, and it also compares favorably in size with emerging entertainment/retail destinations that are occurring throughout the United States such as the Spectrum in Irvine, California and new facilities found in central Bethesda, Maryland.

20. The following retail space allocations are recommended for the Eisenhower East Corridor master plan area, based upon current proposed development program (see Appendix B for the block keys):

<u>Location</u>	<u>Total Square Feet</u>
1. Hoffman Properties, Mill Race and Metro Station Environs: Blocks 6, 7, 8, 9, 10, 12, 13, 14	250,000-300,000
2. Hoffman Properties, Blocks 4, 5	50,000-80,000
3. Eisenhower Avenue "Boulevard Retail, Blocks 18, 22, 23, 24	50,000
4. Carlyle Properties, North of Eisenhower	80,000
5. Properties South of Eisenhower, East of Elizabeth Lane	30,000-40,000
6. Whole Foods Market, Duke Street	<u>50,000</u>
GRAND TOTAL	510,000-600,000

21. It should be recognized that the presence of an excellent market opportunity for the development of a major town center with 400,000+/- square feet of retail/entertainment uses and 9+/- million square feet of office space does not in itself guarantee a successful development. While the master plan outlines an excellent set of guidelines for future developers to follow, it is important to recognize that proactive public leadership will be required in the following areas:

- *Planning of the town center in order to ensure that core activities are provided that serve community needs and provide maximum convenience.*
- *Planning of public spaces as part of the town center and the urban boulevard experience.*
- *Utilization of economic incentives in order to guarantee a balanced, mixed use live-work community.*
- *Careful management of the transportation system, including the integration of public transit systems, existing Metro facility and parking for the town center to ensure public access and convenience.*

III. ANALYSIS OF MARKET POTENTIAL FOR OFFICE SPACE

The following section reviews the market potential for office space development in the City of Alexandria with specific reference to the Eisenhower East Corridor master plan area.

Regional Market Area

For purposes of this analysis the Washington, D.C. Regional Market Area for office space that provides a competitive frame of reference for the City of Alexandria has been identified as including the following geographic areas and sub-areas:

Washington, D.C.

Suburban Maryland

Northern Virginia, including:

Arlington County

Alexandria

Fairfax County

Balance of Northern Virginia.

Effectively, this covers the competitive geographic market area in terms of office-using firms that are locating in the region and the existing and future office space supply that would provide accommodation for these users..

A Note on Data Sources

In order to establish an appropriate database, office inventories from four major sources were compared with respect to their range of coverage and representation about current market conditions. These four sources included the data –bases from Delta Associates, an Alexandria-based real estate consulting firm; Trammell Crow Company, the developer of Mill Race; and two real estate brokerage firms, CB Richard Ellis and Grubb & Ellis that have extensive knowledge of regional office market conditions. Overall, the data for the four sources appear to be reasonably consistent in the aggregate, though each company has

defined sub-markets in Northern Virginia somewhat differently, presumably in order to meet their internal requirements.

In the analysis presented here, for the Eisenhower East Corridor, Delta Associates' office inventory data were utilized as the baseline measure of existing supply, as that company could provide an historical perspective on Washington D. C.'s metropolitan office market trends covering the 32-year period 1970-2002. Delta Associates also had the most complete office space inventory available. Notwithstanding, the two real estate brokerage companies and Trammell Crow publish quarterly newsletters that provide useful information on current market conditions and on projects which are either under construction or proposed for development in the near future.

Historic Development Trends

As presented in Table 1 below, as of September 2002 the Washington, D.C. Regional Market Area contained 324.9 million square feet of office space; it is generally considered to be the second largest office market in the United States after metropolitan New York. The current distribution of office space by major sub-area is as follows:

Table 1

**CURRENT INVENTORY OF OFFICE SPACE BY MAJOR SUB-AREA
WASHINGTON, D. C. REGIONAL MARKET AREA
September 2002**

<u>Sub-Area</u>	<u>Total Space in Millions</u>	<u>Percent of Market</u>
Washington, D.C.	106.5	32.8%
Suburban Maryland	75.1	23.1%
Northern Virginia:		
Arlington	31.2	9.6%
Alexandria	13.0	4.0%
Fairfax County	89.0	27.4%
Balance of Northern Virginia	<u>10.1</u>	<u>3.1%</u>
Total, Northern Virginia	<u>143.3</u>	<u>44.1%</u>
Total, Regional Market Area	324.9	100.0%

Source: Delta Associates

With 143.3 million square feet of space, Northern Virginia has captured 44.1% of the total metro office space market. A review of historic development trends indicates that Northern Virginia's dominance of the market as an office location was established in the late 1980s, led by office construction activity centered in the Dulles Corridor and the balance of Fairfax County. During the period 1985-1990 over 42 million square feet were developed in Northern Virginia, a level of construction greater in magnitude than the recent boom in new office supply associated with the "dot.com" industry.

Historical data from Delta Associates showing the growth in office space supply for the 32-year period 1970-September 2002 are shown in Table 2. While the entire region's office space supply has grown from 65.4 million square feet to 324.9 million square feet during this time frame, the City of Alexandria has kept pace insofar as its inventory has grown from 1.5 million square feet to 13.0 million square feet. It

Table 2

**GROWTH TRENDS IN OFFICE SPACE, WASHINGTON, D. C. REGIONAL MARKET AREA
1970-2002
(In Square Feet)**

Sub-Area	1970	1975	1980	1985	1990	1995	2000	2002 1/
Washington, D. C.	34,444,000	45,537,000	53,021,000	69,156,000	87,399,000	97,442,000	102,537,000	106,437,000
Suburban Maryland	16,656,000	23,002,000	30,543,000	42,781,000	61,037,000	65,980,000	70,240,000	75,133,000
Northern Virginia:								
Arlington County	8,696,000	10,213,000	12,697,000	18,053,000	26,740,000	28,438,000	29,690,000	31,222,000
Alexandria	1,498,000	3,113,000	3,900,000	7,226,000	10,829,000	11,160,000	12,493,000	13,008,000
Fairfax County:								
Dulles Corridor 2/	1,331,000	3,598,000	7,937,000	18,404,000	34,036,000	35,239,000	45,826,000	51,841,000
Balance of Fairfax County	2,716,000	4,581,000	8,133,000	15,042,000	27,269,000	28,848,000	34,163,000	37,147,000
Subtotal: Fairfax County	4,047,000	8,179,000	16,070,000	33,446,000	61,305,000	64,087,000	79,989,000	88,988,000
Balance of Northern Virginia	119,000	579,000	799,000	1,141,000	3,999,000	4,487,000	7,918,000	10,067,000
Subtotal: Northern Virginia	14,360,000	22,084,000	33,466,000	59,866,000	102,873,000	108,172,000	130,090,000	143,285,000
Total. Washington D. C. Regional Market Area	65,460,000	90,623,000	117,030,000	171,803,000	251,309,000	271,594,000	302,867,000	324,855,000

1/ Through September 2002

2/ Tysons Corner, McLean, Vienna, Reston/Herndon

Source: Delta Associates

should be recognized that the other market researchers, apparently working with slightly different data sets, report slightly smaller inventories of space in the City, ranging from 11.8 million square feet to 12.3 million square feet. The Robert Charles Lesser consulting firm, for example, utilized the Grubb & Ellis-produced statistic for the City of Alexandria (11.8 million square feet) in its recent assessment of office space market conditions in a study evaluating the future development potentials of the Van Dorn Metro Station site. A comparison between office space inventories for the four research groups is also summarized in Appendix Table A-1; it may be surmised that the variances likely reflect slightly different

definitions of office space included within the inventories as well as differences in the formulation of geographic sub-areas, methods of measurement and sources of information.

Market share data for the various office space sub-markets in the region are shown below in Table 3. It can be seen that the City of Alexandria currently has a 4.0% share of the regional market; over the 32-year investigation period the city's share has been as high as 4.3% (1990) and as low as 2.3% (1970).

Table 3

**MARKET SHARES OF OFFICE SPACE BY SUB-AREA, WASHINGTON, D. C. REGIONAL MARKET AREA
1970-2002
(In Percentages)**

<u>Sub-Area</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2002 1/</u>
Washington, D. C.	52.6%	50.2%	45.3%	40.3%	34.8%	35.9%	33.9%	32.8%
Suburban Maryland	25.4%	25.4%	26.1%	24.9%	24.3%	24.3%	23.2%	23.1%
Northern Virginia:	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Arlington County	13.3%	11.3%	10.8%	10.5%	10.6%	10.5%	9.8%	9.6%
Alexandria	2.3%	3.4%	3.3%	4.2%	4.3%	4.1%	4.1%	4.0%
Fairfax County:	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dulles Corridor 2/	2.0%	4.0%	6.8%	10.7%	13.5%	13.0%	15.1%	16.0%
Balance of Fairfax County	4.1%	5.1%	6.9%	8.8%	10.9%	10.6%	11.3%	11.4%
Subtotal: Fairfax County	6.2%	9.0%	13.7%	19.5%	24.4%	23.6%	26.4%	27.4%
Balance of Northern Virginia	0.2%	0.6%	0.7%	0.7%	1.6%	1.7%	2.6%	3.1%
Subtotal: Northern Virginia	21.9%	24.4%	28.6%	34.8%	40.9%	39.8%	43.0%	44.1%
Total, Washington D. C. Regional Market Area	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

1/ Through September 2002

2/ Tysons Corner, McLean, Vienna, Reston/Herndon

Source: Delta Associates

Table 4 provides data for the Washington, D. C. Regional Market Area that shows the incremental growth in office space for the periods 1970-2002, 1970-1990 and 1990-2002. The data show that the regional office space inventory has grown at an annual rate of 8.1 million square feet during the last 32 years, punctuated by two "boom" periods--the 1980s, when development exceeded 13 million square feet on an annual basis, and, more recently, 1999-2000, when office space was added at a rate of 11.0 million square feet per year. After adjustment is made for these "boom" periods, it can be seen that sustained annual development of office space over the last 12 years has approached six to seven million square feet in the region, and this range of magnitude would appear to be a reasonable annual development projection for planning purposes in the future.

Table 4

**INCREMENTAL GROWTH IN OFFICE SPACE DURING SELECTED TIME PERIODS
WASHINGTON REGIONAL MARKET AREA AND SUB-AREAS**

Sub-Area	1970-2002		1970-1990		1990-2002	
	1/	Annual	1/	Annual	1/	Annual
Washington, D. C.	71,993,000	2,249,781	52,955,000	2,647,750	19,038,000	1,586,500
Suburban Maryland	58,477,000	1,827,406	44,381,000	2,219,050	14,096,000	1,174,667
Northern Virginia:						
Arlington County	22,526,000	703,938	18,044,000	902,200	4,482,000	373,500
Alexandria	11,510,000	359,688	9,331,000	466,550	2,179,000	181,583
Fairfax County:						
Dulles Corridor 2/	50,510,000	1,578,438	32,705,000	1,635,250	17,805,000	1,483,750
Balance of Fairfax County	<u>34,431,000</u>	<u>1,075,969</u>	<u>24,553,000</u>	<u>1,227,650</u>	<u>9,878,000</u>	<u>823,167</u>
Subtotal: Fairfax County	84,941,000	2,654,406	57,258,000	2,862,900	27,683,000	2,306,917
Balance of Northern Virginia	<u>9,948,000</u>	<u>310,875</u>	<u>3,880,000</u>	<u>194,000</u>	<u>6,068,000</u>	<u>505,667</u>
Subtotal: Northern Virginia	128,925,000	4,028,906	88,513,000	4,425,650	40,412,000	3,367,667
Total, Washington D. C. Regional Market Area	259,395,000	8,106,094	185,849,000	9,292,450	73,546,000	6,128,833

1/ Through September 2002

2/ Tysons Corner, McLean, Vienna, Reston/Herndon

Source: Delta Associates; Whitney & Whitney.

Table 4 also provides a review of the 32-year office space development history for the City of Alexandria on an incremental basis. The data indicate that the City of Alexandria has experienced an average annual construction rate for office space of 360,000 square feet since 1970, though this has not occurred evenly over time. Between 1970 and 1990 the City's office space growth rate was nearly 467,000 square feet annually.

As noted below in Table 5, the city's share of the region's office space growth declined significantly in the 1990s, falling from a market share of 5.0% experienced in the 1970s and 1980s to only 3.0% in the 1990s and the early 21st Century.

Table 5

**CITY OF ALEXANDRIA SHARE OF REGIONAL MARKET AREA OFFICE DEVELOPMENT
SELECTED DEVELOPMENT PERIODS
1970-2002**

	<u>1970-2002 1/</u>	<u>1970- 1990</u>	<u>1990-2002/1</u>
Washington, D. C. Regional Market Area Office Space Development	259,395,000	185,849,000	73,546,000
City Of Alexandria Office Space Development Annual Average	11,510,000 359,688	9,331,000 466,550	2,179,000 181,583
City Share of Regional Market per Period	4.4%	5.0%	3.0%

1/ Through September 2002

Source: Delta Associates; Whitney & Whitney.

A number of reasons can be posited for the apparent recent decline in the City of Alexandria's relative attractiveness as an office location such as the lack of available sites; regional congestion and access problems; and changes in life-style in the region favoring more suburban locations. While these factors may have some validity, another explanation may simply relate to the fact that office space is typically developed in "lumps" rather than in a continuous stream, and if the time period for analysis is extended slightly into the future in order to consider office space that is currently under construction, then Alexandria's indicative market share of the region's office space supply changes substantially, as discussed below.

Office Space Currently Under Construction

At present, there is over 2.7 million square feet of office space under construction in the City of Alexandria. When this prospective office space is factored into the inventory, the City's regional performance in terms of market capture is substantially enhanced. A projected regional office space inventory for 2004 is provided below, based upon the current space that is under construction in the Washington, D.C. Regional Market Area. When these adjustments are made to the inventory, the City of Alexandria's annual development rate for office space for the period 1990-2004 is estimated at 349 thousand square feet; its regional market share for the same period is 5.7%. Over the longer 34-year

period, 1970-2004, Alexandria's projected annual development rate for office space is 418 thousand square feet, and corresponding regional market capture rate is 5.2%.

Table 6

**PROJECTED INVENTORY OF OFFICE SPACE
WASHINGTON, D. C. REGIONAL MARKET AREA AND SELECTED SUB-AREAS
2004**
(in millions of Square Feet)

<u>Sub-Area</u>	<u>Current 2002 Inventory</u>	<u>Under Construction</u>	<u>Projected 2004 Inventory</u>
Washington, D. C.	106.4	4.4	110.8
Suburban Maryland	75.1	1.3	76.4
Northern Virginia, including Alexandria	143.3	5.9	149.2
Alexandria	<u>13.0</u>	<u>2.7</u>	<u>15.7</u>
Total, Regional Market Area	324.9	11.6	336.5
<i>Alexandria Regional Market Share</i>	<i>4.0%</i>	<i>23.3%</i>	<i>4.7%</i>

Note: Various firms have different estimates of space under construction;
in some cases, midpoints have been selected between varying estimates.

Source: Trammell Crow Company; Whitney & Whitney.

Market Occupancy Characteristics

The Washington Regional Market Area exhibits a widely divergent pattern of occupancy based upon current sub-market vacancy rates. According to Trammell Crow Company, the current overall vacancy rate for the entire regional office space market is 7.7% before consideration of space that is available on a sub-let basis. Insofar as growing metropolitan areas often exhibit vacancy rates ranging from eight to twelve percent, this overall vacancy rate suggests that the forces of demand and supply are in relative balance for the region as a whole. However, analysis by sub-area indicates that there are substantial differences in occupancy characteristics depending upon regional location, with office buildings inside the Beltway performing at a high level and buildings on the periphery of the Regional Market Area suffering from the recent declines in the American economy and the collapse of many "dot.com" businesses. Over the last six quarters, 2001 through mid-2002, some of the suburban sub-markets have experienced negative absorption of office space, as companies have gone out of business and/or reduced the amount of area that they occupy. Inclusion of office space that is available for sub-lease within the regional office

space inventory effectively increases the overall vacancy rate in the Northern Virginia Sub-Area from under 10 percent to over 16 percent, as noted below. Sub-markets exhibiting the highest vacancy rates include Herndon, Reston and Tyson's Corner, as shown in Table 7 below.

Table 7

**COMPARISON OF OFFICE SPACE VACANCY RATES, SELECTED SUB-AREAS
WASHINGTON, D. C. REGIONAL MARKET AREA
Mid-2002**

Sub-Area	Delta Associates	Trammell Crow Co.	CB Richard Ellis 1/	Grubb & Ellis
Washington, D. C.		4.3%		
Suburban Maryland		8.4%		
Northern Virginia, including Alexandria		9.8%	16.2%	16.1%
Arlington County		6.2%		8.8%
Crystal City		3.7%	6.0%	4.8%
Fairfax County		11.0%		19.4%
Herndon		18.2%	34.3%	29.1%
Reston		12.4%	19.2%	23.2%
Tyson's Corner		10.6%	18.5%	21.4%
Loudoun County		14.0%		17.8%
Alexandria	8.3%	8.6%		
Including sub-lease space	10.1%		10.2%	11.0%
Total, Regional Market Area		7.7%		

1/ Overall Rate, including sub-lease space.

Sources: Delta Associates; Trammell Crow Company; CB Richard Ellis; Grubb & Ellis; Whitney & Whitney.

Inspection of both the recent development patterns for office space in the region and the current occupancy characteristics of the various sub-areas would suggest the following trends:

- Government-related office employment has remained steady through the recent economic recession;
- Inner Beltway sub-markets, with relatively higher percentages of government-related employment and fewer speculative developments, have maintained relatively strong occupancy characteristics.
- Suburban Northern Virginia markets, the locations for "dot.com" companies and speculative office developments, have been battered by recent economic events, and face even higher vacancy rates as new speculative space is completed and additional "dot.com" companies fold or "downsize" further.

The older, stable office sub-markets such as Alexandria and Arlington are holding strong and maintaining substantially higher occupancy rates in the low- to mid-90% range. Moreover, while 2.7 million square feet are being added to the Alexandria office space inventory by 2004, the space is virtually all committed to future tenants, thus will not add an appreciable vacancy factor to the local market.

One final note on the recent development history of office space in Alexandria: actual absorption of new office space has exceeded the rate of new office development over the last 12 years. The vacancy rate in 1990 for the Alexandria office space inventory was 16.0%; based upon data provided by Delta Associates, the vacancy rate as of September 2002 was only 8.3%. Effectively, between 1990 and 2002 650,000 square feet more office space was absorbed (occupied) than was built during the period.

Development Patterns at Comparable Transit Opportunities

There is increasing recognition throughout the United States that rail transit systems are an integral part of metropolitan transportation planning, and that metro stations provide an exceptional opportunity to serve as locations for high-density activity centers. While discussion of this point would be tantamount to belaboring the obvious, what is perhaps not fully recognized is the degree to which high density developments at metro stations are being successfully completed throughout North America, including projects in such cities as Seattle, Minneapolis, Dallas, Atlanta, Toronto and San Francisco/Oakland. One of the most successful programs of implementing high-density development in conjunction with metro stations has been undertaken in Arlington County with the development of the Rosslyn-Ballston Corridor. Over a 20+/- year development period, the five station corridor--consisting of Rosslyn, Courthouse, Clarendon, Virginia Square and Ballston--has witnessed the development of nearly 20 million square feet of office space, 2.5 million square feet of retail space, 23 thousand residential units and 3.2 thousand hotel units. On average, about four million square feet of office space and a half million square feet of retail space have been developed or approved for construction at each station, as noted in Table 8 below. While suburban Maryland has not evidenced the same level of development as Arlington around its stations to date, the Bethesda and Friendship Heights stations have become important mixed-use nodes

featuring entertainment and retail facilities, and significant redevelopment activities are being undertaken at the Rockville and Silver Spring Metro stations.

Table 8
DEVELOPMENT PATTERNS AT ARLINGTON COUNTY METRO STATIONS
ROSSLYN-BALLSTON CORRIDOR
2002

<u>Land Use</u>	<u>Rosslyn</u>	<u>Court House</u>	<u>Clarendon</u>	<u>Virginia Square</u>	<u>Ballston</u>	<u>Total</u>	<u>Average Metro Station</u>
Planned Capacity							
Office Space in Square Feet	11,286,517	4,974,323	5,873,754	3,088,948	9,285,794	34,509,336	6,901,867
Retail Space in Square Feet	686,934	176,895	830,434	338,534	1,249,453	3,282,250	656,450
Housing Units	8,101	6,585	1,677	5,159	7,942	29,464	5,893
Hotel Rooms	2,445	908	300	46	1,331	5,030	1,006
Existing /Approved for Development							
Office Space in Square Feet	8,252,157	3,643,778	926,755	1,281,692	5,597,586	19,701,968	3,940,394
Retail Space in Square Feet	662,788	140,086	500,618	306,723	866,934	2,477,149	495,430
Housing Units	6,067	6,315	1,441	3,038	6,090	22,951	4,590
Hotel Rooms	2,225	391	-	46	556	3,218	644
Future Potential							
Office Space in Square Feet	3,034,360	1,330,545	4,946,999	1,807,256	3,688,208	14,807,368	2,961,474
Retail Space in Square Feet	24,146	36,809	329,816	31,811	382,519	805,101	161,020
Housing Units	2,034	270	236	2,121	1,852	6,513	1,303
Hotel Rooms	220	517	300	-	775	1,812	362

Source: County of Arlington; Whitney & Whitney.

Potential Competitive Locations for Office Space Development

While the City of Alexandria is a mature community that is largely built out, there are nevertheless a number of potential alternative locations within the City of Alexandria that could compete for future office space development along with the Eisenhower East Corridor. These include the following: Mark Center; Potomac Yard; miscellaneous smaller redevelopment sites in and around Old Town; and Eisenhower West. Each opportunity area is reviewed below.

- Mark Center

Mark Center is reported by Robert Charles Lesser & Co. as having an approved plan for the future development of nearly 1.4 million square feet of office space. Historically, this I-395 location has attracted government-related employment by virtue of its inner Beltway location and proximity to the Pentagon.

The location does not have a metro station and is somewhat peripheral with respect to the City of

Alexandria's restaurants, entertainment/ retail opportunities and other services. It is not likely to provide major competition in the future to the Eisenhower East development.

- Potomac Yard

The Potomac Yard master plan program has been approved for development of 1.9 million square feet of office space. The site is presently served by the Jefferson Davis Memorial Highway (U.S. 1) and Washington Street/George Washington Memorial Parkway, though both these roadways are reaching their maximum capacities at peak periods during rush hours. While there has been some discussion of the possible creation of a metro station at the Potomac Yard site, no funding has been identified at this time. The Potomac Yard site's long and narrow configuration is not particularly conducive for development as a major office center. Nevertheless, its immediate proximity to Crystal City, the Pentagon, Ronald Reagan Washington National Airport and central Washington, D.C. provide the site with important attributes as a potential location for government-oriented office space over the long term, assuming resolution of its access issues.

- Smaller Redevelopment Sites, Old Town

There are a number of smaller locations along North Washington and King Streets that can accommodate office developments scaled at 70,000 square feet or less. While these sites offer proximity to Old Town with its extensive array of services and other amenities, in the aggregate they do not constitute a major source for a large supply of competitive office space in the future.

- Eisenhower West

Given its accessibility from the Beltway and immediate proximity to the Van Dorn Street Metro Station, Eisenhower West represents an excellent longer-term office development opportunity that should emerge as the Eisenhower East Corridor is developed. At the present time, however, it is more likely to be more attractive to a "campus" or suburban office space user than to the more urban-oriented office space user that would likely consider the Eisenhower East Corridor location.

Characteristics of Current and Future Demand

Realtors tend to characterize the Alexandria office space market as comprised primarily of trade associations, government contractors and smaller, second-tier businesses that cannot afford downtown Washington, D.C. In this view, the larger law firms, international banks and multi-national corporations have remained in downtown Washington, D.C., while the new technology companies and have tended to locate in the suburbs along the Dulles Corridor and Tyson's Corner where they can enjoy spacious sites, large floor plates and free parking. There is also the "pull" factor on jobs that has happened over the last 15 years in most metropolitan areas--as commutes into metro centers become more difficult, jobs have followed residents to the suburbs.

The above characterization of recent development patterns may provide a partial description of what has happened in the Washington, D.C. metropolitan area. However, both the success of Arlington County's metro station development program in attracting major office projects and Alexandria's recent success in attracting major corporate tenants in addition to the PTO to the Eisenhower East Corridor provide strong evidence that inner Beltway locations can be viable sites for major office tenants in the immediate future.

In addition, there is a growing recognition among some employers that suburban life styles are losing some of their appeal to a widening segment of the population for a complex number of reasons related to the changing demographic structure of the resident population, their life styles, and the nature of their work. Many cities are undergoing resurgence in popularity as residential location, as younger households reject longer commutes in favor of greater convenience and choice. Also benefiting from this centripetal population trend are older communities with a strong institutional/historic/cultural base such as Alexandria, Berkeley, Pasadena and Bethesda that in many respects embody many of the characteristics of the "urban village" that are being represented in current urban planning models.

Future Trends in Office Space Development

As aptly stated in the June 2001 issue of Urban Land, “Uncertainty and volatility characterize today’s business world, and no one has the answers about the near future of the office market.” Reflecting this truism, authors discussing the future of office space seldom reach any consensus about their subject, though an initial effort is offered below that hopefully summarizes some of the trends and issues that will likely impact the demand for and supply of office space in the future, thus should to be considered in the master planning of the Eisenhower East Corridor.

- Volatility of the Business Climate

It is generally recognized that the business climate is becoming increasingly volatile as measured by the companies who require a continual adjustment in the amount of office space they utilize for their operations. Companies change their space requirements with increasing frequency; unfortunately, the physical planning and development of this required office space typically lags well behind, leaving real estate facility managers, architects, and developers to deal with unnecessary and/or non-functional space. Moreover, while it can be argued that new “fast-response” business strategies may be needed for office space design and execution in order to satisfy business needs, it can also be asserted that cities must continue to plan for the longer term, focusing on provision of basic infrastructure and a stable environment that hopefully will be able to serve office user needs for multiple generations.

In a volatile economy, small- and mid-sized firms are likely to be very cautious about committing financial resources to real estate, whether for purchase, long-term lease, or direct expenditures for tenant improvements. Some futurists assert that firms will increasingly opt for greater flexibility in their commitments for and use of office space, adopting the following strategies:

- Utilizing shared office space, assuming security issues can be resolved;
- Committing to shorter term leases;
- Utilizing FF&E (Furniture, Fixtures, Equipment) leases rather than investing in furniture, office equipment, and even walls and partitions; and
- Providing fewer frills and fewer private or permanent workspaces for employees.

One possible implication of such strategies is a reduction in the size of office space per worker or higher net employment densities. Given this possibility, some flexibility may be necessary in the provision of parking for office employees – if office densities increase, parking needs would logically proportionally increase as well.

- The Changing Nature of Work and the Work Place

Kevin Kelly, founding editor of Wired magazine, recently noted, “I go into the office for only two things: to be interrupted and to have meetings.” In his view, home is where you work, work is where you socialize. In the age of “connectivity” the office is increasingly designed for creativity and collaboration, with the result that meeting areas are more important than private areas. Thus, while the amount of private space in an office may be declining, social space is on the rise. That work is a social activity is also reflected in falling self-employment; between 1994 and 1999, as telecommuting increased self-employed persons declined for the first time since the 1960s. One area where there is little current discussion is the individual office space requirements for workers. In part, this may reflect the trend away from private office space, though some authors argue that private space will always be necessary for certain types of work functions. Notwithstanding, David McIntosh argues (ULI on the Future: The Real Estate and Technology Link) that the nature of work conducted in an office building has changed dramatically: “Mindless execution is out; collaborative creativity is in.” He proposes that office design will need to change in at least three ways:

Perks. With pressures to reduce square footage and to enforce egalitarianism, space will become a collective perk, enhancing the stature of the work group.

Lighting. In Netherlands, social legislation has been enacted that office workers must be within 5 meters (16.4 feet) of a window. It is likely that healthy air and lighting will become increasingly important design issues in the United States.

Fractals. Another element of “human-centered” architecture, fractals follow the principle that “the whole of an object should have the same level of complexity as any portion.” Translating to cities and office buildings, the esthetic of fractals says that cities should have centers, buildings should have centers, building floors should have centers and sections of floors should have centers.

Cutting through all the theory, he argues that three types of functional office space will emerge in the future:

Crunching space: space that is required for the “white collar factory”-- big floors and cheap.

Convening space: space that is required for meetings; expensive, centrally located and hard to reproduce. This is the space that has become more important as the number and complexity of communications has increased.

Connecting space: space that people come to in order to take advantage of the infrastructure, though much of this infrastructure effectively can be moved home over time.

Of significance to the City of Alexandria's master planning activities, the planning of convening space(s) is of paramount importance: As McIntosh notes,

"Convening space increasingly will be in two locations: center cities and transportation hubs. Urban locations have two benefits... they enable people to meet with more people per day (than do the suburbs), and they provide attractions outside the office."

"Location matters again. The biggest paradox of the Internet revolution is that by enabling us to work anywhere, it has made location more important than ever... Convening work – where real value is created--happens in high value locations, i.e., points of high density and resultant high contact."

Summarizing, a master plan approach that focuses on the creation of a high density town center at the metro station would appear to be consistent with futurists' thinking regarding the optimization of the available master plan area.

- City Amenities

There is growing recognition that suburban office buildings lack the requisite amenities that make living "easy". Large employers in suburban settings now include conveniences such as food service, banking, fitness centers and day care facilities within their office compounds. Even further in this regard, Arlington County has insisted that its mixed-use developments provide grocery stores to ensure that basic living requisites are provided conveniently to employees and residents.

- Sustainable Design Considerations

While sustainable design is well established in Europe, the concept is just beginning to be fully recognized as part of master planning and urban design in the United States. The City of Seattle has recently begun a major investigation of the applications of sustainable design to urban planning with a program entitled, "Implement: Sustainable Design Construction and Operation Standards for Buildings, Rights-of-way, and Parks." Sustainable design goes well beyond its most obvious applications related to building energy efficiency, though this is a very important consideration given that buildings account for half the energy consumption of developed countries. According to journalist Bette Hammel in Urban Land, sustainable or "green" design involves ten primary issues:

1. Low Energy/High Performance. The building should be designed to depend as little as possible on fossil-fuel energy;
2. Replenishable Sources. Buildings should be constructed with replenishable or near-inexhaustible materials.

3. Recycling. The building should be designed to eliminate waste and pollution. Green buildings typically conserve and recycle water.
4. Embodied Energy. Buildings should be constructed of materials that do not require great amounts of energy to produce, transport and install.
5. Long Life, Loose Fit. Re-use and recycle historic buildings with materials that age well.
6. Total Life Cycle-Costing. Involves determining the cost of operation and maintenance of the building over its useful life in addition to its capital cost.
7. Embedded in Place. Setting is crucial. Architecture should fit the place and locale.
8. Access and Urban Context. Buildings locations should be placed near public transportation and be accessible by the public.
9. Health and Happiness. Buildings should be designed for the healthy occupancy of the employees, with consideration given to the quality of air, light and absence of toxic substances.
10. Community and Connection. Buildings should be connected to the natural world and designed to enhance the quality of life.

The City of Alexandria's master planning process currently deals with many of these issues; as standards evolve other elements can be effectively addressed as well.

Summary of Strengths and Weaknesses of Eisenhower East Corridor as a Location for Office Space

Based upon the market research and contacts with realtors, the major strengths of the Eisenhower East Corridor as a location for office space development may be summarized as follows:

- Immediate proximity to the existing metro station. As demonstrated by Arlington County and numerous other metropolitan areas, a transit station can serve as a lynchpin to a high-density mixed-use development program that provides a successful live-work environment and economic benefits to the municipality. It is also a favored location by employers seeking access to a large pool of labor.
- Access and visibility from the I-95/I-495 Beltway, a roadway that is currently undergoing substantial improvements to its capacity and ultimate ability to serve the City of Alexandria. These improvements include the expansion of the Wilson Bridge across the Potomac River; the addition of travel lanes to the I-95/I-495 Beltway at the Springfield Interchange; and improvements to the ramp systems that provide direct linkages between the I-95/I-495 Beltway and the Eisenhower East Corridor site and I-95/I-495.

- Proximity to governmental office centers in Arlington and Washington, D.C. by either transit or automobile;
- Proximity to the Ronald Reagan Washington National Airport;
- Proximity to the cultural and commercial recreation opportunities found in Old Town Alexandria;
- Potential synergistic benefits associated with a master-planned, mixed-use, pedestrian environment that affords the opportunity to both live and work in the Eisenhower East Corridor;
- Cost advantages associated with a near-central location that is outside the District of Columbia boundary – realtors indicate that annual operational costs for office buildings are from \$4.00 to \$7.00 per foot lower in Alexandria than in Washington, D.C;
- A proven market location that is proximate to the primary generator of jobs requiring office space, the Federal Government, and satisfies the GSA requirement for contractors to locate within 2,500 feet of a metro station.

In addition to these positive features, there should be some “spillover” benefits accruing to the Eisenhower East Corridor in the form of additional office tenants that are generated by the presence of the Federal Court Buildings and the PTO office. According to developers and realtors contacted, however, the attraction power of these facilities is very difficult to quantify. One estimate places the total PTO-generated employment in the Eisenhower East Corridor at about 10,000 jobs at full build-out including those already committed, though there is no hard evidence to substantiate this estimate. Notwithstanding, there is general consensus that over time a number of small and mid-size legal firms with space requirements under 20,000 square feet will be attracted to the Eisenhower East location, though the area is unlikely to appeal to major firms other than those that have already indicated their intent to relocate to the area.

The major weaknesses or deficiencies of the Eisenhower East Corridor as an office location identified in discussions with realtors and developers are as follows:

- The local accessibility to the site via the arterial street system is deficient in a number of important respects due to the historical “spoke” pattern of regional arterial roads focusing on Old Town; the absence of a north-south grid pattern of streets westerly of U.S. 1; and the southerly

barrier condition presented by Cameron Run and the I-95/I-495 Beltway. In this regard, significant road and transit improvements will be needed to accommodate future traffic generated by both residents and employees, including the widening of Eisenhower Avenue, enhancement of the Telegraph Road ingress/egress to the corridor; creation of additional road linkages between the Eisenhower East Corridor and Duke Street; expansion of the platforms and other improvements at the Eisenhower Avenue Metro Station; and augmentation of the feeder bus system serving the Eisenhower Avenue Metro Station.

- The proposed urban character of future Eisenhower East Corridor development may not appeal to certain companies that favor the lower density, heavily-landscaped suburban environment that is provided in Tyson's Corner, Herndon and other locations near Dulles International Airport.
- Some realtors indicated that the limitations on parking to 2.0 spaces per 1,000 square feet of office space will not be acceptable to some of the larger space users who prefer the 3.5 to 4.0 space per 1,000 square foot ratios available in suburban locations. In this regard, realtors indicated that they lost potential office space deals at the King Street Metro Station several years ago when they insisted on maintaining a lower 2.0 space/1,000 square foot ceiling. It should be recognized, however, that times have changed, and that use of the metro and other transit options including ride-share programs have gained prominence. The development of mixed-use projects that provide adjacent residential opportunities coupled with a reduction in the incentives to use the private automobile such as free employee parking would also contribute to making the 2.0 standard more palatable to a broader cross-section of firms and employees.
- The relative scarcity of lower-density residential environments immediately adjacent to the Eisenhower East site was also cited by realtors as an issue, as they noted that existing senior executive housing tended to be concentrated near Bethesda and McLean while junior executives tended to heading toward Reston and Loudoun County.
- A final issue raised by developers and realtors related to the "entitlement process" in Alexandria. There was a general feeling expressed that there was currently too much uncertainty in the entitlement process; as a result, some developers have been reluctant to purchase land on a speculative basis and undergo major risks associated with gaining required approvals. The

Department of Planning & Zoning is aware of this issue and actions such as the master planning of the Eisenhower East Corridor are being taken to address their concerns..

Notwithstanding the above concerns, there is recognition that the Eisenhower East Corridor master-planning program does signal that in the future the development process may be substantially improved, and that the City is developing a framework that provides greater certainty to the gaining of development entitlements. There is also recognition that the City's regulatory procedures are not solely responsible for recently constrained real estate development in the community; a highly politicized citizen base, reluctant landowners, and softening regional economic conditions also have contributed to the slow pace of new development and the perception of a negative business environment.

Summary of Market Potential for Office Space in the Eisenhower East Corridor

Given its strategic position in the Washington, D.C. metropolitan area, the continuation of the Federal Government as a primary generator of office employment in the region and the completion of the proposed improvements to the regional road system in the immediate vicinity of the Eisenhower East Corridor, the City of Alexandria should continue to serve as a prime location for new office development in the region. Its market "niche" is well established as a location that is close to the center of the Washington, D. C. metropolitan area, is highly economic in terms of operational costs, and is easily accessible by automobile and transit to a large labor pool. Accordingly, the City of Alexandria should be able to continue to capture a four to five percent market share of the Washington, D.C. Regional Market Area demand or from 250,000 to 350,000 square feet per year for the next 10 to 15 years in addition to the space that is currently committed for development at PTO. The majority of that space – perhaps 200,000 to 250,000 square feet – should be capturable at Eisenhower East Corridor locations.

In order to achieve this level of market penetration it will be necessary for the City to ensure that developers provide the amenities and conveniences that are commonly associated with a highly urbanized location. In addition to providing office space, Corridor developments should offer a range of

nearby residential choices that encourage a “live-work” life style and a range of shopping and entertainment experiences that are accessible on a pedestrian basis. The type of town center that could serve as an important “anchor” attraction for future office space is reviewed below in the analysis of retail development potentials.

Potential Impact of Reduced Parking Standards on Future Office Development.

An important consideration in the assessment of the future market potential for office space in the Eisenhower East Corridor is the City of Alexandria’s potential restriction of parking in new office developments to an effective ratio of 2.0 parking spaces per 1,000 square feet of office space for projects located within 1,500 feet of the Eisenhower Avenue Metro Station. While it is beyond the scope of this study to provide an exhaustive review of this issue, an initial review of the matter revealed the following:

- Empirical studies of office employee parking behavior (see Donald C. Shoup, “An Opportunity to Reduce Minimum Parking Requirements,” APA Journal (Winter 1995) suggests that employer-paid parking demand is 2.4 spaces per 1,000 square feet, and driver-paid parking demand is 1.8 spaces per 1,000 square feet. Effectively, when the cost of parking is not subsidized by the community or the employer and passed on to the employee, on balance there is likely to be a significant reduction in net employment-related parking demand;
- Washington, D.C. restricts parking in office buildings to a standard of 1.66 and Arlington is pushing for a 1.0 standard near metro stations, thus Alexandria is hardly on the “fringe” with respect to this issue;
- While realtors indicate that some larger tenants insist upon parking levels at 3.0 or more spaces per 1,000, these users are not likely candidates for the highly-urbanized development that is being proposed for the Eisenhower East Corridor;
- Initial discussions with developers and lenders suggested that the parking restriction was not considered by them to be a major problem that would potentially constrain new office development programs; and

- Finally, the implementation of a comprehensive transportation system management plan involving transit and other movement systems should be able to mitigate any short-term stresses created by the 2.0 standard in the Eisenhower East Corridor.

IV. ANALYSIS OF MARKET POTENTIAL FOR RETAIL SPACE

The following section summarizes the market potential for retail development in the Eisenhower East Corridor. This analysis considers two types of retail development opportunity in the planning area:

- The market potential for a “town center” retail experience offering a diverse mix of retail, restaurant and services uses that serves the larger regional population; and
- The market potential for convenience retail and services activities that provide for the immediate needs of residents, employees and visitors located in the Eisenhower East Corridor.

Delineation of Market Areas for the “Town Center” Retail Development

Market areas for a potential “town center” type of retail development in the Eisenhower East Corridor have been derived from two basic sources: (1) application of appropriate geographic and mileage standards for town centers and urban entertainment/retail complexes that have been determined from patronage at comparable developments; and (2) direct observation of current customer visitation patterns to the existing cinema complex that is located on the Hoffman property within the planning area. Utilizing these sources, the PRIMARY MARKET AREA (PMA) for the proposed town center includes the City of Alexandria and a “pac-man” shaped configuration that extends for a 10-mile radius in the westerly, southerly and easterly directions from the existing Hoffman cinema complex site as shown in Figure 1 below. Effectively, the PMA reflects current usage patterns (see Table A-2) indicating that between 70% and 80% of current attendance at the existing theatres comes from residents of the City of Alexandria, Fairfax County and Prince George’s County, Maryland. The SECONDARY MARKET AREA (SMA) has been identified geographically as including the following: Arlington County; District of Columbia; Prince William County, Virginia; and portions of Fairfax County, Virginia and Prince George’s County, Maryland that lie more than 10 miles from the existing cinema complex site. These market area definitions reflect that: (1) the I-95/I-495 Beltway is a significant determinant of the shape of the PMA by providing access for Prince George’s County residents to the site; (2) despite their relative proximity to Alexandria, Arlington residents utilize entertainment/retail opportunities locally, in Washington, D.C. and northern Maryland (Bethesda) rather than travel southerly to Alexandria; and (3) residents in southern Fairfax

County and Prince William County tend to gravitate toward the metropolitan center for entertainment /retail activities and can be “intercepted” at the Eisenhower East location.

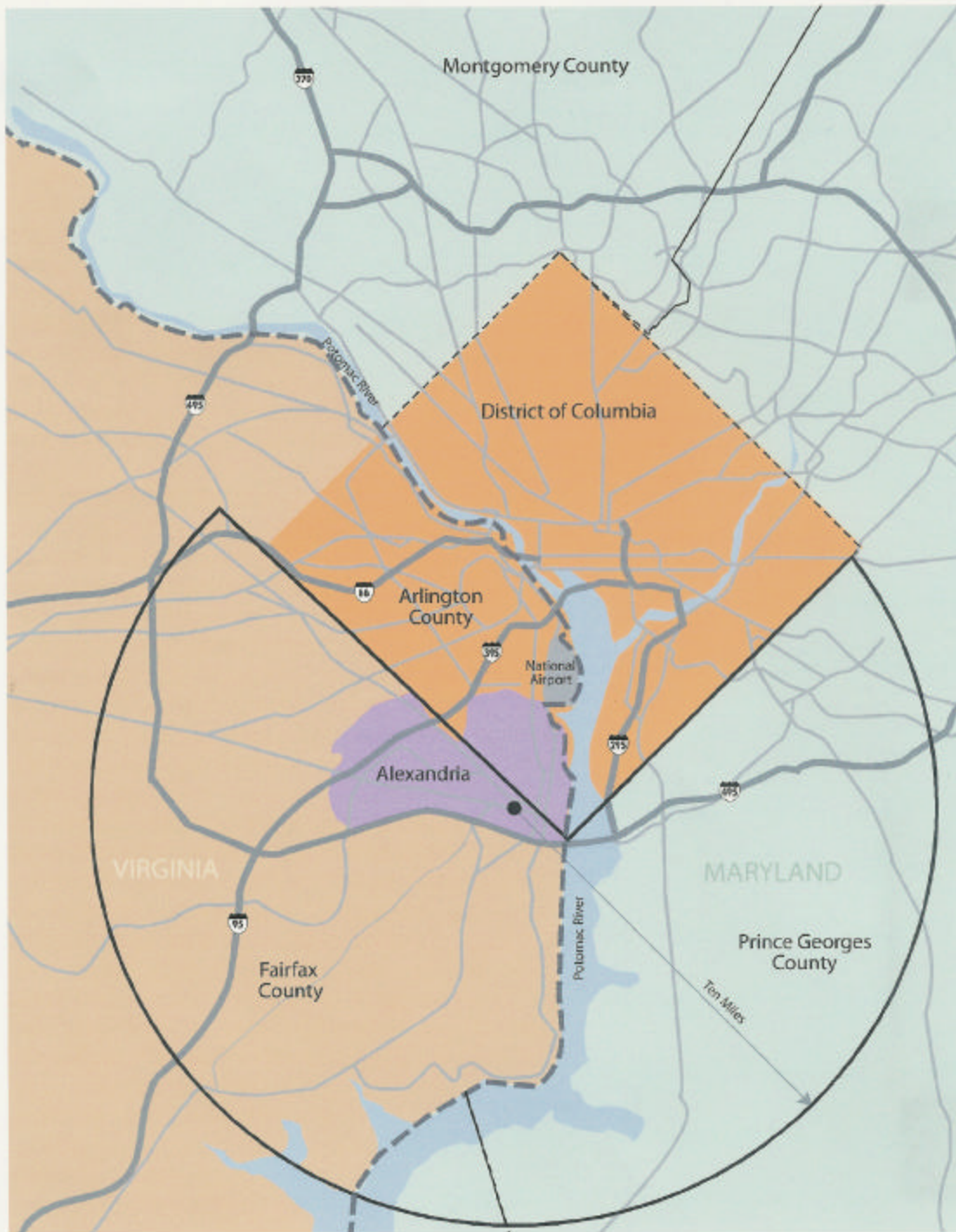
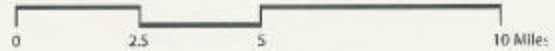


Figure 1 Primary Market Area



Primary Market Area Demographic Characteristics

As presented in Table 9, the Primary Market Area (PMA) for the Eisenhower East town center is currently estimated at 761.1 thousand persons. The PMA is growing at a rate of 1.1% per year, and by 2007 should exceed 804 thousand persons. About 18% of the PMA population or 133.1 thousand persons reside within the City of Alexandria.

Table 9

PRIMARY MARKET AREA (PMA) POPULATION, INCOME AND RETAIL EXPENDITURE CHARACTERISTICS 2000-2007

<u>Market Area Segment</u>	<u>2000</u>	<u>2002</u>	<u>2007</u>
A. Population			
City of Alexandria	128,283	133,078	144,403
Fairfax/Prince Georges Counties within 10 Miles	615,665	627,990	659,773
Total PMA	743,948	761,068	804,176
Projected Annual Growth Rate, 2000-2007:	1.12%		
B. Per Capita Income			
City of Alexandria	\$ 46,613	\$ 50,215	
Fairfax/Prince Georges Counties within 10 Miles	\$ 35,137	\$ 37,853	
Total PMA	\$ 37,144	\$ 40,014	
Projected Annual Growth Rate, 2002-2007:	1.50%		
C. Aggregate Income in Thousands			
City of Alexandria	\$ 6,203,165	\$ 7,251,260	
Fairfax/Prince Georges Counties within 10 Miles	\$ 22,065,685	\$ 24,974,076	
Total PMA	\$ 28,268,849	\$ 32,178,514	
D. Potential Retail Expenditures in Thousands			
City of Alexandria	\$ 2,109,076	\$ 2,465,428	
Fairfax/Prince Georges Counties within 10 Miles	\$ 7,502,333	\$ 8,491,186	
Total PMA	\$ 9,611,409	\$ 10,956,614	
Percent of Income Expended for Retail Sale	34.0%		

Sources: Claritas; Randall Gross, Arlandra Draft Market Potentials Analysis; Whitney & Whitney.

In terms of per capita incomes, the PMA's current average is estimated at \$37,144. The PMA is dominated by the City of Alexandria, where average per capita incomes are currently estimated at \$46,613. By 2007, average annual per capita incomes for PMA residents should approach \$40,000 as measured in constant 2002 dollars; growing at a similar rate, the per capita average annual income in the City of Alexandria should exceed \$50,000.

Table 9 also provides current estimates of the PMA's aggregate income and potential expenditures for retail sales. The current Aggregate Income for PMA residents approaches \$28.3 billion; by 2007, PMA Aggregate Income should reach nearly \$32.2 billion. Typically, PMA residents spend the equivalent of 34% of their incomes for retail expenditures. Application of this figure to current and projected future incomes for PMA residents results in a projection of their potential retail expenditures at \$9.6 billion in 2002 and \$11.0 billion in 2007.

Secondary Market Area Demographic Characteristics

Reflecting its strategic location within the Inner Beltway, the proposed Eisenhower East town center would enjoy a Secondary Market Area (SMA) that virtually covers the remainder of the Washington, D.C. metropolitan area. As of 2002 the SMA embraced a total population of 2.47 million persons, with an average per capita income of \$36,513 and an Aggregate Income exceeding \$90 billion. These data are summarized in Table 10 below:

Table 10

SECONDARY MARKET AREA (SMA) POPULATION, INCOME AND RETAIL EXPENDITURE CHARACTERISTICS 2000-2007

Note: Secondary Market Area includes Arlington County; District of Columbia; Prince William County; and portions of Fairfax and Prince Georges Counties located more than 10 miles from study site.

	<u>2000</u>	<u>2002</u>	<u>2007</u>
A. Population	2,409,227	2,465,470	2,606,626
Projected Annual Growth Rate, 2000-2007:	1.59%		
B. Per Capita Income		\$ 36,513	\$ 39,335
Projected Annual Growth Rate, 2002-2007:	1.50%		
C. Aggregate Income in Thousands		\$ 90,021,706	\$ 102,531,297
D. Potential Retail Expenditures in Thousands		\$ 30,607,380	\$ 34,860,641
Percent of Income Expended for Retail Sale	34.0%		

Sources: Claritas; Randall Gross, Arlandra Draft Market Potentials Analysis; Whitney & Whitney.

Over the next five years, assuming continued population and real income growth at current levels the SMA's Aggregate Income should exceed \$102.5 billion annually, yielding an annual retail expenditure potential of nearly \$35.0 billion. These data are also summarized in Table 10. While a detailed projection of the potential sales capture from this source of demand by Eisenhower East retailers has not been calculated in the analysis, it is important to note that the SMA typically contributes from 15% to 20% of the potential market support to a major urban center.

Retail Market Potential for Eisenhower East Town Center

There are four basic steps in the translation of market area retail expenditure potentials into projections of supportable space at a particular site. These procedures are identified below:

- Allocation of total projected retail sales expenditures into various retail goods (and store) categories;
- Determination of total potential sales for the market area disaggregated into the selected retail goods categories;
- Determination of percentage capture of potential market area sales by the proposed retail facility; and
- Translation of projected sales capture into supportable retail space by individual store categories.

A detailed discussion follows covering each step in the analysis.

- Allocation of Potential Retail Sales by Retail Space Category

The allocation of retail sales by retail category presented below follows the logic of the Standard Industrial Classification Code system developed by the Census Bureau that groups retail stores by similar type for data collection purposes, with two further refinements that consider the characteristic locational requirements for retail stores offering various retail goods and the typical consumer behavior related to purchasing retail goods. Accordingly, four major classes of retail goods may be defined for purposes of analysis. These include Shopper Goods, Convenience Goods, Eating and Drinking facilities and a "catchall" category, Highway-Oriented commercial/non-store retailers. These retail groupings, and their respective percentage shares of total potential retail sales for higher income market areas such as the Eisenhower East's PMA and SMA are shown below:

Table 11

**ALLOCATION OF RETAIL SALES BY RETAIL GOODS CATEGORY
EISENHOWER EAST PMA AND SMA RESIDENTS**

<u>Retail Category</u>	<u>Percent of Retail Sales</u>
Shopper Goods	
Apparel and Related	4.5%
General Merchandise	12.0%
Specialty Goods	16.0%
Home Furnishings, et al	<u>5.0%</u>
Subtotal	37.5%
Eating And Drinking	12.00%
Convenience Goods	
Food Stores/Supermarkets	15.50%
Drug Stores	4.00%
Liquor	<u>0.50%</u>
Subtotal	20.00%
Highway Commercial/Non-Store Retailers	
Automotive Dealers	15.0%
Service Stations	7.0%
Hardware/Building Materials	6.0%
Other, including Non-Store Retailers	<u>2.5%</u>
Subtotal	30.5%
Grand Total	100.0%

Source: Drived from U. S. Census of Retail Trade and Retail Sales Data Collected
for Higher Income Communities by Whitney & Whitney.

Following this retail paradigm, Shopper Goods are characteristically found in major downtown shopping districts, regional malls, community/power centers, and large strip centers. For Shopper Goods, consumers generally are willing to travel to locations where there is an opportunity to compare prices and examine a range of alternative goods as part of the purchase decision. For this analysis, four major types of Shopping Goods stores are delineated: Apparel and Related, including shoe stores; General Merchandise, such as department stores and major discount retailers; Specialty stores, including an array of small store retailers such as florists, sporting goods dealers, camera stores and gift shops; and Home Furnishings et al, including the full range of furniture and appliance dealers.

In contrast to Shopper Goods, Convenience Goods are typically purchased on a frequent basis at locations that are highly accessible, typically located near the home or place of employment in a neighborhood shopping center or strip. Convenience Goods commonly apply to three store types: food stores, ranging from major supermarkets to “mom and pop” bakeries; drug stores/pharmacies; and liquor stores.

Eating and Drinking establishments are more or less ubiquitous in terms of their location and shopping-related function; they can fulfill immediate convenience requirements or serve as destination events for discriminating palates.

These three retail goods categories noted above are commonly offered in urban shopping complexes, thus stores serving these goods are considered as candidates for the Eisenhower East town center. In total, they represent about 69.5% of the potential retail purchases likely to be made by PMA residents.

The final retail grouping, the Highway Commercial/Non-Store retailer includes automobile dealers, auto parts suppliers, garden/building materials stores, service stations and similar retailers. As a rule, retailers offering these types of goods are not likely candidates for a town center, as the locational preferences/space requirements/rental payment capacities of these facilities are not commonly satisfied in a highly urbanized setting or a downtown location. Accordingly, this retail goods category is not considered further in the analysis.

- Determination of Potential PMA Resident Retail Sales

Table 12 provides a projection of the Eisenhower East PMA's potential retail sales expenditures for Shopper Goods, Convenience Goods and Eating and Drinking establishments – retail categories considered as viable candidates for a town center type of development. The projected retail sales potential for the PMA in 2002 is nearly \$6.7 billion. In 2007, the PMA's potential sales demand approaches \$7.6 billion.

Table 12

**PRIMARY MARKET AREA POTENTIAL RETAIL EXPENDITURES
BY MAJOR RETAIL CATEGORY, PMA RESIDENTS
2002 AND 2007
(in Thousands of \$)**

Retail Expenditure Category	Percent Allocation	2002	2007
Candidate Goods for Town Center:			
Shopper Goods	37.5%	\$ 3,604,278	\$ 4,108,730
Eating and Drinking	12.0%	\$ 1,153,369	\$ 1,314,794
Convenience Goods	20.0%	\$ 1,922,282	\$ 2,191,323
Subtotal	69.5%	\$ 6,679,929	\$ 7,614,847
All Other Retail Expenditures	30.5%	\$ 2,931,480	\$ 3,341,767
Total Potential Retail Expenditures	100.0%	\$ 9,611,409	\$ 10,956,614

Source: Whitney & Whitney.

- Potential Capture of PMA Resident Retail Sales by Eisenhower East Town Center

Potential sales capture at the proposed Eisenhower East retail complex is determined by the application of sales capture rates for each of the types of retail goods considered for inclusion in the proposed town center to the total potential sales. For purposes of this analysis, the PMA was subdivided into two sub-components – City of Alexandria residents and the remainder of the PMA. The application of the capture rates followed these general guidelines:

- Consumers typically distribute their sales over a range of shopping opportunities. Even premier shopping centers (regional centers over one million square feet) that are dominant in a market area seldom capture more than 20 percent of demand across a broad range of retail categories. Accordingly a community-scaled (250,000 to 400,000 square feet) shopping center's capture rate for shopper goods retail categories typically ranges from three to five percent.
- Convenience goods tend to be purchased close to home or workplace; as a consequence, the convenience goods capture rate over the entire PMA as defined here is likely to be smaller than shopper goods capture.
- Eating and Drinking sales tend to be dispersed over a wide range of facilities, thus less likely to be concentrated at one location than shopper goods.
- Given their relative proximity to the site, City of Alexandria residents are likely to visit the town center more frequently than other PMA residents.

After consideration of the site's location, existing and potential competitive facilities, and the present market reach of the cinema complex, two sets of market capture rates were utilized in the analysis: a "baseline" capture rate and an "optimistic" capture rate, with the latter representing the market potential if a major retail developer were introduced to the Eisenhower East development program. These capture rates are presented below in Table 13; depending on the type of retail good, the proposed town center's capture rate ranges from 0.5% to 4.0% of total market demand from PMA residents.

Table 13

**CAPTURE PROJECTIONS OF RETAIL SALES BY RETAIL CATEGORY
EISENHOWER EAST PRIMARY MARKET AREA (PMA) RESIDENTS
(in Percentages)**

<u>Retail Category</u>	Baseline Projection		Optimistic Projection	
	City of <u>Alexandria</u>	Rest of <u>PMA</u>	City of <u>Alexandria</u>	Rest of <u>PMA</u>
Shopper Goods				
Apparel and Related	2.0%	1.0%	4.0%	2.0%
General Merchandise	2.0%	1.0%	4.0%	2.0%
Specialty Goods	3.0%	1.0%	4.0%	2.0%
Home Furnishings, et al	3.0%	1.0%	4.0%	2.0%
Eating And Drinking	3.0%	1.0%	3.0%	2.0%
Convenience Goods				
Food Stores/Supermarkets	2.0%	0.5%	2.0%	0.5%
Drug Stores	2.0%	0.5%	3.0%	0.5%
Liquor	2.0%	0.5%	2.0%	0.5%

Source: Whitney & Whitney

Application of the capture rates to the respective retail categories produces a retail sales capture projection for the proposed Eisenhower East town center from PMA residents of \$80.9 million in 2002 and \$92.9 million in 2007 per the Baseline Scenario; under the Optimistic Scenario the capture projection is \$130.3 million in 2002 and \$149.3 million in 2007. The projections are detailed in Table 14.

Table 14

**CAPTURE PROJECTIONS OF RETAIL SALES BY RETAIL CATEGORY
EISENHOWER EAST PRIMARY MARKET AREA (PMA) RESIDENTS
2002 and 2007**

Baseline Projection		
<u>Retail Category</u>	<u>2002</u>	<u>2007</u>
Shopper Goods	\$ 48,380,878	\$ 55,510,056
Eating And Drinking	\$ 16,595,473	\$ 19,064,964
Convenience Goods	<u>\$ 15,938,637</u>	<u>\$ 18,352,898</u>
Total Sales	\$ 80,914,988	\$ 92,927,918

Optimistic Projection		
<u>Retail Category</u>	<u>2002</u>	<u>2007</u>
Shopper Goods	\$ 87,903,638	\$ 100,665,315
Eating And Drinking	\$ 25,598,273	\$ 29,254,387
Convenience Goods	<u>\$ 16,782,267</u>	<u>\$ 19,339,069</u>
Total Sales	\$ 130,284,178	\$ 149,258,771

Source: Whitney & Whitney

The basic assumption structure underlying the retail sales capture forecasts for each Scenario can be found in Appendix Tables A-3 through A-6.

- Translation of Potential Sales Into Supportable Retail Space, PMA Residents

The final step in the retail space projection is the translation of projected sales into supportable retail space. This translation is accomplished by dividing the projected sales capture for each retail goods category by the dollar volume of sales per square foot that is required to support the space at an economically viable level of performance. Sales volume per square foot requirements utilized in this analysis range from \$400 to \$600 per square foot, depending on the individual retail category under consideration.

Under the more conservative Baseline scenario, the total supportable retail space – including a 10% allowance for personal, entertainment and business services such as cleaners, hair salons, health clubs, travel agents, et al – at Eisenhower East in 2002 is 183.2 thousand square feet, increasing to 210.4 thousand square feet by 2007. Under the Optimistic scenario, projected supportable retail space is 297.0 thousand square feet in 2002, increasing to 340.3 thousand square feet by 2007. These

projections just consider support from PMA residents. When the likely additional support from SMA residents and tourists is considered, the projected supportable space can be increased by 15% ("Baseline" scenario) to 20% ("Optimistic" scenario).

Summary of Market Potential for an Eisenhower East Town Center, per Projected PMA/SMA Support

Table 15 summarizes the potential supportable retail space at Eisenhower East from the PMA and SMA market areas under the Baseline and Optimistic Scenario structures for the periods 2002 and 2007. The projections provide a significant range in total supportable space, as summarized below:

**SUPPORTABLE RETAIL SPACE AT EISENHOWER EAST TOWN CENTER
PMA AND SMA RESIDENTS**

	<u>2002</u>	<u>2007</u>
Baseline Scenario	210,669	241,992
Optimistic Scenario	356,409	408,338

Source: Whitney & Whitney

Notwithstanding the variance between scenarios, the projections clearly indicate that there is potential market support to sustain a town center retail program of between 200,000 and 300,000 square feet in the Eisenhower East Corridor from the existing and projected regional resident market. Moreover, this level of support largely exists at present, thus before consideration of the additional market demand that would logically be generated by the build-out of proposed commercial and residential space in the Eisenhower East Corridor per the master plan. This additional source of demand for retail goods and services is considered in the following sections.

Table 15

**POTENTIAL SUPPORTABLE RETAIL SPACE, EISENHOWER EAST CORRIDOR
COMBINED PRIMARY MARKET AREA (PMA) AND SECONDARY MARKET AREA (SMA) RESIDENTS
2002-2007**

BASELINE FORECAST

<i>Retail Space Category</i>	<i>SMA Support Factor: 15.00%</i>			<i>SMA Support Factor: 15.00%</i>		
	-----2002-----			-----2007-----		
	PMA Supportable Space in Square Feet	SMA Supportable Space in Square Feet	Total Supportable Space in Square Feet	PMA Supportable Space in Square Feet	SMA Supportable Space in Square Feet	Total Supportable Space in Square Feet
Shopper Goods						
Apparel and Related	10,548	1,582	12,130	12,080	1,812	13,892
General Merchandise	35,161	5,274	40,435	40,266	6,040	46,306
Specialty Stores	36,879	5,532	42,411	42,367	6,355	48,722
Home Furnishings, et al	17,287	2,593	19,880	19,859	2,979	22,838
Subtotal	99,875	14,981	114,856	114,572	17,186	131,758
Eating and Drinking	33,191	4,979	38,170	38,130	5,720	43,850
Convenience Goods						
Food Stores/Supermarkets	24,705	3,706	28,411	28,447	4,267	32,714
Drug Stores	7,969	1,195	9,164	9,176	1,376	10,552
Liquor Stores	797	120	917	918	138	1,056
Subtotal	33,471	5,021	38,492	38,541	5,781	44,322
Total Retail	166,537	24,981	191,518	191,243	28,686	219,929
Services @10%	<u>16,654</u>	<u>2,498</u>	<u>19,152</u>	<u>19,124</u>	<u>2,869</u>	<u>21,993</u>
Total Supportable Space	183,191	27,479	210,669	210,367	31,555	241,922

OPTIMISTIC FORECAST

<i>Retail Space Category</i>	<i>SMA Support Factor: 20.00%</i>			<i>SMA Support Factor: 20.00%</i>		
	-----2002-----			-----2007-----		
	PMA Supportable Space in Square Feet	SMA Supportable Space in Square Feet	Total Supportable Space in Square Feet	PMA Supportable Space in Square Feet	SMA Supportable Space in Square Feet	Total Supportable Space in Square Feet
Shopper Goods						
Apparel and Related	21,097	4,219	25,316	24,160	4,832	28,992
General Merchandise	70,323	14,065	84,388	80,532	16,106	96,638
Specialty Stores	62,509	12,502	75,011	71,584	14,317	85,901
Home Furnishings, et al	29,301	5,860	35,161	33,555	6,711	40,266
Subtotal	183,230	36,646	219,876	209,831	41,966	251,797
Eating and Drinking	51,197	10,239	61,436	58,509	11,702	70,211
Convenience Goods						
Food Stores/Supermarkets	24,705	4,941	29,646	28,447	5,689	34,136
Drug Stores	10,078	2,016	12,094	11,642	2,328	13,970
Liquor Stores	797	159	956	918	184	1,102
Subtotal	35,580	7,116	42,696	41,007	8,201	49,208
Total Retail	270,007	54,001	324,008	309,347	61,869	371,216
Services @10%	<u>27,001</u>	<u>5,400</u>	<u>32,401</u>	<u>30,935</u>	<u>6,187</u>	<u>37,122</u>
Total Supportable Space	297,008	59,402	356,409	340,282	68,056	408,338

Source: Whitney & Whitney

Existing and Proposed Development, East Eisenhower Corridor

Existing and proposed development in the Eisenhower East Corridor is delineated in Appendix Table A-7. A total of 47 blocks or areas have been identified, based upon sub-area identification numbers provided by the City of Alexandria Department of Planning & Zoning. These areas have been cross-referenced in the appendix table to the existing Hoffman Center Plan, and are identified in the Eisenhower East map shown in Appendix B. These same data are grouped by geographic sub-area in Table 16 below in order to facilitate their evaluation as retail development opportunities. The four geographic sub-areas include the following:

1. Hoffman Properties, Mill Race and Eisenhower Avenue Metro Station Environs;
2. Carlyle Properties and Adjacent Sites north of Eisenhower Avenue;
3. Properties south of Eisenhower Avenue, including the ATA and City of Alexandria properties;
and
4. The Duke Street retail site (Whole Foods market under construction).

Based upon current approval status and best estimates of future entitlements, the Eisenhower East Corridor could ultimately be developed with over 17 million square feet of space, distributed between major land uses as follows:

<u>Land Use</u>	<u>Square Feet</u>
Office Space	9,504,104
Retail Space	595,761
Cinema Complex	78,000
Hotel Space	810,700
Residential Space	<u>6,114,122</u>
Total	17,102,597

In turn, the total space projected for the corridor potentially generates three major sources of retail demand. These sources are as follows: (1) the resident population, projected at 11,206 persons at build-out and allowing for a 4.8% vacancy rate; (2) an anticipated work force projected at 31,954 employees at build-out with a vacancy allowance in office space at 10%; and (3) visitors to the Corridor hotels, projected to represent 454,973 visitor days at build-out.

Table 16

PROJECTIONS OF RESIDENT POPULATION, EMPLOYMENT AND VISITORS, EISENHOWER EAST CORRIDOR

Block Number	Sq Ft Office	Sq Ft Retail	Sq Ft Theatres	Sq Ft Hotel	Hotel Rooms	Sq Ft Residential	Total Residential Units	Total Employment	Total Residents	Visitor Days
1 Hoffman Properties, Mill Race and Metro Station Environs										
1				101,000	197			84		80,893
2	658,000							2,303		
3	342,000							1,197		
4.5	468,200	24,800		308,700	386			2,074		158,501
6	936,000	225,240						3,726		
7		17,000	78,000					112		
8		21,680				450,000	450	43	900	
9	374,000	54,700				421,000	421	1,418	842	
10		8,000						16		
11,12	422,900	26,400				350,000	350	1,533	700	
13,17,18	223,600	30,500				611,200	695	844	1,390	
15	27,000							94		
Subtotal	3,451,700	408,320	78,000	409,700	583	1,832,200	1,916	13,446	3,832	239,394
2 Carlvle Properties and Adjacent Sites, North of Eisenhower										
A		4,700				813,655	549	9	1,098	
H						440,000	429		858	
16				101,000	150			126		61,594
23	85,974	7,500						316		
	90,000	7,500						330		
31	164,407							575		
	140,730							493		
32	240,323	19,600						880		
	222,021							777		
33										
34	134,961	23,652						520		
36	410,168			300,000	375			1,811		153,984
37	499,974							1,750		
38	515,650							1,805		
39	386,995							1,354		
40	383,783							1,343		
41		20,364				345,490	309	41	618	
42,43	1,087,212							3,805		
44						332,377	332		664	
Subtotal	4,362,198	83,316	-	401,000	525	1,931,522	1,619	15,936	3,238	215,578
3 Properties south of Eisenhower, Including ATA and City Parcels										
19						352,800	353		706	
20	176,000							616		
21						315,000	315		630	
21	213,866							749		
24	210,800					262,000	262	738	524	
25A	210,800					145,900	146	738	292	
25B,26	504,050	53,800				392,700	393	1,872	786	
27,28,29,30	374,600					740,000	740	1,311	1,480	
Subtotal	1,690,116	53,800	-	-	-	2,208,400	2,209	6,023	4,417	-
4 Duke Street Convenience Retail										
35		50,325				142,000	142	101	284	
GrandTotal	9,504,014	595,761	78,000	810,700	1,108	6,114,122	5,886	35,505	11,771	454,973

With Vacancy Allowances:

31,954 11,206

Assumptions:

Square Feet per Hotel Employee, Holiday Inn	1200
Square Feet per Hotel Employee, Other Hotels	800
Square Feet per Office Employee (unless data exist)	286
Square Feet per Retail/Restaurant Employee	500
Square Feet per Residential Unit (proposed units)	1000
Population per Residential Unit	2

Visitor Days:	
Annual Occupancy Rate	75%
Persons per Room	1.5
Visitor Days per Room	411
Office Vacancy Allowance	10.0%
Residential Vacancy Allowance	5.2%

Source: City of Alexandria Planning & Zoning; Whitnev & Whitnev.

Projected Supportable Retail Space from Eisenhower East Corridor Residents, Employees and Visitors

Total projected retail sales demand from future Eisenhower East Corridor residents, employees and visitors is projected at \$277.3 million. This projection is shown by major demand source in Table 17, with the underlying assumption structure for each of the demand sources presented in Appendix tables A-8 and A-9. Of this gross potential, the amount considered as a reasonable target for local retailers within the Corridor at build-out is projected at \$115.6 million, or about 42% of the future retail sales demand. This adjustment allows for the likelihood that all sources of demand--residents, employees and visitors staying in Corridor hotels— will spend a substantial share of their retail dollars in existing and future stores located outside the Eisenhower East Corridor. The approximate proportions of local retail sales demand generated by each demand source is projected as follows:

Table 17

**PROJECTED RETAIL DEMAND FROM EISENHOWER EAST CORRIDOR
RESIDENTS, EMPLOYEES AND VISITORS AT BUILD-OUT**

<u>Source</u>	Total Retail Demand (in millions)	Allocable to Corridor Retailers (in millions)	Percent of Total
Employees	\$ 71.9	\$ 57.5	53.3%
Residents	\$ 177.6	\$ 44.9	41.6%
Visitors (in local hotels)	<u>\$ 18.2</u>	<u>\$ 5.5</u>	<u>5.1%</u>
	\$ 267.7	\$ 107.9	100.0%

Source: Whitney & Whitney

The projected demand allocable to local retailers is further refined into major retail goods types and supportable space in Table 18, based upon judgments about how each source of demand will likely distribute its expenditures in the future. The largest expenditure category is projected to be the Eating & Drinking sector. Assuming that the minimum sales threshold is \$500 per square foot in order to economically sustain retail space, the total supportable retail space at full build-out approaches 215,800 square feet; with a 10% allowance for services, the total supportable space approaches 237,400 square feet.

Table 18

**PROJECTED ALLOCATION OF RETAIL DEMAND AND SUPPORTABLE SPACE AT BUILD-OUT
EISENHOWER EAST RESIDENTS, EMPLOYEES AND VISITORS**

Retail Good Type	<u>Sales in Millions</u>	<u>Supportable Retail Space</u>
Shopper Goods	\$ 29.3	58,671
Eating & Drinking	\$ 46.3	92,624
Convenience Goods	<u>\$ 32.3</u>	<u>64,524</u>
Subtotal	\$ 107.9	215,819
Allowance for Services 10.00%		<u>21,582</u>
Grand Total		237,401

Source: Whitney & Whitney

Allowing for a 20-year development period for the Eisenhower East Corridor ranging from 2002 to 2022, a preliminary phasing of the supportable retail space would be as follows:

RETAIL SPACE DEVELOPMENT PHASING

	<u>By 2007</u>	<u>By 2012</u>	<u>By 2017</u>	<u>By 2022</u>
Retail/Services Space	80,000	140,000	190,000	237,400

Summary Market Support for Retail Space, Eisenhower East Corridor

Table 19 combines the retail potential derived from regional residents in the PMA and SMA with locally generated demand from build-out of the Eisenhower East Corridor. Two summary projections are provided: the first utilizes the "Baseline" projection for the regional market combined with the local market support; the second utilizes "Optimistic" forecast for the regional market support, based upon the assumption that a major town center is developed at the Eisenhower Avenue Metro Station.

Per the Baseline forecast, the current 2002 demand for retail space in the Eisenhower East Corridor master plan area is 210,700 square feet; this increases over the 20-year forecast period to 479,300 square feet, distributed by major space category as follows:

Table 19

**TOTAL SUPPORTABLE RETAIL AND SERVICES SPACE
REGIONAL MARKET AREA RESIDENTS AND EISENHOWER EAST CORRIDOR RESIDENTS, EMPLOYEES AND VISITORS
2002-2022**

<u>Market Source/Supportable Retail Space</u>	<u>2002</u>	<u>2007</u>	<u>2012</u>	<u>2017</u>	<u>2022</u>
Baseline Forecast					
Eisenhower East Corridor Residents, Visitors, and Employees					
Shopper Goods		19,771	34,599	46,956	58,671
Eating and Drinking		31,213	54,622	74,130	92,624
Convenience Goods		<u>21,743</u>	<u>38,051</u>	<u>51,641</u>	<u>64,524</u>
Subtotal		72,727	127,273	172,727	215,819
PMA and SMA Residents					
Shopper Goods	114,856	131,758	131,758	131,758	131,758
Eating and Drinking	38,170	43,850	43,850	43,850	43,850
Convenience Goods	<u>38,492</u>	<u>44,322</u>	<u>44,322</u>	<u>44,322</u>	<u>44,322</u>
Subtotal	191,518	219,930	219,930	219,930	219,930
Combined Sources of Demand					
Shopper Goods	114,856	151,529	166,357	178,714	190,429
Eating and Drinking	38,170	75,063	98,472	117,980	136,474
Convenience Goods	38,492	66,065	82,373	95,963	108,846
Total Retail	191,518	292,657	347,203	392,657	435,749
Services 10.00%	<u>19,152</u>	<u>29,266</u>	<u>34,720</u>	<u>39,266</u>	<u>43,575</u>
Grand Total	210,670	321,923	381,923	431,923	479,324
Optimistic Forecast					
Eisenhower East Corridor Residents, Visitors, and Employees					
Shopper Goods		19,771	34,599	46,956	58,671
Eating and Drinking		31,213	54,622	74,130	92,624
Convenience Goods		21,743	38,051	51,641	64,524
Subtotal		72,727	127,273	172,727	215,819
PMA and SMA Residents					
Shopper Goods	219,876	251,797	251,797	251,797	251,797
Eating and Drinking	61,436	70,211	70,211	70,211	70,211
Convenience Goods	<u>42,696</u>	<u>49,208</u>	<u>49,208</u>	<u>49,208</u>	<u>49,208</u>
Subtotal	324,008	371,216	371,216	371,216	371,216
Combined Sources of Demand					
Shopper Goods	219,876	271,568	286,396	298,753	310,468
Eating and Drinking	61,436	101,424	124,833	144,341	162,835
Convenience Goods	<u>42,696</u>	<u>70,951</u>	<u>87,259</u>	<u>100,849</u>	<u>113,732</u>
Total Retail	324,008	443,943	498,489	543,943	587,035
Services 10.00%	<u>32,401</u>	<u>44,394</u>	<u>49,849</u>	<u>54,394</u>	<u>58,704</u>
Grand Total	356,409	488,338	548,338	598,338	645,739

Source: Whitney & Whitney

Baseline Forecast: Supportable Space in Square Feet

	<u>2002</u>	<u>2007</u>	<u>2012</u>	<u>2017</u>	<u>2022</u>
Shopper Goods	114,856	151,529	166,357	178,714	190,429
Eating and Drinking	38,170	75,063	98,472	117,980	136,474
Convenience Goods	<u>38,492</u>	<u>66,065</u>	<u>82,373</u>	<u>95,963</u>	<u>108,846</u>
Total Retail	191,518	292,657	347,203	392,657	435,749
Services 10.00%	<u>19,152</u>	<u>29,266</u>	<u>34,720</u>	<u>39,266</u>	<u>43,575</u>
Grand Total	210,670	321,923	381,923	431,923	479,324

Source: Whitney & Whitney

Under the Optimistic projection, the total supportable space is projected currently at 356,000 square feet, and increases to over 645,700 square feet at build-out.

Optimistic Forecast: Supportable Space in Square Feet

	<u>2002</u>	<u>2007</u>	<u>2012</u>	<u>2017</u>	<u>2022</u>
Shopper Goods	219,876	271,568	286,396	298,753	310,468
Eating and Drinking	61,436	101,424	124,833	144,341	162,835
Convenience Goods	<u>42,696</u>	<u>70,951</u>	<u>87,259</u>	<u>100,849</u>	<u>113,732</u>
Total Retail	324,008	443,943	498,489	543,943	587,035
Services 10.00%	<u>32,401</u>	<u>44,394</u>	<u>49,849</u>	<u>54,394</u>	<u>58,704</u>
Grand Total	356,409	488,338	548,338	598,338	645,739

Source: Whitney & Whitney

Recommended Allocation of Retail Space by Sub-Area

For purposes of allocating retail space, the Eisenhower East Corridor may be subdivided into four sub-areas. As presented previously in Table, according to current information these four sub-areas have been allocated almost 595,761 square feet of retail space that has been distributed as follows:

<u>Sub-Area</u>	<u>Current Allocation</u>
1. Hoffman Properties, Mill Race and Metro Station Environs	408,320
2. Carlyle Properties and Adjacent Sites, North of Eisenhower	83,316
3. Properties Located South of Eisenhower and East of Mill Road	53,800
4. Duke Street Convenience Retail	<u>50,325</u>
Total	595,761

As an overall planning parameter, the master plan allocation of almost 600,000 square feet of retail space for the Eisenhower East Corridor lies between the Baseline projection of 496,300 square feet and the Optimistic projection of 662,700 square feet that were considered sustainable at build-out from the

combination of the PMA/SMA regional demand and local Eisenhower East Corridor support from employees, visitors and residents. While slightly aggressive, this scale is consistent with the objectives of developing a major town center that would serve as a focal point for the region and compares with emerging entertainment/retail developments that are occurring throughout the United States such as the Spectrum in Irvine, California and central Bethesda, Maryland.

With regard to the individual allocations to each sub-area, the following comments are applicable based upon the results of the market analysis:

1. The development of the Whole Foods supermarket on the edge of the Eisenhower East Corridor master plan area will satisfy a significant amount of local resident convenience goods demand in the immediate future. Over time, there should be an opportunity to develop one more major supermarket in the master planning area, with the most logical location for the facility in the recommended town center near the Eisenhower Avenue Metro Station. While a supermarket in a highly urbanized area may be difficult to justify in terms of economic return, such facilities are key “anchors” to town centers, and appropriate incentives should be found to encourage such development.
2. The proposed allocation of over 83,000 square feet of retail space to the Carlyle Properties would appear to be realistic, as it represents an amount of space that can be supported by the anticipated base of employees, residents and visitors.
3. The proposed development of 53,000 square feet of retail space on Blocks 25B, 26 south of Eisenhower is probably sustainable in theory from the anticipated office and residential development on adjacent blocks. However, it should be recognized that the location is not particularly viable as a retail site given that: (a) there is no access from the east due to the existing park, cemetery and other physical constraints; (b) access from the south is constrained due to the I-95/I-495 Beltway and Cameron Run; and (c) the Whole Foods location on Duke Avenue is a superior site, and would logically “intercept” shoppers considering traveling to a south of Eisenhower location for convenience shopping. As a consequence, this site should probably focus on local needs and be scaled at 30,000 to 40,000 square feet of retail space at a maximum.

4. The “marquee” location for the vast percentage of retail space to be developed in the Eisenhower East Corridor is at a location on Eisenhower Avenue at the Metro Station, the highest point of access in the planning area. While it may be appropriate to provide some street retail along Eisenhower Avenue, there should be a destination location in the Corridor that clearly identifies the town center and provides a focal point for the community. The most appropriate location for this central retail focus is on Block 8, with support commercial appropriate on Blocks 6, 7, 9, 10, 12, 13 and 14.
5. Assuming that retail development is initially focused between Block 6, the Cinema Complex and the Metro Station, over time it should be possible to develop street retail along Eisenhower Avenue and Mandeville Lane (Pershing Avenue). With regard to the latter opportunity, perhaps the key to its development is enhancing the gateway opportunity from Telegraph Road and completing convenient access linkages to Duke Street.
6. Summarizing the above, the following retail space allocations are recommended for the Eisenhower East Corridor planning area, based upon the current proposed master plan:

<u>Location</u>	<u>Total Square Feet</u>
1. Hoffman Properties, Mill Race and Metro Station Environs: Blocks 6, 7, 8, 9, 10, 12, 13, 14	250,000-300,000
2. Hoffman Properties, Blocks 4, 5	50,000-80,000
3. Eisenhower Avenue "Boulevard Retail, Blocks 18, 22, 23, 24	50,000
4. Carlyle Properties, North of Eisenhower	80,000
5. Properties South of Eisenhower, East of Elizabeth Lane	30,000-40,000
6. Whole Foods Market, Duke Street	<u>50,000</u>
GRAND TOTAL	510,000-600,000

V. IMPLEMENTATION CONSIDERATIONS

It should be recognized that the presence of an excellent market opportunity for the development of a major town center with 400,000+/- square feet of retail/entertainment uses and 9+/- million square feet of office space does not in itself guarantee a successful development. While the master plan outlines an excellent set of guidelines for future developers to follow, it is important to recognize that proactive public leadership will be required in the following areas:

- a. *Planning of the town center in order to ensure that core activities are provided that serve community needs and provide maximum convenience.*

For example, it is important to ensure that certain uses such as grocery stores and other convenience requirements are provided within the town center in order to allow for the area to succeed as a pedestrian-oriented complex where residents can satisfy basic needs without heavy reliance on the automobile:

- b. *Planning of public spaces as part of the town center and the urban boulevard experience.*

The City can play an important role in working with developers to ensure that they provide public open spaces and related facilities as part of their projects. This is particularly important in the planning of the town center as a true mixed use development that transcends a conventional shopping center and offers public gathering places, civic uses and public institutions, even civic art.

- c. *Utilization of economic incentives in order to guarantee a balanced, mixed use live-work community.*

The City may find it necessary to become involved in the adjustment of uses and densities on a project-by-project basis in order to achieve the proper long-term balance of uses that ensure a successful live-work environment. The County of Arlington has been very successful in achieving its development objectives through the provision of incentives such as density “bonuses” in order to ensure that affordable housing and community services are provided as part of developers’ projects.

- d. *Careful management of the transportation system, including the integration of public transit systems, existing Metro facility and parking for the town center to ensure public access and convenience.*

As currently proposed, the Eisenhower East Corridor will require continuous monitoring of its transportation systems and parking program in order to ensure its capability to provide for a daytime population of 32,000+/- employees and a weekend population of a comparable magnitude at the town center. In order to ensure the success of its retail element the City may wish to consider becoming actively involved in the provision of parking similar to programs that have been successfully implemented in communities such as Bethesda and Old Town Pasadena.

APPENDIX A: SUPPORT TABLES

Table A-1

**COMPARISON OF OFFICE SPACE INVENTORIES, SELECTED SUB-AREAS,
WASHINGTON, D. C. REGIONAL MARKET AREA
2002**

<u>Market Sub-Area</u>	<u>Delta Associates</u>	<u>Trammell Crow Co.</u>	<u>CB Richard Ellis</u>	<u>Grubb & Ellis</u>
Washington, D. C.	106.4	105.9	90.6	
Suburban Maryland	75.1	72.1		
Northern Virginia	143.3	139.4	131.2	131.1
Arlington County	31.2	31.1		30.7
Rosslyn-Ballston Corridor		18.4	18.2	17.8
Crystal City/Pentagon City		11.5	10.6	11.4
Alexandria	13	12.3		11.8
AlexandriaOld Town		6.6	8.0	
Total, Regional Market Area	324.9	317.4		
<i>Alexandria as Percent of Regional Market Area</i>	<i>4.0%</i>	<i>3.9%</i>		
<i>Alexandria as Percent of Northern Virginia</i>	<i>9.1%</i>	<i>8.8%</i>		<i>9.0%</i>

Sources: Delta Associates; Trammell Crow Company; CB Richard Ellis; Grubb & Ellis.

Table A-2

ANALYSIS OF CURRENT MARKET AREA FOR EXISTING THEATRE COMPLEX
(Automobile Sample Counts)

	Friday		Sunday		Thursday		Saturday		Total, Three	
	<u>6-Sep</u>	<u>Pct.</u>	<u>8-Sep</u>	<u>Pct.</u>	<u>12-Sep</u>	<u>Pct.</u>	<u>14-Sep</u>	<u>Pct.</u>	<u>Evenings</u>	<u>Pct.</u>
Alexandria			27	30.3%	25	26.6%	42	30.0%	94	29.1%
Rest of Virginia										
Arlington			4	4.5%	10	10.6%	8	5.7%	22	6.8%
Fairfax Co			47	52.8%	51	54.3%	74	52.9%	172	53.3%
Prince William Co			11	12.4%	7	7.4%	16	11.4%	34	10.5%
Loudon Co			0	0.0%	1	1.1%	0	0.0%	1	0.3%
Total, Rest of Va			62	69.7%	69	73.4%	98	70.0%	229	70.9%
Total, Virginia			89	100.0%	94	100.0%	140	100.0%	323	100.0%
Total, Virginia	368	65.6%	89		94	73.4%	140	46.8%	602	60.9%
Maryland	158	28.2%	?		28	21.9%	126	42.1%	312	31.6%
Washington	<u>35</u>	<u>6.2%</u>	1		<u>6</u>	<u>4.7%</u>	<u>33</u>	<u>11.0%</u>	<u>74</u>	<u>7.5%</u>
Grand Total	561	100.0%			128	100.0%	299	100.0%	988	100.0%

	Total, Three		Total, Three	
	<u>Evenings</u>	<u>Pct.</u>	<u>Evenings</u>	<u>Pct.</u>
Alexandria	94	29.1%		25.0%
Rest of Virginia				
Arlington	22	6.8%		5.9%
Fairfax Co	172	53.3%		45.8%
Prince William Co	34	10.5%		9.0%
Loudon Co	1	0.3%		0.3%
Total, Rest of Va	229	70.9%		60.9%
Total, Virginia	323	100.0%		
Total, Virginia			602	60.9%
Maryland			312	31.6%
Washington			74	<u>7.5%</u>
Grand Total			988	100.0%

Source: City of Alexandria Planning Department; Whitney & Whitney.

Table A-3

**POTENTIAL SUPPORTABLE RETAIL SPACE, SELECTED RETAIL CATEGORIES
EISENHOWER EAST CORRIDOR PRIMARY MARKET AREA (PMA), 2002**

BASELINE FORECAST

Projected Retail Sales, City of Alexandria Residents, 2002: \$ 2,109,076,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 94,908,420	2%	\$ 1,898,168	500	3,796
General Merchandise	12.00%	\$ 253,089,120	2%	\$ 5,061,782	400	12,654
Specialty Stores	16.00%	\$ 337,452,160	3%	\$ 10,123,565	600	16,873
Home Furnishings, et al	5.00%	\$ 105,453,800	3%	\$ 3,163,614	400	7,909
Subtotal	37.50%	\$ 790,903,500		\$ 20,247,130		41,232
Eating and Drinking	12.00%	\$ 253,089,120	3%	\$ 7,592,674	500	15,185
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 326,906,780	2%	\$ 6,538,136	500	13,076
Drug Stores	4.00%	\$ 84,363,040	2%	\$ 1,687,261	400	4,218
Liquor Stores	0.50%	\$ 10,545,380	2%	\$ 210,908	500	422
Subtotal	20.00%	\$ 421,815,200		\$ 8,436,304		17,716
Total Retail	69.50%	1,465,807,820		36,276,107		74,134
Services @10%						7,413
Total Supportable Space						81,547

Projected Retail Sales, Rest of PMA Residents, 2002: \$ 7,502,333,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 337,604,985	1%	\$ 3,376,050	500	6,752
General Merchandise	12.00%	\$ 900,279,960	1%	\$ 9,002,800	400	22,507
Specialty Stores	16.00%	\$ 1,200,373,280	1%	\$ 12,003,733	600	20,006
Home Furnishings, et al	5.00%	\$ 375,116,650	1%	\$ 3,751,167	400	9,378
Subtotal	37.50%	\$ 2,813,374,875		\$ 28,133,749		58,643
Eating and Drinking	12.00%	\$ 900,279,960	1%	\$ 9,002,800	500	18,006
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 1,162,861,615	0.5%	\$ 5,814,308	500	11,629
Drug Stores	4.00%	\$ 300,093,320	0.5%	\$ 1,500,467	400	3,751
Liquor Stores	0.50%	\$ 37,511,665	0.5%	\$ 187,558	500	375
Subtotal	20.00%	\$ 1,500,466,600		\$ 7,502,333		15,755
Total Retail	69.50%	5,214,121,435		44,638,881		92,404
Services @10%						9,240
Total Supportable Space						101,644

Table A-3, Continued

**POTENTIAL SUPPORTABLE RETAIL SPACE, SELECTED RETAIL CATEGORIES
EISENHOWER EAST CORRIDOR PRIMARY MARKET AREA (PMA), 2002**

BASELINE FORECAST

Projected Retail Sales, Total PMA, 2002:		\$	9,611,409,000				
<u>Retail Space Category</u>	Percent of Total Sales Allocable to	Potential Sales	Percent Capture	Potential Sales Capture	Required Sales per Square Foot	Supportable Space in Square Feet	
Shopper Goods							
Apparel and Related	4.50%	\$ 432,513,405	1.22%	\$ 5,274,218	500	10,548	
General Merchandise	12.00%	\$ 1,153,369,080	1.22%	\$ 14,064,582	400	35,161	
Specialty Stores	16.00%	\$ 1,537,825,440	1.44%	\$ 22,127,298	600	36,879	
Home Furnishings, et al	5.00%	\$ 480,570,450	1.44%	\$ 6,914,781	400	17,287	
Subtotal	37.50%	\$ 3,604,278,375	1.34%	\$ 48,380,878		99,876	
Eating and Drinking	12.00%	\$ 1,153,369,080	1.44%	\$ 16,595,473	500	33,191	
Convenience Goods							
Food Stores/Supermarkets	15.50%	\$ 1,489,768,395	0.83%	\$ 12,352,444	500	24,705	
Drug Stores	4.00%	\$ 384,456,360	0.83%	\$ 3,187,727	400	7,969	
Liquor Stores	0.50%	\$ 48,057,045	0.83%	\$ 398,466	500	797	
Subtotal	20.00%	\$ 1,922,281,800	0.83%	\$ 15,938,637		33,471	
Total Retail	69.50%	6,679,929,255		80,914,989		166,538	
Services @10%						<u>16,654</u>	
Total Supportable Space						183,192	

Source: Whitney & Whitney

Table A-4

**POTENTIAL SUPPORTABLE RETAIL SPACE, SELECTED RETAIL CATEGORIES
EISENHOWER EAST CORRIDOR PRIMARY MARKET AREA (PMA), 2002**

OPTIMISTIC FORECAST

Projected Retail Sales, City of Alexandria Residents, 2002: \$ 2,109,076,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 94,908,420	4%	\$ 3,796,337	500	7,593
General Merchandise	12.00%	\$ 253,089,120	4%	\$ 10,123,565	400	25,309
Specialty Stores	16.00%	\$ 337,452,160	4%	\$ 13,498,086	600	22,497
Home Furnishings, et al	5.00%	\$ 105,453,800	4%	\$ 4,218,152	400	10,545
Subtotal	37.50%	\$ 790,903,500		\$ 31,636,140		65,944
Eating and Drinking	12.00%	\$ 253,089,120	3%	\$ 7,592,674	500	15,185
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 326,906,780	2%	\$ 6,538,136	500	13,076
Drug Stores	4.00%	\$ 84,363,040	3%	\$ 2,530,891	400	6,327
Liquor Stores	0.50%	\$ 10,545,380	2%	\$ 210,908	500	422
Subtotal	20.00%	\$ 421,815,200		\$ 9,279,934		19,825
Total Retail	69.50%	1,465,807,820		48,508,748		100,954
Services @10%						10,095
Total Supportable Space						111,050

Projected Retail Sales, Rest of PMA Residents, 2002: \$ 7,502,333,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 337,604,985	2%	\$ 6,752,100	500	13,504
General Merchandise	12.00%	\$ 900,279,960	2%	\$ 18,005,599	400	45,014
Specialty Stores	16.00%	\$ 1,200,373,280	2%	\$ 24,007,466	600	40,012
Home Furnishings, et al	5.00%	\$ 375,116,650	2%	\$ 7,502,333	400	18,756
Subtotal	37.50%	\$ 2,813,374,875		\$ 56,267,498		117,286
Eating and Drinking	12.00%	\$ 900,279,960	2%	\$ 18,005,599	500	36,011
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 1,162,861,615	0.5%	\$ 5,814,308	500	11,629
Drug Stores	4.00%	\$ 300,093,320	0.5%	\$ 1,500,467	400	3,751
Liquor Stores	0.50%	\$ 37,511,665	0.5%	\$ 187,558	500	375
Subtotal	20.00%	\$ 1,500,466,600		\$ 7,502,333		15,755
Total Retail	69.50%	5,214,121,435		81,775,430		169,053
Services @10%						16,905
Total Supportable Space						185,958

Table A -4, Continued

**POTENTIAL SUPPORTABLE RETAIL SPACE, SELECTED RETAIL CATEGORIES
EISENHOWER EAST CORRIDOR PRIMARY MARKET AREA (PMA), 2002**

OPTIMISTIC FORECAST

Projected Retail Sales, Total PMA, 2002:		\$	9,611,409,000				
<u>Retail Space Category</u>	Percent of Total Sales Allocable to <u>Retail Space Category</u>	Potential Sales	Percent Capture	Potential Sales Capture	Required Sales per Square Foot	Supportable Space in Square Feet	
Shopper Goods							
Apparel and Related	4.50%	\$ 432,513,405	2.44%	\$ 10,548,437	500	21,097	
General Merchandise	12.00%	\$ 1,153,369,080	2.44%	\$ 28,129,164	400	70,323	
Specialty Stores	16.00%	\$ 1,537,825,440	2.44%	\$ 37,505,552	600	62,509	
Home Furnishings, et al	5.00%	\$ 480,570,450	2.44%	\$ 11,720,485	400	29,301	
Subtotal	37.50%	\$ 3,604,278,375	2.44%	\$ 87,903,638		183,230	
Eating and Drinking							
	12.00%	\$ 1,153,369,080	2.22%	\$ 25,598,273	500	51,197	
Convenience Goods							
Food Stores/Supermarkets	15.50%	\$ 1,489,768,395	0.83%	\$ 12,352,444	500	24,705	
Drug Stores	4.00%	\$ 384,456,360	1.05%	\$ 4,031,358	400	10,078	
Liquor Stores	0.50%	\$ 48,057,045	0.83%	\$ 398,466	500	797	
Subtotal	20.00%	\$ 1,922,281,800	0.87%	\$ 16,782,267		35,580	
Total Retail	69.50%	6,679,929,255		130,284,178		270,007	
Services @10%						<u>27,001</u>	
Total Supportable Space						297,008	

Source: Whitney & Whitney

Table A-5

**POTENTIAL SUPPORTABLE RETAIL SPACE, SELECTED RETAIL CATEGORIES
EISENHOWER EAST CORRIDOR PRIMARY MARKET AREA (PMA), 2007**

BASELINE FORECAST

Projected Retail Sales, City of Alexandria Residents, 2007: \$ 2,465,428,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 110,944,260	2%	\$ 2,218,885	500	4,438
General Merchandise	12.00%	\$ 295,851,360	2%	\$ 5,917,027	400	14,793
Specialty Stores	16.00%	\$ 394,468,480	3%	\$ 11,834,054	600	19,723
Home Furnishings, et al	5.00%	\$ 123,271,400	3%	\$ 3,698,142	400	9,245
Subtotal	37.50%	\$ 924,535,500		\$ 23,668,109		48,199
Eating and Drinking	12.00%	\$ 295,851,360	3%	\$ 8,875,541	500	17,751
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 382,141,340	2%	\$ 7,642,827	500	15,286
Drug Stores	4.00%	\$ 98,617,120	2%	\$ 1,972,342	400	4,931
Liquor Stores	0.50%	\$ 12,327,140	2%	\$ 246,543	500	493
Subtotal	20.00%	\$ 493,085,600		\$ 9,861,712		20,710
Total Retail	69.50%	1,713,472,460		42,405,362		86,660
Services @10%						<u>8,666</u>
Total Supportable Space						95,326

Projected Retail Sales, Rest of PMA Residents, 2007: \$ 8,491,186,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 382,103,370	1%	\$ 3,821,034	500	7,642
General Merchandise	12.00%	\$ 1,018,942,320	1%	\$ 10,189,423	400	25,474
Specialty Stores	16.00%	\$ 1,358,589,760	1%	\$ 13,585,898	600	22,643
Home Furnishings, et al	5.00%	\$ 424,559,300	1%	\$ 4,245,593	400	10,614
Subtotal	37.50%	\$ 3,184,194,750		\$ 31,841,948		66,373
Eating and Drinking	12.00%	\$ 1,018,942,320	1%	\$ 10,189,423	500	20,379
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 1,316,133,830	0.5%	\$ 6,580,669	500	13,161
Drug Stores	4.00%	\$ 339,647,440	0.5%	\$ 1,698,237	400	4,246
Liquor Stores	0.50%	\$ 42,455,930	0.5%	\$ 212,280	500	425
Subtotal	20.00%	\$ 1,698,237,200		\$ 8,491,186		17,831
Total Retail	69.50%	5,901,374,270		50,522,557		104,583
Services @10%						<u>10,458</u>
Total Supportable Space						115,041

Table A-5, Continued

**POTENTIAL SUPPORTABLE RETAIL SPACE, SELECTED RETAIL CATEGORIES
EISENHOWER EAST CORRIDOR PRIMARY MARKET AREA (PMA), 2007**

BASELINE FORECAST

Projected Retail Sales, Total PMA, 2007: \$ 10,956,614,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 493,047,630	1.23%	\$ 6,039,919	500	12,080
General Merchandise	12.00%	\$ 1,314,793,680	1.23%	\$ 16,106,450	400	40,266
Specialty Stores	16.00%	\$ 1,753,058,240	1.45%	\$ 25,419,952	600	42,367
Home Furnishings, et al	5.00%	\$ 547,830,700	1.45%	\$ 7,943,735	400	19,859
Subtotal	37.50%	\$ 4,108,730,250	1.35%	\$ 55,510,056		114,572
Eating and Drinking	12.00%	\$ 1,314,793,680	1.45%	\$ 19,064,964	500	38,130
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 1,698,275,170	0.84%	\$ 14,223,496	500	28,447
Drug Stores	4.00%	\$ 438,264,560	0.84%	\$ 3,670,580	400	9,176
Liquor Stores	0.50%	\$ 54,783,070	0.84%	\$ 458,822	500	918
Subtotal	20.00%	\$ 2,191,322,800	0.84%	\$ 18,352,898		38,541
Total Retail	69.50%	7,614,846,730		92,927,918		191,243
Services @10%						<u>19,124</u>
Total Supportable Space						210,367

Source: Whitney & Whitney

Table A-6

**POTENTIAL SUPPORTABLE RETAIL SPACE, SELECTED RETAIL CATEGORIES
EISENHOWER EAST CORRIDOR PRIMARY MARKET AREA (PMA), 2007**

OPTIMISTIC FORECAST

Projected Retail Sales, City of Alexandria Residents, 2007: \$ 2,465,428,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 110,944,260	4%	\$ 4,437,770	500	8,876
General Merchandise	12.00%	\$ 295,851,360	4%	\$ 11,834,054	400	29,585
Specialty Stores	16.00%	\$ 394,468,480	4%	\$ 15,778,739	600	26,298
Home Furnishings, et al	5.00%	\$ 123,271,400	4%	\$ 4,930,856	400	12,327
Subtotal	37.50%	\$ 924,535,500		\$ 36,981,420		77,086
Eating and Drinking	12.00%	\$ 295,851,360	3%	\$ 8,875,541	500	17,751
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 382,141,340	2%	\$ 7,642,827	500	15,286
Drug Stores	4.00%	\$ 98,617,120	3%	\$ 2,958,514	400	7,396
Liquor Stores	0.50%	\$ 12,327,140	2%	\$ 246,543	500	493
Subtotal	20.00%	\$ 493,085,600		\$ 10,847,883		23,175
Total Retail	69.50%	1,713,472,460		56,704,844		118,012
Services @10%						11,801
Total Supportable Space						129,813

Projected Retail Sales, Rest of PMA Residents, 2007: \$ 8,491,186,000

<u>Retail Space Category</u>	<u>Percent of Total Sales Allocable to Retail Space Category</u>	<u>Potential Sales</u>	<u>Percent Capture</u>	<u>Potential Sales Capture</u>	<u>Required Sales per Square Foot</u>	<u>Supportable Space in Square Feet</u>
Shopper Goods						
Apparel and Related	4.50%	\$ 382,103,370	2%	\$ 7,642,067	500	15,284
General Merchandise	12.00%	\$ 1,018,942,320	2%	\$ 20,378,846	400	50,947
Specialty Stores	16.00%	\$ 1,358,589,760	2%	\$ 27,171,795	600	45,286
Home Furnishings, et al	5.00%	\$ 424,559,300	2%	\$ 8,491,186	400	21,228
Subtotal	37.50%	\$ 3,184,194,750		\$ 63,683,895		132,746
Eating and Drinking	12.00%	\$ 1,018,942,320	2%	\$ 20,378,846	500	40,758
Convenience Goods						
Food Stores/Supermarkets	15.50%	\$ 1,316,133,830	0.5%	\$ 6,580,669	500	13,161
Drug Stores	4.00%	\$ 339,647,440	0.5%	\$ 1,698,237	400	4,246
Liquor Stores	0.50%	\$ 42,455,930	0.5%	\$ 212,280	500	425
Subtotal	20.00%	\$ 1,698,237,200		\$ 8,491,186		17,831
Total Retail	69.50%	5,901,374,270		92,553,927		191,335
Services @10%						19,133
Total Supportable Space						210,468

Table A-6, Continued

**POTENTIAL SUPPORTABLE RETAIL SPACE, SELECTED RETAIL CATEGORIES
EISENHOWER EAST CORRIDOR PRIMARY MARKET AREA (PMA), 2007**

OPTIMISTIC FORECAST

Projected Retail Sales, Total PMA, 2007:		\$	10,956,614,000				
Retail Space Category	Percent of Total Sales Allocable to Retail Space Category	Potential Sales	Percent Capture	Potential Sales Capture	Required Sales per Square Foot	Supportable Space in Square Feet	
Shopper Goods							
Apparel and Related	4.50%	\$ 493,047,630	2.45%	\$ 12,079,838	500	24,160	
General Merchandise	12.00%	\$ 1,314,793,680	2.45%	\$ 32,212,901	400	80,532	
Specialty Stores	16.00%	\$ 1,753,058,240	2.45%	\$ 42,950,534	600	71,584	
Home Furnishings, et al	5.00%	\$ 547,830,700	2.45%	\$ 13,422,042	400	33,555	
Subtotal	37.50%	\$ 4,108,730,250	2.45%	\$ 100,665,315		209,831	
Eating and Drinking	12.00%	\$ 1,314,793,680	2.23%	\$ 29,254,387	500	58,509	
Convenience Goods							
Food Stores/Supermarkets	15.50%	\$ 1,698,275,170	0.84%	\$ 14,223,496	500	28,447	
Drug Stores	4.00%	\$ 438,264,560	1.06%	\$ 4,656,751	400	11,642	
Liquor Stores	0.50%	\$ 54,783,070	0.84%	\$ 458,822	500	918	
Subtotal	20.00%	\$ 2,191,322,800	0.88%	\$ 19,339,069		41,007	
Total Retail	69.50%	7,614,846,730		149,258,771		309,347	
Services @10%						<u>30,935</u>	
Total Supportable Space						340,281	

Source: Whitney & Whitney

Table A-7

EXISTING AND PROPOSED LAND USES, EISENHOWER EAST CORRIDOR MASTER PLAN STUDY AREA

Block Number	Existing/Proposed Use	Development Date	Sq Ft Office	Sq Ft Retail	Sq Ft Hotel	Hotel Rooms	Sq Ft Residential	Total Units	Total Space
1	Holiday Inn	Existing			101,000	197			101,000
2	Office	2007	658,000						658,000
3	Office	2014	342,000						342,000
4,5	Mixed Use	2015	468,200	24,800	308,700	386			801,700
6	Office with Retail Under Construction, Proposed	Existing 2003,2007	936,000	225,240					936,000 225,240
7	Cinema complex	Existing		95,000					95,000
8	Office	2012		21,680			450,000	450	471,680
9	Mixed Use	2016,2017	374,000	54,700			421,000	421	849,700
10	Retail	2018		8,000					8,000
11,12	Office(Blk 11) Residential(Blk 12)	2018,2019 2019	422,900	8,400 18,000			350,000	350	431,300 368,000
13,17,18	Approved Mixed Use	2005,2008	223,600	30,500			611,200	695	865,300
14	Parking Structure	2008							
15	Office and Related Institutional	Existing	27,000						27,000
16	Proposed Hotel	2005			101,000	150			101,000
19	Residential	2006					352,800	353	352,800
20	Office	Existing	176,000						176,000
21(part)	Apartments Under Construction	2003					315,000	315	315,000
21(part)	Institutional Use(Office)	Existing	213,866						213,866
22	Parks/Open Space	2008							
23	Office with Ground Floor Retail	Existing 2008	85,974 90,000	7,500 7,500					93,474 97,500

Table A-7, Continued

EXISTING AND PROPOSED LAND USES, EISENHOWER EAST CORRIDOR MASTER PLAN STUDY AREA

Block Number	Existing/Proposed Use	Development Date	Sq Ft Office	Sq Ft Retail	Sq Ft Hotel	Hotel Rooms	Sq Ft Residential	Rental Units	Total Space
24	Proposed Residential	2011	210,800				262,000	262	472,800
25A	Proposed Mixed Use	2010	210,800				145,900	146	356,700
25B,26	Proposed Mixed Use	2009	504,050	53,800			392,700	393	950,550
27,28,29,30	Proposed Residential	2013-2017	374,600				740,000	740	1,114,600
A	Residential	Existing		4,700			813,655	549	818,355
H	Residential	Existing					440,000	429	440,000
									-
31	Office	Existing	164,407						164,407
	Office	Under Const.	140,730						140,730
32	Office	Existing	240,323	19,600					259,923
	Office	Under Const.	222,021						222,021
33	Park/Open Space	Existing							
34	Office/Retail	Existing	134,961	23,652					158,613
35	Retail	Existing		8,216					8,216
	Residential. Supermarket	Under Const.		42,109			142,000	114	184,109
36	Office	2005,2011	410,168						410,168
	Hotel	2009			300,000	375			300,000
37	Office	2005,2008	499,974						499,974
38	Federal Courts	Existing	515,650						515,650
39	Office	2005	386,995						386,995
40	Office	2005	383,783						383,783
41	Residential with Retail	2005		20,364			345,490	309	365,854
42,43	Residential	2005	1,087,212						1,087,212
44	Residential	2007					332,377	332	332,377
			9,504,014	673,761	810,700		6,114,122		17,102,597

Source: City of Alexandria; Whitney & Whitney.

Table A-8

EISENHOWER EAST CORRIDOR LOCALLY-GENERATED RETAIL DEMAND PER MASTER PLAN SPACE ALLOCATIONS
2002-2022

A. Demand Generated by Projected Employment

Total Employment per Master Plan		35,505
Net Employment @ 90.0% of capacity		31,954
Annual Employment Days per Employee		250
Annual Employment Days, Corridor		7,988,594
Average Retail/Restaurant Expenditure per Day	\$	9.00
Total Employment-Related Retail Demand	\$	71,897,347
Allocation to Local Retailers		80.00%
Net Employment-Related Retail Demand	\$	57,517,877

B. Demand Generated by Visitors at Eisenhower East Corridor Hotels

Annual Visitor Days		454,973
Average Per Capita Retail/Restaurant Expenditures per Day	\$	40.00
Total Visitor Retail/Restaurant Demand	\$	18,198,900
Allocation to Local Retailers(exclusive of hotels)		30.00%
Net Visitor-Related Retail Demand	\$	5,459,670

C. Demand Generated by Eisenhower East Residents

Total Potential Residents, per Master Plan		11,771
Net Residential Population @ 95.2% Occupancy		11,206
Average per Capita Income	\$	46,613
Aggregate Income	\$	522,362,655
Percent Allocable for Retail/Restaurant Sales		34.00%
Total Resident-Related Retail/Restaurant Demand	\$	177,603,303

Allocation to Local Retailers:

	<u>Allocation</u>	<u>Market Share</u>	<u>Total Sales</u>	<u>Percent</u>
Shopper Goods	37.50%	20.00%	\$ 13,320,248	29.64%
Eating & Drinking	12.00%	40.00%	\$ 8,524,959	18.97%
Convenience Goods	20.00%	65.00%	<u>\$ 23,088,429</u>	<u>51.38%</u>
Total			\$ 44,933,636	100.00%

D. Total Demand from Corridor Employees, Overnight Visitors and Residents

Total Demand	\$	267,699,550	
Net Demand Allocable to Local Restaurants/Retailers	\$	107,911,183	40.31%

Source: Whitnev & Whitnev.

Table A-9

TRANSLATION OF EISENHOWER EAST CORRIDOR LOCALLY-GENERATED RETAIL DEMAND INTO SUPPORTABLE RETAIL SPACE

A. Allocation of Net Retail Demand by Major Retail Category: In Percentages

<u>Demand Source</u>	<u>Shopper Goods</u>	<u>Eating & Drinking</u>	<u>Convenience Goods</u>
Net Employee Demand	25.00%	60.00%	15.00%
Net Visitor Demand	30.00%	60.00%	10.00%
Net Resident Demand	29.64%	18.97%	51.38%

B. Allocation of Net Retail Demand by Retail Category: In Dollars

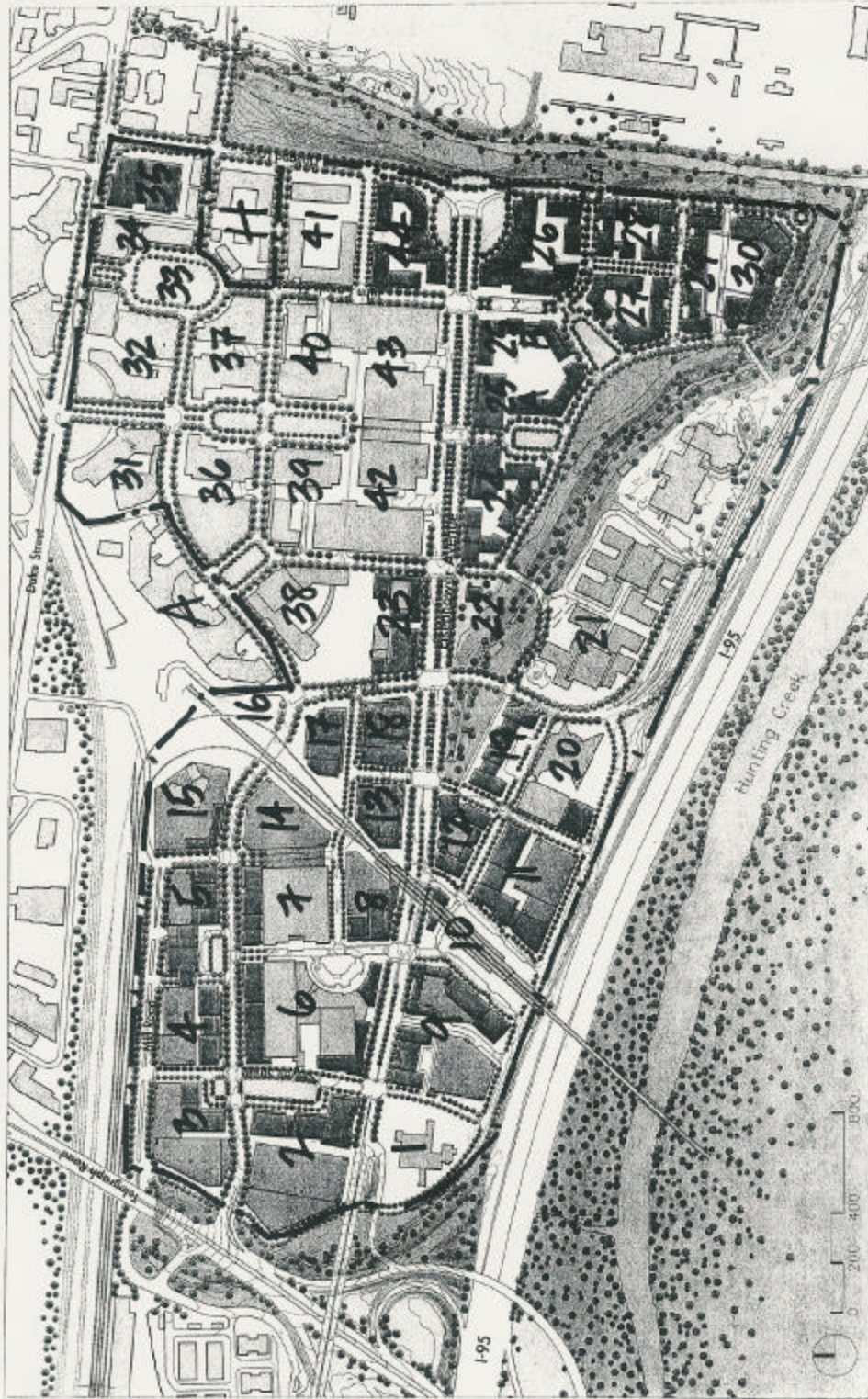
<u>Demand Source</u>	<u>Total</u>	<u>Shopper Goods</u>	<u>Eating & Drinking</u>	<u>Convenience Goods</u>
Net Employee Demand	\$ 57,517,877	\$ 14,379,469	\$ 34,510,726	\$ 8,627,682
Net Visitor Demand	\$ 5,459,670	\$ 1,637,901	\$ 3,275,802	\$ 545,967
Net Resident Demand	\$ 44,933,636	\$ 13,318,330	\$ 8,524,959	\$ 23,088,429
Total Demand	\$ 107,911,183	\$ 29,335,700	\$ 46,311,487	\$ 32,262,078
Percent Distribution	100.00%	27.19%	42.92%	29.90%

C. Supportable Retail Space in Square Feet

	<u>Total</u>	<u>Shopper Goods</u>	<u>Eating & Drinking</u>	<u>Convenience Goods</u>
Total Demand	\$ 107,911,184	\$ 29,335,700	\$ 46,311,487	\$ 32,262,078
Required Sales per Square Foot		\$500	\$ 500	\$ 500
Total Supportable Retail Space	215,819	58,671	92,623	64,524

Source: Whitnev & Whitnev.

APPENDIX B: BLOCK NUMBERING KEY



Ehrenkronz Eckstut & Kuhn Architects
 Gietling Jackson Kercher Anglin Lopez Finehart, Inc.

EISENHOWER EAST
 Alexandria, VA

Department of Planning & Zoning
 City of Alexandria, VA

APPENDIX C: PROPOSED PARKING STANDARDS MEMORANDUM

MEMORANDUM

To: Kimberley Fogle

From: Bill Whitney

Date: October 7, 2002

Subject: Proposed Parking Standards, Eisenhower East Corridor

With regard to the proposed parking standard of 2.0 spaces per 1,000 square feet of office space, please note the following:

1. In general, the proposed standards are consistent with current practice, both in the Washington metro area and other urban locations of comparable density and similar complexity.
2. Retail parking is the potential key problem area, particularly if the development becomes popular and features a high percentage of its available space in entertainment and restaurant space—two notoriously large parking generators. Is there any provision to deal with overflow situations, such as remote surface lots that can be utilized with trams or jitneys?
3. Visibility of the parking is a key, as well as a street system that allows for drivers to easily associate their destination with the available parking. Hopefully, some of the parking can be developed in large structures within short walking distance of the retail space, as has been done in Bethesda. Valet services can also be very helpful, thus drop-off areas should be considered in the street design and parking plan.
4. In our experience, subterranean parking structures appear to be less successful for retail usage than above-ground structures, perhaps because of their relatively poor visibility, perceived problems with respect to security, and tendency toward smaller sizes given development costs. If parking is to be used for both office and retail purposes on a regular basis, care needs to be taken to ensure that it is user-friendly for the infrequent retail user as opposed to the regular office user.
5. An obvious shared-parking opportunity exists between the metro station and the retail space, though during certain periods of the day the metro user has to have priority. Has this relationship been evaluated?