

# University of New Mexico

## Institute for Social Research

Prepared for: City of Albuquerque Department of Family and Community Services

May 2016

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### Specifics & Findings

**In this brief:** The goal of this research was to study the cost benefit of the Albuquerque, N.M. Heading Home Initiative. This study was designed to measure the use and cost of services for an up to four year period before admission and after admission into the program.

The full report titled *City of Albuquerque Heading Home Cost Study Final Report* can be found at: <http://http://cara.unm.edu/cara-reports.html>

### Main Findings

- Two to three years post-Heading Home study group member costs were \$1,042,312 or 15.2% less than the 2-3 year pre-Heading Home study group member costs. This amounted to an average savings of \$14,728 per study group member.
- Applying this average savings to the 320 AHH clients eligible for the study resulted in a 2-3 years savings of \$4,712,960.
- The Heading Home program serves particularly vulnerable formerly homeless individuals.
- Study group members reported being homeless an average of 6.8 years in their lifetime.
- For every \$1.00 spent the program saved \$0.78. The return on investment is positive.
- Study group members emergency room costs decreased by 76.8% 2-3 years after they were admitted to the program.
- Ambulance and emergency rescue costs declined from \$108,462 or 32.1% 2-3 years after study group members were admitted to the program.

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### Report in Brief:

## City of Albuquerque Heading Home Cost Study

The goal of this research is to study the cost benefit of the Albuquerque, New Mexico Heading Home Initiative (AHH). The research is designed to study the costs before and after the provision of housing for chronically homeless persons in Albuquerque, N.M.

The primary purpose of the City of Albuquerque Heading Home Initiative is to expand treatment and supportive services capacity to house Albuquerque's most vulnerable, chronically homeless people who are struggling with substance use and co-occurring disorders.

This report includes a brief literature review, a short methodology section, a brief description of the study sample, and an analysis of interview and official service and cost data.

A first phase report completed in September 2013 with a one-year study time pre- and post-housing period with 48 AHH clients who became study group members found one year post-Heading Home study group member costs were 31.6% less than the one year pre-Heading Home study group member costs (Guerin, 2013). This phase of the study includes 95 study group members and expands the study time frame up to 4 years.

### Literature Review

Based on some of the most recent national data on homelessness, on a single night in January 2014, approximately 578,424 people were experiencing homelessness in the United States. It is estimated that of these individuals, 200,000 are chronically homeless, and tend to have disabling health

and behavioral health problems. Estimates suggest that at least 40% have substance use disorders, 25% have some form of physical disability or disabling health condition, and 20% have serious mental illnesses; often, individuals have more than one of these conditions. These factors contribute not only to a person's risk for becoming homeless, but also to the difficulty he or she experiences in overcoming it. (The U.S. Department of Housing and Urban Development, 2015, SAMHSA, 2016).

Consequently, the most vulnerable individuals experiencing chronic homelessness tend to be the highest users of community services, such as emergency room visits, inpatient treatment services and outpatient treatment services. While these individuals use these services more frequently, they also require more acute care. In many cases, hospitals must provide acute services for preventable conditions which are exacerbated by the circumstances of homelessness.

Within communities, criminal justice systems are also impacted by homelessness. Findings suggest the relationship between homelessness and jail is bi-directional, meaning "people who are homeless are much more likely to be arrested and in jail than those who are housed, and without adequate discharge planning and supports, people in prison are more likely to become homeless upon release" (Gaetz, 2012). Moreover, it is not uncommon for homeless individuals to spend time in jail for minor violations of the law, such as sleeping in public, hampering the law force's ability to focus on high-risk criminals (Gaetz, 2012).

Ultimately, research has shown the heavy use of these services places a substantial financial burden on the community, and can amount to millions of dollars per year. Albuquerque spends

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- Prior to being housed, jail costs were \$132,054. Jail costs decreased 55.7% or \$58,515 after housing in the 2-3 year study period.
- Hospital inpatient costs decreased by 55.9% in the 2-3 year study period.
- During the 2-3 year study period social service costs (e.g. case management, outreach and social work) increased by 469.3%.
- In the pre-time period study group members were arrested 132 times and in the post-study time period 66 times.
- In the 2-3 year study time frame Heading Home housing costs were \$889,582 and service costs were \$439,888 for an average of \$18,211 per study group member.
- The finding of a net cost benefit parallels the findings of the phase one study and other studies that show this type of program results in a relative decrease in costs.

### Target Audience:

Department of Family and Community Services and Mayor's Office, City of Albuquerque; Albuquerque City Council; Albuquerque citizens; other local and state government policymakers; health and human services providers; the business community; and homeless advocates.

20 million dollars annually to provide homeless services to individuals and families. (NMCEH, 2013; Perlman & Parvensky, 2006; Mondello et al., 2007).

There is a large body of research which has shown supportive housing for the chronically homeless is beneficial in several ways. Furthermore, research has shown permanent supportive housing, such as Housing First programs, produce positive and cost-effective outcomes for both the individual who experienced homelessness, and the community. Findings indicate that supportive housing is cost-effective, or at least cost-neutral, with specific populations. Dionne Miazdyck-Shield (2013) suggests "the studies on cost reduction apply specifically to chronically homeless people with a mental illness who are the heaviest users of services". In other words, quantitative outcomes, such as cost savings, are seen most often within the most vulnerable populations using the Housing First supportive housing model.

Clearly, this is a complex issue, and further examination is necessary. To have a comprehensive body of literature, more needs to be understood about the various costs and benefits of supportive housing, for both the individual experiencing homelessness and the community (Culhane et al, 2011; Culhane et al., 2007; Flaming et al., 2009; Perlman & Parvensky, 2006).

### Study Sample Description

According to AHH program records, as of late September 2014, the AHH Initiative had surveyed over 1,400 individuals sleeping on the streets or in shelters using the Vulnerability Index (VI). AHH discontinued using the VI in September 2014 and since then has been using the VI-SPDAT. The VI-SPDAT combines the VI with the Service Prioritization Decision Assistance Tool (SPDAT). A more complete description of the VI-SPDAT can be found at: <http://100khomes.org/blog/introducing-the-vi-spdat-pre-screen-survey>. According to AHH program records as of late September 2015, a total of 407 individuals had been housed. Of that number 250 were at the time currently still housed, 33 were deceased, 34 had been successfully discharged, 67 had been unsuccessfully discharged, and 23 had been lost to contact. The program began on January

31, 2011 and accepted its first client on February 1, 2011.

We found individuals who became AHH clients and the subset who became study group members were overwhelmingly more vulnerable than homeless individuals who did not become clients.

The study includes 95 study group members. Almost 60% of our study group members were male, 33.7% were Hispanic, 34.7% were White, 13.7% were American-Indian, and 10.5% were African-American. Ten clients self-reported they had served in the military.

Slightly more than 75% of the study group members reported living on the streets (35.2%), shelters (17.9%), hotels/motels (14.7%), or other places (campsite, car, etc.) (7.4%). Almost 90% of study group members self-reported ever being arrested and 76.8% reported ever being incarcerated. A large percent of study group members reported ever being hospitalized (94.7%), ever being treated for drug or alcohol use (70.5%), ever receiving treatment for mental health issues (68.4%), and 82.1% reported a chronic medical problem.

Prior to being housed, study group members reported having several sources of income, of the 95 study group members, only 4 reported no income. Slightly more than 80% of the study group members reported receiving food stamps, followed by receiving money from family or friends (32.6%), Medicaid/Medicare (29.4%), SSDI/SSI (28.4%), and general assistance from the state (27.3%). Smaller numbers of study group members reported earning income through selling blood/plasma (9.4%), child support (3.1%), pension (2.1%), and sex work (2.1%). Almost 14% reported other sources of income including day labor, gambling, recycling/scrap metal, and buying and reselling items.

In the pre-time period study group members were arrested 132 times and in the post-study time period 66 times.

### Cost Analysis

This section reports on the cost analysis which was the focus of the study. As noted

**Table 1. Heading Home Initiative 2-3 Year Cost Comparison**

	2-3 Year Pre-Heading Home Costs	2-3 Year Post-Heading Home Costs	Cost Difference	Percent Difference
Total Cost with Heading Home Costs	\$6,863,530	\$5,821,218	(\$1,042,312)	(15.2%)

earlier we attempted to collect service and cost information on a wide range of services study group members may have received during the study period. With a few exceptions we were able to collect this information.

Because agencies collect and maintain service and cost information in a variety of formats it was necessary to collect and receive information in a number of different formats and then to standardize these various service and cost formats for analysis and reporting. Costs are reported as real costs and not actual costs. In order to compare the costs of services received by study group members in previous years to the current year (2015) costs it was necessary to normalize costs. To normalize costs we decided to inflate previous years' costs to 2015 calendar years costs by using a U.S. currency inflation calculator and medical inflation calculator.

Considering the different cost types, the 2-3 year post-Heading Home Initiative program costs were \$5,821,218 or 15.2% less than the one year pre-Heading Home Initiative program costs. This amounted to an average savings of \$14,728 per study group member (Table 1). Applying the average difference to the 320 eligible study group members generates a 2 year to 3 years cost savings of \$4,712,960.

Utilization of hospital inpatient, emergency room care, ambulance/emergency rescue, mental health outpatient, emergency shelters, and jails were reduced by participation in the program. Medical outpatient and social service costs experienced increases from the pre-time period to the post-time

period. Because Heading Home housing costs and client service costs did not exist in the pre-time period these costs also increased (Figure 1).

We also completed a return on investment (ROI) analysis and found a ROI of \$0.78. This can be interpreted as for every \$1.00 spent the program saved \$0.78. The ROI is positive.

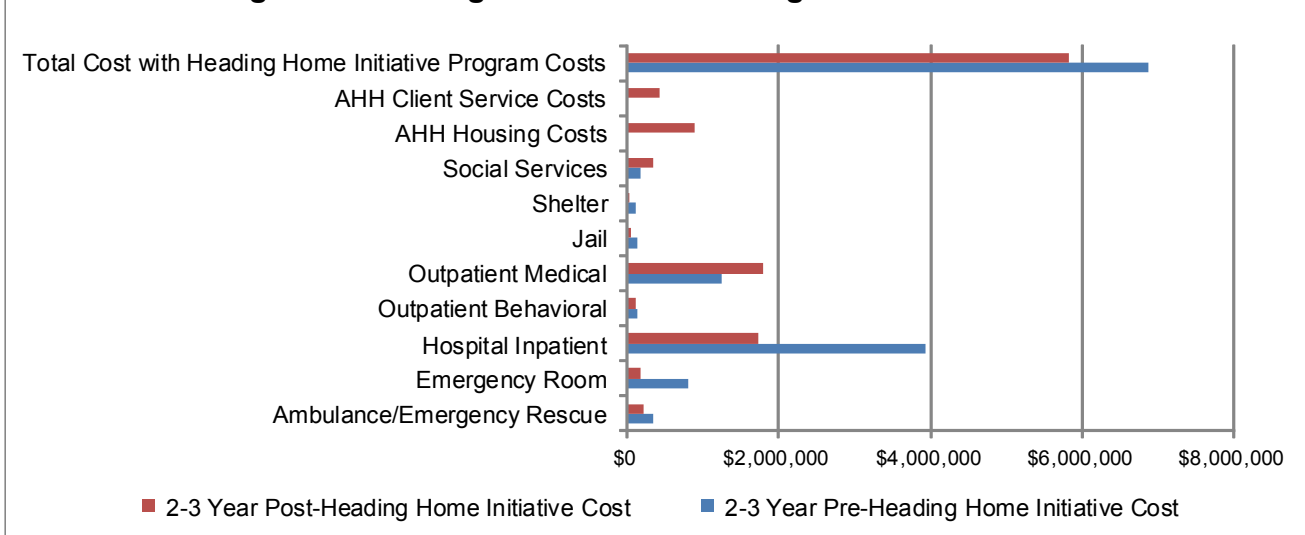
### Conclusion

The primary purpose of this study was to report on the cost effectiveness of the Heading Home Initiative program using two methods that have been used in previous studies. First, we interviewed study group that included questions about study group member's income status and employment, quality of life, length of time lived in Albuquerque, date of birth, race/ethnicity, lifetime homelessness, and shelter utilization.

The second, and more important method, relied on the collection of service and cost data maintained by various Albuquerque agencies. This included emergency room, inpatient medical, outpatient medical, outpatient behavioral health, ambulance/rescue services, jail bookings, and shelters. We also collected local arrest histories to document the number of arrests pre- and post-housing. At the completion of recruiting for the study, we were able to recruit 95 or 30.4% of 320 eligible Heading Home Initiative program clients.


Considering all the cost types the 2-3 year post-Heading Home costs were 15.2% less than the 2-3 year pre-Heading Home

**Figure 1. Heading Home Initiative Program 2-3 Year Costs**



program costs. This amounted to an average savings of \$14,728 per study group member.

Utilization of emergency room care, medical outpatient, hospital inpatient, emergency shelters, behavioral health outpatient, and jails were reduced by participation in the program. Outpatient medical and social service costs increased from the 2-3 year pre-time period to the 2-3 year post-time period.

Similar to other studies and the previously completed phase one study (2013) this study found a net cost benefit. The estimated benefit is fairly large in the first year post-program and becomes more moderate in the ensuing years post-program admission. 

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## About The Institute for Social Research

The Institute for Social Research is a research unit at the University of New Mexico. ISR conducts high quality research on local, state, national, and international subjects. Critical issues with which the Institute works includes substance abuse treatment, health care, education, traffic safety, DWI, crime, homeland security, and terrorism.

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## Methodology

This study focused on a cost analysis that compared the cost of a wide variety of different services for a period before study group members entered the Heading Home Initiative program to the cost after study group members entered the program for a similar time period. We also include a Return on Investment (ROI) analysis.

This study used two methods to study and measure the cost of the Heading Home Initiative, an interview and record review, with a focus on the record review. The Heading Home Initiative provided us information from their Vulnerability Index (VI) Survey. The VI was used until late 2014 in homeless enumeration counts in numerous locations in the United States. It is designed to identify and prioritize the homeless population for housing based on their health and provides information on vulnerability, length of time lived on the street, homelessness in the past three years, health status, substance abuse history mental health, insurance, veteran status, gender, race/ethnicity, citizenship, and education.

## Interview

Interview data included military service (to determine veteran status), medical status, employment/support status, legal status, drug/alcohol use, family/social relationships, psychiatric status, length of time lived in Albuquerque, date of birth, and race/ethnicity.

## Service and Cost Data

This method relied on the collection of service and cost data collected and maintained by various agencies. This included emergency room, inpatient medical, inpatient behavioral health, outpatient medical, outpatient behavioral health, ambulance services, fire department response services, Assertive Community Treatment (ACT) services, jail bookings, social services, and shelter utilization. We also collected official local arrest histories to document the number of arrests pre- and post-housing.

## Follow-Up Interview

The follow-up interview was conducted approximately 12 months after the intake interview and took approximately 15 minutes. The follow-up interview included quality of life questions, satisfaction with services, and indicators of social stability.

## Adjusting Costs

In order to compare the cost of care provided to study group members in previous years to the current year it was necessary to normalize the costs. We used a medical Consumer Price Index inflation calculator from the Bureau of Labor Statistics (BLS) to normalize medical costs and a consumer price index calculator from the BLS to normalize costs that were not medical costs.