



Distribution and Logistics

in Greater Baltimore

prepared by:



Introduction

In the subsequent presentation, the Economic Alliance endeavors to summarize the positive attributes and characteristics of potential value of the Greater Baltimore region to a distribution organization. Upon review, the principal takeaways from this presentation are as follows:

- Greater Baltimore is robust market, offering exceptional quality of life at a comparatively low cost of living;
- The Port of Baltimore offers unparalleled advantages and growth opportunities to importers in Greater Baltimore;
- The location of Greater Baltimore in the Mid-Atlantic region offers distributors efficiencies in reaching some of the most population-dense areas in the country in a short drive.

Online retailers are constantly challenged to meet increasing customer demands amidst a changing economic environment that impacts costs. First-class logistics and fast distribution channels become necessities for e-commerce consumers expecting products to arrive soon after purchase.

Greater Baltimore offers a cost competitive environment in which to efficiently distribute goods to a large sector of the population of the United States; collaborate with other distribution and logistics centers; and pursue new opportunities for growth. Its strategic advantages have made the region, specifically Cecil and Harford Counties, popular with distribution centers such as Bob's Discount Furniture and Kenco Corporation.

Market note: Warehousing and distribution activity in the Greater Baltimore market has been very active, with current vacancy rates reflecting a very tight 7.91% in Cecil County (virtual full occupancy). This has sparked increased investor and tenant driven demand for both speculative and new build-to-suit construction projects. In addition, **there are presently two major business-to-business/business-to-consumer logistics center requirements (approximately 1 million square feet) considering locations near the Port of Baltimore and along the Baltimore/Philadelphia I-95 North Corridor.**

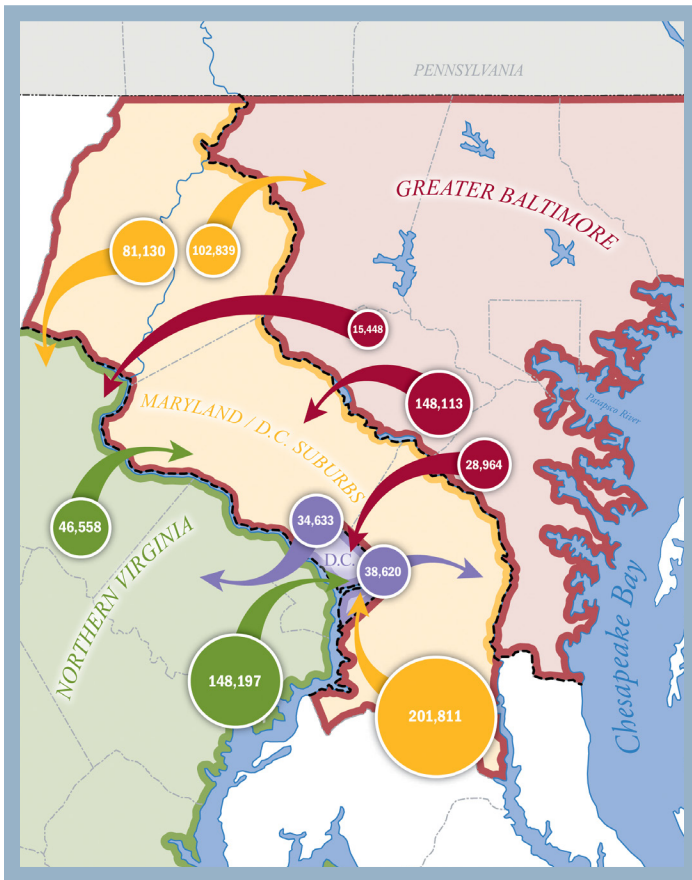
Part I: The Case for Greater Baltimore

Greater Baltimore is well-positioned to absorb projected growth and maintain its high quality of life.

- **Well-connected:** The Greater Baltimore/Central MD region is well connected by road, rail and air, both locally and to the rest of the world. Locally, nearly 300,000 residents commute to/from Greater Baltimore/DC everyday. The region is also home to three major national/international airports (BWI, Dulles and Reagan).
- **College graduates:** The Greater Baltimore/Central MD region has more than 1.2 million residents age 25+ with a bachelor's degree or higher.
- **Home prices** in Greater Baltimore are well below that of other large coastal markets. Coupled with its access to Greater Washington labor, home prices and cost of living make Greater Baltimore a good choice for new and expanding operations.
- **Schools:** Maryland Schools rank the highest in a variety of metrics by the College Board and Education Week. Both public and private schools are some of the best in the nation.
- **Quality of Life:** Baltimore area residents enjoy a world-class quality of life, with access to some of the best arts and entertainment facilities, great K-12 and college education systems and high opportunity for employment.
- **Destination for Talent:** Due to the region's high quality of life, great value and vast economic opportunity, Greater Baltimore has become a prime attraction for young and talented workers.

Defining the Greater Baltimore Region

The Baltimore-Washington region is well connected internally and to the East Coast through comprehensive interstate, rail and air networks and hubs. Amtrak trains go from New York to 3 stations in Baltimore and Central Maryland in less than 2.5 hours. The MARC Train offers low cost travel between Greater Baltimore and the DC Metro. BWI is one of the fastest growing airports in the US and offers frequent flights to cities nationally and internationally.



These regional connections allow for the fluid movement of residents from one market to the next, which expands the talent pool and market of Greater Baltimore far into the DC Metro area. Over 118,000 residents commute from the DC metro area to Greater Baltimore for work daily. Commuters from the Maryland suburbs that are traditionally defined as the DC Metro constitute nearly one-tenth of the Greater Baltimore labor pool. Combined, these two regions create Central Maryland, which is used when appropriate as the statistical base for the Greater Baltimore region.

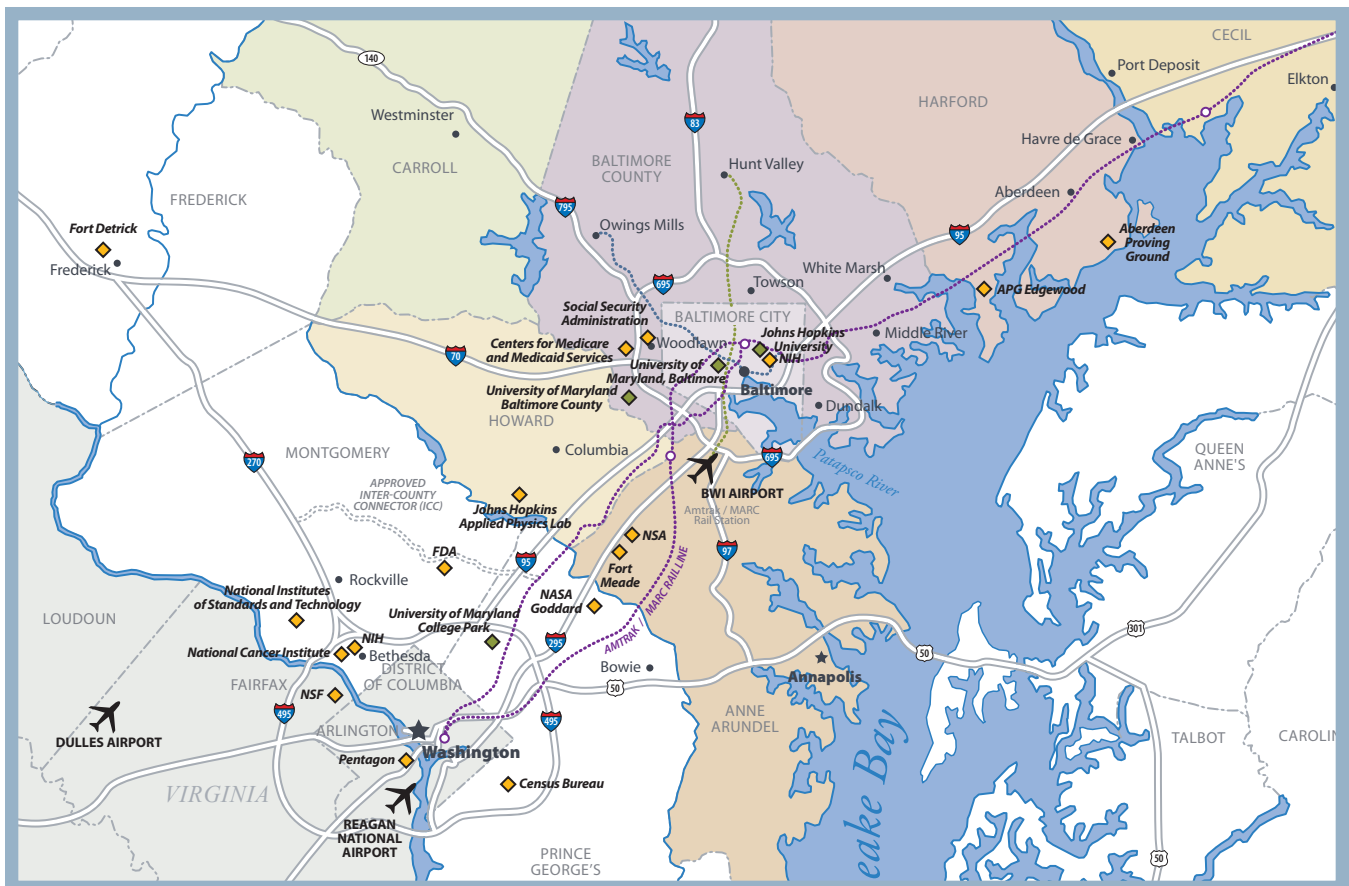
Regional Commuters				
	From Baltimore MSA to:	From MD Suburbs of DC to:	From DC to:	From Northern VA to:
Baltimore MSA	902,984	102,839	6,599	9,062
MD/DC Suburbs	148,113	466,768	38,620	46,558
DC	28,964	201,811	158,871	12,097
Northern VA	15,448	81,130	34,633	660,503

Source: US Census Bureau, Longitudinal Employer-Household Dynamics, OnTheMap, 2010

Transportation Options

The Greater Baltimore economy relies on companies and employees getting around the region and the world efficiently. The following are some of the options available to workers and businesses.

- **Amtrak** is efficiently connected to major markets across the northeast corridor from Washington to Boston. The **MARC Train** is a state-subsidized commuter train that efficiently connects Baltimore to Washington, DC at a low cost.
- The east coast's major thoroughfare, **I-95**, passes directly through Baltimore and Central Maryland. The **I-695** loop and **I-70** connect the central and western parts of Maryland to other states.
- The **Baltimore Metro Subway** connects Owings Mills through Baltimore to Johns Hopkins Hospital. The **Baltimore Light Rail** connects Hunt Valley through Baltimore to BWI Airport.
- The **three major Baltimore-Washington area airports** (BWI, DCA and IAD) provide direct service to all major US cities and most international destinations.



Cost of Living

Greater Baltimore residents enjoy a high quality of life at a cost lower than most major eastern markets. The region's median home price of \$228,800 in 2011 was well above the US average of \$169,500. However, the region's prices remained lower than most other coastal markets, including New York at \$362,700. Since 2008, Greater Baltimore's home prices have declined by 16.5 percent, which is slightly less than the US average. Only three major metropolitan areas realized gains over that period and only three saw gains from 2010-2011.

Cost of Living Selected Metros			
Metro Area	ACCRA Index*	Moody's Index**	Moody's Rank***
Baltimore	119.2	115.0	24
Boston	137.4	119.5	19
New York	219.2	128.4	8
Philadelphia	125.1	108.8	40
Washington DC	143.5	121.5	17

*Source: 2012 ACCRA Annual Average Section 1 Cost of Living Index

**Source: Moody's Analytics, 2009 Cost of Living Index

*** Rank out of 384 US metros

Median Home Price 25 Largest US Metros 4th Quarter 2011		
Rank	Metro Area	Median Price
1	San Francisco	\$462,300
2	New York	\$362,700
3	San Diego	\$358,000
4	Boston	\$325,000
5	Washington, D.C.	\$313,300
6	Los Angeles	\$296,900
7	Seattle	\$267,600
8	Denver	\$230,700
9	Baltimore	\$228,800
10	Portland	\$218,900
	US	\$163,500

Median Home Price 25 Largest US Metros 4th Quarter Change			
Rank	Metro Area	1-Year	3-Year
1	Tampa	3.0%	-21.7%
2	Houston	1.2%	2.8%
3	Denver	0.4%	5.2%
4	Dallas	-0.3%	0.3%
5	Miami	-1.4%	-35.2%
6	San Antonio	-2.3%	-1.6%
7	Riverside	-3.0%	-26.4%
8	Baltimore	-3.6%	-16.5%
	US	-4.2%	-16.8%
9	Portland	-4.9%	-21.8%
10	Washington, D.C.	-5.4%	-8.8%

Source: National Association of Realtors, 4Q 2011 | Rank among top 25 US metros / 1-Year trend

Schools

Education Week grades state K-12 education systems annually. In its 2012 release, Maryland was ranked 1st in the nation for overall state education grade. It also ranked 1st in Transitions & Alignment, 3rd in K-12 Achievement, 3rd in Teaching Profession, and 6th in School Finance categories.

The College Board releases ranking information at the state level on the percentage of public school students scoring 3 or higher on AP exams, one of the strongest predictors of college success. In this ranking, Maryland students rank 1st nationally.

Education Week State Education Rankings 2011		
Rank	State	Score
1	<i>Maryland</i>	87.8
2	Massachusetts	84.2
3	New York	83.9
4	Virginia	82.6
5	Arkansas	81.6
-	US Average	76.5

Source: Education Week, January 2012

Advanced Placement (AP) Exams % of Public School Students Scoring 3 or Higher Class of 2011		
Rank	State	Percent
1	<i>Maryland</i>	27.9%
2	New York	26.5%
3	Virginia	25.6%
4	Massachusetts	25.5%
5	Connecticut	25.3%
6	Florida	23.9%
7	California	23.4%
8	Colorado	22.3%
9	Vermont	21.4%
10	Utah	20.7%
-	US Average	18.1%

Source: College Board, 2011

College Education Attainment

The Greater Baltimore/Central MD region is one of the most highly educated regions in the US. Among the 25 largest US metro areas, the Baltimore MSA ranks 8th for college education attainment while nearby DC is 1st. Baltimore MSA is 4th for advanced degrees. By virtue of its size, major employers and top ranked educational institutions, the market has a large number and percentage of highly-educated residents.

Percent with Bachelor's Degree or Higher 25 Largest US Metros 2010		
Rank	Metro Area	%
1	Washington, D.C.	47.1%
2	San Francisco	43.5%
3	Boston	42.1%
4	Denver	37.7%
5	Minneapolis	37.5%
6	Seattle	36.9%
7	New York	35.6%
8	Baltimore	34.6%
9	Atlanta	34.4%
10	San Diego	34.1%
	US	27.9%

Percent with Graduate or Professional Degree 25 Largest US Metros 2010		
Rank	Metro Area	%
1	Washington, D.C.	22.2%
2	Boston	18.4%
3	San Francisco	16.9%
4	Baltimore	14.9%
5	New York	14.5%
6	Denver	13.1%
7	Seattle	12.9%
8	Chicago	12.7%
9	Philadelphia	12.7%
10	San Diego	12.7%
	US	10.3%

Education Attainment Comparison of Similar Eastern Metros				
Job Title	Washington- Baltimore CSA	Greater Baltimore / Central MD	Baltimore MSA	New York- NJ MSA
Population 25+	3,751,334	3,204,578	1,791,848	12,631,589
Bachelors	919,297	667,668	352,994	2,652,634
Graduate	813,344	569,781	266,985	1,831,580
Bachelors or Higher	1,732,705	1,237,449	619,979	4,496,846
Percent Bachelors	24.5%	20.8%	19.7%	21.0%
Percent Graduate	21.7%	17.8%	14.9%	14.5%
Percent Bachelors or Higher	46.2%	38.6%	34.6%	35.6%

Source: US Census Bureau, American Community Survey 2010, 5-year estimates

Part II: Distribution and Logistics in the Region

Greater Baltimore is well-positioned as a prime location to serve as a distribution hub.

- The **Port of Baltimore** is among the best performing ports in the United States. Efficiencies generated by the expansion of the Panama Canal stand to dramatically increase traffic at the Port.
- **Strategic Location:** The Greater Baltimore region offers overnight trucking access to one third of the US population. 60% of the US population is located east of the Mississippi River, giving East Coast ports a comparative advantage over West Coast ports.
- **Talent:** Over 35,000 in Greater Baltimore are employed in Transportation and Warehousing. The region has a very high concentration of Warehousing and Storage professionals.

Port of Baltimore

The Port of Baltimore offers nearly unmatched efficiency and growth potential. The Port records truck turns in under one hour for import/export in and import container out, one of the best figures on the East Coast. The Port of Baltimore is the furthest inland East Coast port. Its position up the Chesapeake Bay creates a strategic advantage in shipping discretionary cargo to the Midwest and it sits amidst the third largest consumer group in the country behind only New York/New Jersey and Los Angeles/Long Beach.

The Port anticipates continued rapid growth from the expansion of the Panama Canal and the continued emergence of the Suez Canal.

The Port of Baltimore ranks favorably when compared to other US ports:

- **Ranks #1** in Roll-on/Roll-off cargo, and saw a **51% increase in tonnage** at the public marine terminals in 2011.
- Handled **37.8 million tons of cargo** in 2011, 11th most in the county.
- Handled **15% more cargo in 2011** than 2010, more than any other US port.
- Handled **\$51.4 billion worth of goods** in 2011, 12th most in the US.
- Handled cargo worth more than ever in 2011, and saw a **24% increase in cargo value** from 2010.
- Has a current throughput of **631,806 TEUs** with a capacity of 1.2 million TEUs.
- Records **37 container moves per hour per crane**, one of the best figures on the East Coast.

Port of Baltimore

Improvements

The Port of Baltimore has established itself as the destination of choice for imports bound for the east coast. The expansion of the Panama Canal, scheduled to be completed in 2014, will enable supersized container cargo vessels to deliver goods to and from Asia and to some of the largest markets in the United States.

Other recent improvements to the Port of Baltimore create efficiencies in importing and distributing products throughout the Mid-Atlantic and the Northeast Corridor.

- A new **1,200 foot berth** with 50 feet of water, making Baltimore one of only two Eastern US ports to offer a channel able to accommodate the largest shipping vessels
- 4 new **super-post-Panamax cranes** with the ability to accommodate ships as large as 14,000 TEUs
- The **National Gateway Project** will create a new rail corridor that allows for double-stacked trains. The new rail line will connect Baltimore to other Mid-Atlantic ports and markets in the Midwest and the South. Double-stacked trains will lower overall transportation costs for distributors.
- The new **Baltimore-Washington Rail Intermodal Facility**, to be completed in 2015, will improve the on-dock rail offerings from CSX. The intermodal facility will allow for Baltimore to serve as an origin and destination for double-stacked trains on the National Gateway.



Source: Maryland Department of Transportation

Location & Talent

Greater Baltimore is strategically located on the I-95 corridor. Its position in the densely populated Northeast Corridor puts it within overnight driving distance of:

- **One third of the US population**, 91 million people
- **One third of US households**
- **\$1.2 trillion** in effective buying income, 35% of the US total
- **\$566.2 billion** in retail sales, 33% of the US total

The corridor from Washington, DC to Boston stretches 442 miles, a short distance than the 502-mile California corridor from San Diego to San Francisco.

Class I rail lines connect the region to the Northeast, Midwest, and South. CSX, Norfolk Southern, and five short lines operate in Greater Baltimore. The National Gateway project will connect double-stack trains originating in Baltimore to Pittsburgh, Charlotte, and Wilmington.

The region is home to over 35,000 Transportation and Warehousing professionals, while over 500 more work in Process, Physical Distribution, and Logistics Consulting Services. Greater Baltimore has a higher concentration of professionals working in Water Transportation and Warehousing and Storage occupations.

