A Behavioral Science Approach to Enhancing Recruitment and Residency Efforts in the CMPD

SAFE Charlotte Recommendation 6





LETTER FROM THE CEO			
EXECUTIVE SUMMARY			
CHALLENGE #1	I: ENHANCING RECRUITMENT EFFORTS	09	
WHAT IS KNOWN			
OUR ASSESSMENT OF THE CHALLENGE 1			
WHAT WE WANT TO KNOW 1			
WHAT WE DID AND SUBSEQUENTLY UNCOVERED 1			
OUR RECOMMENDATIONS 2			
CHALLENGE #2: ENHANCING RESIDENCY EFFORTS 28			
WHAT IS KNOWN			
OUR ASSESSMENT OF THE CHALLENGE			
WHAT WE WANT TO KNOW			
WHAT WE DID AND SUBSEQUENTLY UNCOVERED			
OUR RECOMMENDATIONS			
CONCLUSION			
ABOUT THE PROJECT TEAMS			
REFERENCES .		51	
APPENDIX A:	SUMMARY OF CMPD RECRUITMENT &	57	
APPENDIX B:	RESIDENCY REQUIREMENTS AND INCENTIVES IN PEER CITIES	61	
APPENDIX C:	RESIDENCY DATA 2017 VS. 2020	63	
APPENDIX D:	COMMUNITY DIAGNOSTICS SURVEY QUESTIONS & RESULTS	65	
APPENDIX E:	QUESTIONS & ANSWERS	71	

Letter from the CEO

Historically, policing has not been a community service granted significant investment for innovation, and yet the expectations on the role that police play in serving the needs of changing societies have continued to rise. The calls for change from various constituencies has grown louder while it has become harder to determine the right courses of action.

Behavioral science provides leaders with an evidence-based approach to determine what works and what does not. This framework offers guidance to stakeholders about which policy ideas may need more work before being implemented. It demands a distinction between intuition and evidence to help sort opinion, however strong, from fact. Further, it provides a root cause analysis to help innovators understand the "why" of what works and what does not. Behavioral science is a powerful facilitator for diverse stakeholders working through complex challenges. In a period when the stakes are so high, with matters of health and safety, life and death, it is crucial to invest in the right solutions.

The scope of this report includes the application of behavioral science to complex questions: (1) how can we enhance recruitment efforts, and (2) how can we enhance residency efforts. The exploration of these questions from a scientific lens has uncovered some challenging insights for the reader to consider.

Kelly Peters CEO & Co-Founder





The City of Charlotte and Charlotte Mecklenburg Police Department (CMPD) have a clear focus: Safety and Accountability for Everyone. Safety is a foundational aspect to well-being and both parties have renewed commitments to finding novel strategies to support the well-being of the Charlotte community.

A Community Input Group met with community leaders in the summer of 2020 to develop a plan. The group provided crucial feedback to several potential initiatives and further, they helped develop recommendations for the coming years. With the contributions of the Community Input Group and City Council, the SAFE Charlotte report was published (City of Charlotte, 2020b).

The SAFE Charlotte report, adopted by the city on October 26, 2020, is a summary of the city's past actions and future goals to reimagine policing in Charlotte. Included in the report are six recommended immediate actions the city can implement.

The aim of Recommendation 6 is to enhance recruitment and residency efforts for officers in the CMPD. The City of Charlotte and CMPD sought out experts to apply a behavioral science approach to these challenges and partnered with BEworks and Amplify Consulting to do just that (see page 47 for more about BEworks and Amplify Consulting).

Enhancing recruitment and residency efforts plays a key role in the overall goals of SAFE Charlotte. CMPD has been dealing with a staffing deficit of around 170 officers for several years, and the deficit is currently reflected in every division. The recommended number of positions in the CMPD is based on the number of residents they served. Therefore, as Charlotte continues to be one of the fastest growing cities in the country, more officers will be needed to maintain the recommended ratio of officers to residents.

Officers already face tough challenges in their role of providing safety, and these challenges are only magnified when managing a staffing deficit that results in current officers shouldering more than the recommended percent of the population. Simply put, more officers are needed. Furthermore, as the CMPD works to enhance their connection with the community, they will require more available officers to take on those tasks.

In this report, the challenges within Recommendation 6 are divided into two sections: (1) Enhancing Recruitment Efforts, and (2) Enhancing Residency Efforts. Within each section is a description of the proposed strategies for each and the inputs that went into their development.



The project teams completed a number of research activities for Recommendation 6:

• 14 Stakeholder Interviews

Structured interviews with CMPD officers and leadership, city staff, members of the Community Input Group, and communication experts

Historical Data Analysis

• Analysis of CMPD officer application, disqualification, voluntary drop-out, and hiring rates, including breakdowns by gender and race

Landscape Scan

• A review of peer cities' use of residency requirements and incentives

A Discovery Workshop

• An interactive workshop with CMPD leadership and city staff to review findings and determine areas of focus for this project

• A Diagnostics Survey with 126 Charlotte community members

• A tool used to assess differences in the experiences and beliefs of community members who live near officers versus those who do not

A Behavioral Audit

• A review of the beginning steps of the CMPD application process to identify areas of opportunity to improve completion rates

An Expert Diagnostics Think Tank with 5 behavioral scientists

• Collaborative working sessions of behavioral scientists to identify psychological and behavioral barriers applicants may face when attempting to complete the CMPD application process

• 2 Expert Ideation Think Tanks with 5 behavioral scientists

• Collaborative working sessions of behavioral scientists to identify evidencebased strategies to address barriers and drive behavior change for (1) improving application rates, and (2) improving officer-community relationships

• 4 In-Depth Scientific Literature Reviews

• A review of evidence published by researchers and scientists on: (1) the barriers to application completion, (2) ways to improve application completion, (3) the effectiveness of residency efforts, (4) ways to improve intergroup relationships

• 2 Collaborative Ideation Workshops

• Interactive workshop with CMPD leadership and city staff to develop strategies to improve (1) application rates, and (2) officer-community relationships using the outputs of each task outlined above

The insights derived from these activities were used to focus strategy development. Specifically, to enhance recruitment efforts, we determined that it would be most fruitful to focus on reducing applicant voluntary drop-outs. Ten evidence-based recommendations were identified and developed to support this goal (see page 26 for a summary). Regarding the goal to enhance residency efforts, we did not discover meaningful evidence to support the hypothesis that increasing the percent of officers living in the city would result in the ultimate goals of improving officer-community relationships or reducing crime. Evidencebased strategies have been proposed to improve officer-community relationships, which are outlined in this report (see pages 44-45 for a summary).



Challenge

Enhancing Recruitment Efforts

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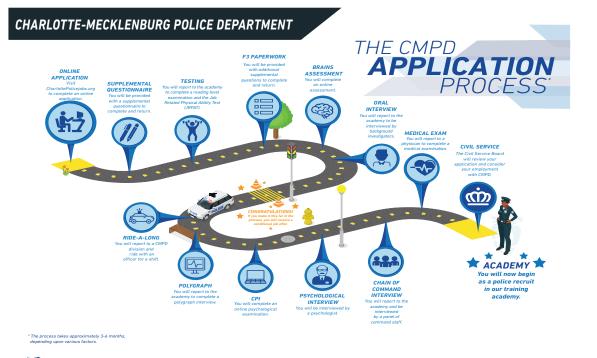
What is Known

The CMPD, just like many police departments across the country, has been grappling with the challenge of filling vacant officer positions for several years. As Charlotte continues to grow, the number of positions will need to grow as well. Not only does the CMPD have the challenge of finding candidates for these positions, but candidates need to be qualified individuals who represent the diversity within the Charlotte-Mecklenburg region.

Recruiting qualified and diverse candidates is not a challenge that is unique to Charlotte. Indeed, police recruitment has proven to be difficult since the 1990s as qualified candidates gravitate towards higher paying positions in the private sector (Taylor et al., 2005). Arguably, recruitment for police officers is more difficult than ever given the current national climate as well as the increased scrutiny that officers face.

Despite these challenges, CMPD is on the cutting edge of several best practices outlined in the field for recruitment and hiring of police officers. The selection process is rigorous, evaluation-focused, and bias is mitigated via standardized questions, multiple evaluators, and the use of minimum thresholds. In working with Kelso Communications, CMPD has also adopted recruitment tools and strategies such as:

- 1. Year-round recruitment
- 2. Targeted recruitment at college campuses and military bases
- 3. Geographically targeted recruitment
- 4. Leveraging internet recruitment and ad campaigns
- 5. Recruiting officers with existing Basic Law Enforcement Training (BLET) certifications ("Intermediate" recruits) and officers from a different department who already have the necessary training and experience ("Lateral" recruits)
- 6. Social media presence





Our Assessment of the Challenge

There are three areas of opportunity to fill vacant positions:

- 1. Increase applications
- 2. Decrease disqualifications
- 3. Decrease voluntary drop-outs

In order to determine the highest impact area, we analyzed deidentified data from the CMPD and evaluated where we might be able to make the largest impact on increasing hired applicants as soon as possible.

Data Summary

Between March 31 and December 31, 2020, there were 2,850 applications for officer positions.

New Trainee Applicants	Intermediate Applicants	Lateral Applicants	
Applicants without any prior experience or training in policework or law enforcement	Applicants who have Basic Law Enforcement Training (BLET) certification but without the required patrol experience	Applicants who have previously worked in a difference police department	
Of the new trainee applicants:	Of the intermediate applicants:	Of the lateral applicants: • 4% were hired	
・2% were hired	\cdot no hires at the time $^{\circ}$	• 33% voluntarily	
• 41% voluntarily	• 18% voluntarily	dropped out	
dropped out	dropped out	• 52% were disqualified [▷]	
\cdot 34% were disqualified	\cdot 77% were disqualified $^{ m b}$	• 11% were still going	
 23% were still going through the process 	 5% were still going through the process 	through the process	

^a The path for Intermediate applicants was new at the time and no applicants had finished the application process as of December 31, 2020. ^b Discussions with CMPD stakeholder revealed that these high rates are likely elevated due to applicants starting the wrong application.

Voluntary Drop-outs

We defined voluntary drop-outs to be any applicant who explicitly withdrew their application, but also those who did not complete steps of the process within the provided timeframe, did not reach out to complete that step at another time, and did not respond to follow-up communication from the CMPD.

Disqualifications

We defined disqualifications as applicants who did not meet the requirements to move on to the next stage of the process in the application.

High-Level Summary of Results by Demographics

Gender	Race/Ethnicity
 Far fewer women applied compared to men 	 Far fewer Latino individuals applied compared to their representation in Charlotte-Mecklenburg region (~13%)
• Women were hired at a significantly lower rate compared to men	African American applicants were hired at a much lower rate compared to
Voluntary drop-outs and disqualification rates were similar across women and men, except	white applicants African American applicants were
the disqualification rate for lateral applicants was higher for women than men	disqualified at a significantly higher rate than white applicants

Our Focus & Rationale

Do we focus on increasing applications?

The CMPD have been working on ways to increase their reach to new applicants in Charlotte and across the country. Notably, these efforts seem to be increasing applicants as the CMPD saw an 18% increase in applicants from 2019 to 2020. Therefore, although we can apply a behavioral science lens to communication materials and developing additional channels to help increase the number of qualified applicants entering the application process, the other areas may allow us to make a stronger impact.

Do we focus on decreasing disqualifications?

There are a few areas within this focus that we could assess: (1) Changing applicant behavior, such as reducing mistakes or missing information that will get flagged as dishonesty, (2) Changing assessor behavior, such as the reliability of disqualification reasons within and across raters, and (3) Changing disqualification criteria, such as assessing whether certain criteria introduce unnecessary barriers.

Upon our evaluation, we identified that (1) dishonesty disqualifications are infrequent, (2) the CMPD uses a multi-evaluator process, reducing the issue of evaluator reliability, and (3) the disqualification criteria are almost entirely state driven with few additional criteria being added by the department. Therefore, for the purposes of this project, we have deprioritized the focus on decreasing disqualifications.

Do we focus on decreasing voluntary drop-outs?

The rate of voluntary drop-outs overall is 40% of applicants. This highlights a fruitful area of opportunity to increase hiring rates by finding ways to support individuals who have already indicated interest in becoming an officer by starting the application process. Additionally, by decreasing the rate of voluntary drop-outs, we can support the efforts already in place to increase the number of applicants by keeping as many of the qualified applicants in the process for as long as possible. Therefore, in collaboration with CMPD and City of Charlotte, we focused our efforts on decreasing voluntary drop-outs.

What We Want to Know

To determine the most impactful strategies to decrease voluntary drop-outs, we need to answer the following questions:



b. Do individuals start the process with beliefs or experiences that hinder their progression?

2. What can be done to buffer against these reasons and motivate application completion?

- a. What have others done in the domain of police applications and analogous challenges?
- b. What strategies would our team of behavioral scientists suggest testing?

What We Did and Subsequently Uncovered

1. Why are individuals voluntarily dropping out of the application process?

Research activities to answer the question:

Expert Diagnostics Think Tank Deep Dive of the Scientific Literature

Behavioral Audit

To get a better understanding of the underlying behavioral drivers of voluntary drop-outs, we conducted three research activities. We started out by conducting a think tank with our team of behavioral experts to identify all potential barriers to CMPD application follow through. We complemented this with a comprehensive review of the scientific literature to pinpoint those barriers which had been found to significantly propel drop-out rates in similar contexts, as well as in other types of processes. Finally, we ran a behavioral audit of the first steps in the application process to detect potential behavioral barriers and friction points inherent to this particular step of the process. These research activities helped to identify barriers in the application process that applicants were unable or unwilling to self-report.

Ideal Data Driven Diagnostics for a Longer Time Period

Predictive Modeling of Voluntary Drop-outs

A predictive model that leverages data from applicants can complement the behavioral barriers we uncovered. This model would identify self-reported beliefs and experiences that predict whether or not an applicant will voluntarily drop-out, adding a data-driven layer of potential barriers to completing the process. The model would entail:

1. Assessing the beliefs and experiences of applicants before they begin the application process.

Applicants must be assured that their beliefs and experiences will not be used to determine their eligibility as a new trainee. This will build trust and ensure a healthy response rate.

2. Tying their responses to their eventual progress through the application process.

This requires a large enough sample size for an adequate statistical analysis and implies a fairly long data collection period to achieve the required sample size. Therefore, we were unable to use this approach in the current project.

Expert Diagnostics Think Tank

In our think tank session, our diverse team of behavioral experts carefully analyzed the voluntary drop-out challenge at the CMPD, evaluating the evidence and taking into consideration both the qualities that the CMPD is looking for in applicants, as well as the application process's characteristics. The session was orchestrated in a such a manner that our team of experts produced a long list of behavioral barriers that can reasonably motivate voluntary drop-outs at different stages of the application process. All the potential barriers elicited had a robust grounding in the behavioral science literature. They have been evidenced as key barriers to behavior in similar contexts, either by our own team in other projects, or by other researchers in published journals.

We then curated this list, collapsing and categorizing barriers according to the behavioral principles they address. Common ideas and behavioral principles emerged as we organized barriers into a total of 22 clusters. Some of the most prominent clusters included barriers related to misaligned values and perceived fit, perceived difficulty of the process, misunderstanding of application instructions, disapproval from family and friends, and low confidence. This curated list of potential barriers served as a key input for the next step in our behavioral diagnostic process, which involved a deep dive of the scientific literature to flesh out how these barriers impact behavior.

Deep Dive of the Scientific Literature

We complemented the list of potential barriers generated by our behavioral experts with a deep dive of the behavioral science literature. This allowed us to narrow down the list with the strongest, most compelling evidence relevant to the challenge at hand. To this end, we reviewed a vast number of articles in peer-reviewed scientific journals that evaluated how the different barriers identified in our think tank had impacted behavior in analogous contexts and comparable populations.

Nevertheless, all the potential barriers identified by our think tank converged on an overarching hypothesis that served as a guiding framework for our deep dive of the scientific literature: individuals who voluntarily drop out had enough motivation to complete the first step, but their motivation is fragile. Depending on the strength and source of their motivation, even a small amount of friction experienced in the process can bring them to the tipping point of dropping out or abandoning the application.

The corresponding thorough literature review buttressed five major barriers that we postulated as the primary causes of voluntary drop-outs:



Barrier 1: Misguided Belief About the Process

Before engaging in tasks or processes, people will often form a set of expectations surrounding those activities. When they actually engage in those activities, they will use their preconceived expectations as a comparative referent to form judgments, which in turn have an effect on behavior (Oliver, 1980). Such expectations may be rooted in the task's complexity, difficulty and/or time needed to complete it. A misalignment between a task's difficulty and the actual experienced difficulty, for example, could lead to reductions on motivation and intent to complete the task. For example, researchers investigating this phenomenon asked participants to rate the perceived difficulty of performing tasks such as reading several pages, exercising, and flossing. Perceived difficulty was found to be negatively associated with intentions to complete these tasks (Rodgers et al., 2008).

The empirical evidence found in the literature allowed us to hypothesize that applicants are more likely to drop out when they hold incorrect or misguided beliefs about the CMPD application process. The application is depicted in the CMPD's webpage as a winding road consisting of multiple steps and tests, which could be perceived as an overly difficult or complex process. The first of these steps (i.e., the initial online application) has eight distinct and lengthy sections that must be completed by applicants. As the first experience in the process, it can lead applicants to generate misguided beliefs about the difficulty and complexity of the entire process.

Barrier 2: Lack of Officers in Social Network

Previous research has pointed to the relative importance of social support in identifying and pursuing police enforcement career choices. Namely, researchers have found evidence of the considerable influence parents, peers, and career counselors can have in selecting a career in police enforcement (Raivola & Puhakka, 2000). These findings are in line with a robust body of research on the importance of role models as pillars of social support in general, and for career choice and advancement in particular (Bandura, 1977). Career indecision, for example, frequently emerges among undergraduate students who need to choose an academic major as well as to develop career goals for the future. However, researchers have found that role model supportiveness and role model relationship quality can significantly contribute to career decidedness (Perrone et al., 2002). Likewise, in a study conducted with 386 female undergraduates, researchers found that having a role model that students look up to in a given profession impacts career choice directly, and also influences the students' perceived abilities in the same domain (Quimby & De Santis, 2006). In a different study with undergraduate medical students, researchers found that having a positive role model in a particular specialty (i.e., anesthesia), was strongly associated with both a satisfactory learning experience and a career intention in that specialty (Watts et al., 1998). As the evidence suggests, having a professional you can look up to in your social network can impact your decision to pursue said profession.

Hence, we hypothesize that CMPD applicants are more likely to drop out when they do not have police officers in their social network. This is particularly important in the early stages of the process, as many applicants who have only completed the first step have not yet fully committed to the effort and determination that the entire application entails. They are still in "decision mode," essentially gathering information to prove to themselves that this is the right career choice. Knowing a CMPD officer who can provide a first-person perspective can be instrumental in getting these early-stage applicants to fully commit.

Barrier 3: Poor Perceived Job Fit

The perceived compatibility and degree of alignment between an individual and an occupation has been shown to have a positive association with work engagement (Cai et al., 2018) as well as performance (Han et al., 2015), and to mitigate employee turnover (Boon & Biron, 2016). Relatedly, the fit between an individual and an organization has been linked to organizational attraction and retention, and employees' work-related attitudes and actions (Hoffman & Woehr, 2006; Kristof-Brown et al., 2005). For example, in one study, researchers examined how perceived job fit impacted graduate applicants' attraction to the organization and their intentions to accept a job offer prior to, during, and at the end of the selection process. They found that perceived job fit was positively associated with organizational attraction at all stages, and with intentions to accept a job offer at the end of the selection process (Carless, 2005). In another study involving applicants for the position of police officer, researchers found that perceptions of police work were inconsistent with the actual characteristics of the job.

In another study involving applicants for the position of police officer, researchers found that perceptions of police work were inconsistent with the actual characteristics of the job. In particular, potential applicants often underestimate the importance of good communication, and problem-solving skills in social domains, as well as features of community policing as key for the job. This disconnect was found to be a major barrier to application, especially for women (Lord & Friday, 2003). Given the crucial impact that perceived job fit can have in pursuing a career, we hypothesize that CMPD applicants are more likely to drop out when they do not perceive themselves as fitting well with the job.

Barrier 4: Low Confidence

Self-efficacy is the term used in behavioral science to characterize a person's confidence in their own abilities. More specifically, self-efficacy is defined as the belief in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands (Wood & Bandura, 1989). It has been shown to predict several important work-related outcomes, including job attitudes (Saks, 1995), training proficiency (Martocchio & Judge, 1997), and job performance (Stajkovic & Luthans, 1998). Several studies have provided evidence of the crucial role of self-efficacy in pursuing and advancing a career in policing (e.g., Wolter et al., 2019). In a study conducted with police applicants and high-school students, researchers found that higher self-efficacy was linked with a higher probability to apply to a police department. Likewise, interest in a given set of activities related to the job was found to be associated with higher-self efficacy in those domains. Crucially, the researchers found that people who have an interest in community-oriented policing are likely to also have interest in traditional policing activities (Lord & Friday, 2003).

The evidence suggests that perceived self-efficacy can have a considerable impact in police recruitment efforts and applicants' decisions. Consequently, we hypothesize that CMPD applicants are more likely to drop out when they are not confident in their abilities to pass the application process. As part of our behavioral audit, we found the way the application process is described can lead the applicant to doubt their ability to successfully complete it. The process includes a fitness tests, a biographical assessment, a medical exam, a polygraph test, and two interviews. For some applicants this might sound like an exciting journey, but for others it could have a detrimental effect in their self-efficacy and their overall confidence.

Barrier 5: Low Commitment

Achieving a given objective or reaching a certain goal begins with the generation of intentions. Intentions to carry out actions that will make it possible to reach that goal. Unfortunately, intentions often do not materialize into concrete actions (Gollwitzer & Sheeran, 2006). Oftentimes, this gap between intentions and actions is caused by a lack of commitment (Bryan et al., 2010). Low commitment to a specific job or career can have a detrimental effect on persistence in pursuing career goals (Colarelli & Bishop, 1990). Low career commitment is also associated with a higher likelihood to change careers rather than persevere in achieving career objectives (Colarelli & Bishop, 1990).

Given how low commitment can influence decision-making and follow through on career related activities, we hypothesize that applicants are more likely to drop out when they are not committed to working for the CMPD.

Behavioral Audit

The barriers identified by our think tank and further refined by our deep dive of the scientific literature, were supplemented with a systematic behavioral audit of the first steps in the application process. To this end, we undertook the application process ourselves to gain firsthand experience with it. This allowed us to uncover behavioral barriers innate to the forms and user experience design of the first steps in the application process.

Firstly, the behavioral audit found a relative lack of emotional triggers to drive action. By describing the benefits of reading the instructions or of completing the application, users are given a concrete goal with potential personal benefits that can help drive motivation and action.

Secondly, at various points during the application we found an excessive use of text. Whenever possible, text should be reduced to promote processing fluency (the ease with which information is processed) among applicants. Excessive text can impede flow and add unnecessary friction in the process. This is particularly important in the first stages of the application, where the prime objective is to generate engagement and follow through.

Similarly, the behavioral audit uncovered some unnecessarily complex question labels (e.g., Nepotism) that can create confusion and lead to procrastination by applicants. As a general rule, labels throughout the application process should aim to simplify comprehension. In line with this tenet, repeated questions should be minimized or omitted. Asking the same question several times diminishes the perception of progress and can negatively impact motivation.

In other parts of the application, behavioral principles such as the endowed progress effect can be leveraged to optimize the experience and encourage follow through. The endowed progress effect takes place when people provided with artificial advancement toward a goal exhibit greater persistence toward reaching that goal (Nunes & Drèze, 2006). For example, by converting a task requiring eight steps into a task requiring ten steps but with two steps already complete, the task is reframed as one that has been undertaken and incomplete rather than not yet begun, thus promoting follow through (Nunes & Drèze, 2006). In the application, applicants who have already read the instructions and registered their account, can be made visually aware of the completions of those two steps to drive application follow through.

Finally, reducing hassle costs throughout the application process can help reduce voluntary drop-outs. For example, the follow-up email to continue with the supplemental application does not include a link to the application page. Making applicants search for the application page instead of directly providing a link within the email increases hassle costs and allows applicants to rationalize leaving it for later. This can be easily solved by including the link within the email.

2. What can be done to overcome these barriers and motivate application completion?

We conducted three research activities to answer this question:



Collaborative Ideation Workshop Scientific Literature Review

To develop strategies to address the barriers to application completion outlined above, we conducted three research activities. First, a group of behavioral scientists gathered to develop strategies backed by their fields of expertise, their knowledge of foundational research, and their experience applying behavioral science insights to real-world challenges (Expert Ideation Think Tank). We then conducted a Collaborative Ideation Workshop with City and CMPD staff to further develop our proposed strategies, develop new strategies, and inform how the strategies can be applied to the CMPD context specifically. Finally, we consulted the scientific literature to further evaluate what other experts have found in tackling similar or analogous challenges and under what circumstances efforts were effective (Scientific Literature Review). We outline the proposed strategies that we prioritized and the scientific rationale for each in the next section.



Our Recommendations

Our *Recommendations*

We divided our recommendations into two groups: (A) Modifications to the Application Process, and (B) New Initiatives.

A. Modifications to the Application Process

The plan to tackle voluntary drop-outs should start out with a set of modifications that we suggest being put in place in the current application process. These modifications can be implemented within the various forms and platforms already in place for the application process. They have been formulated based on our expert assessment of their potential to reduce voluntary drop-out rates via proven behavioral science tactics.

1. Summary Recommendations from the Behavioral Audit

We start out by summarizing our main recommendations uncovered by the behavioral audit we conducted of the initial online application step:

- Describe the benefits of completing each section in the application to drive motivation and action.
- Reduce excessive text to improve comprehension and flow.
- Minimize repeated questions and simplify labels to optimize cognitive processing.
- Include visual cues of steps that have been already completed to promote follow through.
- Include links to next step in the follow-up email to reduce hassle costs and promote immediate action.



BEworks

2. Add Implementation Intentions

When individuals want to reach a goal they have set for themselves, they usually start out by generating the intention to carry out actions that will bring them closer to that goal. However, intentions often fail to transform into concrete actions (Gollwitzer & Sheeran, 2006). A growing body of research suggests that strengthening intentions with a plan that specifies when, where, and how actions will be carried out promotes goal realization. These plans are called implementation intentions (Gollwitzer & Sheeran, 2006). Implementation intentions have been effective in driving behaviors of all types, including personal goal attainment, service acquisition, project execution, and cooperation (Gollwitzer & Sheeran, 2006). They have even proven effective in mobilizing behaviors traditionally considered difficult to promote in the target population, as in the case of influenza vaccination. One group of researchers found that an intention implementation, which asked participants to write down the date and time they planned to receive the vaccine, increased vaccination rates by 4.2 percentage points (Milkman et al., 2011).

In this sense, requesting applicants to provide a specific date and time when they plan to complete the second part of the application could help minimize voluntary drop-outs. Specifically, as soon as they have finished entering all their information in the initial online application, applicants could receive a prompt to input the date and time they plan to complete the supplemental questionnaire. Informing applicants about the amount of time they will need to complete the supplemental questionnaire will also help them to prepare and better plan. This will help mitigate procrastination and set them up for the successful completion of the second step in the process.

3. Add Chunking and Pseudo-Set Framing

Chunking refers to the grouping of information into easily digestible and understandable components. Psychology research suggests that chunking information improves comprehension and decision making. In particular, this type of information reorganization facilitates processing, increases the probability of information being remembered and promotes its dissemination (Gobet et al., 2001). Chunking has been widely used to optimize communications and promote associated behaviors, including in digital domains such as with the adoption of mobile banking applications (Wijland et al., 2016). With complex processes involving multiple steps, chunking can facilitate comprehension and promote action. The application is currently described as a winding process with many distinct and seemingly disjointed steps. By grouping these steps into logically cohesive stages, the process can be simplified and made easier to understand for applicants.

Optimizing the presentation of the steps in the CMPD's landing page via chunking will also inherently create pseudo-sets: arbitrary groupings of discrete items or tasks as part of a cohesive whole or group via visual cues and/or written descriptions (Barasz et al., 2017). People possess a natural aversion to incompleteness, and frequently demonstrate behaviors that seek to complete incomplete sets (Ellis, 2013). Even without providing an explicit goal, pseudo-sets have been shown to alter people's perception and trigger their desire to complete them, even when such an action of completion involves additional effort without additional rewards (Barasz et al., 2017).

1. "Real Police Officers" Initiative

In virtually all occupations there is a difference between the external image that people have of the job and what the real professionals actually engage in and perform as part of their job. The external image of policing has centered on aspects of the profession that are consistent with some of the more stereotypical traits traditionally portrayed in the media. Thus, people tend to focus on tasks such as arresting and detaining people, conducting searches and seizures, using physical force, and using lethal force as some of the most prominent activities of policing. However, contrary to popular belief, other tasks such as providing emergency assistance and handling human relations problems are oftentimes more common within the police profession. Consequently, qualities such as honesty, patience, and good communication skills are highly regarded in the profession. Community policing particularly emphasizes these less stereotypical traits. The extent to which the external image and the actual characteristics of the job coalesce can influence the likelihood that good candidates decide to apply to become a police officer. It can also have a considerable impact on the likelihood of completing training and remaining in police work (Lord & Friday, 2003).

We have formulated a proposed strategy that is consistent with the behavioral science research on how to tackle such misperceptions:

Proposed Strategy

Create a new narrative around what it means to be an officer.

We hypothesize that this will decrease voluntary drop-outs by broadening perceptions about CMPD officers and increasing perceived job-fit.

In line with this strategy, the "**Real Police Officers**" initiative would leverage a multitude of channels to communicate what real CMPD officers do as part of their job. Content could be harnessed to drive a compelling narrative about the rewarding tasks and duties that are less prominent in the public eye, but that are undoubtedly at the core of being a CMPD officer. Traits and skills such as good communication, and problem solving in social domains, as well as features of community policing could gain the visibility needed to attract candidates who might otherwise not apply or who might falter in their determination throughout the application process. Short videos, testimonials and infographics could be used to showcase "Real Police Officers" with an emphasis on the positive outcomes the job has both on the community and on the police officers themselves.

2. "Expanding the Network" Initiative

When people engage in new ventures or processes, they often must deal with unexpected difficulties and complexities inherent to such new ventures. Transitioning from high school to college or embarking on a mid-career change are examples of situations characterized by novelty and uncertainty. Having adequate social support is critical to successfully navigate these types of situations. Social support has been shown to help buffer psychological distress in college students (Lepore, 1992), to mitigate academic stress and build resilience (Wilks & Spivey, 2010), and even to lower cardiovascular reactivity to stressful activities such as giving a public speech (Lepore et al., 1993).

Likewise, studies have demonstrated the positive impact that adequate social support can have on work engagement in different occupations (Christian et al., 2011; Halbesleben, 2010). For police officers in particular, researchers have found positive associations between social support (provided or enabled by colleagues and supervisors) and work engagement (Biggs et al., 2014; Gillet et al., 2013; van Gelderen & Bik, 2016). In other studies, social support has been proven to drive student persistence (Skahill, 2002) and to have a positive impact on active career preparation (Hirschi et al., 2011).

For CMPD applicants, having access to a network of individuals with specific professional experience can provide the social support needed to stick with the application process and follow through on their career choice. The proposed strategy focuses on expanding this specific social support network:

Proposed Strategy

Increase opportunities to connect with officers.

We hypothesize that this will decrease voluntary drop-outs by creating social supports for those who may not already have them.

The **"Expanding the Network" initiative** inspired by this strategy aims to create scenarios that increase the chance of applicants to interact with CMPD officers. This will allow applicants to ask questions and resolve doubts surrounding the application process in a low-pressure context. It will also create a natural environment for applicants to build relationships with potential role models and learn first-hand the ins-and outs of the profession. In-person meet-ups, virtual info sessions, and open house events could help build these early-stage relationships between applicants and officers. These efforts could be complemented with social media to incorporate CMPD officers into the applicants' digital networks (e.g., Facebook groups and LinkedIn networks). For maximum impact, we recommend the CMPD officers participating in this initiative have been recruited in the last couple of years. This ensures that information and support they provide regarding the application process is not outdated. It also boosts their credibility and their opportunities to make meaningful connections with potential applicants.

3. "Acknowledgment with Encouragement" Initiative

Our overarching tendency to adopt the option preferred by other people is called the social proof heuristic. Its influence on behavior has been studied extensively and it has been shown to have a substantial impact on people's decisions (Melnyk et al., 2021). Social proof can be triggered by presenting majority information on products and services, or suggesting that many people have behaved in a certain way in previous occasions (Cialdini, 2006; Lun et al., 2007). Social proof can be especially effective in influencing behavior when individuals lack the motivation necessary to complete a give a task (Jacobson et al., 2011; Salmon et al., 2015). For instance, in one study, student chose to complete extra surveys when a descriptive norm told them that other students allegedly also completed extra surveys (Jacobson et al., 2011).

For CMPD applicants who feel uncertain about their ability to tackle the application process, social proof can be a source of motivation that propels them to stick with it. The corresponding proposed strategy leverages this behavioral science approach to drive persistence:

Proposed Strategy

Provide social proof of success for those who face difficulties with the application process.

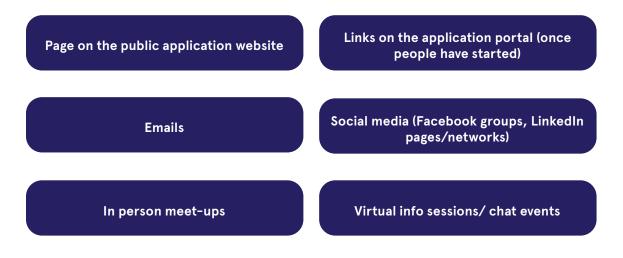
We hypothesize that this will decrease voluntary drop-outs by boosting motivation to overcome challenges.

The **"Acknowledgment with Encouragement" initiative** operationalizes this strategy. At its core, this initiative is about acknowledging applicants who have succeeded despite the seemingly insurmountable challenges of the application process. By putting the spotlight on these "ordinary" individuals who were nonetheless able to overcome the difficulties along the journey, applicants will feel encouraged to continue with the application themselves. The relatability of these successful peers, coupled with testimonials on how they dealt with the challenges of the application process, will boost motivation and help reduce voluntary drop-outs.



Channels

The three novel initiatives described above address the overarching goal of helping apt applicants who nevertheless fail to complete the first steps of the application process because their motivation is fragile. Because even a small amount of friction experienced in the process can bring them to the tipping point of dropping out, a multifaceted approach to broaden and optimize the effectiveness of each initiative is highly recommended. Therefore, we suggest using several channels in tandem to amplify the effect of these three initiatives on applicants' behavior.





Summary of Recommendations to Reduce Applicant Voluntary Drop-outs

A. Modifications to the Application Process

- 1. Describe the benefits of completing each section in the application to drive motivation and action.
- 2. Reduce excessive text to improve comprehension and flow.
- 3. Minimize repeated questions and simplify labels to optimize cognitive processing.
- 4. Include visual cues of steps that have been already completed to promote follow through.
- 5. Include links to next step in the follow-up email to reduce hassle costs and promote immediate action.
- 6. Encourage applicants to specify goals for when they will complete different steps of the process to help them follow through with their own intentions.
- 7. Reframe particular steps as falling under overarching milestones to help the process seem more manageable.

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B. New Initiatives

1. "Real Police Officers" Initiative

Create a new narrative around what it means to be an officer to decrease voluntary drop-outs by broadening perceptions about officers

2. "Expanding the Network" Initiative

Increase opportunities to connect with officers, to decrease voluntary drop-outs by creating social supports for those who may not already have them

3. "Acknowledgement with Encouragement" Initiative

Provide social proof of success from those who face difficulties with the application process, to decrease voluntary drop-outs by boosting motivation to overcome challenges

See pages 20-25 in the report for more information about these recommended strategies.



Challenge

Enhancing Residency Efforts

BEworks

What is Known

Officer residency has been a topic of conversation since the early days of modern police departments. Communities have long commented on the desire for civil servants, including police officers, fire protection services, and teachers to live in the communities they serve. For officers, many departments implemented residency requirements, mandating officers to live in their jurisdictions. Today, although mandates are less common, several departments have proposed or implemented financial incentives for officers to live in the cities they serve (or even particular areas of the cities).

Below, we review the incentives available to officers in Charlotte and how these compare to programs in peer cities.

Residency Requirements & Incentive Programs in the CMPD

CMPD Residency Requirements

Officers are required to live within 45 miles of CMPD Headquarters.

CMPD Residency Incentive Program

In 2018, the CMPD began offering \$2500 residency incentive to each officer who lives in Charlotte. The payment is divided into two \$1250 payments over two years. During a time when police work is under scrutiny, on top of the high cost of living in Charlotte, the hope was to increase the visibility of officers thereby strengthening connections between residents and officers.

Recommendation 6 in the SAFE Charlotte Report describes an interest in incentivizing officers to specifically live within the "Corridors of Opportunity." The Corridors of Opportunity are six areas within Charlotte identified as being historically disinvested. The City of Charlotte is working to invest in these areas by supporting existing businesses and advancing community safety, mobility, and housing options. As such, one aim is to integrate the residency incentive program with the Corridors of Opportunity program such that officers would be incentivized to live in or near the Corridors of Opportunity.

Comparisons to Programs in Other Cities

Of the 20 cities evaluated, 4 have residency requirements (Fort Worth, TX; Indianapolis, IN; Kansas, MO; Memphis, TN).

Comparisons to Programs in Other Cities

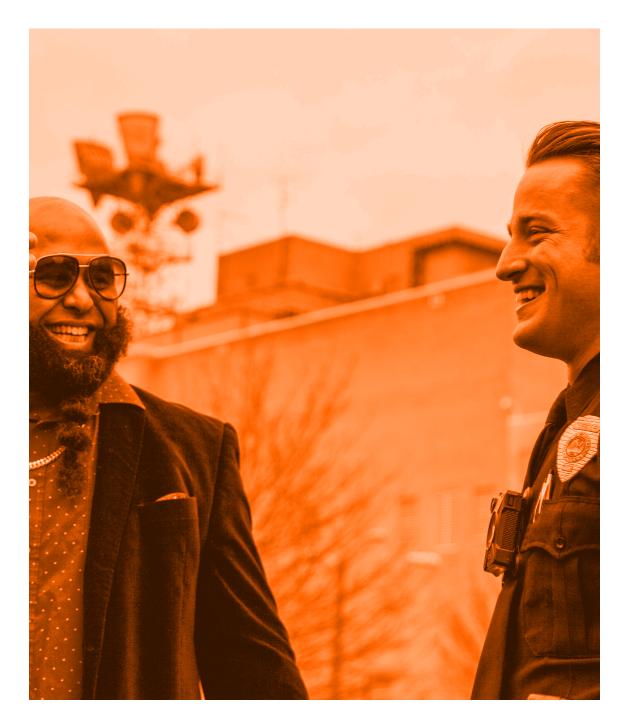
Of the 20 cities evaluated, 4 have home purchase assistance programs (Atlanta, GA; San Diego, CA; Louisville, KY; Memphis, TN).

Comparisons to Programs in Other Cities

- Portland, OR offers lieutenants and other higher command staff a 5% pay increase if they live within city limits.
- Houston, TX proposed a program that would offer \$25,000 over the course of three years to officers who moved to high-crime neighborhoods (Houston Police Department, 2015). It doesn't appear that the program was implemented.

Additional Housing Programs Available to Officers

HouseCharlotte offers several down payment assistance programs for people who hold various positions (DreamKey Partners, 2021b). One program, the Charlotte Community Heroes Program, is specifically for law enforcement officers and other essential workers. It offers funding up to \$30,000 towards home purchases within Mecklenburg County for those with income between 80% and 120% of the area median income. HouseCharlotte offers other home purchase assistance programs for those who are not eligible for the Community Heroes Program. These programs can be combined with other down payment assistance programs such as the North Carolina Housing Finance Agency Community Partners Loan Pool (CPLP; DreamKey Partners, 2021a).



Wha is Known

Our Assessment **of the** Challenge

How many officers have taken the incentive to live in the city?

As of December 2020, 430 officers have utilized the \$2500 residency incentive. Despite the significant number of individuals who took the incentive, it is unclear whether these individuals already lived in the city at the time or moved from outside the city based on the available data. It is also unclear whether individuals who took the incentive eventually moved outside the city.

The data suggest that the residency incentive program may not be effective as a recruitment tool. First, the majority of individuals who took the incentive were officers who already lived in the city, for equity purposes. This made up 89.5% of the officers who received the incentive (385 of the 430). The remaining 45 individuals were new hires since the inception of the program. These 45 individuals make up only 15.3% of the 295 new hires between the start of the program and December 2020. Again, it is unknown whether these individuals were already living in the city or were motivated to move by the incentive program. Overall, the data suggests that most new hires are not utilizing the residency incentive.

In light of these findings, we asked

What the Stakeholders Had to Say About the Residency Incentive Program

Our stakeholder interviews revealed that officers rarely took the incentive to move into Charlotte (as evidenced by only 10.5% of those who took the incentive having been hired after the inception of the residency program); those who do move into Charlotte from surrounding areas often do so for other reasons. As such, many stakeholders hypothesized that the majority of officers who had taken the residency incentive likely already lived in Charlotte. Further, our stakeholder interviews revealed that similar to the residency incentive program, other housing assistance programs (such as the Community Heroes Homeownership Program) were also under-utilized by officers. Taken together, existing housing assistance, including the current residency incentive program, do not seem to be effective in driving officer residency in Charlotte.

stakeholders to hypothesize why most officers choose to live outside Charlotte in order to further our understanding of whether the barrier to living in Charlotte is finance related.



Why aren't officers living in the city?

Interviewed officers provided critical insight. They noted that finances are not the primary reason for living outside of the city.

Lifestyle factors are at play:

Lifestyle factors, such as the quality of schools, neighborhood preferences, and square footage of living space are important.

Safety concerns are paramount:

Many officers expressed concern about their personal safety and the safety of their family members when living in the same community as the one they police, especially when they can be identified via a marked car.

Reframing the challenge: What is the ultimate purpose of increasing officer residency?

Given the primary concerns are not financial in nature, it is understandable that there is such a low uptake of housing assistance programs, including the current residency incentive program. As such, even if there were to be an increase in the monetary incentive offered, getting officers to move into Charlotte will remain an uphill battle.

Therefore, in considering an optimal residency program that balances budget with program efficacy, we sought to better understand the ultimate purpose for increasing officer residency in Charlotte. Doing so would allow us to focus our efforts on developing solutions that target the most impactful behaviors.

When stakeholders were asked to provide their perspective on the ultimate purpose of the residency incentive program and the purpose it is thought to serve in Charlotte, most of their responses fell into two categories: crime reduction and enhancing officer-community relationship. Based on these perspectives, we reviewed the scientific literature to provide a preliminary assessment of whether there was existing evidence to support the link between officer residency and both crime and officer-community relationship.



Is the ultimate goal to reduce crime?

The Hypothesis:

A number of stakeholders hypothesized that increasing the number of officers who live inside Charlotte–especially within the Corridors of Opportunity–would help to advance safety and reduce local crime.

What the Scientific Literature Says:

In examining the literature, there is a lack of evidence to suggest residency will have a direct and positive impact on crime. For instance, a study using a small sample found no correlation between residency percentage and both perceived and actual crime (Smith, 1980). In a separate, large scale study, Murphy and Worral (1999) examined the relation between residency requirement and community members' confidence in officers. The researchers found that the more officer residents there were in an area, the more negatively community members viewed officer's ability to protect the public. Officer residency was also not correlated with the public's view of officers' ability to solve or prevent crimes. Furthermore, it should be noted that community-oriented policing—such as Neighborhood Watch or community meetings—has shown to have a limited impact on crime prevention in systematic analyses across multiple studies (Gill et al., 2014); in fact, the best ways to prevent crime tend to be proactive patrols or targeted arrests for certain types of crimes (Gottfredson et al., 1998).

Conclusion:

Altogether, these findings provide relatively robust evidence that officer residency would be unlikely to have a significant and direct impact on crime.

Is the ultimate goal to improve officer-community relationships?

The Hypothesis:

A second belief that we heard in our stakeholder interviews is that increasing officer residency within Charlotte can improve officer-community relations. The premise is that officers who reside in the communities that they serve will have greater knowledge of the communities' needs and develop more empathy and knowledge of their constituents, resulting in a more collaborative and cooperative relationship rather than a hostile one.

What the Scientific Literature Says:

There has been limited research examining this empirical question. Officercommunity relationship can be studied in a number of ways.

In examining whether officer residency is related to reported use of excessive force, we find that the evidence is mixed at best. One study found that a greater percent of officers residing in a given community is correlated with fewer community members reporting officers' use excessive force. This relationship persisted even when accounting for size of police department, community wealth, and percentage of African Americans living in the community (Smith, 1980). However, a more recent paper found that when additional factors were taken into account, such as boards to report excessive use of force, any significant effect of officer residency and racial representation was mitigated, suggesting that the particular context of a given city and police department are more influential than residency (Trochmann & Gover, 2016).

When conceptualizing officer-community relationship in terms of community members' impression of officers, we found only one study examining the connection between these impressions and officer residency—in fact, the same study reported early by Smith (1980). Specifically, when examining whether the percent of officer residents in a community is associated with improved perception of officers, it was found that residency was correlated with a greater proportion of community members seeing officers in a positive light (i.e., that they were more honest and courteous), had outstanding job performance, and were very confident of police competence.

Conclusion:

There is limited and mixed evidence to suggest that officer residency is related to positive officer-community relationships.

To recap, based on conversations with stakeholders, the two primary reasons for wanting to increase officer residency in Charlotte are to reduce crime and improve officer-community relationships. In reviewing the scientific literature, we find that officer residency itself may have little to no impact on crime. While there is a potential connection between officer residency and officer-community relationship, it remains unclear whether there would be positive impact given the limited research on officer residency and officer-community relationship, especially as it pertains to Charlotte.

What We Want to Know

To determine whether more resources should be devoted towards developing a residency program that aims to serve the ultimate goal of improving officer-community relationships, we sought to answer two questions:

1. Do Charlotte communities with officer residents have better officer-community relationships?

The answer to this question will allow us to better understand whether a residency program will be effective in driving officer-community relationships in Charlotte.

2. What is associated with positive officer-community relationships in Charlotte?

If we understand what drives officer-community relationships in Charlotte, we can turn to scientific evidence on how we might implement those drivers.



What We Did and Subsequently Uncovered

Our Method

To answer both questions, we designed a diagnostic survey tool with the aim of gathering community members' views of and interactions with CMPD officers.

Two Groups of Respondents

We examined responses between community members who lived in an area (1) with officer residents and (2) without officer residents.

These two groups were determined using two criteria. First, we obtained the zip codes of current officers and identified the eight zip codes within Charlotte where the most officers lived. If a respondent lived in one of these zip codes, they were considered to live in an area with officers. Second, we used was respondents' self-reported knowledge of whether an officer lived within a two-block radius of their resident. If respondents answered yes to this question, then we would also consider these individuals to live in an area with officer residents.

The goal of this diagnostic survey was twofold. One, the diagnostic survey would allow us to examine whether there were any differences in individual community members' views of and interactions with officers, depending on if officer residents lived nearby. This provides a more granular analysis compared to past research we have reviewed. Furthermore, the current diagnostic survey design allows us to examine other factors that were not explored in past research, which may be associated with positive perceptions of officers.

Diagnostics Survey Sample

We received survey responses from 126 Charlotte community members, 64% of whom lived in an area near an officer resident. The makeup of the sample is relatively diverse. See Appendix D for a breakdown of the sample by gender and ethnicity and a detailed summary of all questions and results.

Do Charlotte communities with officer residents have better officer-community relationships?

To answer this question, we examined both community members' impression of officers as well as the types of encounters they had with officers (if any), depending on whether they lived in communities with officer residents.

When community members were asked to rate their impressions of officers, we found that responses did not differ between individuals who lived in communities with officer residents than communities without. In other words, living near an officer is not associated with more positive views of officers.

We then examined the number of times individuals interacted with or encountered officers in a variety of situations. Since the majority of individuals reported having no interactions with officers, we examined the percent of individuals who had one or more encounters and compared these responses across the two groups. We found that across the board, the percent of community members who interacted or had passive encounters with officers did not differ whether they lived in communities with officer residents. That is, living near an officer is not associated with more officer interactions or encounters.

What is associated with positive officer-community relationships in Charlotte?

To answer this question, we examined whether any of the factors incorporated in the diagnostic survey was related to positive impressions of officers. We found that the types of interactions and encounters that was related to positive impressions of officers were limited to whether individuals had spoken with an officer in a casual event and, to a lesser extent, whether they have encountered an officer assisting someone else.

Key Learnings & Implications

In summary, we did not find differences in community members' views of officers or the number of encounters or interactions they had with officers as a function of whether an officer lived nearby. Interestingly, however, we did find that casual interactions with officers were linked to more positive views of officers.

These findings are in line with an extensive body of work in social psychology showing that interpersonal interactions between members of different groups can lead to a reduction in intergroup bias and more positive views of one another. This concept is known as contact theory (Allport, 1979).

Our Recommendations

Overall Proposed Strategy

Increase positive, casual interactions between community members and officers

We hypothesize that this will decrease intergroup conflict and prejudice by increasing the similarities individuals see in people from the other group.

3 Initiatives to Bring the Strategy to Life

Our goal is to help bring officers and community members of Charlotte together. To bring our strategy to life, we propose 3 initiatives that are informed by and built on past research and initiatives that serve to both maximize participation and engagement from all parties as well as increase overall impact of the strategy.

"Playing

Together":

drive motivation for initial contact between different social groups by having individuals engage in fun activities or shared interests

"Learning Together":

present opportunities to teach and learn from one another, which can provide an opportunity to level the playing field and equate the status of different social groups

"Sharing

Together":

sharing experiences, beliefs, and feelings that show one's vulnerability that will bring people from different social groups closer

Recommended Sequencing of the Initiatives:

Intergroup contact requires both parties to be willing and motivated to engage with one another. Considering the current national climate, it is important to start with a campaign that minimizes or even helps to curtail any anxieties that different groups may have about interacting with police officers. As such, we recommend focusing first on two campaigns— "Playing Together" and "Learning Together"—to help establish better rapport between community members and officers before tackling the campaign "Sharing Together."

Scientific Rationale of the Initiatives

Contact theory is a long-standing body of work that has been touted as one of the most influential areas of research within social psychology (Pettigrew & Tropp, 2006). It began as a means of desegregating ethnic groups, but the research has since expanded to different types of group identities such as nationality (Adachi et al., 2015) and political stance on policy (Broockman & Kalla, 2016). The core thesis of contact theory is that increased instances of interpersonal contact between individuals of different groups can reduce bias for the other group. Though contact has been shown to be effective in reducing bias in a general, the effects of these interpersonal interactions can be further improved under certain conditions (Alberton & Gorey, 2018; Pettigrew & Tropp, 2006).

Consistent with contact theory, research has shown that individuals who share a close relationship with an officer tend to have more confidence in officers' ability to perform their duties (Lee & Gibbs, 2015). However, interpersonal contact need not be limited to only deep, personal connections; brief, informal interactions have also been shown to reduce intergroup bias (e.g., Broockman & Kalla, 2016). Both sharing a close relationship with a member of a different group and brief, interpersonal interactions can reduce the social distance (i.e., more likely to encounter an officer in one's social circle) between groups which, in turn, provide opportunities for intergroup members to share common experiences and learn about each other's goals and values.

However, it is important to keep in mind that interpersonal contact can come in a variety of different forms and that intergroup relations can benefit from some forms of contact over others. In a field study conducted by Maxson and colleagues (2003), the researchers surveyed residents in different neighborhoods in Los Angeles to ask them about their perception of and interactions with officers. The researchers found that community members' confidence in officer performance and their view of officers was highest when they have only had informal contacts (e.g., conversations with officers on patrol, interacting with officers at community meetings or activities, etc.), and lowest when community members have only ever had formal contact when dealing with officers in an official capacity (e.g., calling the police to request service, officers questioning residents about possible crimes, etc.). In line with this notion, other researchers also found that community members' ratings of how positive an interaction was with a

police officer was correlated with how positively they viewed officers in general (Worrall, 1999). While a number of studies have shown that community members' views of officers become more negative with more contact (see Alberton & Gorey, 2018 for a review), it is critical to note that many of the interactions took place in a formal setting when contact was involuntary. As such, in order to facilitate a better intergroup relationship between police officers and community members, contact should be positive and made voluntarily.

One important benefit that comes with interpersonal contact is that it allows individuals to learn about members of the other group on a more personal level. These individuating pieces of information can help to mitigate the negative effects of stereotypes (Ambady et al., 2004; Rubinstein et al., 2018). Interpersonal contact may be especially impactful for individuals who have never interacted with members of a different group, as their impressions of these other groups will most likely be based on stereotypes (Chang & Milkman, 2020).

While the literature presents compelling evidence that interpersonal contact can lead to improvements in intergroup dynamics, it is important to acknowledge that members of different groups may be reluctant to initiate contact, especially if there has been ongoing and unresolved conflict between groups (Crisp et al., 2010; Halperin et al., 2012). As such, it is important to address and mitigate any anxieties that both parties may have towards initiating contact in order for contact interventions to be successful.

In summary, to ensure that an interpersonal interaction between officers and community members is effective, not only should there be opportunities to initiate connection and contact, but the City should promote contact in a way that motivates all parties to engage with one another meaningfully. Furthermore, to increase the impact of the contact, the interaction should help to increase the perceived similarity between individuals from different social groups or with different group identities, effectively helping to reduce social distance between intergroup members. Additionally, the interaction should encourage intergroup members to see those from a different social group as distinct individuals rather than a mere member of a given social group.

Three Components of Each Initiative

We recommend that each initiative have the following three components:



To increase positive, casual interactions between community members and officers, we suggest enhancing efforts in attending events by creating new events aimed at attracting individuals who are unlikely to positively engage with officers in opportunities currently available (e.g., monthly community meetings, National Night Out). To ensure the efforts and impact of these events reach as many people as possible, we suggest creating marketing and communication campaigns surrounding the events. And finally, to further bolster engagement from officers and community leaders, we suggest education on the rationale and evidence supporting the overall strategy.

Why 3 Components?

Improving officer-community relationships by nurturing the right climate for intergroup contact is a complex challenge that requires continual effort. In other words, a one-shot program or intervention would not likely bring about change. As such, we propose a 3-component approach to have a wide-scale impact, to target different populations, and to drive different behaviors.

Our primary focus is on events because they offer opportunities for community members to have casual, interpersonal contact with officers—the approach backed by the scientific literature. However, although events are hypothesized to be highly effective in driving intergroup contact, oneon-one or even one-on-many interactions require extensive time and effort.

The other two components are therefore

designed to be complementary to and enhance the effectiveness of these events. To elevate the number of people that these efforts can reach, we suggest adding Marketing and Communication about the events to the general Charlotte population as video campaigns and marketing that can result in a wider audience reach. A great example of a successful video campaign in this regard is the Heineken #OpenYourWorld campaign where individuals with opposing views came to a common understanding to overcome their differences. Though these campaigns can be powerful, viewers are merely experiencing the impact of intergroup interactions vicariously, rather than directly. Likewise, Education efforts can help to boost the success of the events. Primarily, Education serves to create buyin from officers and community leaders by teaching them the value of interpersonal contact, which can have a cascading effect on their social network.

A Closer Look at Component #1: Events

Community events, whether in-person or online, serve as opportunities for community members and CMPD officers to initiate interpersonal contact in a casual, safe setting. These events should be designed with the aim of driving memorability and impact, whenever possible. Community events can provide opportunities for community members to have direct, interpersonal contact with members of the police, especially those who may strongly distrust the police and may not be interested in attending typical events already available. As such, when conceptualizing new events, one should not be limited to past efforts or activities, but rather think outside the box to try and connect with individuals of diverse group identities and lived experiences. See the implementation principles and examples for how to develop impactful events.

Implementation Principles for Events

In this section, we provide principles to consider along with specific examples of how these principles may come to light. These examples were developed in our collaborative workshops with staff from the City and CMPD to ensure their impactful application in the Charlotte context.

A. Create Opportunities

For events to be successful, they need the right elements and considerations to foster the best possible conditions to drive intergroup contact. Individuals from different groups are more likely to interact with one another if they feel that their voices can be heard and, as a result, come to a common understanding. We have included some considerations below when developing an event.

1. Consider the Audience

It is important to consider who is the primary intended audience for the event, and to plan with this piece of information in focus. We recommend that the City of Charlotte and CMPD focus on individuals who have not had casual interactions with officers in the past, including those who are distrustful of officers and have a contentious relationship with the police. Groups who have had a historically tenuous relationship with the police may not be motivated to attend an event that appeals to individuals who have not had these experiences; as such, effort should be made to consider their needs to create a more inclusive event.

For example:

For the campaign "Play Together," organizers may consider running a survey to learn about the types of activities different individuals may be interested in. Additionally, there may be subgroups within the proposed target population (i.e., individuals who have never had casual interactions with officers), and different events should be organized to address the needs of these different subgroups. For instance, families with young children may be interested in different events than older individuals.

2. Consider the Location

Relatedly, the location for the event can help to create opportunities for connection among people who may not have had positive and casual interactions with officers in the past.

For example:

Consider hosting events in Corridors of Opportunity or other areas where diverse communities intersect. Also, consider what types of events may be most appealing to individuals who frequent or reside in the area. Again, use data when you can to determine the types of activities that your intended audience is interested in, rather than relying on assumptions or stereotypes to make these decisions.

B. Drive Attendance

In addition to planning events of interest to the intended audience, there should be additional tools and instruments in place to encourage their attendance. Intentions do not always translate into action. This is known as the intention-behavior gap (Sheeran & Webb, 2016). Furthermore, individuals may also be easily demotivated if their close family and friends are distrustful of the police. We have derived a few factors to encourage initial intentions to actual attendance.

1. Pave the Path of Least Resistance

Consider ways to make attendance particularly easy and remove points of friction that may prevent individuals from attending the event.

For example:

Consider working with local services such as CATS to offer free public transit to and from events that may be difficult to access in order to reduce any reluctance individuals may have towards going to the event.

2. Boost Motivation

Consider ways that will help to boost motivation for these individuals and help them follow through with their intentions.

For example:

One way to close the intention-behavior gap is having individuals commit to going to the event, and it would be even better if they had a more detailed plan or reason to go to the event—this is known as an **implementation plan.** For instance, individuals can be given the opportunity to sign up for tickets to the event in advance. When they sign up for the ticket, ask them to list 1-2 reasons for why they want to go to the event.

C. Maximize Impact

In addition to creating opportunities such as events for community members and officers to interact, it is also important to consider ways to help facilitate positive contact between both parties. We list a number of concrete tactics below to increase perceived similarities between different groups as well as the likelihood that someone will be perceived as distinct individuals rather than a member of their group.

1. Find Commonalities

Perceiving similarity in one another is one way that will help to maximize the impact of the interaction. This could involve an event where members from different groups cooperate on a common task or work towards a common task. Furthermore, sharing common interests, hobbies, and activities can also help individuals to see each other as having similarities.

For example:

An intramural sports event where officers team up with community members and complete against other officer-community member teams. This allows for an opportunity for officers and community members to mingle and cooperate with one another.

2. Increase Perceived Distinctiveness

One way to ensure that interpersonal interaction between group members remain positive and memorable is to ensure that the interaction is distinct in some way, shape, or form. For instance, elements of the event can employ the use of humor or concepts that fall outside of one's expectation, which can can help to drive positive emotions.

For example:

Allowing officers to take part in an activity that takes them out of the context of law enforcement allows community members to more easily humanize them and be more willing to approach them.

A Closer Look at Component #2: Marketing & Communication

Both education workshops and community events, while impactful in that they offer opportunities to have direct interpersonal interactions, are limited in their reach since they happen on set dates in set locations. As such, more wide-spread marketing and communication efforts are required to drive a comprehensive communication-marketing strategy that will reach a wider audience.

A Closer Look at Component #3: Education

Education focuses on teaching both community member leaders as well as the CMPD on the importance and benefits of casual interactions. This serves to bridge the gap in how members from different groups view each other and to increase understanding for one another. This could be in the form of workshops or training sessions where leaders or stakeholders from both groups are invited to attend.

Summary of Recommendations to Improve Officer-Community Relationships

Overall Proposed Strategy

Increase positive, casual interactions between community members and officers

We hypothesize that this will decrease intergroup conflict and prejudice by increasing the similarities individuals see in people from the other group.

Three Initiatives to Bring the Strategy to Life:

"Playing

Together":

drive motivation for initial contact between different social groups by having individuals engage with fun activities or shared interests

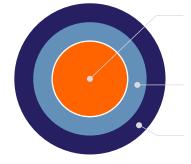
"Learning Together":

present opportunities to teach and learn from one another, which can provide an opportunity to level the playing field and equate the status of different social groups "Sharing

Together":

sharing experiences, beliefs, and feelings that show one's vulnerability that will bring people from different social groups closer

We recommend that each initiative have the following three components:



1. Events:

to maximize the impact of interpersonal interactions between members of different groups

2. Marketing & Communication:

to drive a wider audience reach and increasing scalability

3. Education:

to get buy-in from community leaders and for them to understand the overall efforts of the campaign & how it can drive impact

Implementation Principles for Events

A. Create Opportunities	B. Drive Attendance	C. Maximize Impact
The purpose of new events is to create opportunities for casual connections among community members and officers who do not tend to engage in opportunities currently available.	In addition to creating opportunities that are of interest to your intended audience, additional efforts can help drive attendance.	Once the intended audience is at the event, additional efforts can encourage impactful interactions.
• Consider the interests of the intended audience	 Pave the path of least resistance to make attending as easy as possible 	Help community members and officers find commonalities
• Consider the location for the intended audience	• Boost motivation to attend	 Help community members and officers see the uniqueness of the individuals they meet

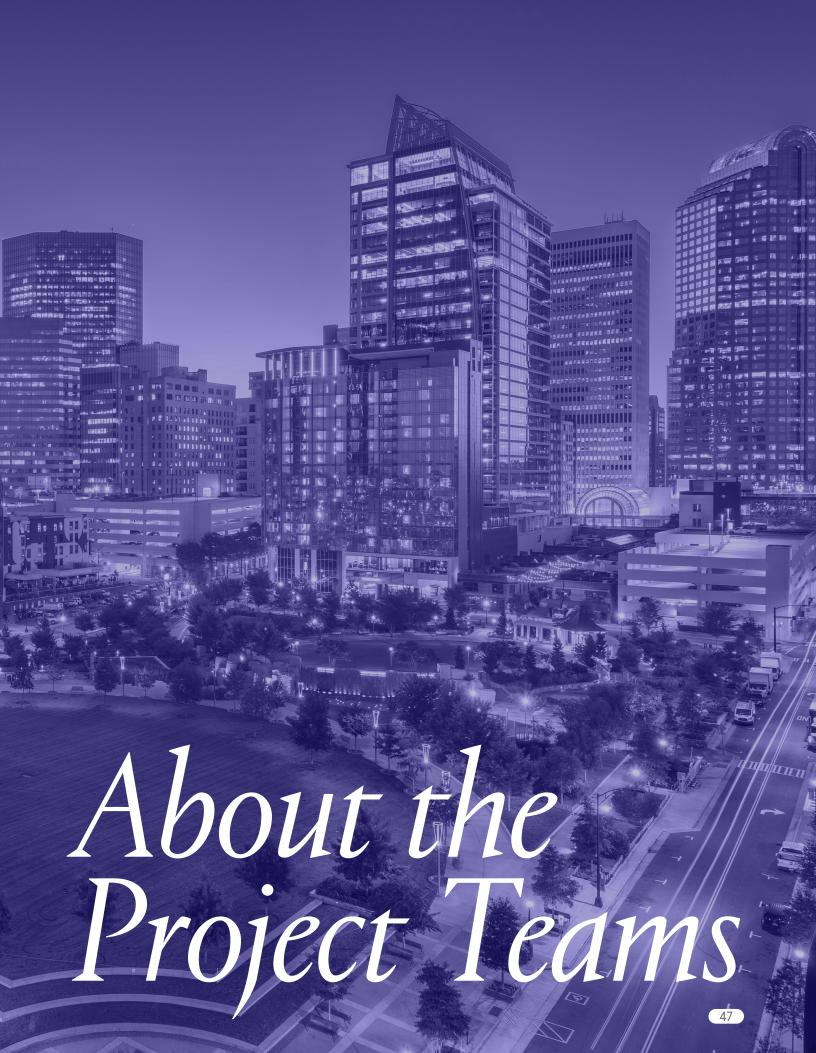
See pages 38-43 in the report for further descriptions and examples.

Conclusion

The challenges outlined in Recommendation 6 of the SAFE Charlotte report are important and complex. The CMPD and City of Charlotte have made substantial efforts in these regards, but were looking for a new approach to bolster those efforts. A behavioral science approach revealed important factors about the feelings and experiences of applicants, officers, and community members to inform the barriers they may face and provided evidence-based strategies to overcome those barriers. A behavioral science approach allows us to "stand on the shoulders of giants" by leveraging what has been done in the scientific literature to apply new insights and develop new behaviorally informed solutions.

Our research revealed fruitful areas of focus for each challenge. First, our findings supported the decision to enhance recruitment efforts by developing strategies to decrease applicant voluntary drop-out. The recommended strategies will ensure the efforts already in place to increase applications are not lost with those applicants dropping out. Second, our findings revealed no evidence for the hypothesis that increasing officer residency will improve officer-community relationships in Charlotte. Therefore, we adjusted the focus of our strategy development to instead enhance officer-community relationships using evidence-based solutions from the scientific literature and data collected from Charlotte community members.

The final steps integral to a behavioral approach and the BEworks Method is Implementation and Testing. Rigorous testing of the proposed strategies on a small scale allows you to assess the level of impact the strategies have on your ultimate goals before building it out on a larger scale, saving time and money, as well as mitigating risks. Therefore, we strongly suggest continuing with the evidence-based approach as you move into building and implementing the proposed strategies in the report. Scientific, evidence-based, paths are the best way to lay a strong foundation for building safety and accountability for everyone.



About the Project Teams

The City of Charlotte and the Charlotte Mecklenburg Police Department (CMPD) partnered with BEworks, a behavioral science team, and Amplify Charlotte, a community engagement team. The BEworks team looked at the challenge through a behavioral lens to provide a new perspective on the barriers to recruitment and residency as well as to provide differential thinking for developing solutions. To maximize the impact of this approach, behavioral science insights and methods were combined with the expertise of those at CMPD.

About BEworks

Our goal when we launched BEworks over a decade ago was the same as it is today: to serve as pioneers in the field of behavioral science. Carefully applied, we believe that behavioral science can unlock consumers' needs, motivate teams with purpose, and empower leaders to drive with aspiration. We take pride in our rigorous commitment to evidence-based insights and cutting-edge scientific methods.

Today, BEworks has the world's largest team of experts in behavioral science. All our practitioners are accomplished researchers, hold advanced graduate degrees, and have extensive experience in applying BE to complex strategic, marketing, operational, and policy challenges.

For the challenges that you are looking to solve, we believe that behavioral change requires a shift in culture ("tone from the top"), better use of data ("what gets measured gets managed") and behavioral science ("the understanding of human decision-making and behavior"). Of the three, a shift in culture is clearly happening. As populations and workforces become more diverse and accessible, many companies and governments, such as yours, are leading by example and setting stronger policies and processes around diversity, inclusion, and belonging. The second factor, data, has begun to play an increasingly important role in promoting greater transparency of the numbers and providing the accountability to identify problem areas and trigger change. The last factor, behavioral science, is a crucial piece that under many scenarios, has yet to play a major role. We view this last piece as the missing link to truly driving significant behavioral change at scale and speed.

BEworks is here to serve as your last piece to the puzzle. We are here to help you incorporate the tools and methods from behavioral science. In conjunction with leadership buy-in and data science, we are here to help you take a more holistic and systems-based approach to solving complex behavioral change challenges.



Our Approach

Unlike many hiring processes, the hiring of police officers is highly structured and grounded in science. Many police recruitment processes, including the CMPD, have a "select out" process based on minimum thresholds across a series of assessments, including minimum requirement screeners, psychometrics tests, psychological test, oral interview, agility test, polygraph test, medical examination, and background test. Completing this highly rigorous process can take months, but the end results should be decisions that are unbiased and meritocratic. Theoretically, this would make sense-with: however, when you look at the numbers, the picture is very different. Behavioral science can help identify where some of the challenges may lie. We explore some of these below to help showcase how we can improve recruitment and hiring solutions by understanding the psychological and behavioral barriers at play.

The Foundation of our Method

Research

 Operationalize success in behavioral terms by defining Measurable Observable Behaviors (MOBs)

• Base our understanding of challenges on pre-existing behavioral science research, and where possible, take a data-driven approach to refining our diagnosis of root causes

Strategy

• Build on prior behavioral scientific research in order to develop novel behavioral strategies for tackling challenges

• Develop strategies that are aligned to the type of behavior change that is desired without reducing choice or introducing friction

Implementation

• Test our strategies in order to know if and how they work so that it is possible to create a sustainable choice architecture and mitigate business risk

About Amplify Consulting

Amplify Consulting, LLC, a consulting firm located in Charlotte, NC, specializes in community outreach planning, community development, marketing, communication, and local government policy. Amplify is managed by the Owner and Principal Consultant, Christine Edwards and is HUB, MBE, SBE, and DBE certified. They work with municipal governments to enhance community engagement capacity and increase awareness of special projects by hosting public meetings and workshops, specifically for capital projects and community developments. Though Amplify Consulting specializes in community outreach planning and place-based outreach initiatives, they have professional experience with priority-setting, stakeholder interviewing, public opinion polling, and facilitating focus groups.

In this project, Amplify Consulting conducted stakeholder interviews with City officials, community members, CMPD applicants, and CMPD leaders/staff. They also used their expertise in community engagement and network of local resources to drive engagement with project's community member survey. Finally, Amplify Consulting was an active participant in the collaborative ideation workshops to ensure the specific context within Charlotte was integrated into the proposed strategies.



References

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51

- Adachi, P. J. C., Hodson, G., Willoughby, T., & Zanette, S. (2015). Brothers and sisters in arms: Intergroup cooperation in a violent shooter game can reduce intergroup bias. Psychology of Violence, 5(4), 455–462. https://doi.org/10.1037/a0037407
- Alberton, A. M., & Gorey, K. M. (2018). Contact is a stronger predictor of attitudes toward police than race: A state-of-the-art review. Policing: An International Journal, 41(1), 2–23. https://doi.org/10.1108/PIJPSM-06-2017-0070
- Allport, G. W. (1979). The nature of prejudice (Unabridged, 25th anniversary ed). Addison-Wesley Pub. Co.
- Ambady, N., Paik, S. K., Steele, J., Owen-Smith, A., & Mitchell, J. P. (2004). Deflecting negative self-relevant stereotype activation: The effects of individuation. Journal of Experimental Social Psychology, 40(3), 401–408. https://doi.org/10.1016/j. jesp.2003.08.003
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84(2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191
- Barasz, K., John, L. K., Keenan, E. A., & Norton, M. I. (2017). Pseudo-set framing. Journal of Experimental Psychology: General, 146(10), 1460–1477. https://doi.org/10.1037/ xge0000337
- Biggs, A., Brough, P., & Barbour, J. P. (2014). Relationships of individual and organizational support with engagement: Examining various types of causality in a three-wave study. Work & Stress, 28(3), 236–254. https://doi.org/10.1080/02678373.2014.934316
- Boon, C., & Biron, M. (2016). Temporal issues in person-organization fit, person-job fit and turnover: The role of leader-member exchange. Human Relations, 69(12), 2177-2200. https://doi.org/10.1177/0018726716636945
- Broockman, D., & Kalla, J. (2016). Durably reducing transphobia: A field experiment on doorto-door canvassing. Science, 352(6282), 220–224. https://doi.org/10.1126/science. aad9713
- Bryan, G., Karlan, D., & Nelson, S. (2010). Commitment Devices. Annual Review of Economics, 2(1), 671–698. https://doi.org/10.1146/annurev.economics.102308.124324
- Cai, D., Cai, Y., Sun, Y., & Ma, J. (2018). Linking Empowering Leadership and Employee Work Engagement: The Effects of Person-Job Fit, Person-Group Fit, and Proactive Personality. Frontiers in Psychology, 9, 1304. https://doi.org/10.3389/fpsyg.2018.01304
- Carless, S. A. (2005). Person-job fit versus person-organization fit as predictors of organizational attraction and job acceptance intentions: A longitudinal study. Journal of Occupational and Organizational Psychology, 78(3), 411–429. https://doi. org/10.1348/096317905X25995
- Chang, E. H., & Milkman, K. L. (2020). Improving decisions that affect gender equality in the workplace. Organizational Dynamics, 49(1), 100709. https://doi.org/10.1016/j. orgdyn.2019.03.002
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. Personnel Psychology, 64(1), 89–136. https://doi.org/10.1111/j.1744-6570.2010.01203.x

Cialdini, R. B. (2006). Influence: The psychology of persuasion (Rev. ed., [Nachdr.]). Collins.

- City of Charlotte. (2020a). Safe Charlotte. City of Charlotte Government. https:// charlottenc.gov/safecharlotte/Pages/default.aspx
- City of Charlotte. (2020b). SAFE Charlotte (p. 32). https://citycharlottencgov.azureedge.net/ Safe_Charlotte_Digital.pdf
- Colarelli, S. M., & Bishop, R. C. (1990). Career Commitment: Functions, Correlates, and Management. Group & Organization Studies, 15(2), 158–176. https://doi. org/10.1177/105960119001500203
- Crisp, R., Husnu, S., Meleady, R., Stathi, S., & Turner, R. (2010). From imagery to intention: A dual route model of imagined contact effects. European Review of Social Psychology, 21, 188–236. https://doi.org/10.1080/10463283.2010.543312
- DreamKey Partners. (2021a). Community Partners Loan Pool Flyer. https://www. dreamkeypartners.org/wp-content/uploads/2021/05/CPLP-Flyer-English-2021.pdf
- DreamKey Partners. (2021b). HouseCharlotte Program. DreamKey Partners. https://www. dreamkeypartners.org/housecharlotte-program/
- Ellis, W. D. (2013). A source book of Gestalt psychology (Repr. [d. Ausg.] 1938, 1. issued in paperback). Routledge.
- Gill, C., Weisburd, D., Telep, C., Vitter, Z., & Bennett, T. (2014). Community-oriented policing to reduce crime, disorder and fear and increase satisfaction and legitimacy among citizens: A systematic review. Journal of Experimental Criminology, 10. https://doi. org/10.1007/s11292-014-9210-y
- Gillet, N., Huart, I., Colombat, P., & Fouquereau, E. (2013). Perceived organizational support, motivation, and engagement among police officers. Professional Psychology: Research and Practice, 44(1), 46–55. https://doi.org/10.1037/a0030066
- Gobet, F., Lane, P., Croker, S., Cheng, P., Jones, G., Oliver, I., & Pine, J. (2001). Chunking mechanisms in human learning. Trends in Cognitive Sciences, 5(6), 236–243. https:// doi.org/10.1016/S1364-6613(00)01662-4
- Gollwitzer, P. M., & Sheeran, P. (2006). Implementation Intentions and Goal Achievement: A Meta-analysis of Effects and Processes. In Advances in Experimental Social Psychology (Vol. 38, pp. 69–119). Academic Press. https://doi.org/10.1016/S0065-2601(06)38002-1
- Gottfredson, D., Bushway, S., & Reuter, P. (1998). Preventing Crime: What Works, What Doesn't, What's Promising (p. 750).
- Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In Work engagement: A handbook of essential theory and research (pp. 102–117). Psychology Press.
- Halperin, E., Crisp, R. J., Husnu, S., Trzesniewski, K. H., Dweck, C. S., & Gross, J. J. (2012). Promoting intergroup contact by changing beliefs: Group malleability, intergroup anxiety, and contact motivation. Emotion, 12(6), 1192–1195. https://doi.org/10.1037/ a0028620

- Han, T.-S., Chiang, H.-H., McConville, D., & Chiang, C.-L. (2015). A Longitudinal Investigation of Person-Organization Fit, Person-Job Fit, and Contextual Performance: The Mediating Role of Psychological Ownership. Human Performance, 28(5), 425–439. https://doi.org/10.1080/08959285.2015.1021048
- Hirschi, A., Niles, S. G., & Akos, P. (2011). Engagement in adolescent career preparation: Social support, personality and the development of choice decidedness and congruence. Journal of Adolescence, 34(1), 173–182. https://doi.org/10.1016/j. adolescence.2009.12.009
- Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person-organization fit and behavioral outcomes. Journal of Vocational Behavior, 68(3), 389–399. https://doi.org/10.1016/j.jvb.2005.08.003

Houston Police Department. (2015). Residency Incentive Program.

- Jacobson, R. P., Mortensen, C. R., & Cialdini, R. B. (2011). Bodies obliged and unbound: Differentiated response tendencies for injunctive and descriptive social norms. Journal of Personality and Social Psychology, 100(3), 433–448. https://doi. org/10.1037/a0021470
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of Individuals' Fit at Work: A Meta-Analysis of Person–Job, Person–Organization, Person– Group, and Person–Supervisor Fit. Personnel Psychology, 58(2), 281–342. https://doi. org/10.1111/j.1744-6570.2005.00672.x
- Lee, J., & Gibbs, J. C. (2015). Race and attitudes toward police: The mediating effect of social distance. Policing: An International Journal of Police Strategies & Management, 38(2), 314–332. https://doi.org/10.1108/PIJPSM-03-2015-0034
- Lepore, S. J. (1992). Social conflict, social support, and psychological distress: Evidence of cross-domain buffering effects. Journal of Personality and Social Psychology, 63(5), 857–867. https://doi.org/10.1037/0022-3514.63.5.857
- Lepore, S. J., Allen, K. A., & Evans, G. W. (1993). Social support lowers cardiovascular reactivity to an acute stressor. Psychosomatic Medicine, 55(6), 518–524. https://doi.org/10.1097/00006842-199311000-00007
- Lord, V., & Friday, P. (2003). Choosing a career in police work: A comparative study between applicants for employment with a large police department and public high school students. Police Practice and Research, 4(1), 63–78. https://doi. org/10.1080/1561426032000059196
- Lun, J., Sinclair, S., Whitchurch, E. R., & Glenn, C. (2007). (Why) do I think what you think? Epistemic social tuning and implicit prejudice. Journal of Personality and Social Psychology, 93(6), 957–972. https://doi.org/10.1037/0022-3514.93.6.957
- Martocchio, J. J., & Judge, T. A. (1997). Relationship between conscientiousness and learning in employee training: Mediating influences of self-deception and self-efficacy. Journal of Applied Psychology, 82(5), 764–773. https://doi.org/10.1037/0021-9010.82.5.764
- Melnyk, V., Carrillat, F. A., & Melnyk, V. (2021). The Influence of Social Norms on Consumer Behavior: A Meta-Analysis. Journal of Marketing, 002224292110291. https://doi. org/10.1177/00222429211029199

- Milkman, K. L., Beshears, J., Choi, J. J., Laibson, D., & Madrian, B. C. (2011). Using implementation intentions prompts to enhance influenza vaccination rates. Proceedings of the National Academy of Sciences, 108(26), 10415–10420. https://doi. org/10.1073/pnas.1103170108
- Murphy, D. W., & Worrall, J. L. (1999). Residency requirements and public perceptions of the police in large municipalities. Policing: An International Journal of Police Strategies & Management, 22(3), 327–342. https://doi.org/10.1108/13639519910285080
- Nunes, J. C., & Drèze, X. (2006). The Endowed Progress Effect: How Artificial Advancement Increases Effort. Journal of Consumer Research, 32(4), 504–512. https://doi. org/10.1086/500480
- Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. Journal of Marketing Research, 17(4), 460–469. https://doi. org/10.1177/002224378001700405
- Perrone, K. M., Zanardelli, G., Everett L. Worthington, J., & Chartrand, J. M. (2002). Role model influence on the career decidedness of college students. College Student Journal, 36(1), 109–113.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. Journal of Personality and Social Psychology, 90(5), 751–783. https://doi. org/10.1037/0022-3514.90.5.751
- Quimby, J. L., & De Santis, A. M. (2006). The Influence of Role Models on Women's Career Choices. The Career Development Quarterly, 54(4), 297–306. https://doi. org/10.1002/j.2161-0045.2006.tb00195.x
- Raivola, P., & Puhakka, H. (2000). Selecting police work as a career: The importance of gender; aptitude and interest. Unpublished Manuscript, Police Academy of Finland, Ministry of Security, Helsinki, Finland.
- Rodgers, W. M., Conner, M., & Murray, T. C. (2008). Distinguishing among perceived control, perceived difficulty, and self-efficacy as determinants of intentions and behaviours. British Journal of Social Psychology, 47(4), 607–630. https://doi. org/10.1348/014466607X248903
- Rubinstein, R. S., Jussim, L., & Stevens, S. T. (2018). Reliance on individuating information and stereotypes in implicit and explicit person perception. Journal of Experimental Social Psychology, 75, 54–70. https://doi.org/10.1016/j.jesp.2017.11.009
- Saks, A. M. (1995). Longitudinal field investigation of the moderating and mediating effects of self-efficacy on the relationship between training and newcomer adjustment. Journal of Applied Psychology, 80(2), 211–225. https://doi.org/10.1037/0021-9010.80.2.211
- Salmon, S. J., De Vet, E., Adriaanse, M. A., Fennis, B. M., Veltkamp, M., & De Ridder, D. T. D. (2015). Social proof in the supermarket: Promoting healthy choices under low self-control conditions. Food Quality and Preference, 45, 113–120. https://doi. org/10.1016/j.foodqual.2015.06.004
- Sheeran, P., & Webb, T. L. (2016). The Intention-Behavior Gap: The Intention-Behavior Gap. Social and Personality Psychology Compass, 10(9), 503–518. https://doi.org/10.1111/ spc3.12265

- Skahill, M. P. (2002). The Role of Social Support Network in College Persistence among Freshman Students. Journal of College Student Retention: Research, Theory & Practice, 4(1), 39–52. https://doi.org/10.2190/LB7C-9AYV-9R84-Q2Q5
- Smith, D. C. (1980). Police Attitudes and Performance: The Impact of Residency. Urban Affairs Quarterly, 15(3), 317–334. https://doi.org/10.1177/107808748001500304
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A metaanalysis. Psychological Bulletin, 124(2), 240–261. https://doi.org/10.1037/0033-2909.124.2.240
- Taylor, B., Kubu, B., Fridell, L., Rees, C., Jordan, T., & Cheney, J. (2005). The cop crunch: Identifying strategies for dealing with the recruiting and hiring crisis in law enforcement. Washington, DC: Police Executive Research Forum.
- Trochmann, M. B., & Gover, A. (2016). Measuring the impact of police representativeness on communities. Policing: An International Journal of Police Strategies & Management, 39(4), 773–790. https://doi.org/10.1108/PIJPSM-02-2016-0026
- van Gelderen, B. R., & Bik, L. W. (2016). Affective organizational commitment, work engagement and service performance among police officers. Policing: An International Journal of Police Strategies & Management, 39(1), 206–221. https://doi.org/10.1108/ PIJPSM-10-2015-0123
- Wijland, R., Hansen, P., & Gardezi, F. (2016). Mobile nudging: Youth engagement with banking apps. Journal of Financial Services Marketing, 21(1), 51–63. https://doi.org/10.1057/fsm.2016.1
- Wilks, S. E., & Spivey, C. A. (2010). Resilience in Undergraduate Social Work Students: Social Support and Adjustment to Academic Stress1. Social Work Education, 29(3), 276–288. https://doi.org/10.1080/02615470902912243
- Wolter, C., Santa Maria, A., Gusy, B., Lesener, T., Kleiber, D., & Renneberg, B. (2019). Social support and work engagement in police work: The mediating role of work-privacy conflict and self-efficacy. Policing: An International Journal, 42(6), 1022–1037. https:// doi.org/10.1108/PIJPSM-10-2018-0154
- Wood, R., & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. Journal of Personality and Social Psychology, 56(3), 407–415. https://doi.org/10.1037/0022-3514.56.3.407
- Worrall, J. L. (1999). Public perceptions of police efficacy and image: The "fuzziness" of support for the police. American Journal of Criminal Justice, 24(1), 47–66. https://doi.org/10.1007/BF02887617

Appendix

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Summary of CMPD Recruitment & Hiring Data

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mannan A detailed breakdown of the reasons why candidates voluntarily dropped out of the application process or were disqualified in each of the three application streams. The following data is from March 31 to December 31, 2020.

New Total Applicants: 2466 Voluntary Drop-Out (41%)	Lateral Total Applicants: 306 Voluntary Drop-Out (33%)	Intermediate Total Applicants: 78 Voluntary Drop-Out (18%)			
Supplemental Not Completed (49%) Voluntary Withdraw (37%) No Show to Written Exam (13%)	Voluntary Withdraw (64%) Supplemental Not Completed (31%) No Show to Written Exam (5%)	Voluntary Withdraw (43%) Supplemental not completed (43%) No Show to Written Exam (14%)			
Disqualification (34%)	Disqualification (52%)	Disqualification (77%)			
Minimum Qualification Not Met (32%) Driving History (20%) Criminal History (8%) Other Apps More Suitable (8%) Judgement/Character (6%)	Minimum Qualification Not Met (74%) Minimum Standards (8%) Failed to Respond to Participate in Process (6%) Other Apps More Suitable (5%) Employment History (3%)	Minimum Qualification Not Met (82%) Driving History (5%) Judgement/Character (5%) Minimum Standard (3%) Other Apps More Qualified (3%)			

Note: Percentage displayed in smaller text under each category reflect the percent of people within each category for which a reason is provided (e.g., of the 41% of new recruits who voluntarily dropped out, 49% of them did not complete their supplemental questions).

Discussions with CMPD recruitment officers revealed that the high rate of disqualification for the code "minimum qualifications not met" for Laterals and Intermediates was likely due to applicants filling out the wrong application.

A breakdown of application status by gender and race across the three streams

1.	New Recruit Applicants (2466 Total)									
	Break	down by C	Gender		Bi	reakdowr	n by Gend	ler		
Application	Men	Women	Others	Asian	Black	Latino	Mixed Race	White	Others	
	75.5%	23.9%	0.6%	2.0%	37.1%	0.9%	11.2%	41.8%	6.9%	
	Of those who applied:			Of those who applied:						
Hired	2.8%	1.2%	6.3%	6.0%	0.7%	0.0%	2.5%	4.1%	1.8%	
Voluntary Drop-out	41.2%	41.4%	43.8%	40.0%	38.5%	40.9%	40.4%	43.7%	42.7%	
Disqualified	33.7%	33.6%	43.8%	30.0%	39.4%	18.2%	37.5%	27.9%	35.7%	
Ongoing	22.3%	23.6%	6.3%	24.0%	21.3%	40.9%	19.5%	24.3%	19.9%	

Note: Percentage displayed for Hired, Voluntary Drop-out, Disqualified, and Ongoing for each group are calculated based on the subgroup membership (e.g., number of total male applicants as the denominator for each outcome category for that group) rather than the total number of recruits, to ensure rates were comparable across group membership.

2.	Lateral Applicants (306 Total)									
	Break	down by C	Gender		Bi	reakdowr	n by Gend	ler		
Application	Men	Women	Others	Asian	Black	Latino	Mixed Race	White	Others	
	78.4%	20.6%	1.0%	2.0%	42.5%	1.0%	8.2%	40.5%	5.9%	
	Of those who applied:			Of those who applied:						
Hired	4.6%	1.6%	33.3%	0.0%	3.1%	0.0%	0.0%	6.5%	5.6%	
Voluntary Drop-out	34.6%	27.0%	33.3%	16.7%	26.2%	0.0%	24.0%	41.1%	50.0%	
Disqualified	47.5%	69.8%	33.3%	83.3%	59.2%	66.7%	60.0%	43.5%	33.3%	
Ongoing	13.3%	1.6%	0.0%	0.0%	11.5%	33.3%	16.0%	8.9%	11.1%	

Note: Percentage displayed for Hired, Voluntary Drop-out, Disqualified, and Ongoing for each group are calculated based on the subgroup membership (e.g., number of total male applicants as the denominator for each outcome category for that group) rather than the total number of recruits, to ensure rates were comparable across group membership.

3.	New Recruit Applicants (2466 Total)								
	Breakdow	n by Gender		B	reakdowr	by Gend	ler		
Application	Men	Women	Asian	Black	Latino	Mixed Race	White	Others	
	65.4%	34.6%	2.6%	51.3%	3.8%	10.3%	23.1%	9.0%	
	Of those w	ho applied:	Of those who applied:						
Hired	17.6%	18.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Voluntary Drop- out	76.5%	77.8%	0.0%	17.5%	0.0%	25.0%	22.2%	14.3%	
Disqualified	5.9%	3.7%	100.0%	80.0%	100.0%	62.5%	66.7%	85.7%	
Ongoing	17.6%	18.5%	0.0%	2.5%	0.0%	12.5%	11.1%	0.0%	

Note: Percentage displayed for Hired, Voluntary Drop-out, Disqualified, and Ongoing for each group are calculated based on the subgroup membership (e.g., number of total male applicants as the denominator for each outcome category for that group) rather than the total number of recruits, to ensure rates were comparable across group membership.

Appendix D

Residency Requirements and Incentives in Peer Cities

Cities Reviewed	Residency Requirement	Residency Incentive
Atlanta, Georgia	None	Incentive to purchasing a home in strategic neighborhoods
Austin, Texas	None	None apparent, though authorization has been obtained to start one
Denver, Colorado	None	None apparent
Minneapolis, Minnesota	Prohibited	None apparent, though steps have been taken to explore this option
Portland, Oregon	None	A 5% pay increase if senior officers choose to live within city limits
San Diego, California	None	Down payment assistance program for officers if they choose to live within the city
Arlington, Texas	None	None apparent
Columbus, Ohio	None	None apparent
Dallas, Texas	None	None apparent
Fort Worth, Texas	Must reside within 30 min of designated station within 6 months of employment	None apparent
Houston Texas	None	None apparent; a residency incentive program was proposed but was not implemented by the police department
Indianapolis, Indiana	Must live within designated counties, or a county less than 50 miles from the closest boundary of the city	None apparent
Kansas, Missouri	Mandated; Residency must be established within the city	None apparent
Long Beach, California	None	None apparent; a previous incentive program existed until there was no longer funding
Louisville, Kentucky	None	Small housing credit offered for purchasing primary residence in designated areas
Memphis, Tennessee	Mandated; residency must be established within the county	Homebuyer incentive program available to the public, with special additional requirements that officers must fulfill in order to be eligible
Nashville, Tennessee	None	None apparent
Omaha, Nebraska	None	None apparent
Tulsa, Oklahoma	None	None apparent
Seattle, Washington	None	None apparent

Data was provided by the city and was collected in Oct 2020.

62

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Appendix

Residency Data 2017 vs. 2020

Below are data provided by the City on residency rates as of December 31, 2017 (i.e., prior to the inception of the residency incentive program) and December 31, 2020.

2017										
	Inside County		Inside CMPD Jurisdiction		Inside City Limits		Inside a Corridor of Opportunity			
	No	Yes	No	Yes	No	Yes	Yes	No		
Number of Employees	562	393	668	287	689	266	1*	954		
Percent of Total	58.85%	41.15%	69.95%	30.05%	72.15%	27.85%	0.10%	99.90%		
Total Number of Employees		955								

2020									
	Inside County		Inside CMPD Jurisdiction		Inside City Limits		Inside a Corridon of Opportunity		
	No	Yes	No	Yes	No	Yes	Yes	No	
Number of Employees	921	714	1083	552	1136	499	3*	1632	
Percent of Total	56.33%	43.67%	66.24%	33.76%	69.48%	30.52%	0.18%	99.82%	
Total Number of Employees				16	35				

* Employees lived in the Freedom Drive/Wilkinson Corridor

Note: Of the 1619 total Employees in 2017, 664 Employees were not accounted for because the system did not have historical addresses for where they lived in 2017.

After reviewing this data, we have the following question:

1. Is there anything about the missing data from 2017 that might indicate those individuals are particularly like to live within or outside of the regions specified in the table?

2. Could the slight increase in the percent of officer residents between 2017 and 2020 be attributed to other factors and fluctuations, other than the introduction of the residency incentive program?

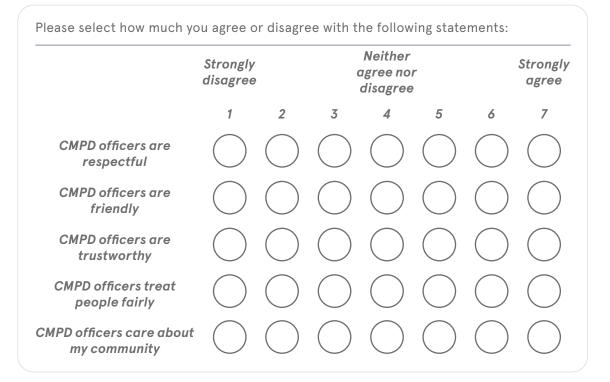
Appendix

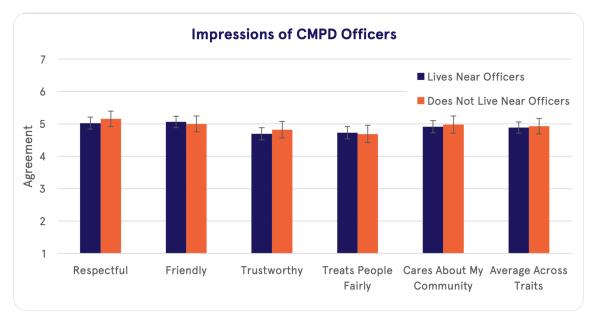
COMMUNITY DIAGNOSTICS SURVEY QUESTIONS & RESULTS

65

We conducted a diagnostics survey with 126 Charlotte community members. Respondents were: 71% woman, 28% man, 2% undisclosed; 48% White, 47% Black, 3% Latino, 3% Multiracial, 4% other.

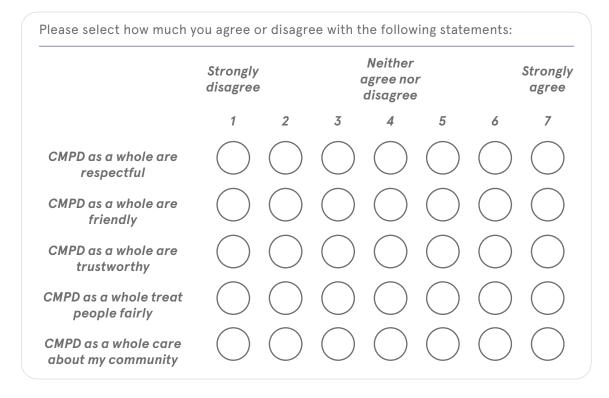
Below are the questions from the diagnostics survey. Following each question is the average response. For the majority of the analyses, we compared averages responses from community members who (1) live near officers or (2) do not live near officers.

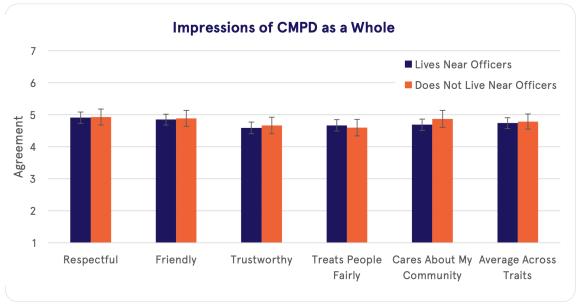




Note: The bars represent average ratings across respondents in each group; the higher the rating, the more positive the impression. The brackets on bars represent the Standard Error of the Mean, which indicates an estimate of the most likely range that the population mean would fall under.



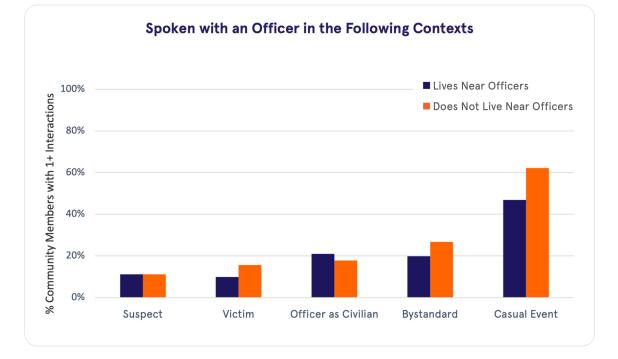




Note: The bars represent average ratings across respondents in each group; the higher the rating, the more positive the impression. The brackets on bars represent the Standard Error of the Mean, which indicates an estimate of the most likely range that the population mean would fall under.

In the past 6 months, how many times have you **spoken with** a CMPD officer in the following settings? Please provide your best estimate.

Item	Selection
Casual setting with an officer representing CMPD (e.g., at a community event, walking down the street)	0 - 10+
Casual setting with an officer in their day-to-day life (e.g., as your neighbor, friend, relative)	0 – 10+
On official police business: As a bystander (stating what you saw)	0 - 10+
On official police business: As a victim (e.g., of robbery, assault, etc.)	0 - 10+
On official police business: As a potential offender/suspect (e.g., traffic stop, noise violation, trespassing, disorderly conduct, drug possession, theft, assault, and others)	0 - 10+

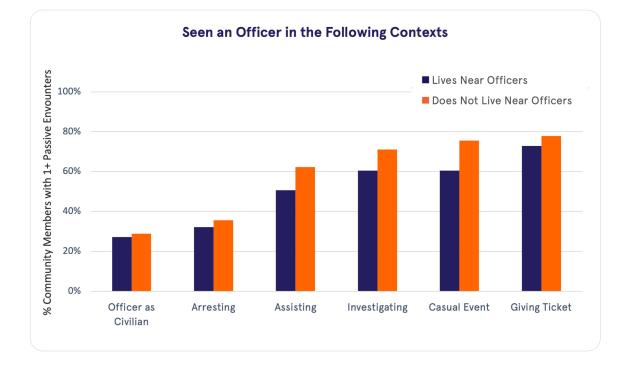


Note: Since the majority of individuals reported having never spoken with officers, responses were dichotomized into those who had never interacted with officers vs. those who have had 1+ interactions with officers across the different scenarios.

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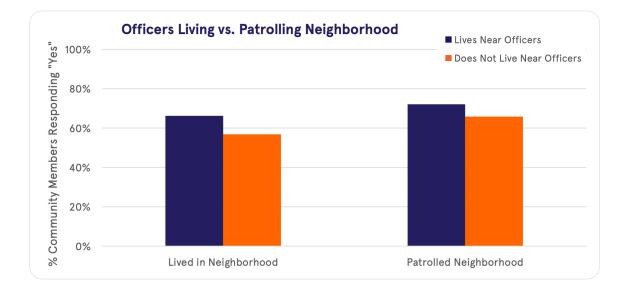
In the past 6 months, how many times have you seen a CMPD officer in the following settings? Please provide your best estimate.

Item	Selection
Casual setting representing CMPD (e.g., at a community event, walking down the street)	0 - 10+
Casual setting in their day-to-day life (e.g., as your neighbor, friend, relative)	0 – 10+
Giving someone a ticket	0 - 10+
Arresting someone	0 - 10+
Assisting someone	0 - 10+
Investigating a situation	0 - 10+

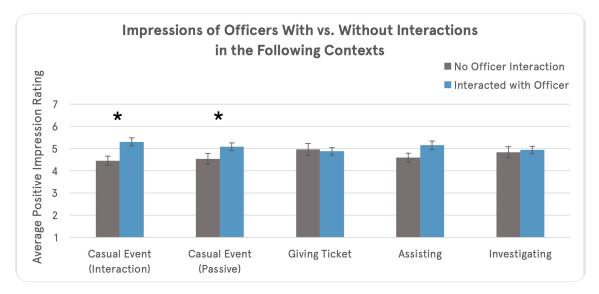


Note: Since the majority of individuals reported having no passive encounters with officers, responses were dichotomized into those who had never had passive encounters with officers vs. those who have had 1+ passive encounters with officers across the different scenarios.

	Yes	No
Would you feel safer if more officers lived in your neighborhood?	\bigcirc	\bigcirc
Would you feel safer if more officers patrolled your neighborhood?	\bigcirc	\bigcirc



Additional Analyses: Looking at the relation between community members' impression of officers and whether they have encountered or interacted with officers in the past. Note that this analysis is only done for situations where more than 50% of individuals reported having 1 or more interaction or encounter with an officer.



Note: The bars represent average impression rating of officers provided by respondents as a function of whether the respondent had previously encountered or interacted with an officer in each of the scenarios listed. The brackets on bars represent the Standard Error of the Mean, which indicates an estimate of the most likely range that the population mean would fall under. Asterisks (*) indicate differences that are statistically significant.

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Appendix

Questions & Answers

The challenges addressed in this report are far from simple. Several questions are likely to arise as individuals try to understand and address the various components and considerations necessary to drive long-term change for the good of the applicants, CMPD officers, and community at large. Below we address some of these questions.

1. Will the recommendations included to decrease voluntary drop-outs in this report help to improve the diversity of hired officers?

In short, we hypothesize that they can. We hypothesize that the recommendations in the report will be effective for any applicant at risk of dropping out of the application process. At the same time, we expect that the hypothesized barriers to completing the application may be particularly present for members of under-represented groups. For example, members of under-represented groups may be particularly likely to lack officers in their social networks, and therefore the recommendation to create an initiative around "Expanding the Network" may be particularly helpful for them. Therefore, it is certainly possible that the recommendations will improve the number of diverse individuals that make it through the process and get hired.

The voluntary drop-out rates at the CMPD between April and December 2020 were not significantly higher among applicants from under-represented races or gender. In fact, voluntary drop-outs rates were lower among African Americans than their White counterparts. We caution against placing any meaning on this result as the rate of disqualifications were higher among African Americans, and thus the lower rate of voluntary drop-outs may be artificial.

2. Should the CMPD routinely survey applicants who voluntarily drop out of the application process to better understand their perspective?

Understanding the perspective of applicants is an important piece of the puzzle. At the same time, we know that individuals do not always have insight into what truly influences their behavior. When a person is asked why they did (or did not do) something, justifications for their behavior quickly come to mind. Sometimes these justifications are true, but other times, the mind is biased to only believe they are true and how we recall the event becomes influenced by this bias. Furthermore, there are often several factors that influence behavior at the same time, and people overweigh some factors in hindsight. Therefore, while evaluating the perspective of applicants is important information for understanding the challenge, it is even more important that we understand that it is just that—their perspective—and not the whole picture.

We also suggest taking into consideration the interpretation of the survey results. When collecting data, it is also important to consider how the data will be used. Responses to this type of survey will come in slowly, and it will be tempting to evaluate each individual response and develop solutions on the perspective of one or a handful of individuals. Before interpreting the data, you will want to ensure that you have a representative sample of voluntary drop-outs and understand when you should generalize the responses. When looking at individual responses, it is tempting to: (1) focus on extreme responses, (2) focus on responses that fit with our intuitions of the problem, and (3) find patterns that are just happenstantial. Remember: A data driven approach can still be biased.

3. You decided not to focus on increasing residency. Do you believe that the residency incentive program should discontinued or that a new residency incentive program should still be developed?

We shifted the focus of our strategy development to improving officer-community relationships because there was little evidence to suggest that officer residency would serve the ultimate goals of either reducing crime or improving officer-community relationship. It is also unclear whether the incentive is encouraging officers to move, likely because the reasons for not living in the city are not primarily financial. As such, we would recommend phasing out the residency incentive program and using the budget towards other efforts that have evidence of attaining your ultimate goals.



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T: 416.920.1921







