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State Center

MARKET ANALYSIS

PART 2: Residential

Prepared March 25, 2008
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INTRODUCTION

A Market Analysis has been undertaken to determine the economic potentials for retail, office, entertainment, residential, and hotel development or redevelopment at the State Center site. A Part 1 Report has already been submitted which summarized trends in the Baltimore regional economic base and provided findings from a site assessment that examined the overall marketability of the site for various uses. The Part 1 Report also summarized findings from the commercial market analyses for retail, office, and entertainment uses.

This **Part 2** Report summarizes draft findings from an assessment of residential potentials, including affordable housing opportunities and market-rate housing demand at the State Center site. This report includes an overview of residential market conditions in Section 1, followed in Section 2 by a demographic analysis and needs assessment for affordable housing within a State Center community impact area. In Section 3, a separate demographic analysis is conducted in support of market-rate housing in the broader residential market area. Residential demand is also forecasted. The site's capture of the residential market is determined in Section 4, based on an assessment of the competitive framework. Finally, Section 5 provides a summary of the recommended mix of affordable and market-rate housing at the site, and generates preliminary recommendations for the product mix.

A Part 3 Report is being developed that will summarize the hotel potentials for the site. An Executive Summary will be produced for public distribution as appropriate, summarizing all three parts of the market analysis. Once the market findings have been vetted, the consultant will prepare a Strategic Plan to assist with more detailed questions related to development format, management structure, marketing, and maximization of neighborhood revitalization opportunities.

Section 1. RESIDENTIAL MARKET CONDITIONS

This section examines residential market trends and existing conditions in Baltimore and the surrounding region. Trends in housing stock and construction, housing sales and pricing, rents, occupancy, and other factors are examined as they relate to the regional housing market. Housing markets throughout the U.S., including Baltimore's, are undergoing a major correction due in part to the collapse of certain credit instruments coupled with an expanding over-supply of product. The impacts of this market correction on Baltimore are also explored in order to provide context for the market analysis.

Construction Trends

Row houses have dominated central Baltimore City's housing stock since the city boomed as a hub for manufacturing and shipping in the 19th and early 20th centuries. Thousands of the small houses were built to house workers including immigrants from southern and eastern Europe and later, black families migrating from the south in search of economic opportunity. New construction is more diverse, but the city and region still support construction of thousands of townhouse-style housing units.

There were over 83,000 housing units constructed in the Baltimore region from 1999 through 2007, for an average of about 9,230 per year. However, most of the residential permits were issued between 2003 and 2006, when there was significant construction activity throughout the region. There were 12,435 units permitted each year during the 2003-2006 period, as compared with 9,172 per year between 1999 and 2002. Between 2005 and 2007 however, the number of permits per year fell by 36%.

Baltimore City accounted for 5.5% of all housing permitted in the region between 1999 and 2007, with a total of 4,590 residential building permits. Again, most of the construction occurred between 2003 and 2006, when the City permitted an average 908 units per year. Between 1999 and 2002, the City only permitted 234 units per year, although it should be noted that even that number is a significant gain over much of the 1990's, when the City saw very little new housing construction. Between 2005 and 2007, the City's housing construction permitting fell by 75%, a dramatic decrease in development activity.

Table 1. RESIDENTIAL PERMIT TRENDS, BALTIMORE AND REGION, 1999-2007

Year	<u>Baltimore City</u>			<u>Baltimore Region</u>		
	SF	MF	Total	SF	MF	Total
1999	46	145	191	4,504	1,459	5,963
2000	219	38	257	6,857	3,049	9,906
2001	115	80	195	8,428	1,973	10,401
2002	181	112	293	8,802	1,640	10,442
2003	206	489	695	7,998	2,817	10,815
2004	433	307	740	7,145	2,775	9,920
2005	643	613	1,256	8,001	2,932	10,933
2006	332	317	649	5,908	1,794	7,702
2007 1/	233	81	314	5,618	1,337	6,954
Total 1999-2007	2,408	2,182	4,590	63,261	19,776	83,036
Ave Annual	268	242	510	7,029	2,197	9,226
1999-2002	140	94	234	7,148	2,030	9,178
2003-2006	449	460	908	9,464	2,990	12,453
Change	220%	390%	288%	32%	47%	36%
05-07 Change	-64%	-87%	-75%	-30%	-54%	-36%

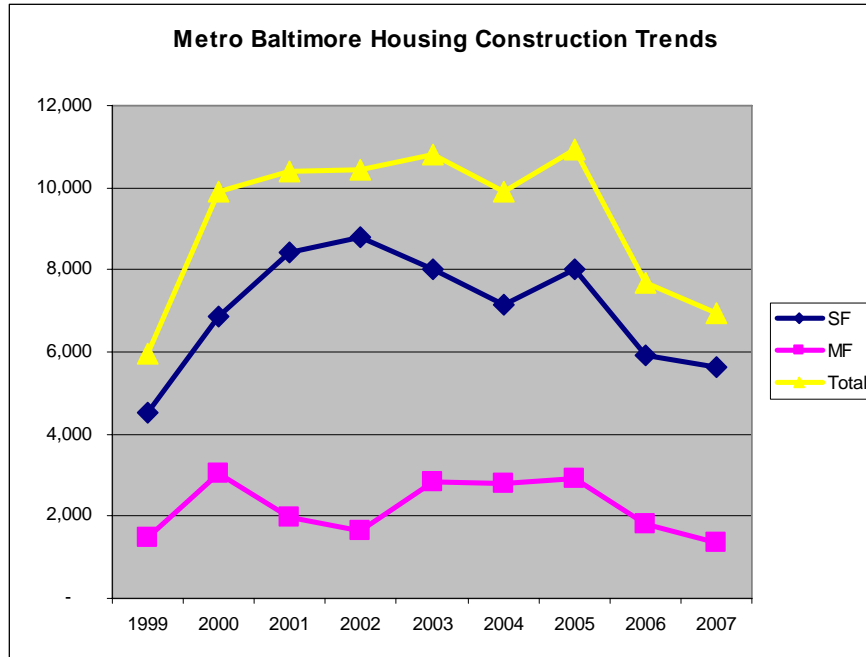
Note: 1/ 2007 data annualized based on eight months.

Sources: U.S. Bureau of the Census and Randall Gross / Development Economics.

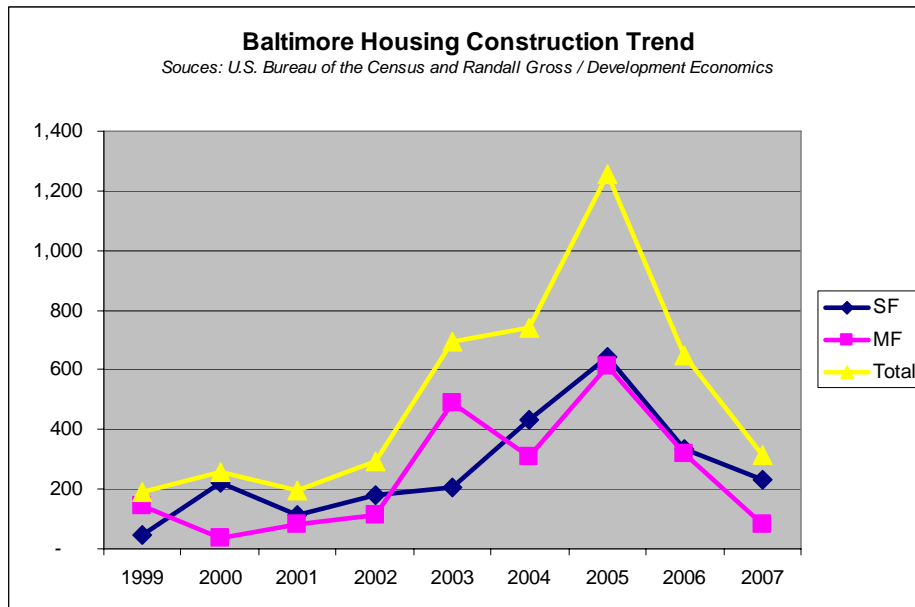
In general, the region's housing construction increased significantly starting in 1999 and stabilized at around 10,000 to 11,000 units per year for six years between 2000 and 2005. After that year, construction fell dramatically, as noted above to less than 7,000 estimated units in 2007.

Type of Unit

The region's housing construction has been dominated by single-family, detached units, which accounted for 76% of all units permitted between 1999 and 2007. There were 63,300 single-family units permitted versus less than 20,000 multi-family units. Single-family construction peaked in 2002 at nearly 9,000 units, but has fallen almost every year since that time. Multi-family construction stabilized at about 2,500 to 3,000 units per year from 2003 to 2005, and has only fallen since 2006. Thus, condominium (and apartment) development cycle peaked four years later than single-family, and began to wane four years later.



Baltimore City. The city's construction cycle was much more sharply pronounced than that of the region as a whole, with development increasing rapidly from less than 200 units 1999 and peaking at 1,256 units in 2005 before falling precipitously back down to an estimated 314 units in 2007.



The mix of single-family versus multi-family construction was much more evenly distributed in Baltimore City than in the region as a whole, with almost the same number of single-family units (449) built as multi-family (460) from 1999

through 2007. Even within Baltimore, single-family outpaced multi-family construction in seven of the last nine years.

Housing Sales & Pricing Trends

Data on housing sales and prices in Baltimore city and county were analyzed in order to provide an indication of trends in the for-sale housing market. Clearly Baltimore City shared in the run-up in housing prices that resulted not just from pent-up demand but also from historically-low interest rates and a volatile combination of financial instruments that made credit available to a larger share of potential homebuyers.

Number of Sales

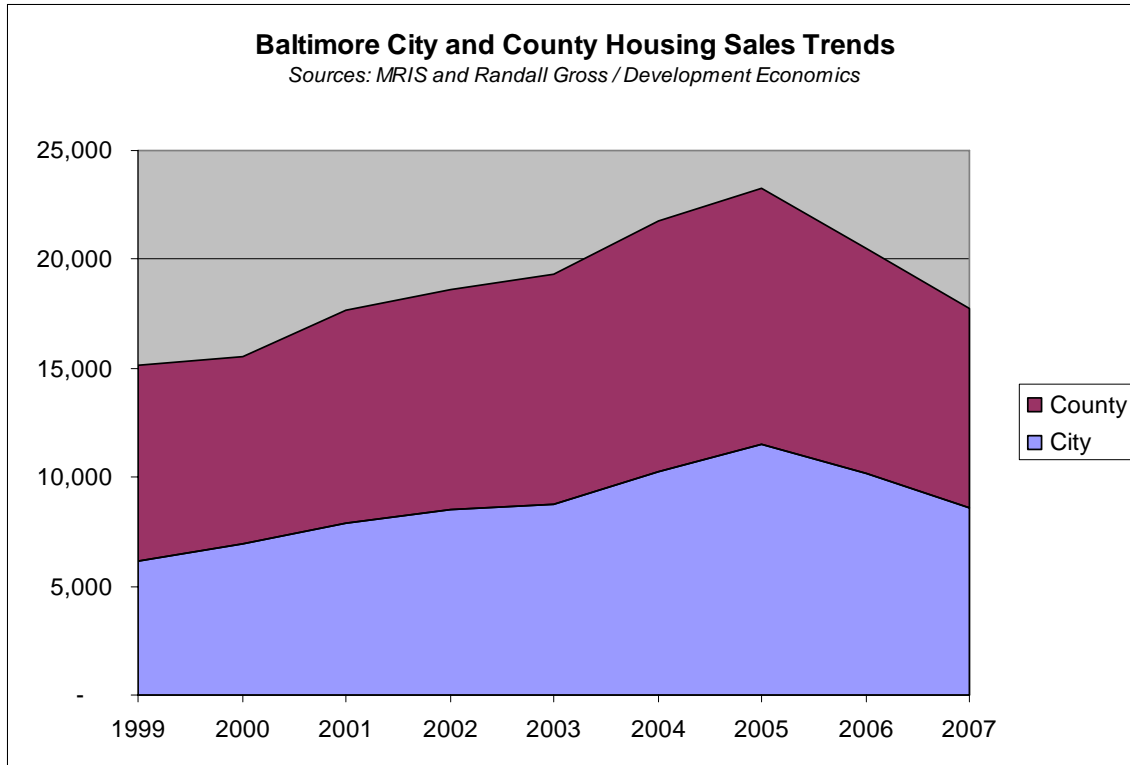
Between 1999 and 2007, there were 78,838 homes sold in the city of Baltimore, for an average of 8,760 per year. Starting in 1999, the number of residential units sold increased every year until 2007, when the city saw its first decrease in home sales in at least nine years.

Table 2. HOUSING SALES TRENDS, BALTIMORE CITY, 1999-2007

Year	Number	Ave Price	Med Price
1999	6,190	\$ 82,685	\$ 68,000
2000	6,954	\$ 82,217	\$ 65,000
2001	7,855	\$ 80,518	\$ 62,500
2002	8,543	\$ 91,134	\$ 66,900
2003	8,732	\$ 108,472	\$ 75,000
2004	10,253	\$ 131,405	\$ 90,000
2005	11,539	\$ 162,502	\$ 120,000
2006	10,181	\$ 173,157	\$ 140,400
2007 1/	8,591	\$ 188,001	\$ 157,767

Note: 1/ 2007 data annualized based on eight months through August.

Sources: MRIS and Randall Gross / Development Economics.



Within Baltimore County, over 90,700 homes were sold between 1999 and 2007, for an average 10,080 per year. The county's housing sales peaked the same year as in Baltimore City, with 11,741 sales in 2005.

Table 3. HOUSING SALES TRENDS, BALTIMORE COUNTY, 1999-2007

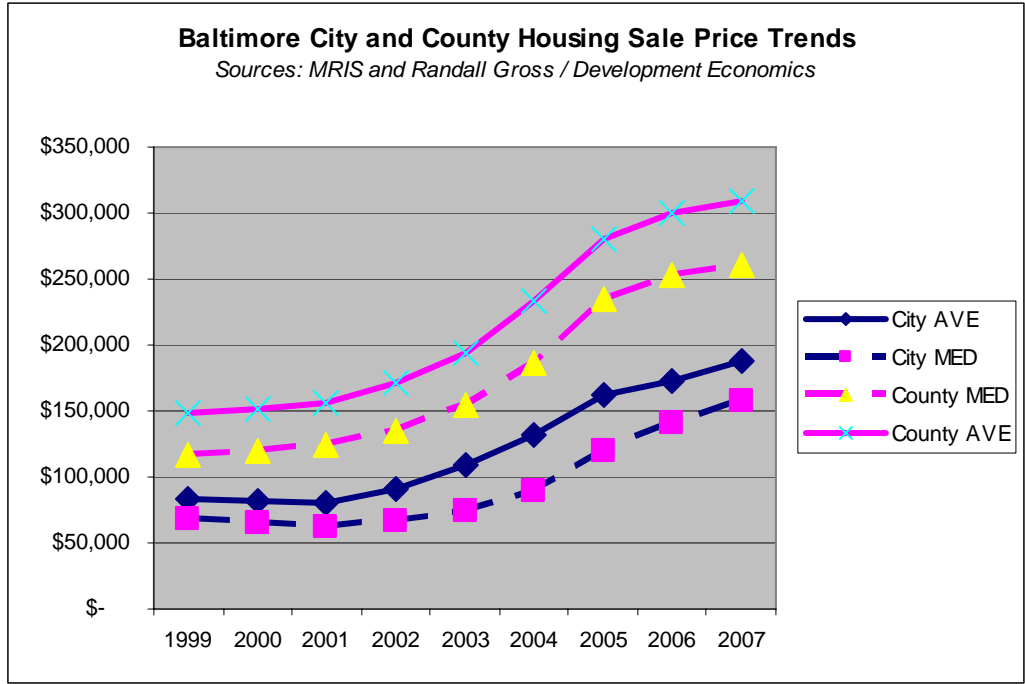
Year	Number	Ave Price	Med Price
1999	8,964	\$ 147,732	\$ 116,500
2000	8,563	\$ 151,536	\$ 119,000
2001	9,793	\$ 156,459	\$ 124,900
2002	10,107	\$ 171,930	\$ 135,000
2003	10,584	\$ 194,689	\$ 155,000
2004	11,534	\$ 233,031	\$ 187,000
2005	11,741	\$ 280,225	\$ 235,000
2006	10,307	\$ 300,502	\$ 253,000
2007 1/	9,119	\$ 308,687	\$ 260,112

Note: 1/ 2007 data annualized based on eight months through August.

Sources: MRIS and Randall Gross / Development Economics.

Sale Prices

While the increase in sales was impressive, the more dramatic increase occurred in median housing prices, which rose by 132% or 14.7% per year (even faster than average home sale prices). In 1999, the median Baltimore City sale price was \$68,000 but it increased to about \$157,800 by 2007. This market run-up contrasts with years of stagnation when Baltimore housing prices either fell or increased barely in tandem with the rate of inflation.



Housing prices in the county increased slightly less dramatically than those in the city, rising by 123% over the period or 13.7% per year. In 1999, the median housing sale price in Baltimore County was \$116,500. By 2007, the price had increased to \$260,112. The growth rate in Baltimore County prices had already begun to taper off by 2005, while the city’s median price continued to escalate. Going into 2008, prices appear to have stagnated and begun to fall precipitously in certain sub-markets of both the city and county. These trends mirror national the housing downturn, which is seeing prices fall in all but a handful of major markets (e.g., Austin, Seattle, Portland).

Baltimore Region. The Baltimore Region had total home sales of 127,484 during the three-year period from 2002 to 2004. Baltimore City accounted for 15.8% of all housing sales in the region during this period. Yet, the city only accounted for 5.5% of the region’s housing construction. Most of the city’s sales remained in existing homes despite the flurry of new construction during this period.

Type of Product

Data on Baltimore City housing sales by type of product was examined for the period in the middle of the run-up in the housing market, from 2002-2004. During this period, 3,944 single-family houses were sold, with a median price of \$116,106. Single-family accounted for 19.6% of all homes sold in Baltimore during this period.

Table 4. HOUSING SALES AND PRICES BY TYPE OF PRODUCT, BALTIMORE CITY, 2002-2004

Type of Product	2002	2003	2004	TOTAL/ Average
<u>Single-Family</u>				
Number Sales	1,145	977	1,822	3,944
Median Price	\$ 95,000	\$114,000	\$130,500	\$116,106
<u>Condominium</u>				
Number Sales	294	363	442	1,099
Median Price	\$ 85,250	\$120,000	\$135,250	\$116,837
<u>Townhouse</u>				
Number Sales	3,601	4,782	6,737	15,120
Median Price	\$ 75,000	\$ 83,000	\$ 93,500	\$ 85,773
<u>TOTAL</u>				
Number Sales	5,040	6,122	9,001	20,163
Median Price	\$ 80,142	\$ 90,141	\$103,040	\$ 93,400

Sources: Maryland State Department of Assessments and Taxation and Randall Gross / Development Economics.

The city also saw the sale of 1,099 condominiums during the 2002-2004 period, with a median price higher than that of single-family houses, at \$116,837. Condos represented 5.5% of the for-sale market during this period. There were 15,120 sales of townhouses, which are the predominant housing type in central Baltimore, accounting for 75% of all housing sales in the city. Townhouses sold at a median price of \$85,773, significantly lower than that for both houses and condominiums in the city.

Baltimore Region. Almost 63,200 single-family homes were sold in the Baltimore Region during the 2002-2004 period. Baltimore City's single-family sales accounted for just 6.2% of this total while Baltimore County's accounted for 32.0%. Condominium sales totaled 10,900 during this period, with Baltimore City accounting for 10.1%. Even then, the city was next to last (ahead of Carroll County) among the six counties included as part of the regional market.

There were 53,385 townhouses sold in the region between 2002 and 2004, and Baltimore City accounted for 28.3% of all townhouse sales. This placed the city second (just behind Baltimore County) among the six jurisdictions in townhouse sales, reiterating the predominance of this type of housing in the city's residential mix. Regional housing sales trends are detailed by county in Appendix Tables 2, 3, and 4.

Prices. The sale price for single-family housing averaged \$240,357 during the 2002-2004 period. The city's average housing price was the lowest of the six counties comprising the regional market, at \$116,106 (or just 48.3% of the region's average). The city's average single-family housing price was only 30.5% of the average in Howard County. Baltimore's average condo sale price, at \$116,837, was 82.9% of the regional average (\$140,895) but was still the lowest of the region's six jurisdictions. Baltimore's townhouse prices were by far the lowest of all of the six counties, at \$85,773, constituting just 60.6% of the regional average of \$141,597. The city's townhouse prices were averaging only 38.8% of those in Howard County. Regional home prices by type of product are summarized in Appendix Tables 5, 6, and 7. Data on apartment rents and occupancy have been collected and will be included in the final residential report.

Section 2. AFFORDABLE HOUSING OPPORTUNITIES

The State Center project is envisioned as a mixed-use and mixed-income community that offers housing opportunities for a broad range of residents. The opportunity for developing affordable housing was determined based on a needs assessment for affordable housing within a “Community Impact Area” surrounding the State Center site. It is important to establish goals and targets for inclusion of affordable, workforce housing that are based on the parameters of community need. At the same time, the ultimate mix of affordable and market-rate housing must respond to the financial viability of cross-subsidization. The following affordable housing opportunities assessment draws from the demographic profile of households within a designated impact area as defined below. The specific development program for affordable housing, however, is developed in Section 5 of this report in consideration of the support generated by market-rate housing and on considerations for basic financial viability.

Community Impact Area

In order to set appropriate goals for the provision of affordable housing units, it is first necessary to define the target impact area. For the purposes of this analysis, the Community Impact Area was defined to include a primary impact zone and a secondary impact zone. The neighborhoods included in these zones are indicated below.

Zone A (Primary Impact)

Midtown-Belvedere
Upton
Druid Heights
Bolton Hill
Reservoir Hill
Charles North
Seton Hill
Penn North
Remington (part)
Barclay

Zone B (Secondary Impact)

Sandtown-Winchester (part)
Harlem Park (part)

This impact area definition at least provides an indication of which households might be influenced to consider moving to State Center to take advantage of homeownership opportunities. These neighborhoods are all relatively close to the State Center site and have existing transit and pedestrian linkages. The opportunity for affordable homeownership or rentals at State Center would be targeted to households in these proximate neighborhoods.

Demographic Trends

Demographic trends were analyzed within the Community Impact Area as a basis for determining the market base for affordable housing. Somewhat more detailed analysis of existing household demographics within the immediate neighborhoods surrounding State Center was conducted by other members of the consultant team based on primary data collected through surveys. This information has also provided input to the demographic analysis. Overall trends in population, households, families, and income are summarized below.

Table 5. DEMOGRAPHIC TRENDS, COMMUNITY IMPACT AREA, 2000-2007

Factor	2000	2007	2000-2007 Change	
			Number	Percent
Population	39,305	37,951	(1,354)	-3.4%
Households	19,213	19,022	(191)	-1.0%
Families	6,621	6,497	(124)	-1.9%
Med Fam Inc	\$ 32,825	\$ 30,012	\$(2,813)	-8.6%

Note: Income expressed in constant 2006 Dollars.
2000 Census income is based on 1999 annual.

Sources: U.S. Bureau of the Census; Claritas, Inc.; and
Randall Gross / Development Economics.

Basic Demographic Trends

The population of the impact area was about 38,000 in 2007, down by an estimated 1,350 or 3.4% from 2000. The decrease in population mirrors trends in many neighborhoods on the west and northwest side of Baltimore as opposed to harbor-front communities where population has increased. Despite the continued decrease in population, households have only declined by 191 or less than 1.0% (0.1% per year) over the seven-year period.

The household base has remained relatively stable in the impact area despite the decrease in population because of a continued decrease in average household size. Between 2000 and 2007, average household size fell from 1.92 to 1.85, a drop of 3.7%. While there are less people, they are distributed over a larger number of households than in 2000. Shrinking household size relates to the changing demographics of the area, where there are more single workers and couples without children than in the past. Families have continued to leave the city due to the reputation of local schools or for more housing, but the area lost just 1.9% of its families between 2000 and 2007. This rate may be more a reflection of the poverty of families in this area, who do not have the resources to move.

Median family income in the impact area was only \$30,000 in 2007, a decrease of more than \$2,800 or 8.6% in real terms since 1999 (2000 Census). Incomes fell during this period for a variety of reasons, including an economic downturn in 2002-3, from which lower-income neighborhoods were the last to recover. While incomes began to show some signs of positive growth by 2005/6, a looming economic downturn is once again putting downward pressure on incomes in low-income neighborhoods.

Income Cohorts

Household incomes in the Community Impact Area were aggregated into cohorts for the purpose of assessing the distribution of incomes in the area. This summary indicates that a high proportion of households are concentrated within the lower-income ranges. In fact, 5,200 households or 27% of the total, have incomes of less than \$10,000 per year, which is below poverty level.

**Table 6. HOUSEHOLD INCOME
COHORTS, COMMUNITY
IMPACT AREA, 2007**

Cohort	Number	Percent
LT \$10,000	5,185	27.3%
\$10-\$15,000	1,935	10.2%
\$15-\$20,000	1,514	8.0%
\$20-\$25,000	1,341	7.0%
\$25-\$30,000	1,135	6.0%
\$30-\$35,000	1,067	5.6%
\$35-\$40,000	971	5.1%
\$40-\$45,000	785	4.1%
\$45-\$50,000	651	3.4%
\$50-\$60,000	963	5.1%
\$60-\$75,000	1,263	6.6%
\$75-\$100,000	958	5.0%
\$100-\$125,000	567	3.0%
\$125-\$150,000	247	1.3%
\$150-\$200,000	189	1.0%
\$200-\$250,000	125	0.7%
\$250-\$500,000	108	0.6%
GT \$500,000	18	0.1%
TOTAL	19,022	100.0%

Sources: Claritas, Inc.; and Randall
Gross / Development
Economics.

More than 16,800 or 88.3% of impact area households have incomes below the range of the median household income in the Baltimore area. It is

estimated that less than one in ten impact area households has income at or above the area median. Nearly two-thirds of the area's households have incomes of below \$35,000 per year. Interestingly, there is a cluster of households with income in the \$60,000 to \$75,000 range, just below the area median income.

Housing by Tenure

While a majority of housing in Baltimore is renter-occupied, housing within the Impact Area is heavily oriented to rental occupancy, with an estimated 82.2% of households in rental units and only 17.8% owner occupied.

**Table 7. HOUSEHOLDS BY TENURE,
COMMUNITY IMPACT AREA, 1990-2007**

Tenure	1990	2000	2007	
			Number	Percent
Owner Occup.	3,573	3,502	3,387	17.8%
Renter Occup.	17,649	15,711	15,635	82.2%
Total	21,222	19,213	19,022	100.0%

Sources: U.S. Bureau of the Census; Claritas, Inc.;
and Randall Gross / Development Economics.

The number of owner occupied units fell by 5.0% between 1990 and 2007, although the overall ownership rate actually increased from 16.8% to 17.8%. While this trend bodes well for the community, such gains are also fragile given the financing situation for moderate-income households and the high foreclosure rates among the riskiest homebuyers. Even so, there is a need to protect and encourage homeownership because of the stability and asset base it provides to the community.

Demographic Forecasts

Demographic forecasts suggest that population will continue to decrease within the Community Impact Area, at least through 2012, when the population will be 36,900. Population within the area will have fallen by another 1,100 or 2.8%. The household base will also decrease, although at a slower rate due to the continued anticipated decrease in average household size. The area will lose about 375 households or 2.0%, to a total of 18,650 by 2012.

**Table 8. DEMOGRAPHIC FORECASTS, COMMUNITY
IMPACT AREA, 2007-2012**

Factor	2007	2012	2007-2012 Change	
			Number	Percent
Population	37,951	36,893	(1,058)	-2.8%
Households	19,022	18,649	(373)	-2.0%
Families	6,497	6,327	(170)	-2.6%
Med Fam Inc	\$ 30,012	\$ 32,659	\$ 2,647	8.8%

Sources: U.S. Bureau of the Census; Claritas, Inc.; and
Randall Gross / Development Economics.

Average household size in the area will fall from 1.85 in 2007 to about 1.83 by 2012. The continued exodus of families with children will help contribute to this decrease in household size, with a reduction of about 170 families or 2.6% of the total. There will be a forecasted 6,330 families in the impact area by 2012. Thus, families will represent just 33.9% of all households in the Community Impact Area.

Median family income is expected to reverse recent gains and fall between 2007 and 2009/10. However, it is anticipated that family incomes will stabilize and increase again by 2012. While an 8.8% increase in income is expected, real incomes are likely to increase on average by less than 3.0% based on assumptions regarding inflation over the next few years. Further, much of that income growth will occur due to relatively higher-income households entering the impact area rather than any real growth income among existing households.

Housing Tenure

It is anticipated that homeownership rates will decrease somewhat, at least in the short term, within the Community Impact Area. By 2012, it is forecasted that 17.5% of housing will be owner occupied while 82.5% will be rental. By 2012, there will be about 3,260 owner-occupied units and 15,390 rental units. The overall housing tenure forecasts are summarized in the following table.

**Table 9. HOUSEHOLDS BY TENURE,
COMMUNITY IMPACT AREA, 2007
AND 2012**

Tenure	2007	2012	
		Number	Percent
Owner Occ.	3,387	3,260	17.5%
Renter Occ.	15,635	15,389	82.5%
Total	19,022	18,649	100.0%

Sources: U.S. Bureau of the Census; Claritas, Inc.;
and Randall Gross / Development Economics.

Impact Area Housing Sales

Housing sales trends within the Community Impact Area were analyzed by individual neighborhood from 1998 through 2006. A total of about 3,000 houses were sold in the Community Impact Area between 1998 and 2006, for an average of 328 per year.

Table 10. HOUSING SALES TRENDS, SELECTED NEIGHBORHOODS, BALTIMORE, 1998-2006

Year	MT-		B Hill	D Hgts	Her	Mad	Res	Chas	Mt	Set	TOTAL	Chg
	Belv	Uptn			Csg	Park	Hill	North	Vrn	Hill		
1998	29	62	36	41	5	9	42	3	6	78	311	
1999	32	38	59	27	-	9	47	6	12	79	309	-1%
2000	40	25	56	28	1	13	39	-	16	107	325	5%
2001	56	25	64	17	-	12	46	3	22	125	370	14%
2002	27	26	56	11	-	13	53	3	9	13	211	-43%
2003	26	27	61	8	26	12	79	12	23	24	298	41%
2004	79	46	48	23	1	15	98	5	27	8	350	17%
2005	85	60	47	47	1	21	104	3	23	20	411	17%
2006	61	57	55	29	-	12	116	2	22	15	369	-10%
TOTAL	435	366	482	231	34	116	624	37	160	469	2,954	41.3%
<i>Ave/Year</i>	<i>48</i>	<i>41</i>	<i>54</i>	<i>26</i>	<i>4</i>	<i>13</i>	<i>69</i>	<i>4</i>	<i>18</i>	<i>52</i>	<i>328</i>	<i>5.2%</i>
<i>'98-02</i>	<i>37</i>	<i>35</i>	<i>54</i>	<i>25</i>	<i>1</i>	<i>11</i>	<i>45</i>	<i>3</i>	<i>13</i>	<i>80</i>	<i>305</i>	<i>-6.1%</i>
<i>'03-06</i>	<i>63</i>	<i>48</i>	<i>53</i>	<i>27</i>	<i>7</i>	<i>15</i>	<i>99</i>	<i>6</i>	<i>24</i>	<i>17</i>	<i>357</i>	<i>16.5%</i>

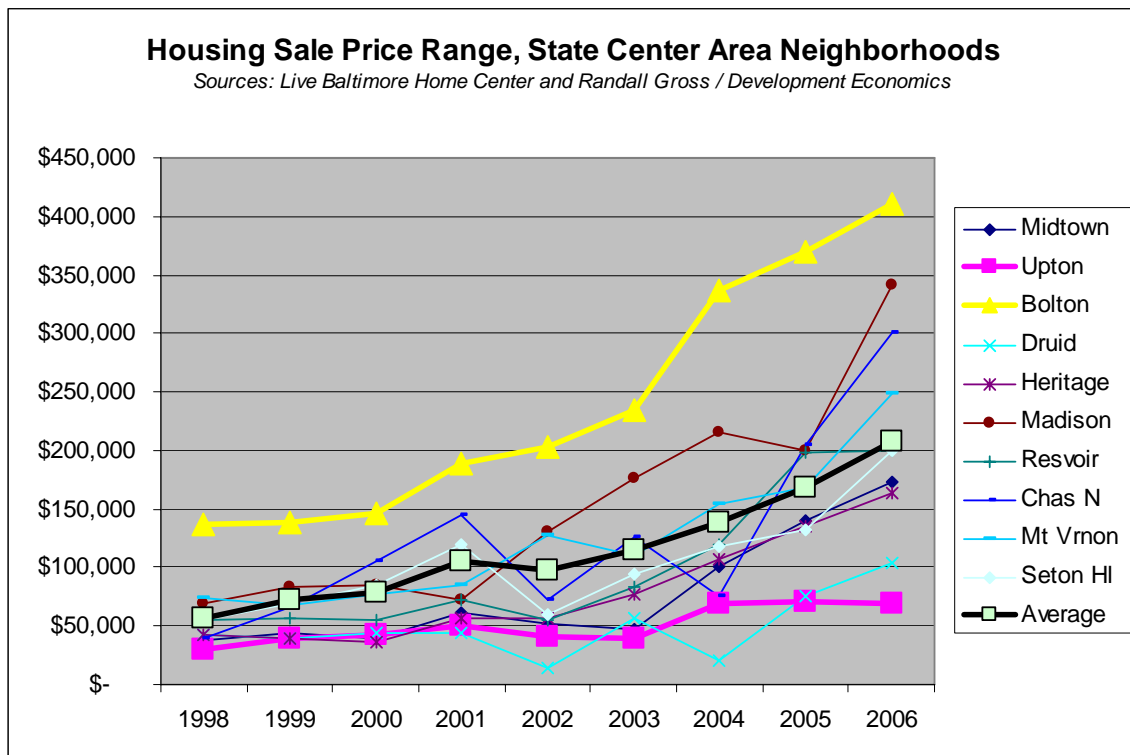
Sources: Live Baltimore Home Center, First American Real Estate Solutions, and Randall Gross / Development Economics.

Considering that only 17.5% of the housing in this area is owner-occupancy, this is quite a substantial number. Between 1998 and 2002, the number of units sold was about 305 per year or 6.1% less than the average. Between 2003 and 2006, an average 357 units were sold per year, or 16.5% above the average.

Neighborhoods experiencing the highest level of housing sales activity were Reservoir Hill (624 sales), Bolton Hill (482), Seton Hill (469), and Mt. Belvedere (435). Very little activity was seen in Charles North, which may explain why the prices there have been skewed by a few sales. Heritage Crossing is a relatively small development that still has original owners, so the number of sales were fairly small. Overall, the number of sales increased until 2002, when there was a 43% drop in the number of housing sale closures. The following year and beyond, sales volumes increased apace up until 2006, when the number of sales fell by 10%.

Sales Prices

This data suggest that there has been a substantial gain in market prices within selected neighborhoods, particularly Bolton Hill and Madison Park.



Bolton Hill sale prices increased from under \$150,000 in 1998 to more than \$400,000, in only eight years. This 180% increase in prices can clearly benefit existing property owners and helps to revitalize the neighborhood, but it

also reduces homeownership opportunities for those without the income to afford properties there. Charles North prices also saw a dramatic gain since 2004, although this sudden increase bucks the trend in previous years towards stagnation. A few properties in Charles North that have sold at much higher prices helped to skew the numbers for 2005 and 2006.

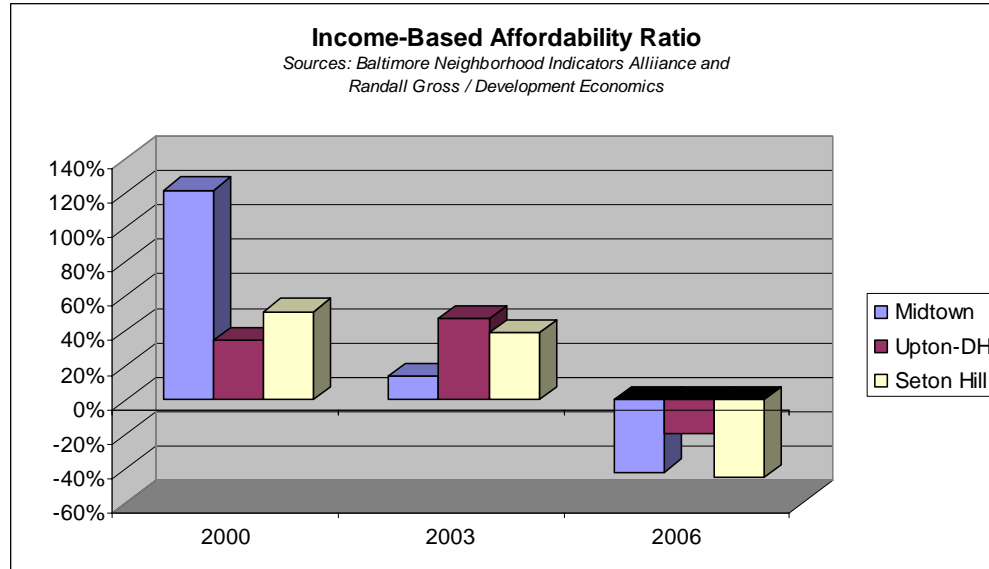
While areas like Bolton Hill, Madison Park, and Charles North have seen dramatic price escalations during a period of hyper investment activity, other nearby neighborhoods like Upton and Druid Heights have failed to ignite interest even at the height of a 10-year up-cycle in the housing market. Overall, housing prices within the Community Impact Area increased from an average of only about \$50,000 in 1998 to more than \$200,000 by 2006, a **300% gain** at an unsustainable rate of nearly 40% per year. Impact Area housing sale prices are detailed by individual neighborhood in the Appendix.

Affordability Measures

Housing affordability is a function of income and price. Given the rapid increase in prices seen in many of the impact area neighborhoods over the past eight years during a time with area household incomes fell, there is clearly a declining opportunity for residents of this area to purchase their own housing. If that opportunity does not exist, even for those with the median household income in the community, then there is an affordability gap for current residents. The higher the affordability gap, the lower is the opportunity for homeownership and asset building among residents in the community.

Affordability Gap

An analysis was conducted of Community Impact Area household incomes in relation to housing prices over time since 2000. This analysis identified a steep decline in the affordability of housing (and concomitant increase in the affordability gap) for existing residents within the community. The analysis focused on three neighborhoods with varying income levels and housing prices.



The Midtown neighborhood had a positive affordability “ratio” of 122% in 2000, meaning that the median household could afford 122% more housing at the median sales price than would be expected based on their income. By 2003, that affordability ratio had decreased to only 14%. By 2006 the median household could not afford to purchase the median-priced house in the neighborhood, which would cost 42% more than they could afford to purchase. Thus, the affordability gap had appeared by 2006 that prevented current residents from purchasing housing.

A similar trend appeared during this period in many other Impact Area neighborhoods. In Upton, median-income households could afford to purchase up to 35% than the median housing price at the time. But by 2006, the median household had incomes 20% below the minimum required to purchase housing in that neighborhood, even though Upton’s housing values had not even increased as rapidly as in other areas. In 2000, Seton Hill’s median household could afford to purchase up to about 50% more than the median price at the time, but by 2006, that same household would require 45% more income in order to afford the median-priced home in their own neighborhood.

Affordable Housing Opportunity

Affordable housing opportunity was determined for the Community Impact Area as a basis for establishing targets for development of affordable product. The number of affordable housing units needed to meet basic demand was calculated for the Community Impact Area. This demand was determined based in part on a number of factors including the number of households with sufficient incomes to purchase housing at an affordable cost (using standard AMI ratios), typical condominium or other housing fees, estimated taxes, the share of households that move every five years, and the share of households that “move-

up” from rental to homeownership. Assumptions have been made with respect to the credit-worthiness and assets of move-up buyers in Baltimore, based on in-house data collected for other studies in the city. There were also assumptions made with respect to the vacancy, demolition, and replacement of housing; plus other constraints on existing supply.

Of course not all of these households would “choose” to purchase housing, and many people have a preference for rental tenure over homeownership. This is particularly true of the elderly, some of whom prefer the safety and security of a managed building or who require certain building amenities and accessibility. Based on an analysis of the affordability of housing, not only for the median household but for all households within the Community Impact Area, key affordable housing

This analysis identified a target base of 4,615 households out of the total impact area renter household universe of 19,254, with sufficient basic income (plus fees and taxes) to afford the purchase of housing. This number were further diminished by an assessment of the other factors affecting the timing and ability to purchase, such as in eliminating the number of households that are not likely to move as well as those that will not move up to purchase housing. Creditworthiness, which is probably defined differently today than it was three months ago, is also important along with other basic risk factors. The findings of this analysis are summarized below.

Table 11. AFFORDABLE HOUSING DEMAND SUMMARY, COMMUNITY IMPACT AREA, STATE CENTER, 2008-2013

Income Cohort	Universe	Afford. Rent/Mtg	Income Qualified	Target	Demand Range	
					Low	High
<\$5,000	2,610					
\$5-\$10,000	3,562	\$ 122				
\$10-\$15,000	1,936	\$ 310				
\$15-\$20,000	1,632	\$ 435				
\$20-\$25,000	1,451	\$ 560				
\$25-\$35,000	2,384	\$ 747	30%	1,474	177	206
\$35-\$50,000	2,104	\$ 1,060	50%	1,527	168	198
\$50-\$75,000	1,917	\$ 1,560	80%	1,141	91	114
\$75-\$100,000	864	\$ 2,185	100%	474	24	28
\$100-\$150,000	468	\$ 3,122				
GT \$150,000	326	\$ 3,872				
TOTAL	19,254			4,615	460	547

Source: Randall Gross / Development Economics.

Out of the 4,615 income-qualified households, there are about 460 to 550 that are likely to move, are potential candidates for purchasing homes, and meet certain basic requirements for homeownership. Of course, this analysis also highlights that the vast majority of households within the Community Impact Area are unlikely to benefit even from affordable housing, since incomes are so low in the area. There are opportunities to enhance and improve public and assisted rental housing for the lowest-income residents, and to better integrate those households into a mixed-income community driven by the State Center redevelopment.

Recommendations with respect to the appropriate **number and mix** of affordable and market-rate housing units are provided in Section 5 of this report. Those recommendations account for the affordable housing need and market-rate housing demand, but also relate to the financing requirements in support of affordable housing development.

Section 3. RESIDENTIAL MARKET DEMAND

The potential for market-rate residential uses was tested through a market analysis. This section summarizes findings on market-rate housing demand in the Residential Market Area and within certain niche markets. Since State Center is located near the heart of a large and complex metropolitan region, housing demand would be generated by several very different niche markets. These niches are defined and demand is forecasted separately for each. Overall housing demand is based on the aggregation of these individual sub-markets and niches.

Key Target Market Niches

State Center would generate housing demand from the residential market area that includes much of the city of Baltimore and surrounding areas. In general, the likely target niches within this market would include “move-ups” and “move-downs” from existing housing. “Move-up” includes existing renters who might purchase housing (as first-time buyers) or move into a higher-rent building closer to their work or amenities. “Move-downs” would include empty nesters or others who already own a house and wish to move into a smaller property, condominium, or rental apartment. In either case, these households would have the resources to afford housing at market rates, as opposed to the need or demand generated for affordable units by residents in surrounding communities, explored in the previous section.

In addition to move-ups and move-downs from existing housing, There is also the opportunity to attract D.C. commuters and relocations (“Relos”) who are transferring or otherwise moving to Baltimore. Relocations can include investors who are purchasing property in order to rent or re-sell to others. However, it is anticipated that the small investor portion of the market will evaporate in the short term due to the difficulties that many face in obtaining financing. A large portion of the housing sales in Baltimore during the last few years (up to 60% in some areas) were generated by investors. Thus, a decrease in this market niche will obviously impact on market activity in the short term.

Employees and graduate students at educational institutions and medical facilities adjacent or near to the site are also an important market niche. These residents are disaggregated from the overall household market and demand is analyzed separately. A survey is now underway of institutional employees and graduate students to assess their existing housing status, demographics, and interest/preferences for purchasing or renting housing at a redevelopment State

Center. Tapping into this institutional market is critical to the success of residential development at State Center. Clearly, this sample survey process will take some time to complete and the results are not included as part of this preliminary residential market analysis. Those results will, however, be incorporated later to help refine and inform the development program. Finally, State workers currently (or potentially) employed at State Center also represent an important potential target niche market. No demographic or housing data has been provided to date on State Government employees. A housing survey is recommended as it would provide similarly useful information on the demographics, housing status, and preferences for housing and amenities that would attract them to live at State Center.

Household Market Area Definition

A Market Area was defined for the purposes of testing demand for market-rate residential among existing and future “move-ups” and “move-down” households in the local market. This LMA includes both a primary target sub-market of households as well as a secondary sub-market. These sub-markets are defined below.

Primary Sub-Market

The primary sub-market for local, first-time buyers, move-ups, and move-downs (for market-rate housing) was defined to include neighborhoods surrounding the site; Midtown, Mount Vernon, and other central neighborhoods, as well as most of the remaining north-western quadrant of the city. The central neighborhoods are rich with renters including many singles and young professionals who are a potential move-up target for housing at State Center. The expected future growth in this population is included. Northwest Baltimore has a number of empty-nester households, some of whom occupy large single-family homes and may otherwise move out of the city and into smaller houses or condominiums. This middle-class black housing niche has been long overlooked in the city's housing market and there is an opportunity to retain some of these households in the city.

Secondary Sub-Market

The secondary sub-market includes primarily the neighborhoods on the eastern side of the city and some suburban areas. These diverse areas include working families, single renters, and empty nesters who are all part of the potential secondary market for housing at the State Center site. Both sub-markets exclude students and workers at selected institutions, who are discussed elsewhere.

Demographic Trends & Forecasts

The demographic trends and forecasts were analyzed as one component of determining overall housing demand in the residential market area. These trends include population, households, families, and household income, which are summarized below for both the primary and secondary sub-markets.

Market Area Trends

Demographic and economic indicators suggest a continued but slower downward trend within the primary market area since 2000. Population in this area was about 318,000 in 2007, down by 14,000 or 4.2% since 2000. The number of households was more stable but still declined by 2,400 or 1.9% from 2000, even with a decrease in average household size from 2.42 in 2000 to 2.34 by 2007. There were an estimated 127,100 households in this area in 2007.

Table 12. DEMOGRAPHIC TRENDS, PRIMARY MARKET AREA, 2000-2007

Factor	2000	2007	2000-2007 Change	
			Number	Percent
Population	331,883	317,812	(14,071)	-4.2%
Households	129,554	127,140	(2,414)	-1.9%
Families	71,952	70,493	(1,459)	-2.0%
Med HH Income	\$ 46,490	\$ 44,716	\$(1,774)	-3.8%

Note: Income expressed in constant 2006 Dollars.
2000 Census income is based on 1999 annual.

Sources: U.S. Bureau of the Census; Claritas, Inc.; and
Randall Gross / Development Economics.

The number of families in the primary market area also fell, with a reduction of about 1,460 or 2.0% to 70,500. The number of families fell at a slightly faster rate than households because there were more singles moving into the market during this period. Black, middle-class families continued to leave the city's northwest neighborhoods for suburban areas perceived to have better schools, less crime, and attractive single-family housing, accounting for much of this decline. Partly as a result of the continued loss of middle-class families and an influx of singles, median household incomes fell in real terms (after accounting for inflation), from \$46,490 in 1999 (2000 Census) to \$44,716 (2007 estimate). Thus, real incomes fell by about 3.8% after inflation. The city was also impacted by a recession and slow growth in real incomes since 2000.

Secondary Sub-Market. Secondary market area demographic trends are fairly consistent with those in the primary sub-market. In this area, population fell by about 6,000 or 5.0% since 2000 to 115,100. The number of households fell by 2.7% or 1,250 to 45,800. The target household base is much smaller in this sub-market than in the primary market area in central and north-west Baltimore.

Table 13. DEMOGRAPHIC TRENDS, SECONDARY MARKET AREA, 2000-2007

Factor	2000	2007	2000-2007 Change	
			Number	Percent
Population	121,133	115,103	(6,030)	-5.0%
Households	47,074	45,823	(1,251)	-2.7%
Families	28,335	27,486	(849)	-3.0%
Med HH Income	\$ 45,817	\$ 45,558	\$ (259)	-0.6%

Note: Income expressed in constant 2006 Dollars.
2000 Census income is based on 1999 annual.

Sources: U.S. Bureau of the Census; Claritas, Inc.; and
Randall Gross / Development Economics.

Working families and retirees continued to leave eastern portions of the city in recent years and were not replaced at the same rate by the formation of new families or by families moving into the city. On the other hand, median income remained relatively constant in real terms in this part of the market area, with only a 0.6% decline (after accounting for inflation) to \$45,600 by 2007.

Forecasts

The primary sub-market is forecasted to see a continued decrease in population over the next five years. The area's population is expected to fall by about 10,300, or 3.2% by 2012/13. The number of households will also decline, by 2,930 or 2.3%, over the five-year period. Similarly, the number of families will fall by 2.4% or 1,690. Household incomes had begun to increase in the primary market area at an estimated rate of about 1.0% above inflation since 2005. This increase resulted from economic growth as well as move-ups among professionals who purchased housing at that time. However, as the nation's economy and housing investment slows, incomes in the city are likely to stagnate over the short term. Still, by 2012, it is expected that household incomes will have posted real growth.

Randall Gross / Development Economics

Table 14. DEMOGRAPHIC FORECASTS, PRIMARY MARKET AREA, 2007-2012

Factor	2007	2012	2007-2012 Change	
			Number	Percent
Population	317,812	307,537	(10,275)	-3.2%
Households	127,140	124,210	(2,930)	-2.3%
Families	70,493	68,804	(1,689)	-2.4%
Med HH Income	\$ 44,716	\$ 44,771	\$55	0.1%

Sources: U.S. Bureau of the Census; Claritas, Inc.; and Randall Gross / Development Economics.

Household incomes within the primary market area were also forecasted by individual income cohort through 2012/13, as shown below.

Table 15. HOUSEHOLD INCOME COHORTS, PRIMARY MARKET AREA, 2007 AND 2012

Income Cohorts	2007	Percent	2012	Percent	2007-2012 Change	
					Number	Percent
LT \$10,000	23,328	18.3%	20,968	16.9%	(2,360)	-10.1%
\$10-\$15,000	10,097	7.9%	9,317	7.5%	(780)	-7.7%
\$15-\$20,000	9,111	7.2%	8,414	6.8%	(697)	-7.7%
\$20-\$25,000	8,892	7.0%	8,049	6.5%	(843)	-9.5%
\$25-\$30,000	8,667	6.8%	7,852	6.3%	(815)	-9.4%
\$30-\$35,000	7,779	6.1%	7,404	6.0%	(375)	-4.8%
\$35-\$40,000	7,042	5.5%	6,750	5.4%	(292)	-4.1%
\$40-\$45,000	6,466	5.1%	6,175	5.0%	(291)	-4.5%
\$45-\$50,000	5,996	4.7%	5,753	4.6%	(243)	-4.1%
\$50-\$60,000	9,198	7.2%	9,375	7.5%	177	1.9%
\$60-\$75,000	10,266	8.1%	10,328	8.3%	62	0.6%
\$75-\$100,000	9,639	7.6%	10,437	8.4%	798	8.3%
\$100-\$125,000	5,113	4.0%	6,026	4.9%	913	17.9%
\$125-\$150,000	2,405	1.9%	3,211	2.6%	806	33.5%
\$150-\$200,000	1,373	1.1%	2,027	1.6%	654	47.6%
\$200-\$250,000	788	0.6%	879	0.7%	91	11.5%
\$250-\$500,000	748	0.6%	904	0.7%	156	20.9%
GT \$500,000	232	0.2%	341	0.3%	109	47.0%
TOTAL	127,140	100.0%	124,210	100.0%	(2,930)	-2.3%
100% AMI	20,298	16.0%	23,825	19.2%	3,527	17.4%
< \$100,000	14,752	11.6%	16,463	13.3%	1,711	11.6%

Sources: Claritas, Inc.; and Randall Gross / Development Economics.

More than one in four primary sub-market households have poverty-level incomes below \$15,000 per year. Further, a large portion of the area's households have incomes within a range that is insufficient to support a

mortgage or rent at market rates. This income barrier has been the most significant constraint to the development of Baltimore's housing market, which has relied on an influx of commuters and young professionals drawn by comparatively low prices (within the east coast), urban amenities, and proximity to Washington. Meanwhile, the outflow of middle-income households (first whites and more recently, blacks) appears to have continued due to the persistence of issues like schools and crime that affect them as well as an aging of the population and the lack of available housing to meet their needs.

In assessing the demand for market-rate housing, this analysis focused on households with at least 100% of area median income (AMI), or those with incomes generally above \$75,000 per year. Thus, while there are 127,100 households in the primary market area, only 20,300 of these households have incomes of at least the AMI level. There is, however, a large cohort of households with incomes just below AMI, totaling about 10,300. It is expected that some of these households will move into the (current) AMI category by 2012/13. Of the 20,300 households with incomes at AMI or above, nearly 15,000 have median incomes of less than \$100,000 per year.

Secondary Sub-Market. The secondary sub-market will experience a similar, continued decrease in population, households, and families over the next five years. Population is forecasted to decline by 3.7%, households by 2.7%, and families by 3.0%. However, household incomes will have recovered at a slightly faster rate and will post growth of 1.1% by the end of the five-year period.

Table 16. DEMOGRAPHIC FORECASTS, SECONDARY MARKET AREA, 2007-2012

Factor	2007	2012	2007-2012 Change	
			Number	Percent
Population	115,103	110,863	(4,240)	-3.7%
Households	45,823	44,581	(1,242)	-2.7%
Families	27,486	26,669	(817)	-3.0%
Med HH Income	\$ 45,558	\$ 46,071	\$ 513	1.1%

Sources: U.S. Bureau of the Census; Claritas, Inc.; and Randall Gross / Development Economics.

Housing Tenure

An assessment was conducted of housing tenure in the market area. Within the primary sub-market, owner occupancy increased from 41.9% in 1990 to 44.4% in 2000, and then to 44.5% in 2007. However, despite this increase in the homeownership rate, the continued decrease in the households meant that the number of owner-occupied units actually fell since 1990 by 1,742 or 3.0% (or by 1.7% (973) since 2000.

Table 17. HOUSING TENURE TRENDS, PRIMARY HOUSING SUB-MARKET, 1990-2007

Tenure	1990	2000	2007	Percent
Owner Occupied	58,293	57,524	56,551	44.5%
Renter Occupied	80,870	72,030	70,589	55.5%
Total	139,163	129,554	127,140	100.0%

Sources: U.S. Bureau of the Census; Claritas, Inc, and Randall Gross / Development Economics.

Given the current financing climate with respect to the tightening of credit at both ends of the mortgage market, renters will be less likely to move up into homeownership in the short term. As a result, homeownership rates in cities like Baltimore are likely to stagnate and even fall for a time. Unstable economic conditions will also contribute to a break in the positive trend in homeownership experienced since 1990.

Table 18. HOUSING TENURE FORECASTS, PRIMARY HOUSING SUB-MARKET, 2007-2012

Tenure	2007	2012	Percent
Owner Occupied	56,551	55,335	44.5%
Renter Occupied	70,589	68,875	55.5%
Total	127,140	124,210	100.0%

Sources: U.S. Bureau of the Census; U.S. Bureau of Economic Analysis; Claritas, Inc.; and Randall Gross / Development Economics.

It is assumed that both economic and financing conditions will have improved by 2012/13 so that the homeownership rate may return close to current levels. Even so, the number of owner-occupancy households within the market area will continue to decline.

Moving & Replacement Rates

The demand for housing among income-qualified households in the market area was identified partly through a series of analyses on demographic characteristics (e.g., age and family type) but also based on move rates, change in tenure, and housing replacement rates. Key move and replacement rate data are summarized below.

Move Rates

An analysis of Census and U.S. Treasury data helped identify the rate at which households are moving their residence within the market area and the patterns of their moves. In general, this analysis found that up to 81% of households within the primary sub-market change their place of residence on average once every five years. In reality, there are a number of households or individuals who change their residence nearly every year, but also a large number of households that remain in one house for 40 years or more. The data were disaggregated to examine households that move but stay within the market area, and this number was still above 65%. The move rate within the secondary sub-market is slightly higher at about 82% per five years, although a higher portion of these households are likely to move out of the market area.

Replacement & Vacancy Factors

A certain number of housing units are replaced each year do to fire and other destruction, redevelopment, and demolition. A portion of these housing units is replaced at a rate of about 1.0 to 1.5% per year, generating demand for replacement housing. A certain portion of the housing stock, including both single-family and multi-family dwellings, will remain naturally vacant and un-sold or un-rented due to turnover in tenancy, marketing, or other reasons.

Move-Up / Move-Down Demand

Based on the analysis of demographic characteristics, forecasted change, move rates, and other factors, total demand was calculated for move-ups and move-downs within the existing household market base.

Table 19. TOTAL HOUSING DEMAND IN TARGET INCOME RANGE, HOUSING MARKET AREA, 2008 - 2013/15

Income Range	Maximum Cost/Month	Total Housing Demand		
		Primary	Secondary	TOTAL
\$75,000-\$100,000	\$ 1,747	1,508	518	2,026
\$100-\$150,000	\$ 2,393	588	197	785
\$150,000-\$200,000	\$ 3,206	54	23	76
TOTAL DEMAND		2,150	738	2,887

Source: Randall Gross / Development Economics.

This analysis determined that there would be demand by 2013/15 for about 2,887 housing units throughout the market area, including 2,150 generated within the primary sub-market. This demand was disaggregated by income range

and monthly housing costs, with most demand generated from households within the \$75,000 to \$100,000 annual income range (including those who will have moved into this income cohort by 2013/15. These households should be able to afford monthly housing costs of up to a maximum of \$1,747. The average housing cost (rent or mortgage) for this group would probably fall within a range of \$900 to \$1,350 per month. The primary sub-market household income cohort from \$100,000 to \$150,000 per year would generate demand for about 588 units by 2013/15. Finally, primary sub-market households within incomes within the \$150,000 to \$200,000 range would generate demand for about 54 units within the market area.

Relocations

In addition to move-ups and move-downs from within the market area, the State Center site would also draw residents who are relocating to the city of Baltimore and the market area from other locations. The "Relo" base was determined through an assessment of employment growth patterns and projections, since employment opportunity is one driver for relocation, but also through an analysis of net migration trends and forecasts for key source markets.

Employment Growth

The State Department of Planning is projecting the addition of an average 2,200 jobs per year in Baltimore through 2015. The ratio of households to jobs is about 1.58 but is expected to fall to 1.5 over the next five to seven years. Job growth was also analyzed by industry sector to assess the impact of specific changes by industry sector.

**Table 20. AT-PLACE EMPLOYMENT PROJECTIONS,
BALTIMORE, 2005-2015**

Factor	2005	2010	2015	Ann Change
Employment	406,400	417,600	428,100	2,170
HH/JOB	1.582	1.535	1.502	-0.01

Sources Maryland State Department of Planning; Claritas, Inc.; and Randall Gross / Development Economics.

Migration Patterns

Migration patterns were also analyzed as an input to forecasting the demand for housing that will be generated by net migration to the market. U.S. Census and Treasury data were analyzed to assess frequency and patterns of migration into Baltimore as well as out-migration patterns. Particular focus was paid to two key sources of in-migration to the city of Baltimore specifically, the Washington, DC and New York-New Jersey metropolitan areas.

Table 21. MIGRATION & DEMAND PROJECTIONS FOR TWO KEY SOURCES, BALTIMORE, 2007-2015

Factor	Maryland	Baltimore	Share of MD
<u>Source- Wash, DC</u>			
Net Inflow 2005-6	7,354	2,427	33%
2006-7 Estimate	4,600	2,508	38%
2007-15 Ann Proj.	1,980	693	35%
<u>Source- NY/NJ</u>			
Net Inflow 2005-6	5,276	1,530	29%
2006-7 Estimate	2,800	1,254	33%
2007-15 Ann Proj.	1,140	353	31%
TOTAL 2007-2015	3,120	1,046	34%

Source: U.S. Bureau of the Census; U.S. Department of the Treasury, Internal Revenue Service; and Randall Gross / Development Economics.

This analysis determined that Maryland generates net inflow of about 3,900 households per year from the Washington, DC source market. Much of this migration is captured by suburban Washington counties including Prince George's and Montgomery. Baltimore City currently captures between 33% and 38% of these in-migrants, which represent positive new influx to the city even as the city generates significant out-migration to its own suburbs in Maryland and to other states.

Maryland also generates net inflow of about 2,600 in-migrants per year from the New York-New Jersey Metropolitan Region, with Baltimore capturing 29% to 33% of these in-migrants. Again, these numbers represent positive inflow to the city at the same time that Baltimore loses existing residents to its suburbs or other locations.

Overheated real estate markets in both Washington and New York have helped to propel some of this migration to Maryland and into Baltimore, where housing is relatively affordable when compared with other cities on the east coast. With a down-cycle in the housing market now underway, it is expected that migration will slow from these markets. Specifically, it is projected that in-migration from Washington DC will slow during the next five to eight years to an average of about 2,000 per year, with Baltimore capturing 700 or 35%. It is projected that in-migration from New York will fall to an average of about 1,100 during the next five to eight years, or about 350 per year to Baltimore. Overall, the state can conservatively expect a Net Gain of 3,100 households from Washington and about 1,100 from New York.

Household Income Patterns. One of the interesting findings from this analysis is that the 2004 median household income of in-migrants to Baltimore was \$3,356 less than the city's median income of \$39,376. This data suggest that in-migrants tended to be those seeking more affordable housing options than they would have found in the high-priced markets like Washington and New York.

Institutional Drivers

A separate analysis was also conducted of the institutional drivers in the housing market, with a focus on medical and university workers and students. These institutions are critical for driving the housing market because they have become the primary source of new job creation in the city and they are also located nearby (or within an easy commute by transit) to the State Center site. Efforts are underway to conduct an extensive survey of graduate students and employees at the key institutions, in order to inform and refine the market findings. However, the results of those surveys will not be available for months, so a preliminary assessment has been completed based on data collected from secondary sources and for the retail market analysis summarized in Part 1.

State Center Area Employment Base

Employment at State Center and the several key institutions was calculated as an input to the retail market analysis in Part 1. As noted previously, there is a large existing and potential employment base on-site, while State Center is also within walking distance of several institutions with a large worker population.

On-Site Employment. As noted in the Part 1 Report, on-site employment is expected to include at least the existing 3,500 State Government workers who currently occupy offices at State Center. There is also the possibility that additional State government agencies might relocate or consolidate offices at a redeveloped State Center, adding to the employment base located there. The candidates for relocation to State Center, as summarized in the Part 1 Report, employ an estimated 1,900 staff at their existing Baltimore offices. Since there is no information as yet to indicate which, if any, of these State employees might be relocated to State Center, it is assumed that State Government employment will remain static at 3,500. Another 900 private office workers could be added to the site based on the office market analysis. As with retail, any additional employment that is brought to the site can increase the potential for residential development and particularly for mixed-use.

Institutional Employment. The major institutions nearby include University of Baltimore (UB), University of Maryland Medical Center (UMMC), and Maryland General Hospital. As noted in Part 1, UB has a total of 4,800 employees at its campus three blocks away. UMMC employs 6,600 workers plus

1,076 attending physicians at its facilities. The medical school employs 1,350 FTE workers plus 1,184 faculty at the medical campus four blocks south of the site. Maryland General Hospital employs another 1,100 workers, one block south of State Center off of Howard Street. The survey is testing the housing status and preferences of many of these institutional employees, and also assessing their interest and willingness to rent or purchase housing at State Center.

In addition, Johns Hopkins University employs 27,751 faculty and staff at its campuses, including in particular those at the Medical School who have direct Metro public transit access to State Center.

Summary. The nearby on-site and off-site institutional employment base (excluding Hopkins) totals 12,840, as summarized below.

Location / Source	Number of Employees
<u>On-Site</u>	
State of Maryland	3,500
Private Offices	<u>906</u>
Sub-Total	4,406
<u>Off-Site</u>	
UMB	4,800
UMMC	2,534 (plus 6,600 hospital)
MD General	<u>1,100</u>
Sub-Total	8,434
TOTAL	12,840 (19,440)

As noted in Part 1, there are additional workers at smaller institutions in the area, including the 300 MICA faculty. The numbers identified above represent one of the target markets for housing at the State Center site.

Graduate Student Base

Graduate and medical students are another target market for housing at the State Center site. As noted in Part 1, the three educational institutions within walking distance of the site are University of Baltimore (UB), University of Maryland Medical Campus (UMMC), and Maryland Institute College of Art (MICA). Johns Hopkins Medical School is also a potential target market because of its accessibility to State Center via public transit. Graduate-level students are the most likely to live off-campus. The graduate student base is summarized as:

Institution	Graduate Students
University of Baltimore	3,003 (Grad & Law)
Hopkins Medical	1,263 (Grad & Med)
UMMC	1,265
MICA	<u>228</u>
TOTAL	5,759

The graduate student enrollment base at these institutions totals 5,759. These students, along with institution faculty and staff represent an important potential market for housing at the State Center site.

Annual Market Base

The total annual demand for housing generated by the staff and students from these institutions was calculated based on their tenure and source of housing, program duration, average commutation patterns, and assumptions on place of residence. The total population at these institutions is 31,378, or 28,410 full-time. Of this number, it is estimated that about **631** hospital and university staff, graduate students, or faculty are likely or available to move each year and would seek to remain in Baltimore. This analysis has assumed that overall, graduate enrolment will remain constant or expand only moderately. More specific data on enrollment is being collected from the institutions as part of the implementation of the survey. The findings from this analysis are summarized in Appendix Table 7.

State Workers

The State worker housing base was analyzed in terms of income, tenure, commutation, and the share that move each year. Since data were not available from the State on the demographics of State employees, assumptions were made with respect to commutation patterns and other characteristics. In general, it was assumed that State workers mirror the demographics and commutation behavior of all Baltimore Region workers. Based on these assumptions resulting from the lack of demographic data on State workers, the following projections have been made for the targeted worker housing base in 2013.

**Table 22. STATE WORKER MARKET BASE,
STATE CENTER AREA, 2008-2013**

Residency	Universe	Move/Yr	2013
Market-Area	418	67	334
Other Baltimore MA	3,082	308	1,541
TOTAL	3,500	375	1,875

Sources: U.S. Bureau of the Census, Staubach, and
Randall Gross / Development Economics.

Based on this assessment, about 375 State employees move each year and chose to live in Baltimore or its inner-ring suburbs. By 2013, there would be 1,875 such moves among State employees that would consider housing within the market area or nearby. Of course, a survey of State employees would help gather much more detailed information on employee housing status and preferences, in the same manner of that being conducted for the nearby medical and educational institutions.

Market Area Housing Demand Summary

This analysis helped to define the housing market base and the demand for housing within the target market area for State Center. Demand would be generated from a variety of sources including primary and secondary sub-market households who will be moving “up” or “down” in coming years; in-migrants particularly from major sources like New York and Washington, DC; faculty, staff, and graduate students at nearby universities and medical centers; and finally, State Government employees who are (or will be) working at the State Center complex. The findings from this demand assessment are summarized below.

Market Source	Target Niche Demand (2013/15)
Primary Move-up/down	2,150 DU
Secondary Move-up/down	740
Relocations (Target Markets)	1,050
Institutional Employees	440
Graduate Students	200+
State Employees	1,880
TOTAL DEMAND	6,460

The State Center project would have to compete for this demand with other housing developments existing and planned, within Baltimore and elsewhere in the region. The Site's capture of this potential market is explored in the following section.

Section 4. SITE POTENTIALS

As noted in the previous section, the core niche markets for housing at State Center will generate demand for up to 6,500 units by 2013/15. Certain assumptions are already built into the demand model, namely that the demand would be generated within the market area. However, the State Center project will have to compete for this demand with other comparable, large-scale mixed-use projects throughout Baltimore. The competitive framework for capturing this demand is summarized below, followed by the site capture and summary of Site Potentials at State Center.

Competitive Framework

Competitive for-sale and rental housing projects in Baltimore and surrounding areas were inventoried in order to assess their competitive positioning vis-à-vis the State Center project, but also to ascertain information on absorption trends, occupancy, and pricing patterns. The analysis focused on large-scale, mixed-use projects that offer an exciting urban living experience. Many of these larger projects are clustered around the Harbor, although there are a few scattered projects in other parts of Baltimore. Smaller projects, especially new or rehabilitated condominiums and rental apartment buildings were also inventoried for this study. Detailed summaries of the market data from these projects are being prepared as input to the final residential study.

Site Potentials

Based on an analysis of the competitive framework, the State Center capture of target market demand was determined and translated into the site's potentials for residential development. These potentials are described below by specific target market niche.

Local Move-Ups / Move-Downs

The State Center site could capture demand for up to 160 market-rate rental units and about 40 for-sale units generated by move-ups and move-downs from within the primary sub-market (and, to a lesser extent, the secondary sub-market). Together, these market niches would generate demand for almost 200 units of housing within the next five to seven years.

Most of the rental demand (or about 120 units) would be generated from households with less than \$100,000 in median income (and excluding those households that could only afford subsidized housing). About 40 units of rental demand at the site would be generated by households with incomes in the

\$100,000 to \$150,000 range. The site could only capture rental demand for a handful of households with incomes higher than \$150,000. In reality, there would be few if any higher-income households renting units at the site.

Most for-sale demand at the site would be generated by move-ups or move-downs in the \$75,000 to \$100,000 household income range, although some units would also be generated by households with incomes above \$100,000. The following table summarizes move-up / move-down demand at the site.

Table 23. MOVE-UP HOUSING MARKET DEMAND, STATE CENTER, 2008-2013

Income Range	Max Rents	Rental Demand		Total
		Primary	Secondary	
\$75,000-\$100,000	\$ 1,747	90	26	116
\$100-\$150,000	\$ 2,393	29	8	37
\$150,000-\$200,000	\$ 3,206	2	1	3
TOTAL RENTAL		122	35	157

Income Range	Price	For-Sale Demand		Total
		Primary	Secondary	
\$75,000-\$100,000	\$281,252	16	3	19
\$100-\$150,000	\$369,232	12	2	14
\$150,000-\$200,000	\$480,238	1	-	1
Greater Market				3
TOTAL PURCHASE		29	5	37
TOTAL MOVE-UP		151	39	193

Source: Randall Gross / Development Economics.

Key Market Opportunities and Constraints. The Baltimore move-up housing market is relatively under-served in the middle-income price ranges. While much of Baltimore’s population lives on household incomes below \$75,000, there is a middle-income group that does move up or down if the appropriate housing product at the right location is available. The State Center site would have difficulty attracting the higher-income households including empty nesters or retirees from north-central Baltimore and Baltimore County who might want a condominium on the Harbor.

However, there are young professional singles and couples who are likely to consider the location if the right amenities are provided and safety is

guaranteed. Similarly, there are black empty nesters in northwest Baltimore who often find that an appropriate housing product does not exist to meet their needs, namely a modestly-priced condominium, apartment flat, cluster home, or patio home. There is also the potential added attraction of a tie in with historic Pennsylvania Avenue, if that street can be brought back to life.

Because the target markets include singles, young professionals, and middle-class black empty nesters, there is some price sensitivity to the product. In general, it is assumed that for-sale condominiums of cluster homes would need to be priced generally in the \$250,000 to \$320,000 range in order to capture the bulk of the market as projected here. The advantage in marketing to the middle-price market is that the current credit crisis has mainly affected the high-risk marginal (low-income) buyer and the small, high-income investor.

State Center would offer not only affordable, new urban living in an exciting mixed-use environment, but also easy access to transit, hospitals/medical facilities, cultural venues, and other amenities. There is significant competition for the amenity-driven buyer and, as noted previously, it is unlikely that State Center could compete with Harbor properties for the highest-income market niches.

Relocations

Baltimore will continue to attract housing buyers and renters from the D.C. market and, to a lesser extent, other markets in the region. Projected modest job growth over time will help generate demand for housing among relocating workers. Overall, it is anticipated that the State Center site could attract a minimum of about 130 Relos by 2013, including approximately 110 for-sale properties and 20 rentals.

Table 24. RELOCATION HOUSING MARKET DEMAND, STATE CENTER, 2008-2013

Source Market	Universe	Demand	Share
D.C. Commuters	3,465	77	60.9%
NY/NJ Metro Area	1,767	13	10.5%
Other Relocations	413	36	28.6%
TOTAL	5,645	126	100.0%
<i>For-Sale</i>		<i>109</i>	
<i>Rental</i>		<i>17</i>	

Source: Randall Gross / Development Economics.

Key Market Opportunities and Constraints. The advantage for State Center in marketing to relocating workers is that those new residents have fewer negative pre-conceptions of the area and nearby West Baltimore. Further, individuals relocating from cities like New York are more likely to prefer an urban setting with good access to a subway. The State Center site also offers competitive pricing advantages over Harbor locations yet is proximate to downtown, the harbor, and the stadiums. The collapse of the investor market, reduced buyer confidence, and an accelerating decrease in D.C. condominium prices will reduce the potential for attracting Washington commuters to Baltimore. When such workers do chose to live in Baltimore, they will have more choices for relatively affordable housing that competes with State Center, at least in the near term (3+ years).

Institution Employees and Students

Because of the drawing back in other market niches due to a collapse in investor confidence and access to financing, an economic downturn, and falling real estate prices in source markets like D.C., the role of institutions becomes even more critical to the success of marketing housing at State Center. Because of its proximity to the institutions, the mixed-use environment, and access to transit, State Center may be very attractive to institutional workers and graduate students. As such, it was determined that the State Center site could capture demand for up to about 450 or 500 units generated by the institutional market.

Table 25. **INSTITUTION-DRIVEN HOUSING DEMAND, STATE CENTER, 2008-2013**

Source Market	JHU	UMB	UMMC	MGH	TOTAL	For-Sale	Rental
Grad/Med Students	46	78	43	-	167	5	162
Faculty	4		10	-	14	11	3
Employees	160	39	30	39	268	48	221
TOTAL	209	117	83	39	449	64	385

Source: Randall Gross / Development Economics.

The site would capture 60 to 70 for-sale and nearly 400 rental housing units by 2013. Clearly, there are a number of assumptions that have been made in the assessment of institution-driven demand, in the absence of the survey data. Once the results of the survey have been analyzed, the findings from this market analysis will be refined as appropriate. More detailed information will become available with respect to target institutional markets, pricing, housing product, timing/phasing, amenities, and other inputs to the development and marketing program.

Key Market Opportunities and Constraints. As indicated above, the area's institutions are a large, stable, and reliable generator of housing demand during a downturn in the overall housing market. There are opportunities for the State to strengthen partnerships between sister agencies to create housing incentives for their workers and students. Such incentives might include financing, guarantees, or direct marketing. University housing partnerships can be developed with private institutions like Johns Hopkins University. There are also opportunities for strengthening the area's reputation as a health center through the integration of programs and housing associated with the area hospitals. Such programs might be targeted at marketing to empty nesters, for example. More detailed marketing strategies will be developed as part of the final Strategic Plan report to the Joint Venture team.

State Workers

Based on assumptions related to the demographics of the State employees and their commutation patterns, and on in-house data on office worker housing preferences, site demand generated by State employees was forecasted for State Center. This analysis indicates that the site could capture a "target" of up to about 60 to 70 State employees to purchase or rent housing units at State Center.

Table 26. STATE WORKER HOUSING DEMAND, STATE CENTER AREA, 2008-2013

Source	Universe	Target	Housing Demand	
			Rental	For-Sale
Market Area	420	38	14	14
Other Metro	3,100	126	9	22
TOTAL	3,520	163	24	36

Source: Randall Gross / Development Economics.

Demand would be generated by State employees for 20 to 30 rental units and about 40 for-sale units at the site by 2013/15. Of course, no information has been provided by the State which would help to indicate the demographics, housing status, or housing preferences of employees. Nor has a survey been conducted of State workers. Such information would be helpful in confirming and refining these projections.

Key Market Opportunities and Constraints. As with institutional workers, State employees provide a large, stable target market for housing at the site. Since the workers are employed by the State, and since it is the State's objective to encourage transit utilization, there may be opportunities to provide State employee housing incentives or transit-related incentives to live at State

Center. There are also other opportunities for housing-transit linkages, financing, and guarantees. Again, such marketing concepts and programs would be developed further and in more detail as part of the Strategic Plan that will be produced after submission of this market analysis.

Market-Rate Housing Demand Summary

Findings from the analyses of various sub-markets and niches, with respect to the Site Potential for State Center, are summarized in the following table. Any overlap between the various source markets has been netted out to generate a Net Demand number.

Table 27. TOTAL MARKET-RATE HOUSING POTENTIAL BY SOURCE MARKET, STATE CENTER AREA, 2013				
Source Market	Gross		Net Demand	
	Potential	Share	Rental	For-Sale
State Workers	59	7.1%	9	22
Hospital/Univ Workers	277	33.8%	110	29
Local Move-Ups	193	23.5%	157	31
Relos/DC Commuters	126	15.3%	17	109
Seniors	-	0.0%	-	-
Students	166	20.2%	161	5
TOTAL	820	100.0%	453	196
Notes:	N/A means Not Applicable. Net Demand expressed in terms of market-rate demand. Senior housing included in Affordable Analysis.			
Source:	Randall Gross / Development Economics.			

The market analysis forecasts demand for approximately 640 to 660 market-rate units by 2013, including 450 to 460 rental units (70%) and 190 to 200 for-sale units (30%).

Product & Pricing

The site potentials were also analyzed in terms of the demand for basic housing products and price ranges. These findings are in preliminary stages and will be further refined based on the results of the institutional housing surveys and other inputs. Nevertheless, preliminary findings on housing price and product are summarized in the table that follows.

Table 28. TOTAL MARKET RATE HOUSING POTENTIAL BY PRODUCT AND PRICE RANGE, STATE CENTER AREA, 2013			
Tenure/Type	Number	Share	Student Rental
<u>For-Sale Condo/Cluster</u>	<u>196</u>	<u>30.2%</u>	
\$250,000-\$299,999	117	18.1%	
\$300,000-\$349,999	65	10.1%	
\$350,000+	13	2.0%	
<u>Rental High-Rise</u>	<u>453</u>	<u>69.8%</u>	<u>137</u>
\$900 - \$1,500	235	36.3%	91
\$1,200 - \$1,750	153	23.6%	38
\$1,500 - \$2,400+	65	9.9%	8
TOTAL	649	100.0%	137
Source: Randall Gross Development Economics.			

The market assessment suggests that demand for approximately 200 market-rate for-sale units could be captured on site, assuming the creation of amenity value at the site, within the next five years. These for-sale units could be developed in several mid- to high-density formats to accommodate demand driven by the target market niches. Such formats might include mixed-use, mid- and high-rise condominium buildings as well as a single-family cluster home format (as opposed to attached townhouses) that might serve to accommodate move-downs at an exciting, mixed-use urban location.

The bulk of the for-sale market would be captured by product priced in the \$250,000 range, accounting for about 18% of the total market-rate site capture or 60% of the for-sale housing. Demand will drop off for housing in the \$300,000 range, but the site could capture up to about 80 sales over a five to seven year period so long as private financing is available in the market.

The site would also capture demand for perhaps 450 rental units, developed in mixed-use mid- and high-rise building formats. Demand would be highest for units priced below \$1,000 and up to \$1,500 per month. At least one-half of the market-rate rental demand or 235 units would be generated in this range. Demand for another 150 rental units would be generated in the \$1,200 to \$1,750 range, while demand falls precipitously for rental housing priced above \$1,500 per month at this location.

The rental housing captured on site would include demand for almost 140 rental housing units (plus some for-sale units) for graduate students. While the

graduate students are an important part of the rental market, they will tend to pull down the overall price range for the product. On the other hand, medical interns and other graduate students working or studying in this area are more likely to be a captured market.

These forecasts represent demand but do not necessarily constitute the recommended program for the site, since an appropriate mix is required in order to market diverse product and respond to financing requirements for affordable housing development. These forecasts of market-rate housing potentials are integrated with the affordable housing need in order to develop an appropriate program for the site, as recommended in the following section.

Section 5. RECOMMENDED RESIDENTIAL PROGRAM

This section provides a recommended residential development program, based on the findings of the affordable housing opportunities assessment and the market-rate residential market analysis. An appropriate mix of market-rate and affordable housing is presented that addresses some of the likely marketing and financing requirements for development of mixed-income housing. Thus, the recommended program incorporates economic and financing considerations.

Proposed Development Mix

The site market potentials and affordable housing opportunities are summarized below and revised for two proposed development options.

Table 29.

**SITE MARKET POTENTIALS VERSUS DEVELOPER
PROGRAM OPTIONS, STATE CENTER 2013/17**

	Market Potentials & Aff Opportunity	Developer Program Options	
		Plan A	Plan B
<u>Rental</u>			
< 30% AMI rent subsidy	60	50	50
40% AMI Rents-LIHTC	40	30	30
50% AMI rents-LIHTC	35	30	30
60% AMI rents-LIHTC	35	40	40
80% AMI rents	28	50	50
Market Rate	<u>450</u>	<u>300</u>	<u>400</u>
SUBTOTAL	648	500	600
<i>Share of Total</i>	69%	50%	60%
<u>For Sale</u>			
60% AMI sales prices	30	50	50
80% AMI sales prices	28	50	50
100% AMI sales prices	30	100	100
Market Rate	<u>200</u>	<u>300</u>	<u>200</u>
SUBTOTAL	288	500	400
<i>Share of Total</i>	31%	50%	40%
TOTAL UNITS	935	1,000	1,000
Affordable	285	400	400
<i>Percent</i>	30%	40%	40%

Sources:

McCormack Baron Salazar Inc., and Randall Gross/
Development Economics.

Market & Affordable Housing Summary Demand

The market analysis identified demand for up to 200 market-rate for-sale housing units plus up to 450 rental units, including a large number of graduate student apartments. The affordable housing assessment identified the opportunity for development of up to about 180 units of affordable for-sale units at 60% to 100% of AMI overall, with a target for about 90 of those units over the next five to seven years. The assessment also identified an opportunity for development of up to 280 affordable rental units for families with incomes at 30% to 80% of AMI, or a target of 140 over the next five to seven years.

Based on further analysis of impact area incomes below 30% of AMI, a target of up to 60 additional households could be established over the five to seven year period. Altogether, the market & opportunity assessments would generally support about 30% affordable on the site using these targets coupled with market demand. The market assessments would also suggest a tenure mix of 69% rental and 31% for-sale housing.

Appropriate Development Mix

While the market assessments may suggest that there is demand for this mix, the development program should avoid a mix that is weighted too heavily towards rental housing vis-à-vis for-sale units. Based on the experience of the developers and the consultant, it is recommended that a mixed-tenure and mixed-income development like State center accommodate an even or 40-60 split between rental and for-sale tenure. Due to existing and near-term market and financing conditions that are strongly favoring rental product, this will mean that State Center development will not aim to accommodate the site's full potential in the rental market, at least in the five-to-seven year period from 2008.

Several options for the development mix have been proposed by the developer based on the market findings but also on the requirements to achieve a preferred tenure balance in the program. Both options call for about 1,000 development units, but with a balance of 50-50 or 60-40 in the mix of rental versus for-sale housing. The developer's options also capture more of the affordable housing opportunity as part of the development mix, yielding 40% affordable overall (although over a longer period than the 30% achieved through the market-based targets).

More detailed analysis is underway to refine the pricing structures and phasing of both market-rate and affordable units. This analysis will be informed further by the institutional survey, particularly with respect to the preferences and price parameters for graduate students, faculty and staff at area hospitals and universities.

Product Recommendations

State Center is envisioned as a mixed-use, transit-oriented development that creates an exciting new “place” in the heart of the city. Mixed-use buildings would provide an important anchor for such development and would help to ensure a lively public environment. A large share of the market-rate and affordable housing units should be developed in mid-rise and high-rise, mixed-use buildings, including both condominium and rental). However, it is also important to retain a sense of neighborhood in order to avoid creating an island of high-density development surrounded by townhouses and low-density public housing. Integration of State Center’s housing with the surrounding community is essential in order to create a sustainable neighborhood and maximize the economic spin-off to surrounding areas.

From the market perspective, there is demand that would be generated by empty nesters such as those from north-west Baltimore who will have a preference for modest-density, single-story units. Ideally, mid-density cluster homes or patio homes would provide an appropriate transition from the high-density core of the site to more medium-density neighborhoods. Such product is severely limited in Baltimore, which is one of the reasons that the city has difficulty retaining middle-class empty nesters.

Programmatic Considerations

As noted in the residential market analysis, the demand projections are predicated on certain assumptions with respect to the marketing of housing units through the use of financing incentives and marketing relationships between various institutions. Among the proposed incentive programs would transit-related and institutional worker housing programs created by State Government as well as by the health and educational institutions. Existing programs would be packaged and new incentives developed that target the Community Impact Area to meet the need for affordable homeownership. Partnerships would be created and strengthened between the State and Johns Hopkins University or other private institutions. Regular buyer incentives (e.g., first-time buyer, etc) would be packaged as part of overall marketing. Finally, opportunities would be created to attract graduated care or assisted living facilities in later phases, if it is shown that there will be a growing need or demand for such facilities as part of the overall health complex concept. These incentives and program considerations will be explored further in the Strategic Plan to be developed for the Joint Venture partners.

APPENDIX

Tbl A-1. HOUSING SALES PRICE TRENDS, SELECTED NEIGHBORHOODS, BALTIMORE, 1998-2006

Year	Midtown- Belvdr	Upton	Bolton Hill	Druid Hgts	Heritage Crsgng	Madison Park	Resvoir Hill	Chas North	Mount Vernon	Seton Hill	Average
1998	37,000	30,000	137,450	42,000	43,000	69,500	55,250	40,000	73,500	54,300	56,465
1999	44,000	40,000	138,000	40,000	39,750	84,000	57,000	65,750	67,450	70,000	72,229
2000	39,500	42,500	145,868	44,000	36,500	84,900	55,000	105,375	77,500	85,000	78,964
2001	61,000	50,000	188,500	44,000	56,875	73,000	72,500	145,000	85,000	119,000	105,051
2002	52,000	41,000	203,000	13,500	56,875	130,000	55,000	72,000	127,000	60,000	98,249
2003	46,750	40,000	235,000	57,000	77,250	176,500	82,900	125,490	110,000	94,750	114,336
2004	100,000	68,500	336,000	21,000	107,588	215,600	120,000	75,250	154,500	117,500	137,861
2005	140,000	70,200	370,000	75,000	136,000	200,000	198,200	205,000	169,000	131,750	168,158
2006	172,900	70,000	410,000	104,515	164,412	342,000	199,950	299,900	247,950	199,900	207,234
Change	135,900	40,000	272,550	62,515	121,412	272,500	144,700	259,900	174,450	145,600	150,769
<i>Ave/Year</i>	15,100	4,444	30,283	6,946	13,490	30,278	16,078	28,878	19,383	16,178	16,752
<i>Percent</i>	40.8%	14.8%	22.0%	16.5%	31.4%	43.6%	29.1%	72.2%	26.4%	29.8%	29.7%
'98-02	8.1%	7.3%	9.5%	-13.6%	6.5%	17.4%	-0.1%	16.0%	14.6%	2.1%	14.8%
'03-06	67.5%	18.8%	18.6%	20.8%	28.2%	23.4%	35.3%	34.7%	31.4%	27.7%	20.3%

Sources: Live Baltimore Home Center, First American Real Estate Solutions, and Randall Gross / Dev. Economics.

**Table A-2. SINGLE-FAMILY HOME SALES,
BALTIMORE REGION, 2002-2004**

County	2002	2003	2004	TOTAL	Share
Anne Arundel	5,632	5,644	6,774	18,050	28.6%
Baltimore County	6,360	6,446	7,396	20,202	32.0%
Carroll	1,882	2,233	2,304	6,419	10.2%
Harford	2,219	2,353	2,663	7,235	11.4%
Howard	2,430	2,416	2,502	7,348	11.6%
Baltimore City	1,145	977	1,822	3,944	6.2%
TOTAL	19,668	20,069	23,461	63,198	100.0%

Sources: MD Dept of Planning & Randall Gross /
Dev. Economics.

**Table A-3. CONDOMINIUM SALES,
BALTIMORE REGION, 2002-2004**

County	2002	2003	2004	TOTAL	Share
Anne Arundel	887	842	701	2,430	22.3%
Baltimore County	1,158	1,209	1,130	3,497	32.1%
Carroll	94	150	102	346	3.2%
Harford	475	423	395	1,293	11.9%
Howard	692	691	853	2,236	20.5%
Baltimore City	294	363	442	1,099	10.1%
TOTAL	3,600	3,678	3,623	10,901	100.0%

Sources: MD Dept of Planning & Randall Gross /
Dev. Economics.

**Table A-4. TOWNHOUSE SALES,
BALTIMORE REGION, 2002-2004**

County	2002	2003	2004	TOTAL	Share
Anne Arundel	3,198	3,205	3,669	10,072	18.9%
Baltimore County	4,766	5,403	6,026	16,195	30.3%
Carroll	361	488	518	1,367	2.6%
Harford	1,324	1,529	1,794	4,647	8.7%
Howard	1,948	1,952	2,084	5,984	11.2%
Baltimore City	3,601	4,782	6,737	15,120	28.3%
TOTAL	15,198	17,359	20,828	53,385	100.0%

Sources: MD Dept of Planning & Randall Gross /
Dev. Economics.

**Table A-5. SINGLE-FAMILY HOME PRICES,
BALTIMORE REGION, 2002-2004**

County	2002	2003	2004	Average
Anne Arundel	\$215,000	\$250,000	\$311,000	\$261,972
Baltimore County	\$160,755	\$195,000	\$215,000	\$191,541
Carroll	\$203,028	\$242,000	\$290,000	\$247,803
Harford	\$206,700	\$237,500	\$274,925	\$241,829
Howard	\$330,000	\$368,800	\$440,000	\$380,212
Baltimore City	\$ 95,000	\$114,000	\$130,500	\$116,106
AVERAGE	\$202,599	\$237,660	\$274,319	\$240,357

Sources: MD Department of Planning and Randall Gross /
Development Economics.

**Table A-6. CONDOMINIUM PRICES,
BALTIMORE REGION, 2002-2004**

County	2002	2003	2004	Average
Anne Arundel	\$131,440	\$154,000	\$201,005	\$159,325
Baltimore County	\$116,000	\$135,900	\$170,125	\$140,370
Carroll	\$118,700	\$129,400	\$149,000	\$132,271
Harford	\$104,900	\$115,000	\$137,000	\$118,010
Howard	\$117,900	\$138,900	\$180,000	\$148,080
Baltimore City	\$ 85,250	\$120,000	\$135,250	\$116,837
AVERAGE	\$116,264	\$136,369	\$169,964	\$140,895

Sources: MD Department of Planning and Randall Gross /
Development Economics.

**Table A-7. TOWNHOUSE PRICES,
BALTIMORE REGION, 2002-2004**

County	2002	2003	2004	Average
Anne Arundel	\$152,000	\$183,000	\$225,000	\$188,457
Baltimore County	\$116,000	\$129,900	\$147,000	\$132,172
Carroll	\$124,900	\$140,000	\$172,250	\$148,233
Harford	\$127,100	\$144,900	\$172,000	\$150,291
Howard	\$185,000	\$210,000	\$265,000	\$221,016
Baltimore City	\$ 75,000	\$ 83,000	\$ 93,500	\$ 85,773
AVERAGE	\$123,883	\$137,396	\$158,023	\$141,597

Sources: MD Department of Planning and Randall Gross /
Development Economics.

**Table A-8. KEY DEMOGRAPHIC FACTORS,
STUDY AREA INSTITUTIONS, 2007**

	Population	Available	Est. Ann. Need
<u>JHU Medicine</u>			
<u>Students</u>	3,450		
House Staff	758	109	12
Graduate Students	781	465	82
Medical Students	482	174	19
Fellow	1,429	309	34
<u>Faculty</u>	3,697		
Full-Time	2,448	372	20
Part-Time	1,249	239	21
<u>Employees 1/</u>	27,751		
Total FTE	23,298		
Medical Staff	4,741	793	42
Nursing Staff	4,679	898	225
Total Part Time	4,453	1,140	285
<u>UMB</u>			
<u>Students</u>	4,895		
Full-Time	3,393	2,418	127
Part-Time	1,502	327	58
<u>Employees</u>	4,800	691	77
<u>UMMC</u>			
<u>Students</u>	1,265	901	47
<u>Faculty</u>	1,401		
Full-Time	1,184	176	13
Part-Time	217	42	5
<u>Employees (FTE)</u>	1,350	291	40
MD Gen. Hospital	1,100	229	40

Sources: UMMC, MGH, UMB, JHU, and Randall
Gross / Development Economics.