

# Burlington Police Department

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## Diversity and Recruitment Report 2010-2016

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Dear Burlingtonians and Vermonters:

In my experience, there is no fixed set of qualifications that guarantee a good police officer. Thinking of our police as cookie-cutter employees who are required to fit an objective mold leaves police departments less able to meet their most complex challenges in a changing social environment. A good police department is a conglomeration of officers who, over and above the basic policing skills certainly required of each, bring a wide variety of abilities and expertise to the problems that confront their communities. These are things like fluency in foreign languages, firsthand knowledge of different cultures and religions, expertise in mechanical and practical reasoning, and different types of emotional intelligence. **Diversity in policing isn't merely an attempt to demonstrate fair hiring practices. It is instrumental to the way in which police departments can best serve and protect their citizens.**

It is the responsibility of police leaders to recruit, train and retain the variety of individual officers who will form into police departments ready to meet the state's evolving challenges. **These challenges require diversity in staffing that meets or exceeds that of the state itself, especially since members of Vermont's smaller demographics have been shown to be more likely to need the services of their police.** This report looks at the last 1,200 men and women who have applied to become Burlington Police Officers and closely analyzes how different demographics fare in the process. It should assist the city and our state in more closely examining what type of hiring process selects the officers we need to create the best police departments possible. This, we owe to the Vermonters we serve and protect as a matter of basic duty.

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## Executive Summary

This report examines the racial diversity of the Burlington Police Department sworn police force and the role the department's recruitment mechanism has in cultivating a diverse force that reflects the community it serves. The general findings of the report are outlined here:

- Racial minorities are underrepresented in the Burlington Police Department sworn personnel, although the magnitude is very small and not statistically significant
- While minority applicants to the BPD are hired at a lower rate than White applicants overall, the disparity appears to stem from outcomes of the State-mandated examinations (i.e. the written entrance exam and physical fitness exam) which disproportionately disqualify Black BPD applicants. The result is a considerable shortage of Black individuals in the remaining pool of applicants eligible for hire by the state's police entities
- When limited to the pool of applicants eligible for hire, or where the BPD has agency in whom they choose to interview and hire, there is evidence that the department selects Black, Hispanic, and Asian applicants for hire at a rate equal to or greater than White applicants

Some specific findings are outlined here:

- Racial minorities are slightly overrepresented in the pool of applicants to the BPD from 2010 to 2016, although the magnitude is not statistically significant
- Of the total pool of applicants, White applicants had the highest likelihood of becoming eligible for hire at more than 1 in 3 (38%), followed by Asian applicants at around 1 in 3 (34%), Hispanic applicants at around 1 in 4 (24%), and Black applicants at around 1 in 9 (11%). The disparity between White applicants and Black applicants and between White applicants and Hispanic applicants for becoming eligible for hire were statistically significant
  - For Black applicants, a 52% failure rate on the Vermont State written entrance exam combined with a 43% failure rate on the Vermont State physical fitness exam – both considerably higher (to a degree of statistical significance) than for White applicants - was largely the reason for their low eligibility rate
  - For Hispanic applicants, a larger than average tendency to never follow through in the recruitment process past the application phase was largely the reason for their low eligibility rate
- Of the total pool of applicants, Asian applicants had the highest likelihood of being hired at around 1 in 10 (10.5%), followed by White applicants at around 1 in 19 (5.3%), Black applicants at around 1 in 31 (3.2%), and Hispanic applicants at 1 in 59 (1.7%). None of these differences were statistically significant
- Of the pool of eligible applicants, Hispanic applicants had the highest likelihood of receiving a conditional offer at more than 1 in 2 (58%), followed by White applicants at around 1 in 2 (46%), Black applicants at around 1 in 2 (43%), and Asian applicants at around 1 in 3 (38%). None of these differences were statistically significant
- Of the pool of eligible applicants, Asian applicants had the highest likelihood of being hired at around 1 in 3 (31%), followed by Black applicants at around 1 in 3 (29%), White applicants at around 1 in 7 (14%), and Hispanic applicants at 1 in 14 (7%). None of these differences were statistically significant

## Introduction

In the Burlington Police Department's (BPD) efforts to cultivate a diverse police force, the department is advancing a data-driven investigation of recruitment flow – from application to hire – to gain a better understanding of the individual stages of the recruitment process and the disparate impact they may have on applicants from diverse backgrounds. The goals of this effort are threefold: 1) To gain an understanding of how the current racial make-up of the department reflects that of the Burlington community; 2) To pinpoint where in the process of recruitment the BPD is losing potential officers to attrition and; 3) To stimulate a plan of action for addressing and ameliorating sources of implicit bias in the recruitment process. This report presents the findings of an analysis of Burlington Police Department diversity and recruitment from 2010 to 2016.

## Background

Although disproportionately “White” relative to the national population, Burlington is among the most diverse cities in Vermont and has experienced an increased rate of immigration of people from diverse cultures and ethnicities in the past decade. According to the 2010 U.S. Census Bureau census, the city of around 42,000 population was 89% White, 4% Black, 3% Hispanic or Latino, 4% Asian, and 1% some other race (see table I). However, with one in four people moving to Burlington a person of color, the city is likely to continue to diversify in the coming years.

**Table I. Burlington Racial Make-up Compared to State and National**

<b>Race</b>	<b>Burlington %</b>	<b>Vermont %</b>	<b>National %</b>
White	88.9	95.3	63.7
Black	3.9	1.0	12.2
Hispanic	2.7	1.5	16.3
Asian	3.6	1.3	4.7
Other	0.9	0.9	3.1

Today, The BPD employs 100 sworn police officers of which 92% are White, 2% are Black, 2% are Hispanic, and 4% are Asian (see table II). People of color are, on the whole, underrepresented in the BPD (8% of the police force compared to 11% of the Burlington community). Looking within the people of color category, Black and Hispanic officers are underrepresented in the police force while Asian officers are overrepresented.

**Table II. Burlington Police Department Racial Make-up Compared to City**

<b>Race</b>	<b>City %</b>	<b>BPD %</b>	<b>Difference</b>
White	88.9	92.0	+2.1
Black	3.9	2.0	- 1.9
Hispanic	2.7	2.0	- 0.7
Asian	3.6	4.0	+0.4
Other	0.9	0.0	- 0.9
Total Minority	11.1	8.0	- 3.1

A natural inquiry that follows is why are African Americans and Hispanics underrepresented in the BPD relative to the community they serve. The answer likely lies in the recruitment process - and more specifically in the individual stages of the recruitment process - which ultimately is responsible for filling the rank and file of the department.

### Methodology

Data on all BPD applicants is stored in an internal database maintained by the department's recruitment coordinator. Included are fields recording the race of applicants as well a detailed, thorough documentation of each applicant's progress through the application process. This includes scores on examinations, number of attempts, pass/fail outcomes, ultimate application outcomes, and notes from the recruitment coordinator on each applicant. From January of 2010 to August of 2016 the BPD received a total of 1,266 applications for a position as an officer<sup>1</sup>. For 76 applicants I was unable to ascertain race due to missing data and, as a result, these applicants (6%) were removed from the sample. The following findings are based on the remaining sample of 1,190 applicants.

### Findings

Of the reduced sample of applicants, 87% were White, 5% were Black, 5% were Hispanic, and 3% were Asian (see table III). Thus, at least at the first stage of the recruitment process, people of color are overrepresented as compared to their make-up of the Burlington community.

<sup>1</sup> An applicant is defined as an individual who submits a formal application and a personal history information document to the recruitment office

**Table III. Applicant Racial Make-up 2010-2016**

<b>Race</b>	<b>Total</b>	<b>Percent</b>
White	1031	86.6
Black	62	5.2
Hispanic	59	4.9
Asian	38	3.2
Total Minority	159	13.4

From application to hire, however, applicants of color are more likely than White applicants to attrit. This attrition may be concentrated at one or two particular stages or gradually throughout the process. Taking a look at the outcomes of recruitment by race indicates generally the results of the process. Table IV describes these outcomes. Of note, a larger percentage of Black and Hispanic applicants are failing at some stage of the recruitment process than White applicants and Asian applicants. Further, White applicants have a 66% and 311% higher likelihood of being hired than Black and Hispanic applicants respectively. Asian applicants, with a 10.5% hire rate, by far have the highest likelihood of hire.

**Table IV. Outcomes of Recruitment Process by Race 2010-2016<sup>2</sup>**

<b>Race</b>	<b>Total</b>	<b>Withdrew %</b>	<b>Failed %</b>	<b>Hired %</b>	<b>Total %</b>
White	1031	13.6	80.9	5.3	100
Black	62	9.7	87.1	3.2	100
Hispanic	59	6.8	91.5	1.7	100
Asian	38	7.9	81.6	10.5	100

The next step is to determine where – at what stage – along the recruitment process particular applicants are being lost. Chart I outlines the flow of recruitment from application to hire by race.

The process begins at application, where a prospective officer fills out a standardized application packet as well as a personal history form. Upon completion of this task, applicants are required to take and pass a series of state mandated tests to become a certified law enforcement officer in Vermont. These include a written entrance exam, a physical fitness test, and a psychological test. If an officer fulfills these three tests to satisfaction, they may be invited for an interview with the BPD. A conditional offer is given to recruits who pass the interview. Next, recruits go through an internal review consisting of a polygraph exam and a personal background investigation. Recruits who successfully navigate through each of these stages and who do not withdraw their

<sup>2</sup> None of the outcomes here were statistically significant by race to the  $p < .05$  degree

application are hired as a Burlington Police Officer. While Chart I is not a true process flowchart in that each successive stage is not fully dependent on the previous<sup>3</sup>, it is an accurate representation of the general flow applicants most often experience.

Looking at the percentage of total applicants remaining (provided in the blue arrows) across race indicates the percentage of each race that reaches a particular stage in the recruitment process.

Strikingly, just 47% of Black applicants and 42% of Hispanic applicants make it to the entrance exam stage compared to 55% of White applicants<sup>4</sup>. Only about a quarter of Black and a third of Hispanic applicants make it to the physical fitness stage compared to nearly a half of White applicants.<sup>5</sup>

Chart II then depicts the applicant attrition flow.

Here, looking at the cumulative percentage of applicant attrition (provided in the blue arrows) across race indicates the percentage of the total attrition for each race pool that occurs by the time they reach each stage in the recruitment process. Most notably, a full 80% of total attrition for Black applicants and 66% of total attrition for Hispanic applicants occurs before the physical fitness stage of recruitment compared to 53% for both Whites and Asians. For African Americans, the disparity largely comes from their high failure rate for the written exam. 52% of Black applicants fail the written exam compared to 9% of Whites, 20% of Hispanics, and 23% of Asians<sup>6</sup>. For Hispanics, the disparity is largely a result of their lack of showing up to take the entrance exam. 58% of Hispanic applicants do not ever take the entrance exam compared to 45% of Whites, 53% of Blacks and only 38% of Asians. The failure rate for the physical fitness test across races mirrors that of the written exam, which further compounds the high attrition problem for Black applicants. 43% of Black applicants fail the physical test compared to 20% of Whites, 20% of Hispanics and 24% of Asians<sup>7</sup>. Thus, by the time applicants reach the psychological test stage – the first point at which the BPD has an opportunity to be selective in whom they interview and

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<sup>3</sup> For example, in some circumstances an applicant may be interviewed by the department before passing the psychological test

<sup>4</sup> The difference between White applicants and Hispanic applicants for making the entrance exam stage was statistically significant to the  $p < .05$  degree

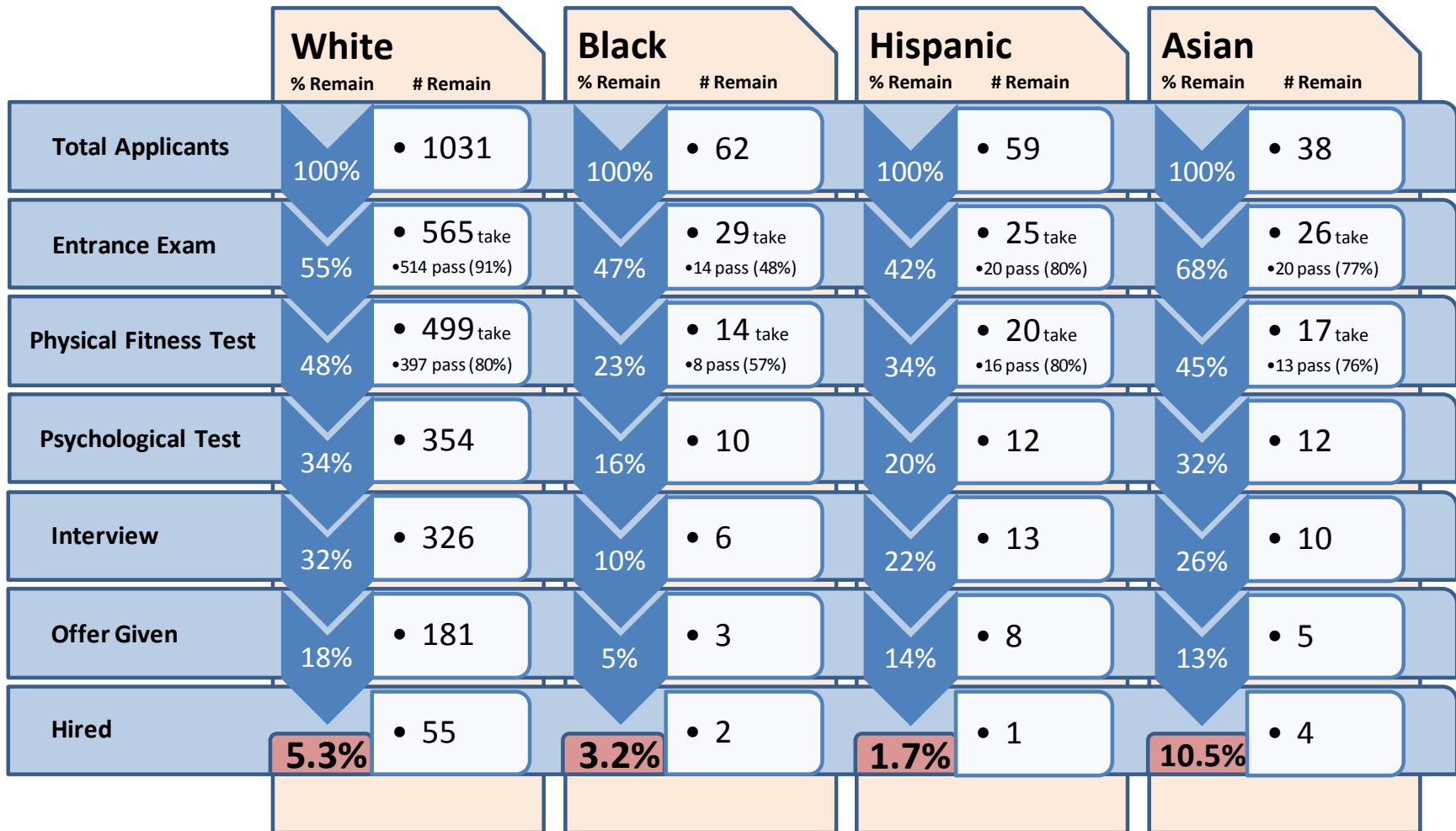
<sup>5</sup> The differences between White applicants and Black applicants and between White applicants and Hispanic applicants for making the physical fitness exam stage were statistically significant to the  $p < .001$  and  $p < .05$  degree respectively

<sup>6</sup> The disparity in pass/fail rate between White and Black applicants on the written exam was statistically significant to  $p < .001$  degree.

<sup>7</sup> The disparity in pass/fail rate between White and Black applicants on the physical fitness exam was statistically significant to  $p < .05$  degree.



**Chart I. Officer Recruitment Flow by Race 2010-2016**



**Chart II. Officer Recruitment Attrition Flow by Race 2010-2016**



later hire – the Black applicant pool has already experienced 90% of its total attrition compared to 65% for White applicants, 72% of Hispanic applicants and 74% of Asian applicants. Looking at this differently, by the psychological test stage only 13% of total Black applicants remain compared to 29% of Hispanic applicants, 39% of White applicants and 34% of Asian applicants.<sup>8</sup>

Chart III shows the recruitment flow of this subset of applicants who are eligible for interview and hire by race.<sup>9</sup>

Chart III presents a more valid picture of the BPD hiring mechanism in that it shows only the stages at which the BPD has agency in who it hires. Although the overall sample demographics provide an illustration of who the BPD is targeting for recruitment at the outset, the internal recruitment stages subsequent to the state mandated exams are more directly a reflection of the hiring processes of the BPD itself.

From 2010-2016 there were 425 applicants eligible for hire. Of these, 92.0% were White, 1.6% were Black, 3.3% were Hispanic, and 3.1% were Asian. A nearly equal percentage of each race were interviewed except for Black applicants who were only marginally less likely to interview.<sup>10</sup>

Moving down, around 50% of White, Black, and Asian applicants who interviewed were given a conditional offer. At 62% of the sample, Hispanic recruits had the highest likelihood of receiving a conditional offer among applicants interviewed.

From conditional offer to hire, each race varied widely in likelihood of joining the BPD. 30% of Whites, 67% of Blacks, 13% of Hispanics, and 80% of Asians given a conditional offer were ultimately hired. This variation occurred for different reasons. Of White applicants given a conditional offer and not ultimately hired, the main reason was a failed polygraph (48%). An additional 24% withdrew their applications and 18% failed the background investigation. The single Black applicant and the single Asian applicant who were given a conditional offer but not hired failed their respective background investigations. Alarming, 7 out of the 8 Hispanic recruits

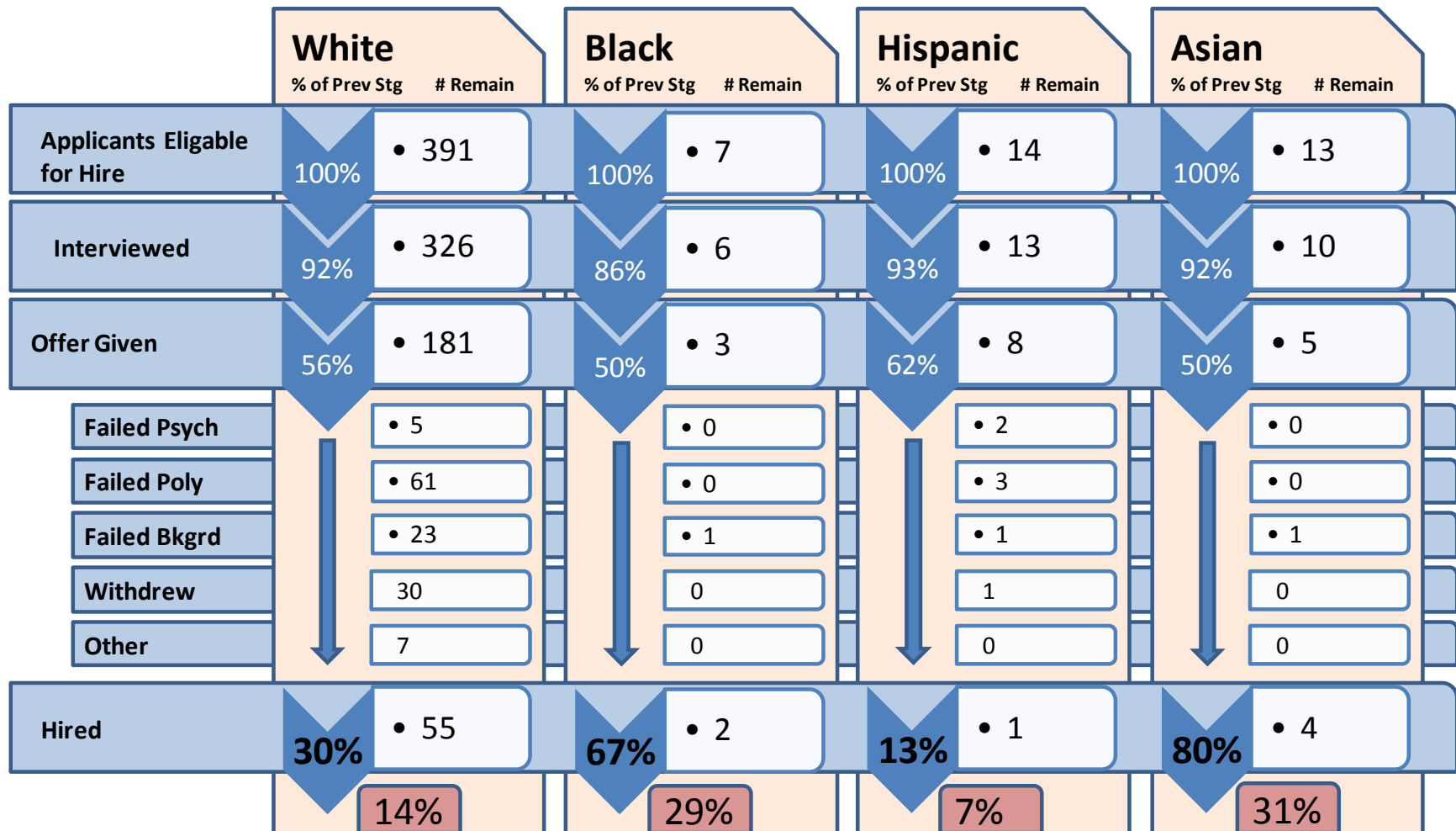
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<sup>8</sup> As shown in Chart III., when you take out applicants who took psychological test stage but did not pass both the written and physical exams (and take out applicants who, in very rare occasions, passed the physical exam without ever passing the written exam), which is a better measure of unique applicants eligible for hire, only 7 (11%) unique Black applicants remain compared to 14 (24%) unique Hispanic applicants, 391 (38%) unique White applicants and 13 (34%) Asian applicants. The differences between White applicants and Black applicants and between White applicants and Hispanic applicants for becoming eligible for hire were statistically significant to the  $p < .001$  and  $p < .05$  degree respectively

<sup>9</sup> Officers who pass both the written and physical exam without first passing the psychological test are technically still eligible for an interview and are included in this subset. However, an applicant who is interviewed and later fails the psychological test is thereafter ineligible for hire.

<sup>10</sup> With an sample n of only 7, this lower percentage of Black applicants who were interviewed is statistically insignificant

**Chart III. Recruitment Flow for Applicants Eligible for Hire by Race 2010-2016**



given a conditional offer were not ultimately hired. Two failed the state mandated psychological exam, three failed the polygraph, one failed the background investigation and one applicant withdrew.

Ultimately, of all applicants objectively eligible for hire, the BPD hired 14% of White recruits, 29% of Black recruits, 7% of Hispanic recruits and 31% of Asian recruits.

**Table V. Hiring Outcome for Applicants Eligible for Hire by Race 2010-2016<sup>11</sup>**

<b>Race</b>	<b>Total</b>	<b>Hired</b>	<b>% Hired</b>
White	391	55	14%
Black	7	2	29%
Hispanic	14	1	7%
Asian	13	4	31%

## Discussion & Conclusions

The Burlington Police Department has a vested interest in filling its ranks with a diverse force that best serves its community. However, the department is currently slightly underrepresented by Black and Hispanic officers. It is important to determine what might be leading to this outcome. Naturally, as the feeding tube of the police force, the recruitment process must be examined, which is what this report intended to do. A look at the very front end of the process – the solicitation of applicants – indicated that people of color are being targeted for recruitment in a way that is proportional to their make-up of the Burlington community. However, from application to hire the recruitment process disproportionately weeds out Black and Hispanic applicants so that they make up only 3.2 and 1.6 percent of all hired recruits respectively. A more detailed glimpse into the process of recruitment revealed that Black and Hispanic applicants are being lost due to attrition at a much faster rate than White and Asian applicants in the early stages of recruitment. By the time the BPD is in a position to interview an applicant for hire, 87% of Black and 71% of Hispanic applicants have been lost to attrition compared to 61% of White and 66% of Asian applicants respectively. For Black applicants, the trouble originates from the written and physical fitness exams. Black applicants have significantly higher failure rates for both of these state mandated exams than applicants of other races. For Hispanic applicants, while their pass rates for the written and physical exams are on par with White and Hispanic applicants, their high likelihood of failing to *take* the written exam after applying and failing to *take* the psychological test after passing both the written and physical exams is an issue of concern.

The back-end of the recruitment process, or the flow from eligibility to hire, tells a different story. The sample size when shrunk to only eligible applicants is certainly small

<sup>11</sup> None of these findings are statistically significant to the  $p < .05$  degree

enough to limit the robustness of conclusions here. Still, it is possible to infer some general conclusions about the way BPD is handling applicants of color. Where the BPD is allowed agency in who they hire there is evidence that the department has been making a concerted effort to hire people of color for the past six years. Black and Asian recruits have the highest likelihood of being hired among eligible applicants. Both are more than two times more likely than White applicants to be hired. While Hispanics have the lowest likelihood of being hired, they have the highest likelihood of receiving a conditional offer and are ultimately not hired due to failing the state mandated psychological test or a component of the internal review.

### **Important Considerations and Next Steps**

It should be noted that, for purposes of this current analyses, the overall racial make-up of the Burlington community was used as the standard for measuring the diversity of the BPD. This is a common and accepted practice for measuring the diversity of a police force. However, the BPD strives to remain dynamic in its ability to police all areas of Burlington, including areas where people of color tend to concentrate. Because of this, the department understands that there may be value in hiring an overrepresentation of minority officers for instances where police service is called upon in these areas.

Additionally, it is worth noting that relative to the rest of the nation the Burlington Police Department is among the departments that most closely resembles the community it serves. A 2015 *Governing the States and Localities* Special Report indicated that, on average, people of color were underrepresented in police departments by 24.5 percentage points<sup>12</sup>. A supplementary analysis conducted by this author indicated that when limited to the departments serving communities with populations very similar in size to Burlington's, people of color were underrepresented by 10.5 percentage points on average<sup>13</sup>. In the BPD people of color are underrepresented by about 3.1 percentage points.

A recent report analyzing three years of the Vermont Police Entrance Exam found the test is not biased against any one race or ethnicity when variation in educational background and gender across those races are accounted for. The current analysis is unable to measure any potential mediating effect that variations in education and primary language spoken across races might have in explaining the disparate rate at which Black applicants fail the written entrance exam. While gender and age have been recorded in the recruitment database, education level has not. However, the educational

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<sup>12</sup> This report analyzed only agencies in areas with populations of 100,000 or more.

<sup>13</sup> Data from the 2007 Law Enforcement Management and Administrative Statistics (LEMAS) study combined with population demographic statistics from the US Census were used to measure the difference between minority make-up of police forces and minority make-up of their respective communities for the 69 police forces that serve communities with populations between 40,000-45,000

background and ESL status of every applicant in the sample was collected via personal history forms each applicant completed. An immediate next step will be to manually code this education and ESL information into the dataset and to run analyses to determine whether or not the disparity in the pass rate for Black applicants remains after controlling for education, age, gender and ESL status.

Finally, although it appears the BPD is hiring officers of color in a way that is proportionate to their make-up in the community, the active police force continues to be slightly underrepresented by Black and Hispanic officers. Another next step will be to analyze officer retention to determine if attrition after hire may help to explain such underrepresentation.

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