HOUSING THE HOMELESS: A REGIONAL ANALYSIS OF THE IMPACT OF AVAILABLE BEDS ON RATES OF HOMELESSNESS

by

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DEDICATION

To my family and friends. Without their support and guidance, I would not be where I am today. Thank you for listening to this thesis for months on end and encouraging my dreams.

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ABSTRACT

The US Department of Housing and Urban Development has been collecting national data on the homeless population and the beds available to these individuals since 2007. This analysis utilizes those data by separating the United States into 11 regions and examining the impact of bed types on five demographics of the homeless population. This study finds that the impact of each bed type varies by region depending on these demographics. One striking finding is that while Safe Haven beds increase the homeless population in several regions, they cause a decrease in multiple homeless demographics in Region 6 [Prairie]. My analysis suggests some directions in policy making for reduction in homeless populations.

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LIST OF ABBREVIATIONS

HUD	United States Department of Housing and Urban Development
SE	Standard Error
ES	Emergency Shelter
TH	Transitional Housing
SH	Safe Haven
PSH	Permanent Supportive Housing
RRH	Rapid Rehousing
DEM	Demonstration Project
ОРН	Other Permanent Housing
PITC	Point-in-Time Count
HIC	Housing Inventory Count

INTRODUCTION

Homelessness is a social, political, and economic issue. These different arenas coupled with the varied demographics within the population and an assortment of services offered to those individuals create a complex problem. There are as many as half a million people who are homeless in the U.S. at any given time of the year, and they are in every state and territory. It is almost as large a population as the entire state of Wyoming. The sheer number of homeless gives this issue urgency in public policy debates. Given that most solutions to the problem of homelessness involve spending government funds, or advocating that charitable organizations shoulder the burden of housing the homeless, this issue is bound to be a political hot potato. This thesis looks to evaluate the effectiveness of different programs in reducing homelessness throughout the United States. The federal government provides not only funding for these programs but also the data utilized in this paper. It is because of this dual role that it is important to understand the government's response to this population throughout history.

The 2017 United States Federal Budget allocated \$2.383 billion for the McKinney-Vento Act overseen by the US Department of Housing and Urban Development (HUD); it is currently the largest federal investment in homeless assistance. The funding goes towards Rapid Rehousing programs, data analysis on the homeless population and homeless youth Demonstration Projects. While the 2017 budget represents a \$133 million increase from the 2016 Federal Budget (Office of Management and Budget, 2016), the Trump Administration's proposed budget for 2018 includes calls for substantial cuts; a proposed 13.2% decrease compared to HUD's 2016 budget. President Trump's plan calls for the elimination of the United States Interagency Council on Homelessness, The Community Development Block Grant, The HOME Investment Partnership Programs and Low Income Home Energy Assistance Program (White House 2017, 25). All of these programs are designed to assist citizens who are experiencing homelessness or are on the verge of becoming homeless. However, the President's "Skinny Budget" does call for a \$4.6 billion increase in the Veterans Affairs funding, some of which is used for programs to assist the homeless population.

The funding that comes from the federal government is dispersed to organizations within the states known as Continuums of Care (CoCs). As there is not a single national solution to end homelessness, and the location and circumstances surrounding an individual experiencing homelessness has an impact on which solution will be successful. It makes sense that the allocation of funding would fall to localized entities. Overall, this study has found that Emergency Shelter beds and Transitional Housing only work for a selective few demographics in key regions. It also finds that Permanent Supportive Housing and Other Permanent Housing is successful for multiple demographics and regions.

LITERATURE REVIEW

Homelessness is by definition having no home or permanent place of residence. While the "stereotypes [welfare leeches, broken down old drunks, crazy people, lazy...] are true of some homeless people, none of them are true of all homeless people. As is true of any large group in the American population, the homeless are a diverse lot; no single catchphrase or easy myth can possibly describe them all" (Wright 1989, 17). While there are some who choose to be homeless, most individuals are homeless due to domestic violence, unemployment, substance abuse, economic downturn, or a mental disability. These are the people that need and seek assistance from supportive services. Funding for these services comes from both public and private entities. In my thesis, I will focus on the role of the United States Government in addressing homelessness; both the funding for services and the policies put in place towards those experiencing homelessness.

Homelessness is not a modern-day problem. While the federal government did not start addressing homelessness until the 20th century, cities responses can be traced back to our country's beginning. In 1788 New York City passed a law that stated that migrant individuals were to be removed from the community. If the individual returned, and were male, the individual would be lashed 39 times; the individual would be lashed 25 times if they were a woman (Schneider 1938, 50). The corporal punishment was meant to discourage individuals who were not a part of the community from creating a burden on the society. This notion has endured for almost two hundred and twenty years in American society. It can be witnessed today with the persistent question of whether

increased supportive services in a city will result in an influx of those in need of said service. While it is reasonable for a community to be concerned about what the added cost of those seeking assistance will bring we now know that it is more cost effective for a city to help than ignore (Fry, 2016). The criminalization of homelessness comes in policies that deter behavior that is necessary for someone who is homeless. For instance, policies that outlaw camping within city limits prohibit eating in a public space or sleeping outside.

A century after New York's law was introduced, in 1894, Coxey's Army, named for its leader, an Ohio businessman experiencing hard times because the Depression of 1893, marched on Washington DC. What began as around a hundred unemployed men turned into thousands of marchers participating in a "petition on boots" (DePastino 2010, 60). From across the country men made their way to Washington aboard the same trains that had once taken them west to the promise of economic opportunity (Anderson 1998, 131). It was impossible for community members to ignore the thousands of men pouring into towns across the nation. While some towns greeted the petitioners with cheers and added participants, others provided the men with a police escort straight out of town (Anderson 1998, 128). The mixed signals of the community members attempting to support the protest and cities looking to move the migrant men along as fast as possible draws more parallels to the modern response to homelessness.

Coxey's Army demanded that the federal government support public works projects, a goal that would increase available jobs and therefore reduce unemployment. Even with the added support from unemployed and homeless men nationwide, the protest did nothing to influence government policy. In fact, the leaders of the army were arrested for trespassing on the lawn of the Capitol. The men that marched in Coxey's Army were migrant workers, or individuals that followed work across the country to support themselves and their families. The "Army" did not ask for food, shelter or the supportive services we see today. They asked for federal funding for public works projects that would have created jobs so that the men could earn an income to buy their food and shelter. Their march raises a question that still resonates today: how do we help different homeless populations when these groups have diverse backgrounds and levels of need?

This is what Alice W. Solenberger (1910) set out to do in Chicago. Solenberger interviewed one thousand homeless men to determine the demographics of the population. She worked for a district office of the Chicago Bureau of Charities, an agency that aided homeless men in the area with expenses such as train tickets to relocate to areas where the men had families. The one thousand men of Solenberger's study came from those who had applied for assistance in the past (Soldenberger 1910, 16-18). The study intended to understand the circumstances of the men who would need assistance in the future. Solenberger surveyed the one thousand men on their age, education level, work history, marital status and country of origin. While this study provided one of the first recorded surveys of individuals experiencing homelessness the author makes no effort to extend the study further. The findings are presented in One Thousand Homeless *Men: a study of original records* (1910) and are left to interpretation by the reader. The problem is that the findings of this study are not generalizable; they are area specific. The other issue with this study is that all types of homeless men are grouped together, when it would have been more beneficial to distinguish their circumstances beyond education level.

Nels Anderson remedied the distinction error. Once a hobo himself, Anderson took pains to cultivate the distinction among those without a formal home. He cited Nicholas Klein's (1926) distinction of the homeless man. According to Klein, there are three categories of homeless that must be considered. The first category is a *hobo*. This is an individual that is migratory and looking for work. The next is a *tramp*. This man travels but does not work. The final distinction is a *bum*. This individual does not travel and does not look for work (Anderson 1998, 62).

The hobo is often a seasonal worker (Anderson 1998, 63). He picks the harvest and lays railroad. He goes where the work is available and moves on when it is done. The similarity to our modern day migrant farm workers is striking. The hobo comes into the fields and picks the harvest without having a permanent home or job security. Without the hobos' work the fields would go unpicked. Migrant workers, while technically homeless, provided a key service to the growing United States. The American frontier was generally devoid of an excess of people. Building railroads, constructing cities and harvesting the crops all called for more workers than the local communities could provide. This is where the migrant worker came in. Without the mobile assistance of the hobo, many projects would have failed.

Anderson notes though that the migrant worker was only appreciated when the economy needed them. "Just as migrancy was essential to the growth and expansion of the American civilization in good times, it was the source of embarrassment in hard times...migrants who might be welcome at other times were very unwelcome during those periods when they were surplus" (Anderson 1998, 122). The migrant was an expendable resource in the early 20th century as Anderson notes. When there were

openings in the workforce the sheer number of overall homeless individuals in the country went unnoticed. However, as Coxey's Army showed us when there is a short supply of work it becomes hard for the public to ignore this population. As Robert Park (1961, xxiii) points out "The man whose restless disposition made him a pioneer on the frontier tends to become a "homeless man"... in the modern city."

If we consider the economic boom that was created from World War II (Wright, 2009, 29) it makes sense that a federal policy addressing homelessness did not exist until 1974. The war created economic opportunities that had not been seen since the final expansion of the railroad (Anderson 1998). This boom lasted into the 1960s while the war itself lasted from 1939 until 1945. Hobos and migrant workers were able to find jobs during the boom and were not the visibly poor that could be seen with Coxey's Army. According to Hopper and Hamberg (1984) the economic boom caused by the war essentially abolished homelessness, for the time being.

The 1974 policy was solely focused on homeless youth (Bagalman et al. 2014, 1). A policy that addressed the entire homeless population was not introduced until almost a decade later. In 1983, the Emergency Food and Shelter program was established. Almost a full century after Coxey's Army marched on Washington; the federal government responded to the needs of individuals lacking food and shelter. This program was administered utilizing a joint effort between the Federal Emergency Management Agency (FEMA) and the Department of Homeland Security (DHS) (Bagalman et al. 2014, 1). It was not until 1987 that the McKinney Act was implemented. This act specifically addressed homeless individuals whereas the Emergency Food and Shelter Act was a broader program that focused on a variety of people including the homeless. The McKinney Act, or as it is known today, the McKinney-Vento Act encapsulated programs ranging from shelter for homeless individuals to education as well as reintegration for homeless veterans (Bagalman et al. 2014, 1). The McKinney-Vento Act is one of the many HUD programs that will face a reduction in funding under President Trump's proposed budget.

It was during this time period that the country saw a reduction in federal funding to mental institutions, which scholars believe could have caused an influx in the homeless population. However due to the lack of quantitative data during this time period it is impossible to state the exact number of individuals who become homeless during the policy shift. Some estimates state that the homeless population increased "600,000 on any given night – and 1.2 million over the course of a year" (Dreier, 2004, 4). When President Reagan cut funding for mental institutions it caused many mental hospitals in operation in the United States during the 1980s to close (Torrey 1988, 198). While his predecessor proposed multiple new pieces of legislation that would have expanded the mental health care field, President Reagan followed the same policies he had enacted in California (Torrey 1988, 197). This mentality held that those with mental illness should be cared for by their community.

However, the lack of adequate resources for those with mental disabilities began long before Reagan was sworn into the Oval Office. Soldiers coming home from World War II and from the Vietnam War were in need of services that simply were not there. "The lack of housing for released mental health patients, the failure of community mental health centers to provide aftercare, increasingly rigid commitment laws and the mental health professionals' abdication of responsibility for the seriously mentally ill..." (Torrey 1988, 177). These were all issues that began to appear during the 1970s. President Reagan's decisions acted as a catalyst for a crisis that was waiting to happen. Solenberger's 1910 study of the men in Chicago found that a large percentage of the individuals had a mental disability of some degree. This indicates that the homeless population has included people who suffer from a mental illness for decades, at the very least.

Around the same time that mental institutions began closing their doors, cities began closing their gates. In 1981 Arizona outlawed basic human behavior such as sleeping, sitting, and eating in public (Erickson 1987, 79), which essentially outlawed homelessness and those who were homeless. These policies came in the wake of *Callahan v. Carey*, a 1979 case decided by the New York State Supreme Court that established the right to shelter for homeless individuals in New York City with two conditions: "...the man meets the need standard to qualify for the home relief program established in New York State; or (b) the man by reason to physical, mental or social dysfunction is in need of temporary shelter." The ruling held the City of New York responsible for housing those that met the above criteria. Almost thirty years later the case has been appealed on four separate occasions. Since the case did not reach the Supreme Court it does not affect the entire country, however it established a precedence of a "right to shelter". In theory, this precedence can be utilized in future court cases and appeals in other cities across the United States.

While not influenced by the *Callahan v. Carey* decision, Ohio commissioned a study to "assist law makers in creative solutions" to end homelessness (Bean, Stefl and Howe 1987). The study looked at 979 individuals experiencing homelessness in Ohio.

Participants of the study were categorized based upon appearance, such as how their hair or clothing looked. The study found that one-third of those individuals selected for an interview needed mental health services. However, there is likely to be selection bias in the types of homeless individuals who would agree to participate in such a study. By asking only those who appear to be homeless, the researchers potentially missed a demographic of individuals who were homeless but did not appear to be so. This likely caused their study to focus heavily on who we would consider to be chronically homeless and left out individuals who were transitionally homeless. The homeless population does not all look alike. There are homeless individuals who wear clean clothes, have jobs, and return to a shelter at the end of the day. Those who were surveyed only represent a portion of the population and therefore Bean, Stefl and Howe find results that are not generalizable to any homeless population.

In 1994, President Clinton commissioned a report on the homeless population that included interviewing not only state and government officials but also surveying 400 homeless individuals. Participants were selected by shelters in ten different cities across the country. The report stated that "...it profits us nothing as a nation to wall off homelessness as a novel social problem made up of a distinctly "different" population." (Interagency Council on the Homeless 1994, 17). The report concluded that there must be a two-prong approach to end homelessness. One prong must focus on the prevention of homelessness while the second prong needed to focus on the increase of services available to those experiencing homelessness. This report called for the beginning of Continuums of Care (CoCs). CoCs are "regional or local planning bod[ies] that [coordinate] housing and services funding for homeless families and individuals" (*What is a Continuum of Care*, 2010). CoCs vary both in geographic size, and the size of the populations they serve, across the United States. For instance, the entire state of North Dakota is a CoC while there are 47 active CoCs in the state of California. These are the agencies that report to HUD each year on the status of the homeless population. From 1988 to 1993, there were national competitions for federal funding (U.S. Department of of Housing and Urban Development, 2009, 1). Since 1994, the CoCs request federal funding each year to be distributed to the agencies that provide supportive services to those experiencing homelessness. The amount requested varies between each CoC based upon the need determined by the CoC itself.

There are a variety of services being offered to those experiencing homelessness, as follows (U.S. Department of of Housing and Urban Development, 2009):

- Safe Haven (SH) is a form of supportive housing that serves "hard-to-reach homeless persons with severe mental illness who come primarily from the streets and have been unable or unwilling to participate in housing or supportive services." (25)
- Transitional Housing (TH) "provides interim placement for persons or households who are not ready for or do not have access to permanent housing. Transitional housing is limited to a length of stay of up to 24 months and provides an opportunity for clients to gain the personal and financial stability needed to transition to and maintain permanent housing." (10)
- Emergency Shelter (ES) is "intended to provide a safe, secure, temporary place for individuals and households to reside while they seek more permanent housing or

supportive services that will facilitate access to permanent housing options. Emergency shelters oftentimes are the point of entry into the homeless system, assisting those confronted with an immediate loss of housing or those who are already homeless. Emergency shelters generally have a length of stay ranging from 1 to 90 days, depending on the individual program." (10)

- Permanent Supportive Housing (PSH) "combines housing assistance and supportive services for homeless persons with disabilities, primarily serving individuals and members of their household who have serious mental illnesses, chronic substance abuse problems, physical disabilities, or AIDS and related diseases." (10)
- Rapid Rehousing (RRH) "rapidly connects families and individuals experiencing homelessness to permanent housing through a tailored package of assistance that may include the use of time-limited financial assistance and targeted supportive services." (US Department of Housing and Urban Development, 2014.)
- Demonstration Projects (DEM) a special project that was funded by HUD in 2008 to determine the success of rapid rehousing.
- Other Permanent Housing (OPH) Permanent Supportive Housing without a disability requirement or housing without services included.

While supportive services are available to a range of demographics within the homeless population there are certain circumstances that have been shown to lead to a higher probability of success. Individuals who are "younger [in] age, [have had] current or recent employment, [an] earned income, good coping skills, adequate family support, absence of a substance abuse treatment history, and absence of an arrest history" (Caton et al 2005, 1753) are able to find and keep housing better than others. For individuals

who are older in age and had an arrest history there is an increase in the likelihood of a longer stay.

For those who do not meet the above criteria, it is more difficult to move out of the shelter system and into society. However, the system itself is in need of help. Culhane (2008, 111) describes it as "largely unregulated, unlicensed, underfunded, and ultimately unsuccessful." Supportive services in the United States work in silos, meaning that the service providers generally do not communicate with one another. The result is that someone can be "in line" for multiple types of housing or for multiple service providers at one time. Currently, due to the lack of communication between service providers, many individuals using these services fall through the cracks, so to speak (Culhane 2008, 111). This problem is being addressed by "Coordinated Entry" within the cities, an idea that was introduced in the 1994 Clinton Report. Coordinated Entry creates a database of services available that matches individuals in need with the beds they qualify for. Creating a single "entry point" into the system allows for cities to collect more data on the individuals experiencing homelessness within their community. This also allows homeless individuals to go to a single location and sign up for a bed on a single list as opposed to traveling to all of the area shelters and signing up on all of those lists for a bed.

One of the services that is offered is Housing First, a type of Permanent Supportive Housing or Other Permanent Housing, that is currently employed by multiple cities in the United States. The model was founded in New York City in 1992, before CoCs were started. Today, federal funding can go towards funding this service. The premise of this model is to supply individuals experiencing homelessness with housing before anything else. This housing is guaranteed to the individual if they follow a small set of guidelines. Unlike other supportive services there is no requirement to enter treatment for substance abuse, therapy for PTSD, or treatment for mental health issues. There are also few restrictions on who can qualify outside of their enrollment in services. According to Sam Tsemberis (2010, 38), the pioneer of Housing First, programs that require sobriety and have certain psychiatric prerequisites create "insurmountable barriers for the most vulnerable sector of the homeless". The autonomy granted to individuals in this program is the reason that Tsai, Mares and Rosenheck (2010) suggest that Housing First is the best option available for those experiencing mental health issues.

While there were several studies that suggested services were necessary, Hurlburt, Wood and Hough (1996) suggested otherwise. Before Housing First became a model used across the nation, the researchers hypothesized that individuals experiencing homelessness and mental illness would have more success if their housing is not dependent upon the individual's participation in therapy. Their study of 462 individuals however shows that it does not matter what type of housing is available, those experiencing mental illness and homelessness at the same time do better overall if they are receiving treatment and have a continuous roof over their head. Clark and Rich (2003) took Hulburt, Wood and Hough's research a step further and compared whether case management services or comprehensive housing was more effective for the chronically homeless. After observing 152 participants over the course of a year, they concluded that "it depends." Clark and Rich (2003) found that for individuals who have a rather low level of mental instability the case management option is cost effective and more beneficial to the individual. For those who have a higher level of mental instability the opposite is true. After a five-year study conducted by Tsemberis and Eisenberg (2000) in regards to the Pathways to Housing initiative in the City of New York, the first Housing First model, that included 242 individuals who were apart of Pathway to Housing against 1,600 individuals who were not part of the program, the researchers found the first proof that this model is effective for the chronically homeless.

The question of how to "best" house the homeless is not a simple question. Until 2007, no national-level data that was consistent across local areas was collected. This makes data analysis difficult, as data was not collected in the same way in the same areas over time. Researchers that wished to study the homeless had to collect their own data or analyze a single location. Previous studies from across the nation utilized localized or inadequate national data to determine that it depends on the region, and the individual as to what program will be successful. What all of these reports can agree on is that to end homelessness we must place people in houses. That is what Housing First is doing.

The Housing First program has also been proven to be cost effective (in popular scholarship but not in peer-reviewed format), at least in certain areas. Ada County, Idaho was found to spend over \$5 million dollars in services per 100 chronically homeless individuals in the community (Fry 2016). These services include police activity and ER visits. However, to simply put all chronically homeless individuals in Ada County into a house and offer supportive services would cost a little over \$1 million, or 30.64% of what the county already spends on chronically homeless. It is important to note that Fry's study focused on how Housing First affected the chronically homeless of Ada County. Housing First is also a less expensive alternative to mental institutions for those

experiencing mental illness (Gulcur et al. 2003). The cost of supportive services incurred by cities due to the chronically homeless are unavoidable costs.

This research has shown that different services work for different demographics of the homeless population. Moreover, there was not a single demographic in this study that was consistently successful across the United States when put into a certain supportive service. Put simply, the location and "type" of homeless individuals does factor into which supportive service they will be successful in. Due to the lack of national, comparable data a study like this has not been possible until now. Even so, this study should be repeated in ten years, focusing on single CoCs instead of regions in order to better understand precisely what works for each individual CoC situation.

METHODS

The Department of Housing and Urban Development started collecting data on the homeless population in 2007. Prior to this a consistent, national count of the homeless did not exist. The data is collected every January by each Continuum of Care (CoC) administering a survey known as the Point-in-Time Count (PITC). At the same time the CoC conducts a Housing Inventory Count (HIC) of the beds available to the homeless population. The CoCs administer these surveys during the last week of January every year. The purpose of the PITC is to provide a yearly snapshot of the homeless population across the United States. This data is not meant to provide a complete picture of the homeless population but a comparative annual overview.

January was chosen as the time of year for this count because it is a cold time of year. This makes it easier to count the number of people experiencing homelessness if many of them are staying in a shelter. However this also places a higher emphasis on the use of shelters that may not be seen in warmer months. This means that the data reflects a higher percentage of the homeless population staying in shelters during this count. This measure is limited as shelters do not always have enough beds available to the homeless and the shelters often have barriers to access, which means the count is conservative.

The shelters in each CoC conduct the count by surveying the number of people in their facilities. The unsheltered population is surveyed by volunteers in the community. In some regions, such as in Boise, Idaho, participants may be compensated for their participation. In Boise, participants receive a gift card for a small amount of money at a local grocery store.

This annual overview allows for new programs and services to be implemented in a CoC and have time to take effect. The data has only been collected since 2007, which means that there is not enough data present to run city level analysis, that would require at least 10 more years of data. A national study would not produce results that could be utilized by CoCs to address the homeless in their area. The range of weather climate across the United States coupled with the varying political climate from state to state creates a different baseline experience for each homeless individual depending on where they are located. To address these issues, I have separated the United States into 11 regions that follow Nate Silver's regional model.





Silver's reasoning behind these regions was "...to create regions that are politically coherent — sharing similar demographics and generally tending to vote together... each region must have at least four states and be geographically contiguous..." (Silver 2008a). Silver's separation of the United States addresses both of the issues identified with a nationwide study. By combining data from at least four states, there are now enough observations to run models that could produce statistical significance, provided results are substantively meaningful.

I selected 62 CoCs in the United States to examine, at least one from each state including Guam, Puerto Rico, the Virgin Islands and Washington DC. The first three were placed in the South Coast Region and DC was placed in the Acela Region. The largest CoCs were selected from each state. If there was a second CoC in a state that had a similar population, then it was included as well. This process led to four CoCs selected from California, three from South Carolina, and two from Kentucky, New Jersey and Ohio.

The data provided by HUD has 21 categories that homeless individuals can be placed in. For the purpose of this project I chose to analyze the five categories that I considered to be overarching: Total Homeless, Sheltered, Unsheltered, Chronically Homeless and Homeless Veterans. Total Homeless is the total number of homeless individuals surveyed during the PITC. Sheltered means that the individual surveyed was staying in a shelter at the time of the survey. The Unsheltered category means that the individual was not staying in a shelter at the time of the survey. Homeless Veterans are

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individuals who are a veteran of the United States Armed Services and are experiencing homelessness.

The Chronically Homeless category has a series of requirements that an individual must meet to be considered chronically homeless. They are:

"A homeless individual/head of house with a disability who:

- Lives in a place not meant for human habitation, a safe haven, or in an emergency shelter, AND
- Has been homeless and living in such a place for at least 12 months OR on at least 4 separate occasions in the last 3 years, as long as the combined occasion are ≥ 12 months, AND
- Each break in homelessness = 7+ consecutive nights.
- A homeless individual may be residing or have resided in an institutional care facility for < 90 days AND met all above criteria before entering the facility.
- Facility stays < 90 days do not constitute a break in homelessness"

(The County of Santa Clara, 2016.)

These categories give an overview of the homeless population. They are not mutually exclusive. Homeless veterans and chronically homeless are either sheltered or unsheltered and all categories are included in the total homeless. The reason each of these five categories is examined separately is because they each address separate needs of the population.

The HIC provided a breakdown of the beds available in each city. Each bed type has different requirements for use by a homeless individual. Some beds are designated for domestic violence survivors, while others are Transitional Housing or Emergency Shelters. The goal of this thesis is to see if there are certain bed types that reduced the population size of certain demographics of the homeless. The HIC separates beds into the categories of Emergency Shelters, Transitional Housing, Safe Haven, Permanent Supportive Housing, Rapid Rehousing, Demonstration Projects and Other Permanent Housing. The first four (ES, TH, SH, PSH) of these housing categories have been recorded in the count since 2007. The last three (RRH, DEM, OPH) have only been counted since 2014. To address the difference in data availability, the variables were ran in two separate models based upon the years they have been counted in the dataset.

I expect that Other Permanent Housing will cause a decrease in the chronically homeless and total homeless populations. This housing type provides beds to homeless individuals with limited barriers and can offer supportive services to those in the program. I also expect that Emergency Shelters will cause a decrease in the unsheltered homeless population and the total homeless population.

The categories of homeless individuals provided by the PITC acted as my dependent variable while the bed types were my independent variables. Each bed type was lagged by one year to control for the effect that an increase or decrease in beds would have on the population the following year. I analyzed the data using a fixed effects model in the Stata statistical analysis software that examined one of the dependent variables against three to four of the independent variables at a time.

The data utilized in these analyses does not provide a complete picture of the homeless population in the United States. However, the analysis does show the effects of increasing or decreasing the types of services available to those experiencing homelessness. It provides a look at each CoC in the United States that can be compared across the country. Nate Silver's regional separation of the United States helps control for the political and weather differences in each state that effect the way of life for the homeless. While it would ideal to examine each city as their own model we simply need more data to do so. Data cannot be collected from cities from prior to 2007 due to the lack of consistency of surveying across the country as well as the lack of the data's existence.

DATA ANALYSIS

	Total	Sheltered	Unsheltered	Chronically	Homeless
	Homeless	Homeless	Homeless	Homeless	Veterans
Emergency	.69984**	1.027373**	1418607**	.0006072	0080607
Shelter Beds (t-1)	(0.000)	(0.000)	(0.004)	(0.979)	(0.266)
Transitional	3.373889**	1.026708**	1.706072**	.723664**	.3383248**
Housing Beds (t-1)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Safe Haven	-26.56712*	8478043	-16.00467+	-11.336**	-2.936164+
Beds (t-1)	(0.048)	(0.865)	(0.076)	(0.003)	(0.066)
Rapid	-1.356915**	665225**	.4082992+	4258053**	2060738**
Rehousing Beds (t-1)	(0.000)	(0.003)	(0.085)	(0.000)	(0.000)
Demonstratio	13.66587**	2.18544	6.096934*	2.806911**	.3180202
n Projects (t- 1)	(0.000)	(0.303)	(0.015)	(0.006)	(0.577)
Permanent	.2055345	0313311	.3113732**	.053664	.0180821
Supportive Housing Beds (t-1)	(0.139)	(0.652)	(0.001)	(0.163)	(0.360)
Other	.6330942*	.1960611	.0767844	.2633603**	.1567209**
Permanent Supportive Housing (t-1)	(0.010)	(0.401)	(0.648)	(0.000)	(0.002)
Constant	-786.0204 (0.213)	-13.42857 (0.918)	-1041.261* (0.011)	25.05298 (0.906)	-5.820541 (0.897)
N	124	124	124	124	124
Number of CoCs	62	62	62	62	62
R ²	0.0007	0.2875	0.2038	0.3666	0.2066

Table 1 Effectiveness of Strategies to Combat Homelessness

SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

A national analysis of the data provided a look at what could potentially be

expected nationwide. If the location of the homeless individual did not have an effect on

what service worked for them, we could expect that the national results and the regional results would look exactly the same. However, as Table 2 illustrates, this is not the case. There are regional variations across all demographics of the homeless population.

This analysis examines what happens to each of the five categories of homelessness when one bed type is added to a region. I found that there are regional differences when it comes to the success of bed types on reducing the homeless population. Table 2: *Effectiveness of Strategies to Combat Total Homelessness (Part 1)* indicates that Safe Haven beds increase the total homeless population by 239 people in Region 2, while in Region 6 these bed types decrease the total homeless population by 30 people. The increase in Region 2 by Safe Haven beds on the Total Homeless population is the largest recorded increase presented in this data. The highest reduction in any population was found in Region 8 due to Rapid Rehousing. This caused a decrease of 90 people.

While we can expect to see a low amount of fluctuation present when a type of bed is added to region, changes greater than two people per one bed added do cause interest. In reality we know that when an Emergency Shelter bed is added to a region it does not force people to become homeless. What the results show by stating that there is an increase in the population when a bed is added is that the bed is not effectively addressing the needs of the population but instead causing more resources to be used.

The analysis modeled the effects of bed types on a regional level, thus the results will be examined on a region by region basis. The table on the following page shows a snapshot of the results of the analysis. The letters in black represent a decrease in the homeless population while the letters in grey represent an increase. The table is broken into 12 sections, one for the national results and 11 for each region.

Region 1- Big Sky Region (Alaska, Idaho, Montana, Utah, Wyoming)

In four out of the five demographics of the homeless population (Total, Sheltered, Chronic and Veteran) the models found that Rapid Rehousing causes an increase in the number of homeless individuals. The increases found with Rapid Rehousing range from 0.144 for the chronically homeless to 2.29 for the sheltered homeless. The consistency of the increase suggest that Rapid Rehousing is not an effective solution to reducing homelessness in Region 1.

The same can be said about Emergency Shelters in Region 1. The models show that Emergency Shelter beds in Region 1 cause an increase in homelessness for Total, Unsheltered, Chronic and Veteran. The increase ranges from 0.33 with a standard error (abbreviated throughout as SE) of 0.05 for Veterans all the way to an increase of 2.48 with an SE of 0.000 for the Total Homeless population. As with Rapid Rehousing, these results indicate that Emergency Shelters are not an effective way of decreasing the homeless population.

N-T	Е	Τ	S		R	D	0	1-T	Е	Τ		Р	R			2-T			S	Р			
N-S	Е	Τ			R			1-S			S	Р	R			2-S		Τ	S				
N-U	Е	Т	S	Р	R	D		1-U	Е			Р				2-U		Т	S				
N-C		Т	S		R	D	0	1-C	Е		S	Р	R		0	2-C	Е	Т	S				
N-V		Т	S		R		0	1-V	Е				R			2-V	Е		S				
3-T	Е				R		0	4-T	Е	Т						5-T	Е	Т		Р	R		0
3-S	Е	Т		Р				4-S	Е	Т		Р				5-S	E	Т					
3-U	Е	Т	S		R		Ο	4-U	Е					D		5-U		Τ					Ο
3-C	Е			Р			0	4-C	Е							5-C	Е	Τ	S	Р	R		Ο
3-V	Е	Т		Р	R		0	4-V	E	Τ			R	D		5-V		Τ					Ο
6-T			S	Р				7-T		Т						8-T					R		0
6-S		Т	S	Ρ				7-S	E	Τ					0	8-S	E		S	Р	R	D	0
6-U			S					7-U		Τ						8-U							
6-C	Е	Т		Р				7-C		Т						8-C	E	Т		Р	R		0
6-V			S					7-V	Е	Т		Р				8-V	Е		S	Р	R	D	Ο
9-T	Е	Т						10-T	Е	Т						11-T	Е	Τ					
9-S	Е	Т	S					10-S	Е	Т						11-S	Е	Т					
9-U	Е	Т			R			10-U			S			D		11-U	Е	Т					
9-C	Е	Т			R		Ο	10-C	Е							11-C	Е	Т					
9-V		Т			R		0	10-V		Т						11-V	Е	Т		Р			

N= National	7= Region 7	U= Unsheltered	R= Rapid Rehousing
1= Region 1	8= Region 8	C= Chronic	D= Demonstration Projects
2= Region 2	9= Region 9	V= Veteran	Ω – Other Permanent Housing
3= Region 3	10= Region 10	E= Emergency Shelters	0- Other Fermanent Housing
4= Region 4	11= Region 11	T= Transitional Housing	
5= Region 5	"N-T"= National Total Homeless	S= Safe Haven	
6= Region 6	"N-S"= National Sheltered Homeless	P= Permanent Supportive Housing	

There are three instances shown in the models of a reduction in the homeless population in Region 1, however these fall into the range of fluctuation. For the Total Homeless population in Region 1, Permanent Supportive Housing is shown to reduce the population by 0.36 with a SE of 0.097. This means that for every three beds Permanent Supportive beds added to Region 1 we can expect one person to not be homeless. Permanent Supportive Housing also reduces the Chronic Homeless population by 0.29 with a SE of 0.00. This makes sense considering that the total homeless count includes those who are experiencing Chronic homelessness. This coefficient translates to three and a half beds necessary to reduce the homeless population by one.

The final instance of a reduction in the homeless population in Region 1 can be found with Other Permanent Housing. The models indicate that OPH causes a reduction in the Chronic Homeless population by 0.83 with a SE of 0.007. This is over twice the reduction caused by PSH in Region 1. The data present for Other Permanent Housing has only been tracked for the past three years, but these results indicate that this is a service that should be watched over the next few years to ensure that the results were accurate.

Region 2- Southwest Region (Arizona, Colorado, New Mexico, Nevada)

Safe Haven beds drastically increase the homeless population in Region 2. The models show that the in all five categories of homelessness assessed in this paper in Region 2 the populations increase by no less than 20.95 people when a single Safe Haven bed is added. Total Homeless sees the largest increase in population with a rise of 239.83 people with a SE of 0.000. According to the results, aside from the Total Homeless population, the Unsheltered Homeless population sees the largest increase caused by Safe

Haven beds. These results indicate that Safe Haven beds in Region 2 are ineffective at reducing the homeless population in any demographic.

Emergency Shelters do prove to be effective at moderately reducing Veteran and Chronic homelessness in Region 2. The results show that Veteran Homelessness is reduced by 0.2339004 with a SE of 0.031 and Chronic Homelessness is reduced by 0.199 with a SE of 0.073. This means that for every five Emergency Shelter beds added in Region 2 we would expect to see a single person reduction in both the Veteran and Chronic Homeless population.

Region 3- Pacific (California, Hawaii, Oregon, Washington)

Region 3 is one of only three regions where there is a reduction shown for each of the five demographics in this study. The total homeless population is reduced by 1.3 people when one Other Permanent Housing bed is added to the region. This means that in theory when four OPH beds are added, the total homeless population should be reduced by five people.

The Sheltered Homeless in Region 3 are best served by Permanent Supportive Housing as compared to Emergency or Transitional Housing. PSH reduces the Sheltered Homeless population in Region 3 by 0.12 with a SE of 0.001. While this is a small decrease (it takes roughly 8.35 PSH beds to reduce the Sheltered Homeless population by one) it is effective. Considering that Emergency Shelters for the Sheltered population cause a 0.5 increase and Transitional Housing causes a 1.08 increase, both with a SE of 0.000, PSH appears to be the best option for the Sheltered population.

For the Unsheltered Homeless in Region 3, Safe Haven is effective at reducing this population. The results show that for each Safe Haven bed added in Region 3, the Unsheltered population is expected to decrease by 61.34 (SE of 0.052). This means that Safe Haven beds are effective in Region 3 for the Unsheltered population. A decrease of 61.34 indicates that the beds are effective at retaining individuals from off the streets.

The Chronically Homeless in Region 3 can be best helped by Permanent Supportive Housing. One PSH bed added in Region 3 is expected to reduce the Chronic Homeless population by 0.22, which means that if 4.53 PSH beds are added the Chronic Homeless population will reduce by one individual. Emergency Shelters on the other hand cause an increase in the Chronically Homeless population in this region. One Emergency Shelter bed increases the population by 1.78 people.

Emergency Shelters in Region 3 only decrease homelessness in regard to the Veteran Homeless population. Even so this the reduction is only by 0.32 with a SE of 0.008. This means that when three Emergency Shelter beds are added to Region 3, the Veteran Homeless population can be expected to reduce by a single individual. In regard to the other four demographics of homelessness addressed in this study the results indicate that Emergency Shelters are not effective at reducing the Total, Sheltered, Unsheltered or Chronic populations.

Region 4- Rustbelt (Indiana, Michigan, Ohio, Pennsylvania)

The Veteran Homeless population is the only population to see a reduction in Region 4. Emergency Shelters, Rapid Rehousing, and Demonstration Projects all cause a reduction in this population. Emergency Shelters cause the smallest reduction out of the three bed types. For each ES bed added in the region the Veteran Homeless population is reduced by 0.099, which means it would take over 10 Emergency Shelter beds to reduce the Veteran Homeless population by one. However, the four other demographics examined in this study saw an increase in population size when Emergency Shelter beds were added to the region.

Rapid Rehousing causes a 0.25 person decrease in the veteran homeless population which means when four Rapid Rehousing beds are added to Region 4, the population should decrease by one individual. Demonstration Projects on the other hand cause a 3.02 person decrease in the veteran homeless population. This means that for each DEM bed added in Region 4, the veteran homeless population is expected to decrease by three individuals. However, DEM beds do not work for the unsheltered population in Region 4. When one DEM bed is added the unsheltered population is predicted to rise by 17.18 people. These results show that regional and demographic defenses have an effect on the bed type.

Region 5- North Central (Iowa, Illinois, Minnesota, Wisconsin)

Region 5 is the second of the three regions that shows a reduction in each category of homelessness examined in this paper. For four out of those five categories, Other Permanent Housing is the cause of this decrease. The total homeless population in Region 5 sees a 4.54 people with a SE of 0.000, when a single OPH bed is added. The unsheltered homeless experience a decrease of 4.32 people, while the chronic homeless see a 3.52 decrease (both with a 0.000 SE). For the veteran homeless population in Region 5 the decrease is not as large as seen for the other demographics. When one OPH bed is added the veteran homeless population is expected to see a decrease of 0.78 people, or in other words when four OPH beds are added, the veteran homeless population decreases by three people.

Other Permanent Housing is not the only bed type that reduces the chronic homeless population in Region 5. Safe Haven beds actually cause a larger decrease in the chronically homeless population than OPH beds do. When one Safe Haven bed is added the chronic population is reduced by 4.64 people. This demographic can also be reduced by 0.56 when an Emergency Shelter bed is added, by 0.133 when a permanent supportive house bed is added and by 0.34 when a Rapid Rehousing bed is added. For the sheltered homeless in Region 5, Rapid Rehousing causes a decrease of 0.27 people, or in other words it would take about 3.66 Rapid Rehousing beds to reduce the sheltered homeless population by one.

Region 6- Prairie (Kansas, North Dakota, Nebraska, South Dakota)

Safe Haven beds are effective in Region 6. For the total, sheltered, unsheltered and veteran homeless population Safe Havens drastically decrease the populations. For the total homeless population, there is an estimated 29.87 person decrease when a single Safe Haven bed is added. For the sheltered homeless this is a 15.29 person decrease. For the unsheltered population one Safe Haven bed is expected to decrease the population by 14.58 people, while the veteran homeless population would see a 5.2 person decrease. These numbers are large, they indicate that Safe Haven beds are effective for almost all of the demographics in Region 6.

For the demographic that was not reduced by Safe Haven beds, Emergency Shelter has shown to be effective. For the chronically homeless in Region 6, ES beds reduce the population by 0.24 people, meaning about four ES beds will reduce the chronically homeless by one person. While this is not as large of a reduction seen with Safe Haven beds in the other demographics we do see all five demographics in Region 6 report a type of bed that effectively reduces the homeless population.

Region 7- South Coast (Florida, Georgia, Guam, North Carolina, Puerto Rico, South Carolina, Virginia, Virgin Islands)

For those in Region 7, there are only two types of beds that show a reduction in any demographic. The sheltered homeless population is reduced by Other Permanent Housing by 1.5 people when one bed is added. For the homeless veterans in this area Permanent Supportive Housing is shown to reduce the population by 0.087 people per PSH bed added. This means that for the veteran homeless population to see a decrease of one person, there needs to be 11.53 PSH beds added to Region 7.

Transitional Housing in Region 7 is shown to be ineffective for each demographic. For the total homeless population one Transitional Housing bed will increase the population by 1.35 people. The sheltered homeless population is expected to increase by 0.86 people while the unsheltered population is estimated to increase by 0.54 for every Transitional Housing bed added. As for the chronically homeless in Region 7, their population is expected to increase by 0.41 and veteran homelessness is estimated to rise by 0.23 per one Transitional Housing bed added. These numbers indicate that Transitional Housing does not decrease the demographic of the homeless population in Region 7.

Region 8- Gulf Coast (Alabama, Louisiana, Mississippi, Texas)

In Region 8, there was not enough data to generate results for the unsheltered population. However, there were a multitude of results found for the other four demographics. For instance, Other Permanent Housing is effective at reducing all of the remaining demographics. For the total homeless population one OPH bed was estimated to reduce the population by 89.88 with an SE of 0.000. The sheltered homeless population was expected to decrease by 50.95 people when one bed is added, while the chronic homeless population would decrease by 13.54. For the homeless veterans in Region 8 there would be a reduction of 11.26 when one OPH bed is added. These results all have a SE of 0.000 and indicate the OPH beds are incredibly effective at reducing the homeless population in Region 8. Permanent Supportive Housing is also shown to be effective at reducing the sheltered, chronic, and veteran homeless populations, at much smaller levels. There is not a decrease larger than one when a Permanent Supportive Housing bed is added in this region.

Emergency Shelters on the other hand are shown to increase the homeless population for the sheltered chronic, and veteran homeless in Region 8. One Emergency Shelter bed is predicted to increase the veteran population by 0.91 people, the sheltered population by 3.6 people and the chronic homeless population by 4.49 people. These results show that in Region 8, Emergency Shelters are not effective at reducing the homeless population.

Region 9- Highlands (Arkansas, Kentucky, Missouri, Tennessee, West Virginia)

In Region 9 there is only one reduction in any demographic found, that is for the veteran homeless population. When one Other Permanent Housing bed is added the veteran homeless population is expected to be reduced by 0.17 people. In other words, it would take also six OPH beds to reduce the veteran homeless population by one person.

Transitional Housing in Region 9 consistently increases the population for all five demographics. While none are increased by more than one person per bed added, the consistent increase in all demographics suggest that Transitional Housing is not an effective way to reduce homelessness in Region 9. The same can be said for Emergency Shelters. For the total, sheltered, unsheltered and chronic populations in this region, Emergency Shelters are shown to increase the populations. Again, none of the populations are estimated to increase by more than one person per bed added but the consistency of increase suggests that ES beds are not effective.

Region 10- New England (Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont)

There was only one reduction in the homeless population shown in Region 10. When a Safe Haven bed was added, the unsheltered population is estimated to decrease by 3.3 people. This indicated that for the unsheltered population, safe beds are effective at moving these individuals out of this population.

Emergency Shelter and Transitional Housing beds on the other hand are both shown to increase the total, sheltered homeless population. Emergency Shelter beds also increase the chronically homeless population and Transitional Housing is shown to increase the veteran homeless population. Just as with the increases caused in Region 9, the increases in population seen in Region 10 are minimal. However the consistency suggests that alternative solutions may be more beneficial.

Region 11- Acela (Washington DC, Delaware, Maryland, New Jersey, New York)

Emergency Shelters were the only bed type in Region 11 that showed a reduction in any demographic of the homeless population. For veteran homeless in this region, when one Emergency Shelter bed was added, the population was expected to decrease by 0.046. In other words, it would take almost 22 Emergency Shelter beds to decrease the veteran homeless population by one person.

For the other four demographics, Emergency Shelters are expected to cause an increase in the population. These results follow the same pattern seen in Regions 9 and 10, minimal but a consistent increase in the populations. Transitional Housing in Region 11 also causes the same pattern of increase as seen in Regions 9 and 10. This suggests that these bed types are ineffective at reducing the homeless population.

Key Findings

It is important to note that an increase in the sheltered population could be a good thing. As it has the potential to mean more people are being moved in off the streets, however it could also mean that more people are transitionally homeless and staying in the shelter for that time.

What this analysis has shown is that Emergency Shelters are not effective at reducing homelessness for most regions and demographics. The same can be said about Transitional Housing. Safe Haven beds work well in Region 6 but not in any other region across the United States. Permanent Supportive Housing does show success at decreasing homelessness in Regions 1, 3, 5, 7 and 8. Rapid Rehousing in the national model appeared to be highly successful at reducing homelessness for almost all demographics however, when looked at regionally this service only works in a few scenarios. As for Demonstration Projects , there were a handful of cases when this service showed to be effective. Other Permanent Housing worked for almost all demographics in both Regions 5 and 8. These results support my hypothesis that different services work for different demographics of the homeless population in different regions around the United States. If the location of an individual experiencing homelessness did not have an effect on the success of the services provided to him, the results would be similar, if not the same, across the entire nation. The results show otherwise.

CONCLUSION

This study has identified patterns within each of the 11 regions on what bed types are successful at reducing homelessness and what bed types simply do not work. Emergency Shelters are only shown to be effective in a handful of circumstances, and the same can be said for Transitional Housing. While Safe Haven beds are ineffective at reducing homelessness in Region 2, they are incredibly effective at reducing homelessness in Region 6. The only bed type that has a high consistency of reducing homelessness is Other Permanent Housing.

This research is limited by the amount of data available. This study should be conducted again in ten years on a city level basis to produce more localized solutions. The next step for this research during the next ten years is to take these models and examine more of the variables available in the data provided by HUD. These variables are more specific than the ones examined in this paper and could provide more descriptive solutions. Another step for this research is to examine the underlying factors in each region that are potentially causing the variation in the effectiveness of services.

Homelessness is a political, social, and economic problem in our society today. Regardless of why someone is homeless, we can see that is socially and economically beneficial to end that individual's homelessness. This study has shown that there is not a single solution to this problem in the United States. The circumstances of each case must be considered in order to best address the needs of the person experiencing homelessness.

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APPENDIX A

Regression Tables

Table 3. Effectiveness of Strategies to 0	Combat Total Homelessness ((Part 1)	I
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	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Emergency	2.47764**	-0.3166883	3.717468**	1.398317**	0.963357**	-0.4864791	-0.0196483
Shelter Beds (t-1)	(0.000)	(0.506)	(0.000)	(0.000)	(0.000)	(0.442)	(0.949)
Transitional	.8872144*	0.3508947	-0.0321994	0.2667653**	0.9758059**	0.5920478	1.351049**
Housing Beds (t-1)	(0.022)	(0.109)	(0.946)	(0.001)	(0.000)	(0.175)	(0.000)
Safe Haven Beds (t-1)	2.385515 (0.599)	239.8311** (0.000)	-043.17278 (0.163)	-1.266642 (0.607)	1.460328 (0.499)	-29.87028** (0.008)	-0.759051 (0.858)
Permanent Supportive Housing Beds (t-1)	-0.3600919+ (0.097)	0.5228609* (0.032)	0.0036614 (0.978)	0.518632 (0.162)	.0934422 (0.118)	0.7351149+ (0.089)	0.1680635 (0.249)
Constant	-512.5055* (0.039)	1915.631** (0.000)	5774.476** (0.010)	207.3374* (0.025)	-144.1005 (0.147)	893.4901** (0.007)	907.5261** (0.000)
Ν	40	32	56	40	32	32	80
Number of CoCs	5	4	7	5	4	4	10
\mathbb{R}^2	0.0388	0.3718	0.4670	0.3505	0.1700	0.0320	0.5853

SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses

+p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Emergency	5.171519	0.5474712**	1.049651**	1.071748**
Shelter Beds	(0.103)	(0.004)	(0.000)	(0.000)
(t-1)				
Transitional	0.3048401	0.7999244**	0.7848695**	1.448667**
Housing Beds	(0.805)	(0.000)	(0.000)	(0.000)
(t-1)				
Safe Haven	19.16984	18.49038	-1.747227	7.985
Shelter Beds	(0.562)	(0.179)	(0.523)	(0.371)
(t-1)				
Permanent	-0.7408047	0.107976	0.0207412	-0.1976218
Supportive	(0.209)	(0.462)	(0.324)	(0.167)
Housing				
Beds (t-1)				
0	713.2452	419.9823**	116.3306**	-3.96591
Constant	(0.353)	(0.041)	(0.001)	(0.992)
Ν	32	56	48	48
Number of	4	7	6	6
CoCs				
R ²	0.1328	0.1264	0.6789	0.8556

Table 4. Effectiveness of Strategies to Combat Total Homelessness (Part 2)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

		~					
	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Emergency	0.5426687	-0.0096064	0.5042891**	1.210643**	0.9454444**	0.3289301	0.3667748*
Shelter Beds	(0.278)	(0.982)	(0.000)	(0.000)	(0.000)	(0.499)	(0.049)
(t-1)							
Transitional	0.495184	0.7513972**	1.082769**	0.2986136**	0.5000485**	1.102911**	0.8589494**
Housing Beds	(0.134)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)
(t-1)							
Safe Haven	8.167894*	94.78532**	2.78698	-0.8583645	2.272947	-15.28598+	0.6673368
Beds (t-1)	(0.035)	(0.007)	(0.588)	(0.709)	(0.341)	(0.078)	(0.800)
Permanent	0.3249576+	-0.1773069	0.1197053**	0.0681822*	0.1223357+	0.5528558+	0.1294759
Supportive	(0.080)	(0.413)	(0.001)	(0.049)	(0.064)	(0.097)	(0.138)
Housing Beds	. ,	· · · ·		· · · ·	· · · ·	, ,	
(t-1)							
	192.4003	842.9536*	-156.3374	156.7103 +	74.60734	455.1166+	318.7587**
Constant	(0.364)	(0.028)	(0.364)	(0.068)	(0.497)	(0.073)	(0.005)
N	40	32	56	40	32	32	80
Number of	5	4	7	5	4	4	10
CoCs							
\mathbb{R}^2	0.0059	0.3998	0.2465	0.2874	0.0557	0.0982	0.5716

Table	5.	Effectiveness	of	Strategies to	Combat	Sheltered	Homelessness	(P	'art 1	1)
				0				· ·		

SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, *p<0.05, **p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Emergency	3.599267**	0.6218347**	1.026822**	1.049045**
Shelter Beds	(0.000)	(0.000)	(0.000)	(0.000)
(t-1)				
Transitional	0.0510845	0.858995**	0.7852989**	1.323001**
Housing Beds	(0.812)	(0.000)	(0.000)	(0.000)
(t-1)				
Safe Haven	15.5409**	25.04002**	2.965418	4.77264
Shelter Beds	(0.007)	(0.000)	(0.259)	(0.562)
(t-1)				
Permanent	-0.4503651**	-0.0142588	0.0055565	-0.2144938
Supportive	(0.000)	(0.874)	(0.783)	(0.103)
Housing				
Beds (t-1)				
Constant	-217.1589	137.5053	34.10012	-112.1695
Constant	(0.104)	(0.117)	(0.296)	(0.752)
Ν	32	56	48	48
Number of	4	7	6	6
CoCs				
\mathbb{R}^2	0.5112	0.1184	0.7291	0.8719

Table 6. Effectiveness of Strategies to Combat Sheltered Homelessness (Part 2)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Emergency	1.934971**	-0.3070819	3.961399**	0.1876732**	0.0179126	-0.1575489	-0.1924758
Shelter Beds	(0.001)	(0.493)	(0.000)	(0.000)	(0.907)	(0731)	(0.379)
(t-1)							
Transitional	0.392056	-0.4005024+	-0.8349537+	-0.03184883	0.4757574**	-0.5108628	0.5413252**
Housing Beds	(0.322)	(0.052)	(0.074)	(0.257)	(0.000)	(0.106)	(0.000)
(t-1)							
Safe Haven	-5.782379	145.0457**	-61.33894+	-0.4082779	-0.8126187	-14.5843+	-1.086524
Beds (t-1)	(0.213)	(0.000)	(0.052)	(0.637)	(0.753)	(0.074)	(0.714)
Permanent	0.6850495**	-0.3455541	-0.0649203	-0.016319	-0.288936	0.1822592	0.0666747
Supportive	(0.002)	(0.132)	(0.636)	(0.210)	(0.686)	(0.560)	(0.521)
Housing Beds	· · · ·	· · · ·	· · · ·	· · · ·			· · ·
(t-1)							
C /	-704.9058**	1072.677**	3955.829+	50.62707	-218.7078+	438.3735	402.3681+
Constant	(0.005)	(0.008)	(0.054)	(0.118)	(0.066)	(0.560)	(0.076)
Ν	40	32	56	40	32	32	80
Number of	5	4	7	5	4	4	10
CoCs							
\mathbb{R}^2	0.0165	0.2851	0.6051	0.0380	0.0003	0.0528	0.3509

Table 7	. Effectiveness	of Strategies	to Combat	Unsheltered	Homelessness	(Part 1	1)
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SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Emergency	1.572253	0.2168369+	0.0256338	0.0319913**
Shelter Beds	(0.604)	(0.070)	(0.212)	(0.003)
(t-1)				
Transitional	0.2537555	0.2493145+	0.0174516	0.1417184*
Housing Beds	(0.830)	(0.074)	(0.716)	(0.023)
(t-1)				
Safe Haven	3.628944	-14.07607	-3.301462 *	-0.042344
Shelter Beds	(0.908)	(0.137)	(0.018)	(0.980)
(t-1)				
Permanent	-0.2904396	-0.0209603	(0.0037298	0.0007032
Supportive	(0.606)	(0.826)	(0.683)	(0.980)
Housing				
Beds (t-1)				
Constant	930.404	51.43005	78.48235**	185.7819
Constant	(0.205)	(0.759)	(0.000)	(0.263)
Ν	32	56	48	48
Number of	4	7	6	6
CoCs				
\mathbb{R}^2	0.0773	0.1495	0.0029	0.0227

Table 8. Effectiveness of Strategies to Combat Unsheltered Homelessness (Part 2)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parenthes +p<0.10, * p<0.05, ** p<0.01, two-tailed

		~			-		
	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Emergency	0.7696052**	-0.1990607+	1.779215**	0.2228326**	0.5563754**	-0.2392895*	-0.0349946
Shelter Beds	(0.001)	(0.073)	(0.000)	(0.000)	(0.000)	(0.028)	(0.895)
(t-1)							
Transitional	-0.690844	0.1905615**	0.2294518	-0.0035782	0.2837818**	0.2667848**	0.4077623**
Housing Beds	(0.686)	(0.010)	(0.470)	(0.951)	(0.003)	(0.001)	(0.003)
(t-1)							
Safe Haven	3.710628*	20.9525*	-17.71035	-0.8116556	-4.643927*	-2.933417	-2.616914
Beds (t-1)	(0.022)	(0.029)	(0.344)	(0.565)	(0.018)	(0.179)	(0.528)
Permanent	-0.2858371**	-0.0666902	-0.2204701+	0.0067222	-0.1326048*	0.2072566*	-0.0267149
Supportive	(0.000)	(0.236)	(0.063)	(0.735)	(0.014)	(0.020)	(0.821)
Housing Beds				· · · ·	· · /	· · · ·	
(t-1)							
0	-147.1245	346.4481**	631.1114	49.05138	-186.8736*	108.0481	194.3728
Constant	(0.111)	(0.001)	(0.558)	(0.351)	(0.017)	(0.120)	(0.245)
Ν	30	24	42	30	24	24	60
Number of	5	4	7	5	4	4	10
CoCs							
R^2	0.2017	0.6569	0.4071	0.0790	0.4513	0.0686	0.2341

Table 9.	Effectiveness	of Strategies to	Combat	Chronic Homelessness	(Part 1)
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SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses

+p<0.10, * p<0.05, ** p<0.01, two-tailed

Region8	Region9	Region10	Region11
4.491961*	0.2131284+	0.1784892**	0.0719902**
(0.015)	(0.078)	(0.000)	(0.003)
-1.067443+	0.339238*	-0.0909642	0.4823509**
(0.097)	(0.031)	(0.291)	(0.000)
18.32176	7.174694	1.262917	-9.918108
(0.246)	(0.377)	(0.473)	(0.152)
-0.635151*	-0.1313474	0.00163	-0.0629903
(0.046)	(0.251)	(0.892)	(0.238)
32.08641	68.99223	77.66972**	122.9337
(0.933)	(0.667)	(0.001)	(0.426)
24	42	36	36
4	7	6	6
0.1985	0.0961	0.4345	0.2465
	Region8 4.491961* (0.015) -1.067443+ (0.097) 18.32176 (0.246) -0.635151* (0.046) 32.08641 (0.933) 24 4 0.1985	$\begin{tabular}{ c c c c c c } \hline Region8 & Region9 \\ \hline 4.491961* & 0.2131284+ \\ (0.015) & (0.078) \\ \hline -1.067443+ & 0.339238* \\ (0.097) & (0.031) \\ \hline 18.32176 & 7.174694 \\ (0.246) & (0.377) \\ \hline -0.635151* & -0.1313474 \\ (0.046) & (0.251) \\ \hline 32.08641 & 68.99223 \\ (0.933) & (0.667) \\ \hline 24 & 42 \\ 4 & 7 \\ \hline 0.1985 & 0.0961 \\ \hline \end{tabular}$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Table 10. Effectiveness of Strategies to Combat Chronic Homelessness (Part 2)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

·	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Emergency	0.3271837*	-0.2339004*	-0.3225592 **	-0.0984032**	-0.0209384	-0.0121993	0.2531593**
Shelter Beds	(0.050)	(0.031)	(0.008)	(0.008)	(0.666)	(0.849)	(0.006)
(t-1)							
Transitional	0.17515443	-0.0803841	0.465563**	0.2687232**	0.200553**	-0.0332282	0.2308782**
Housing Beds	(0.148)	(0.263)	(0.000)	(0.000)	(0.000)	(0.465)	(0.000)
(t-1)							
Safe Haven	-0.3898174	45.6381**	8.800939	-0.5735298	1.222121	-5.199685**	-0.5761753
Beds (t-1)	(0.734)	(0.000)	(0.171)	(0.552)	(0.139)	(0.000)	(0.693)
Permanent	-0.0646156	-0.0468624	0.110041**	0.0050019	-0.0127892	-0.0364028	-0.0866685*
Supportive	(0.246)	(0.393)	(0.008)	(0.713)	(0.574)	(0.487)	(0.037)
Housing Beds	· · · ·	, ,	· · · ·	· · · ·	· · · ·	· · · ·	
(t-1)							
	-66.22846	361.5613**	-481.7936	187.0134**	2.176861	188.5719**	-93.16976
Constant	(0.312)	(0.000)	(0.104)	(0.000)	(0.948)	(0.000)	(0.126)
Ν	30	24	42	30	24	24	60
Number of	5	4	7	5	4	4	10
CoCs							
\mathbb{R}^2	0.0077	0.3148	0.4693	0.0562	0.0512	0.0743	0.5921

 Table 11. Effectiveness of Strategies to Combat Veteran Homelessness (Part 1)

SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses

+p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Emergency	0.9144847**	0.0364972	0.0061917	-0.0459983**
Shelter Beds	(0.000)	(0.499)	(0.618)	(0.020)
(t-1)				
Transitional	0.0852643	0.1413003*	0.2534696**	0.343779**
Housing Beds	(0.271)	(0.040)	(0.000)	(0.000)
(t-1)				
Safe Haven	3.141327+	4.658505	-1.037926	2.583626
Shelter Beds	(0.098)	(0.193)	(0.171)	(0.650)
(t-1)				
Permanent	-0.1790267**	-0.0650185	0.0043569	0.113868**
Supportive	(0.000)	(0.191)	(0.407)	(0.009)
Housing				
Beds (t-1)				
Constant	-51.67389	120.0237*	-13.03599	-355.5208
Constant	(0.261)	(0.062)	(0.208)	(0.426)
Ν	24	42	36	36
Number of	4	7	6	6
CoCs				
\mathbb{R}^2	0.7504	0.1443	0.3283	0.7888

Table 12. Effectiveness of Strategies to Combat Veteran Homelessness (Part 2)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Rapid	1.912814**	3.295067	2.083461**	-0.181116	-0.2351492	5.129061	0.197032
Rehousing	(0.006)	(0.601)	(0.004)	(0.621)	(0.20)	(0.173)	(0.631)
Beds (t-1)							
Demonstratio	0	17.65816	0.1898493	-13.52513	0	0	0
n Beds (t-1)	(Omitted)	(0.561)	(0.983)	(0.587)	(Omitted)	(Omitted)	(Omitted)
Other	0.7149115	-7.299473	-1.3028+	-0.0618689	-4.544858**	-1.896551	-0.2198357
Permanent	(0.751)	(0.606)	(0.053)	(0.526)	(0.000)	(0.736)	(0.886)
Supportive							
Housing (t-1)							
Constant	985.9054** (0.000)	3757.497* (0.036)	11227.66** (0.005)	3038.212** (0.001)	3394.936* (0.033)	840.7483** (0.000)	1932.17** (0.000)
Ν	10	8	14	10	8	8	20
Number of	5	4	7	5	4	4	10
CoCs							
\mathbb{R}^2	0.5869	0.2646	0.9027	0.5505	0.9811	0.0944	0.0070

Table 13. Effectiveness of Strategies to Combat Total Homelessness (Par	t 3)
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SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Rapid	5.691541**	0.9056125	0.112713	-0.6491343
Rehousing	(0.000)	(0.442)	(0.936)	(0.555)
Beds (t-1)				
Demonstratio	-4.71306	0	2.397756	22.00674
n Beds (t-1)	(0.119)	(Omitted)	(0.617)	(0.584)
Other	-89.87953**	-0.0854555	-0.0522883	-2.29451
Permanent	(0.000)	(0.866)	(0.894)	(0.967)
Supportive				
Housing (t-1)				
Constant	954.3525**	1208.836**	1600.275*	15169.75
Constant	(0.005)	(0.000)	(0.037)	(0.116)
N	8	14	12	12
Number of	4	7	6	6
CoCs				
\mathbb{R}^2	0.7796	0.0482	0.0220	0.9224

Table 14. Effectiveness of Strategies to Combat Total Homelessness (Part 4)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

Table 15. Effectiveness of Strategies to Combat Sheltered Homelessness (Part 3)

	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Rapid	2.285719**	2.654276	1.068459	-0.2529148	-0.2731313+	0.4690473	0.3595921
Rehousing	(0.000)	(0.477)	(0.344)	(0.458)	(0.073)	(0.679)	(0.142)
Beds (t-1)							
Demonstratio	0	21.76528	-12.34024	-22.06994	0	0	0
n Beds (t-1)	(Omitted)	(0.227)	(0.327)	(0.311)	(Omitted)	(Omitted)	(Omitted)
Other	15322416	-8.66976	1.917952	-0.065034	-0.220901	0.0342184	-1.505245
Permanent	(0.364)	(0.301)	(0.116)	(0.475)	(0.710)	(0.983)	(0.096)
Supportive				~ /			
Housing (t-1)							
<u> </u>	629.4089**	2248.385*	3429.286**	2926.531**	2607.583*	870.6778**	1261.988**
Constant	(0.000)	(0.035)	(0.000)	(0.000)	(0.021)	(0.000)	(0.000)
Ν	10	8	14	10	8	8	20
Number of	5	4	7	5	4	4	10
CoCs							
R^2	0.8829	0.1160	0.0144	0.7295	0.5883	0.0697	0.2404
COUNCE							

SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Rapid	3.732446**	-0.3721618	0.0990946	-0.6342337
Rehousing	(0.000)	(0.649)	(0.932)	(0.185)
Beds (t-1)				
Demonstratio	-3.853992**	0	1.409984	25.95783
n Beds (t-1)	(0.008)	(Omitted)	(0.724)	(0.136)
Other	-50.94667**	-0.2233402	-0.1161945	-1.106964
Permanent	(0.000)	(0.524)	(0.721)	(0.964)
Supportive				
Housing (t-1)				
C i i i	580.7058**	1073.367**	1552.59*	14412.94
Constant	(0.000)	(0.000)	(0.042)	(0.119)
N	8	14	12	12
Number of	4	7	6	6
CoCs				
R ²	0.6877	0.1468	0.3057	0.9837

Table 16. Effectiveness of Strategies to Combat Sheltered Homelessness (Part 4)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

Table 17. Effectiveness of Strategies to Combat Unsheltered Homelessness (Par	:t 3	5)
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	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Rapid	-0.2268248	0.64007911	2.985015**	0.0713381	0.0431084	0.8290641	-0.2489258
Rehousing Beds (t-1)	(0.710)	(0.881)	(0.000)	(0.2373)	(0.637)	(0.560)	(0.383)
Demonstratio	0	-4.107116	2.565601	17.18085*	0	0	0
n Beds (t-1)	(Omitted)	(0.843)	(0.811)	(0.023)	(Omitted)	(Omitted)	(Omitted)
Other	-0.5139816	1.370287	-1.94887*	0.0035877	-4.317459**	-1.570786	1.112884
Permanent	(0.805)	(0.887)	(0.014)	(0.866)	(0.000)	(0.443)	(0.333)
Supportive							
Housing (t-1)							
Constant	331.8191* (0.049)	1509.112 (0.218)	6398.809* (0.038)	-7.032509 (0.982)	783.7937 (0.147)	152.2489+ (0.067)	690.1328** (0.000)
Ν	10	8	14	10	8	8	20
Number of	5	4	7	5	4	4	10
CoCs							
\mathbb{R}^2	0.0110	0.3597	0.8877	0.877	0.9824	0.1176	0.1472

SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses

+p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Rapid	-	1.171905*	-0.0732572	0.4225789
Rehousing		(0.029)	(0.495)	(0.234)
Beds (t-1)				
Demonstratio	-	0	0.7659844**	-18.36088
n Beds (t-1)		(Omitted)	(0.007)	(0.342)
Other	-	0.1496934	0.0249439	-4.650237
Permanent		(0.525)	(0.413)	(0.846)
Supportive				
Housing (t-1)				
Constant	-	141.5339+	64.17526**	499.4102
Constant		(0.098)	(0.000)	(0.244)
Ν	-	14	12	12
Number of	-	7	6	6
CoCs				
\mathbb{R}^2	-	0.4324	0.1196	0.0057

Table 18. Effectiveness of Strategies to Combat Unsheltered Homelessness (Part 4)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

Table 19. Effectiveness of Strategies to Combat Chronic Homelessness (Part 3)

Region1	Region2	Region3	Region4	Region5	Region6	Region7
0.1443193+	0.3243117	-0.4084229	-0.0290143	-0.3355374**	-0.4693301	0.0218526
(0.052)	(0.598)	(0.112)	(0.741)	(0.000)	(0.306)	(0.918)
0	1.194761	-3.585755	-3.706061	0	0	0
(Omitted)	(0.687)	(0.270)	(0.366)	(Omitted)	(Omitted)	(Omitted)
-0.833113**	-0.2600525	0.4385631+	0.0301692	-3.520335**	0.3987045	0.3778553
(0.007)	(0.851)	(0.068)	(00.198)	(0.000)	(0.532)	(0.679)
111.6**	390.8916*	3331.926*	393.0426**	794.1385**	139.4483**	335.0182**
(0.000)	(0.026)	(0.029)	(0.004)	(0.001)	(0.002)	(0.001)
10	8	14	10	8	8	20
5	4	7	5	4	4	10
0.7805	0.0481	0.7442	0.5642	0.9908	0.4791	0.0276
	Region1 0.1443193+ (0.052) 0 (Omitted) -0.833113** (0.007) 111.6** (0.000) 10 5 0.7805	Region1 Region2 $0.1443193+$ 0.3243117 (0.052) (0.598) 0 1.194761 $(Omitted)$ (0.687) -0.833113^{**} -0.2600525 (0.007) (0.851) 111.6^{**} 390.8916^* (0.000) (0.026) 10 8 5 4 0.7805 0.0481	Region1 Region2 Region3 $0.1443193+$ 0.3243117 -0.4084229 (0.052) (0.598) (0.112) 0 1.194761 -3.585755 $(Omitted)$ (0.687) (0.270) -0.833113^{**} -0.2600525 $0.4385631+$ (0.007) (0.851) (0.068) 111.6^{**} 390.8916^* 3331.926^* (0.000) (0.026) (0.029) 10 8 14 5 4 7 0.7805 0.0481 0.7442	Region1Region2Region3Region4 $0.1443193+$ 0.3243117 -0.4084229 -0.0290143 (0.052) (0.598) (0.112) (0.741) 0 1.194761 -3.585755 -3.706061 $(Omitted)$ (0.687) (0.270) (0.366) -0.833113^{**} -0.2600525 $0.4385631+$ 0.0301692 (0.007) (0.851) (0.068) (00.198) 111.6^{**} 390.8916^{*} 3331.926^{*} 393.0426^{**} (0.000) (0.026) (0.029) (0.004) 10 8 14 10 5 4 7 5 0.7805 0.0481 0.7442 0.5642	Region1Region2Region3Region4Region5 $0.1443193+$ 0.3243117 -0.4084229 -0.0290143 -0.3355374^{**} (0.052) (0.598) (0.112) (0.741) (0.000) 0 1.194761 -3.585755 -3.706061 0 $(0mitted)$ (0.687) (0.270) (0.366) $(Omitted)$ -0.833113^{**} -0.2600525 $0.4385631+$ 0.0301692 -3.520335^{**} (0.007) (0.851) (0.068) (00.198) (0.000) 111.6^{**} 390.8916^{*} 3331.926^{*} 393.0426^{**} 794.1385^{**} (0.000) (0.026) (0.029) (0.004) (0.001) 10 8 14 10 8 5 4 7 5 4 0.7805 0.0481 0.7442 0.5642 0.9908	Region1Region2Region3Region4Region5Region6 $0.1443193+$ 0.3243117 -0.4084229 -0.0290143 -0.3355374^{**} -0.4693301 (0.52) (0.598) (0.112) (0.741) (0.000) (0.306) 0 1.194761 -3.585755 -3.706061 00 $(0mitted)$ (0.687) (0.270) (0.366) $(Omitted)$ $(Omitted)$ -0.833113^{**} -0.2600525 $0.4385631+$ 0.0301692 -3.520335^{**} 0.3987045 (0.007) (0.851) (0.068) (00.198) (0.000) (0.532) 111.6^{**} 390.8916^* 3331.926^* 393.0426^{**} 794.1385^{**} 139.4483^{**} (0.000) (0.026) (0.029) (0.004) (0.001) (0.002) 10 8 14 10 8 8 5 4 7 5 4 4 0.7805 0.0481 0.7442 0.5642 0.9908 0.4791

SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses

+p<0.10, * p<0.05, ** p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Rapid	0.6648465**	1.480326 +	0.0341901	-0.1960842
Rehousing	(0.000)	(0.096)	(0.916)	(0.644)
Beds (t-1)				
Demonstratio	0.4212169	0	0.6478035	0.7342429
n Beds (t-1)	(0.418)	(Omitted)	(0.544)	(0.966)
Other	-13.53913**	0.06475 +	0.0196665	-1.875977
Permanent	(0.000)	(0.0875)	(0.827)	(0.937)
Supportive				
Housing (t-1)				
Constant	163.3953**	212.7682+	220.7915+	1439.647+
Constant	(0.005)	(0.053)	(0.054)	(0.069)
Ν	8	14	12	12
Number of	4	7	6	6
CoCs				
\mathbb{R}^2	0.0008	0.2082	0.3714	0.9153

Table 20. Effectiveness of Strategies to Combat Chronic Homelessness (Part 4)

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

Table 21. Effectiveness of Strategies to (Combat Veteran Homelessness	(Part 3)
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	Region1	Region2	Region3	Region4	Region5	Region6	Region7
Rapid	0.3183851*	0.7231757	-0.6871807**	-0.2457661**	0.0038298	-0.2885092	0.0273894
Rehousing	(0.046)	(0.204)	(0.001)	(0.004)	(0.959)	(0.311)	(0.852)
Beds (t-1)							
Demonstratio	0	1.008791	-1.47107	-3.021657**	0	0	0
n Beds (t-1)	(Omitted)	(0.714)	(0.580)	(0.000)	(Omitted)	(Omitted)	(Omitted)
Other	-0.4820637	-0.8598829	0.8417227**	0.0254811	-0.7756334*	0.5904296	-0.2856756
Permanent	(0.486)	(0.501)	(0.000)	(0.323)	(0.011)	(0.139)	(0.709)
Supportive							
Housing (t-1)							
Constant	127.5647**	332.114*	1186.958**	438.2263**	315.6674+	120.1806**	158.2286**
	(0.001)	(0.041)	(0.002)	(0.000)	(0.098)	(0.000)	(0.005)
Ν	10	8	14	10	8	8	20
Number of	5	4	7	5	4	4	10
CoCs							
R ²	0.3633	0.4041	0.8796	0.7589	0.6997	0.5878	0.0160

SOURCE:

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, *p<0.05, **p<0.01, two-tailed

	Region8	Region9	Region10	Region11
Rapid	0.7501189**	0.2693497+	-0.0203473	0.119851
Rehousing	(0.000)	(0.062)	(0.920)	(0.482)
Beds (t-1)				
Demonstratio	-1.187405**	0	0.7827102	-3.926332
n Beds (t-1)	(0.000)	(Omitted)	(0.201)	(0.702)
Other	-11.26449**	-0.172704**	-0.0652991	-0.2479673
Permanent	(0.000)	(0.006)	(0.245)	(0.983)
Supportive				
Housing (t-1)				
Constant	102.173**	145.1347**	85.08559*	250.7785
Constant	(0.008)	(0.000)	(0.049)	(0.182)
Ν	8	14	12	12
Number of	4	7	6	6
CoCs				
\mathbb{R}^2	0.4716	0.6926	0.4692	0.5900

Table 22. Effectiveness of Strategies to Combat Veteran Homelessness (Part 4

Table entries are OLS coefficients with standard errors, clustered at the CoC level, in parentheses +p<0.10, * p<0.05, ** p<0.01, two-tailed

APPENDIX B

Glossary

HUD- The United States Department of Housing and Urban Development.

Continuum of Care (CoC)- is an administrative body that is in charge of the

administration and funding for a geographical region and the homeless population within that region.

Point-in-Time Count – Annual survey administered by CoCs to gather data on the demographics of the homeless population and determine how funding will be distributed. **Housing Inventory Count** – Annual count of homeless beds available

Emergency Shelters-an overnight facility with the primary purpose to provide temporary or transitional shelter for the homeless

Safe Havens – Supportive housing that serves homeless individuals with severe mental illness that have been previously unwilling/unable to participate in services.

Transitional Housing- Housing with the goal of moving individuals and families into permanent housing within a certain time frame (generally 24 months).

Rapid Rehousing – Housing that rapidly moves individuals and families into permanent housing.

Demonstration Projects- Project funded by HUD in 2008 to determine the success of rapid rehousing bed types.

Permanent Supportive Housing- permanent housing with indefinite leasing assistance paired with supportive services for homeless individuals or families with a disability **Other Permanent Housing-** PSH without a disability requirement OR housing without services included

Region 1- AK, ID, MT, UT, WY

Region 2- AZ, CO, NM, NV

Region 3- CA, HI, OR, WA

Region 4- IN, MI, OH, PA

Region 5- IA, IL, MN, WI

Region 6- KS, ND, NE, SD

Region 7- FL,GA, Guam, NC, Puerto Rico, SC, VA, Virgin Islands

Region 8- AL, LA, MS, TX

Region 9- AR, KY, MO, TN, WV

Region 10- CT, MA, ME, NW, RI, VT

Region 11- DC, DE, MD, NJ, NY