



Probation and Retention Exploratory Predictive Analytics Report

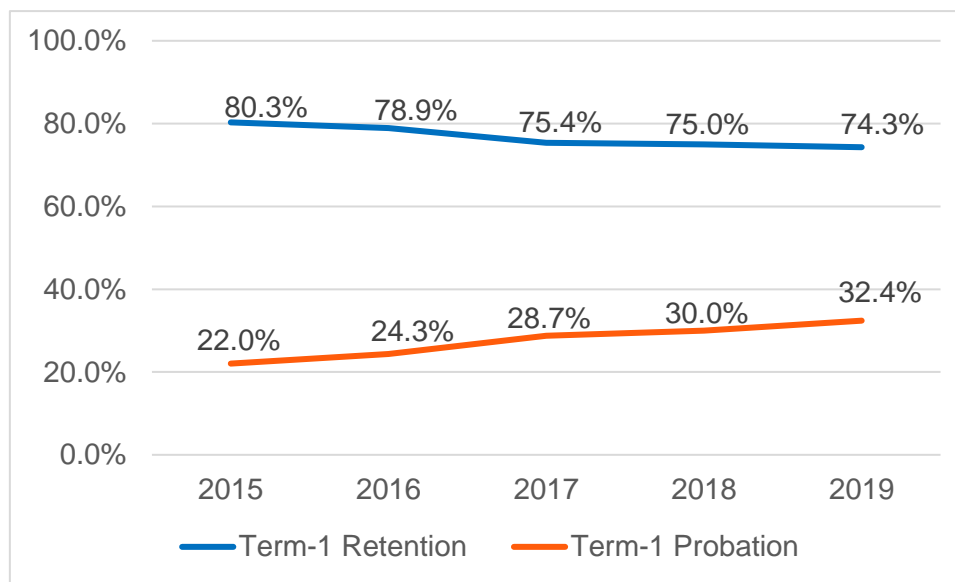
BMCC OFFICE OF INSTITUTIONAL EFFECTIVENESS AND ANALYTICS

A series of analyses on which factors contribute to probation and retention among BMCC first-time freshmen were conducted. Retention was defined as students re-enrolling at BMCC in the subsequent spring term. Probation was defined as students meeting the criteria for academic probation in their first term based on cumulative GPA and credits completed.

BMCC Fall First-time Freshmen Term-1 Retention and Probation Rates

Year	Fall Cohort		Term-1 Retention		Term-1 Probation	
	N		N	%	N	%
2015	6,812		5,470	80.3%	1,501	22.0%
2016	6,580		5,194	78.9%	1,602	24.3%
2017	6,324		4,766	75.4%	1,818	28.7%
2018	6,795		5,097	75.0%	2,038	30.0%
2019	6,567		4,879	74.3%	2,128	32.4%

BMCC Fall First-time Freshmen Term-1 Retention and Probation Rates



Source: IRDB.

The aim was to explore which academic and demographic factors at the start and during the fall term are significantly associated with probation and retention among 2017, 2018, and 2019 fall BMCC first-time freshmen. The following results represent possible areas for further investigation.

Factors associated with entering probation:

- High School GPA
 - Odds of probation decreased 7% for every grade point higher.
- Median neighborhood income
 - Odds of probation decreased 4% for every \$10,000 increase
- Age
 - Odds of probation decreased 9% for every year older.
- Credit Hours Enrolled
 - Odds of probation increased 2% for every additional credit enrolled
- Visiting Learning Resource Center
 - Odds of probation decreased 8% for every visit.
- In a Success Cohort (e.g., ASAP, BLA, or CD)
 - Odds of probation decreased by 21%.
- Nonresident Status
 - Odds of probation decreased by 30%
- Received Federal Pell
 - Odds of probation decreased by 328%
- At least one parent attended college
 - Odds of probation decreased by 9%
- Estimated Family Contribution less than or equal to 3,000
 - Odds of probation increased by 43%
- Enrolled in summer Immersion
 - Odds of probation decreased by 12%
- Enrolled in an ESL Course
 - Odds of probation decreased by 61%
- Earned a WN Grade
 - Odds of probation increased by 228%
- Underrepresented Minority (URM)
 - Odds of probation increased by 52%
- Male
 - Odds of probation increased by 16%

Factors associated with retention:

- High School GPA
 - Odds of retention increased 4% for every grade point higher.
- Median neighborhood income
 - Odds of retention increased 2% for every \$10,000 increase
- Age
 - Odds of retention increased 2% for every year older.
- Credit Hours Enrolled
 - Odds of retention increased 8% for every additional credit enrolled
- Visiting Learning Resource Center
 - Odds of retention increased 7% for every visit.
- Taking the SAT
 - Odds of retention increased by 24%.
- In a Success Cohort (e.g., ASAP, BLA, or CD)
 - Odds of retention increased by 111%.
- Nonresident Status
 - Odds of retention increased by 71%
- Received Federal Pell
 - Odds of retention increased by 438%
- At least one parent attended college
 - Odds of retention increased by 14%
- Estimated Family Contribution less than or equal to 3,000
 - Odds of retention decreased by 47%
- Enrolled in summer Immersion
 - Odds of retention increased by 42%
- Enrolled in FYE Course
 - Odds of retention increased by 15%
- Enrolled in an ESL Course
 - Odds of retention decreased by 35% higher.
- Earned a WN Grade
 - Odds of retention decreased by 78%
- Underrepresented Minority (URM) and Male
 - Odds of retention decreased 27%

Note. Stepwise logistic regression with both forward and backward selection was used.

FOR MORE INFORMATION

CONTACT: BMCC OFFICE OF INSTITUTIONAL
EFFECTIVENESS AND ANALYTICS
ins@bmcc.cuny.edu