



**STRENGTHENING BALTIMORE’S KNOWLEDGE-BASED  
COMMUNITY: AN EXPLORATION OF FACTORS THAT INFLUENCE  
RETENTION EFFORTS OF COLLEGE GRADUATES IN THE  
BALTIMORE REGION**

2023 DISSEMINATION REPORT  
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### ABOUT BALTIMORE COLLEGETOWN NETWORK

The Baltimore Collegetown Network (BCN) is a 501c3, non-profit membership consortium founded in the 1990s as a grassroots organization to affect positive changes in the city of Baltimore. BCN consists of 13 member institutions and serves over 120,000 students in Baltimore city and the region. BCN operates its mission based on three principles: *ATTRACT*, *ENGAGE*, and *RETAIN*. BCN works to attract students to the Baltimore region, engage them in the city while they are enrolled at member institutions, and retain them after they graduate.

## INTRODUCTION

According to Seema D. Iyer,<sup>1</sup> former director of the Baltimore Neighborhood Indicators Alliance at the University of Baltimore, “Baltimore actually stands alone among all cities in the East Coast for population declines. Among all cities greater than 400,000 in the U.S. in 2010, only four out of the 40+ in that category lost any population at all.” Since 2010, Baltimore’s population has declined by 7.2%.<sup>2</sup> Population can lead to a host of problems including reductions in federal and state funding that is often population dependent, vacant houses and neighborhood blight, lost tax revenue, and reduced sway in state legislature as suburban areas outpace Baltimore in increasing population.<sup>3,4</sup> In contrast to Baltimore’s steady population decline, cities such as Philadelphia and Boston experienced population growth and economic revitalization over the last decade.

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*Iyer, 2022*

BCN views its efforts to retain talented, highly educated students as an important part of their contributions to the city’s overall economic health. In the early 2000s, BCN’s efforts seemed to have a significant impact on the retention rates of students remaining in the Baltimore area. From 2003 to 2009, retention of BCN graduates grew from 19% to 32%.<sup>5</sup> Census data from

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<sup>1</sup> Iyer, S. D. (2022, October 18). Data patterns show how to reverse population loss in Baltimore. Will we heed their lessons? | Guest Commentary. *Baltimore Sun*. Retrieved February 12, 2023, from <https://www.baltimoresun.com/opinion/op-ed/bs-ed-op-1019-bnia-baltimore-population-loss-20221018-xxrc4tvq5bexxl25w43a6ppr5y-story.html>.

<sup>2</sup> USAFacts. 2022. *Baltimore city, MD population by year, race, & more*. [online] Available at: <https://usafacts.org/data/topics/people-society/population-and-demographics/our-changing-population/state/maryland/county/baltimore-city> [Accessed 9 August 2022].

<sup>3</sup> Fry, D. C. (2021, August 26). Continued population loss for Baltimore is troubling and unacceptable. Commentary. *The Daily Record*. Retrieved February 12, 2023, from <https://thedailyrecord.com/2021/08/26/continued-population-loss-for-baltimore-is-troubling-and-unacceptable/>.

<sup>4</sup> Manville, M., & Kuhlmann, D. (2018). The social and fiscal consequences of urban decline: Evidence from large American cities, 1980–2010. *Urban affairs review*, 54(3), 451–489.

<sup>5</sup> Johansson, C. S. (2011). The new economic development playbook. *Economic Development Journal*, 10(4), 5.

2022 however indicates that people specifically between the ages of 22 and 29 currently account for only 6.0% of the city’s population and experienced a population decline of over 22%.<sup>6</sup> As this is BCN’s target audience, this most recent data has led BCN staff and its member institutions to consider the effect of their efforts on the region and what they might do differently to achieve their goal of retaining students in the area post-graduation.

This improvement study aims to provide the BCN staff and member institutions with data and analysis about the experiences and attitudes of current graduating students and recent alumni related to the city of Baltimore.

*22% population decline  
between the ages of 22-29  
in Baltimore.  
~ Census Reporter (2022)*

## **FRAMEWORK**

We grounded our study in three theoretical frameworks: migration theory, human capital theory, and quality of life theory. We sought to answer centered around three main questions:

1. Where do BCN college students live before matriculation and after graduation?
2. What factors lead to BCN students’ remaining in or leaving Baltimore after graduation?
3. How do degrees conferred to BCN college graduates compare to industry needs in Baltimore and the surrounding region?

To answer these questions, we used a mixed-methods approach which included:

1. Document collection and analysis of existing data
2. Surveys sent to students and alumni

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<sup>6</sup> Censusreporter.org. 2022. *Grid View: Table B01001 - Census Reporter*. [online] Available at: <[https://censusreporter.org/data/table/?table=B01001&geo\\_ids=16000US2404000,05000US24510,31000US12580&primary\\_geo\\_id=16000US2404000](https://censusreporter.org/data/table/?table=B01001&geo_ids=16000US2404000,05000US24510,31000US12580&primary_geo_id=16000US2404000)> [Accessed 9 August 2022].

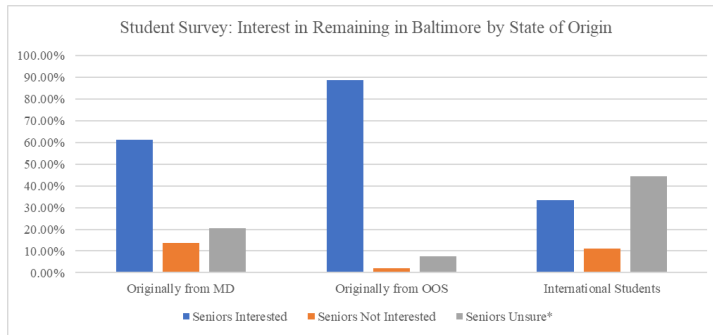
### 3. Interviews with current seniors and recent alumni

# Primary Findings

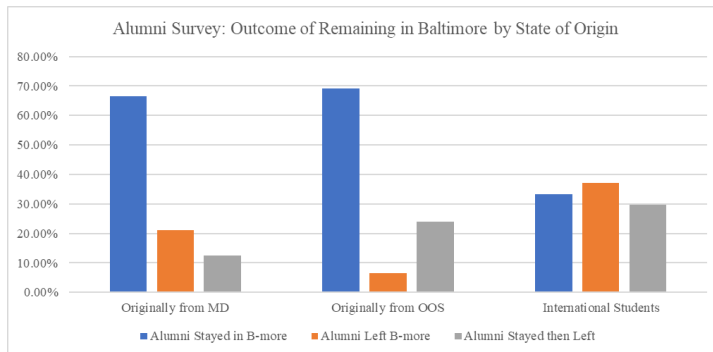
## Student Migration Trends

Our findings are consistent with other research<sup>7,8,9,10,11,12</sup> which found that students matriculate to institutions of higher education in predictable patterns based on institute type. Community colleges and public institutions within BCN most often draw students from the local community or

*Students **plan to and alumni do remain in Baltimore.***



from the state of Maryland. Private and elite institutions are more likely to draw out-of-state and international students from farther afield. Overall, BCN member-institutions attract 62.14% of their student bodies from outside of the Baltimore region and bring an average of 20,867 *new* students, *potential* human capital, to the city and surrounding area each year.



<sup>7</sup> Bloomfield, A., Rose, B. A., Preston, A. M., & Henneberger, A. K. (2018). Brain Drain in Maryland: Exploring Student Movement from High School to Postsecondary Education and the Workforce.

<sup>8</sup> Dougherty, D., McGill, B., Chinni, D., & Zitner, A. (2018, May 15). Where Graduates Move After College. *Wall Street Journal*. Retrieved August 30, 2022, from <https://www.wsj.com/graphics/where-graduates-move-after-college/>.

<sup>9</sup> Ehrke, J., Hastings, L., Balschweid, M., Brodersen, A., & Burkhart-Kriesel, C. (2022). Examining migration factors among generative college graduates: Strategic implications for people attraction, retention, and leadership transfer efforts. *Community Development*, 53(4), 460-476.

<sup>10</sup> Ishitani, T. T. (2011). The determinants of out-migration among in-state college students in the United States. *Research in Higher Education*, 52, 107-122.

<sup>11</sup> O'Neill, M., & Bagchi-Sen, S. (2022). Public universities and human capital development in the United States. *GeoJournal*, 88(1), 733-751.

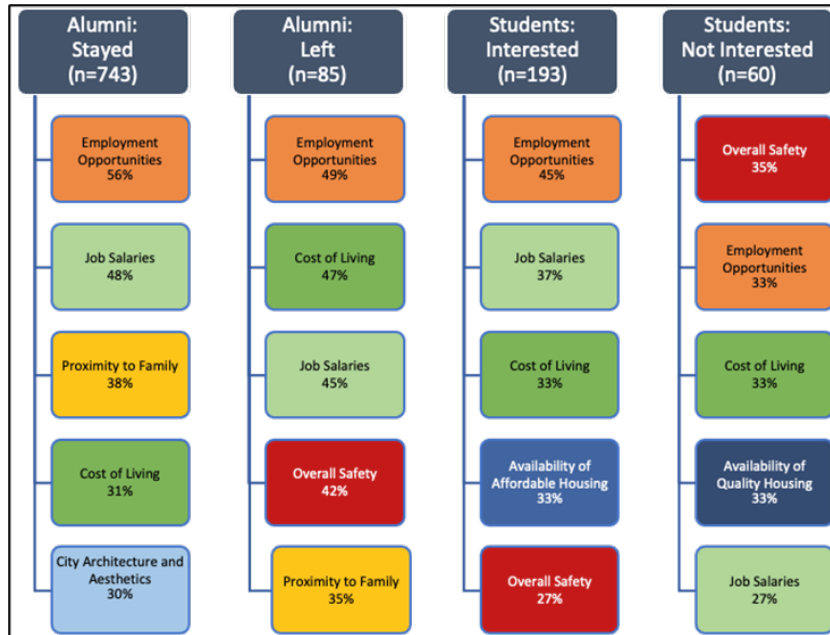
<sup>12</sup> Winters, J. V. (2011a). Human capital and population growth in nonmetropolitan US counties: The importance of college student migration. *Economic Development Quarterly*, 25(4), 353-365. <https://doi.org/10.1177/0891242411418221> Return to ref 2011a in article

Additionally, survey responses indicate that *current seniors plan to, and recent alumni do, remain in the Baltimore region after they graduate* from member institutions. Of the seniors who responded to our survey, 61% of MD residents and roughly 88% of out-of-state (OOS) students indicated that they are interested in staying in Baltimore post-graduation. Out of our alumni respondents, 65% of MD residents and 70% of OOS alumni indicated that they remained in Baltimore after they graduated.

### **Factors that Influence Decision-Making**

A variety of factors that influence student and alumni decisions about whether to stay in Baltimore post-graduation. Alumni and students consistently cited the importance of employment opportunities, job salaries, and cost of living in their decision-making. While overall safety is a top factor for students at BCN member institutions and for alumni who left the region, it is *not* among the top five factors for alumni who remained in the city. Further supporting this finding, interviews with individuals who were inclined to stay in Baltimore reported *feelings of pride and love for Baltimore, which seemed to override any concerns about safety*. This was the case even among those who had witnessed a crime in the city. A current senior from Baltimore who shared that her car had been broken into on the day of the

interview said, *“There’s something about the heart and the grit of the city...I’m really proud to be a Baltimorean...even though most people look at me sideways when I say that.”*



Our data also showed that being engaged in the city as a volunteer or as an intern positively correlated with remaining in Baltimore post-graduation. Regression analyses indicated that volunteering and completing

internships within the region increase the odds of remaining in Baltimore ( $p < .001$ ). *The odds of leaving Baltimore decreased by 68%* for alumni who reported on the survey that they had volunteered.

*Engagement in the city decreases the odds of leaving Baltimore.*

One senior interviewed explained from his perspective that service-based opportunities built connections for him to a lot of different people [in Baltimore].” When focusing on internships, while internships alone does not necessarily impact the odds of remaining in Baltimore, the location of internships does. *82% of seniors and 78% of alumni who completed an internship within the Baltimore region, remain interested and stayed in the city after graduation.*

### Student Interests vs. Industry Needs

Survey results showed that job-degree match was a key factor for alumni who left the region. As we compared the degrees conferred by BCN member institutions with the state’s job growth projections by industry, we found that, during the last ten years, BCN member institutions are conferring far more degrees than jobs available. An alum, when describing what



they liked least about Baltimore, highlighted the lack of opportunities for careers in performing arts and entertainment. While the arts may not be a priority industry for the city, for students that are truly interested in staying, we may miss out on the opportunity to retain those who have the potential to contribute to the cultural richness and diversity of the city based on the challenges they encounter in the job search. From these findings, we draw the

Comparing Job Projections to Degrees Conferred			
Industries Aligning with Top Degrees Conferred from BCN institutions	# of Degrees Conferred (2021)	Total Projected Job Growth in the Baltimore Region (2018-2028)	Average Annual Job Growth
Professional Scientific and Technical Services	13,565	6,603	660.30
Health Care and Social Assistance	5,820	11,252	1,125.20
Educational Services	2,767	4,633	463.30
Other Services (except Public Administration)	2,541	835	83.50
Public Administration*	1,719	377	37.70
Arts Entertainment and Recreation	1,688	816	81.60
Information	1,492	161	16.10
*Public Administration NAICS code aligned with OWIP Government Services projections			

conclusion that *while BCN meets the industry needs of the city, graduates who are unable to find jobs that align specifically with their degrees are very likely to extend their job search beyond the region.*

## Recommendations:

### Prioritize Collaborative Research, Programming, and Partnerships

#### Collaborative Research

The success BCN has demonstrated in attracting students to member institutions through the Colletown Tour program and in engaging them in the city through Baltimore Fellowship, Baltimore Underground and Industry days is laudable. There is, however, less understanding about the impact of BCN graduates on the local workforce and the local economy. We recommend that BCN lead efforts among member institutions to conduct aggregate level research on this topic. Initial efforts can include data sharing among institutions and analysis of home addresses of graduates for the last ten years to understand the migration patterns of graduates.

To facilitate successful data collection and analysis among member institutions, we recommend that BCN create a Community of Practice among Institutional Research professionals. This group would be charged with creating a coordinated and systemic process to collect and analyze institutional data and to survey BCN students, faculty, and staff members. Additionally, a charge to establish a long-term research agenda for BCN would enable member institutions to incorporate BCN data collection within institutional priorities and could strengthen understanding of the impact of programming and services on the Baltimore region.

## **Programming**

Our findings indicated that engagement in Baltimore increased the likelihood of students remaining in the region post-graduation. We also found that students are concerned with the availability of quality and affordable housing. Interviews with study participants demonstrated that individuals who had a strong understanding of and appreciation for Baltimore's racial and socioeconomic complexities had more positive views of the city and the region. Programming for BCN students to educate them about these complexities and to introduce them to opportunities in Baltimore and the surrounding region may lead to better understanding and greater appreciation for the city, which may contribute to increased retention rates among college graduates. We recommend offering programming designed to educate students about Baltimore's housing market and to facilitate relationship building among graduates looking for possible roommates.

Engaging programs like Baltimore Fellowship and Baltimore Underground introduce students to both the exciting opportunities for learning in the city and to the complex racial and socioeconomic realities of the city. These programs, however, are only accessible to a small number of BCN students. We recommend that BCN staff work with member institutions and

local partners to increase opportunities for participation in these programs. We also recommend that BCN create additional Industry Days programming. This will both introduce students to industries which are aligned with their interests and connect students to industries that are projected to grow in the region. Finally, we recommend that BCN create a new Baltimore housing resource page on the BCN website and in-person programming such as neighborhood tours to introduce students to available housing options in the region and to facilitate identification of roommate groupings. A mentorship program to pair current seniors with recent alumni who have chosen to remain in the region could also lead to better retention outcomes.

While our study did not evaluate the retention of faculty and staff members in the Baltimore region, we do recommend that BCN provide new programming for this valuable, existing human capital. Retaining this highly talented group could have a significant impact on the local economy and may reduce population decline. The existing Human Resources Community of Practice could be charged with these efforts.

## **Partnerships**

A foundation of strong partnerships would facilitate our first two sets of recommendations. First and foremost, we recommend that BCN open governing board membership to local business and industry leaders. This would both increase opportunities for partnerships with member institutions and would also create valuable revenue streams for BCN. Second, we recommend that BCN develop new partnerships with business and nonprofit leaders to develop additional internship opportunities for students and to support collaboration for Industry Days programming. Finally, we recommend that BCN leverage established positive relationships with Visit Baltimore and Live Baltimore as foundations to enhance existing programming and to create new programming.