



## QUANTITATIVE ANALYSIS OVERVIEW

**Thank you for participating in our impact analysis process, and for the important work your organization is leading in the community!**

The Constellation Fund supports its poverty-fighting mission by weighing careful qualitative evaluations with quantitative analyses that are driven by peer-reviewed research, local demographic information, and data directly from nonprofits. What follows is a summary of our quantitative findings, which are balanced alongside our qualitative learnings to drive our grantmaking decisions. However, it is important to put this information into the appropriate context.



### Benefit-Cost Analysis

Constellation calculates the value of poverty-fighting benefits that accrue to program participants at or below 185% of the federal poverty guideline. The primary two measurables throughout all of our metrics are lifetime improvements to health and income. We take care to apply metrics that capture both direct and intersectional impacts (e.g. educational outcomes resulting from stabilized housing). To better isolate the impact of an organization, Constellation builds and uses counterfactuals, comparing what happens to participants in a given program against what would have likely have happened had they not received the assistance. These counterfactual estimates are subtracted from our outcomes so as not to overestimate actual impact. All of this work results in a private benefit-cost ratio (BCR), which encapsulates the amount of measurable poverty-fighting benefits created by a potential grant from Constellation for every dollar of that cost. It is worth emphasizing that a private BCR is different than a social BCR, which generally includes public returns on investment (e.g. savings to taxpayers). Constellation acknowledges and applauds such benefits; however, since these benefits generally accrue to people living above the poverty line, they are intentionally excluded from our analysis of impacts for individuals and families living in poverty. As a result, our BCRs are often lower than those of a social BCR.

### Additional Context

#### CONSTELLATION'S METRICS ARE:

**A Standard for Comparing Opportunities:**

Metrics allow for the weighting of similar and dissimilar programs.

**A Tool for Achieving Transparency:**

Constellation welcomes outside voices to examine, criticize, and improve the metrics.

**A Diagnostic Device:**

What do highest-scoring organizations have in common? Lowest?

**A Method for Assessing Constellation:**

We measure our own impact the same way we measure other organizations: how much poverty-fighting good we do with each dollar we spend.

#### CONSTELLATION'S METRICS ARE NOT:

**The Only Criteria for Making Grant Decisions:**

Observations and qualitative information has a coequal role in our approach to grantmaking.

**Report Cards on Potential Grantees:**

A nonprofit can fulfill its own mission without scoring high on Constellation's metrics.

**Exact and Unchanging:**

Neither the data captured nor the calculations applied are perfect and, with additional research and refinement, our metrics are designed to evolve.

**The Only Approach to Smart Philanthropy:**

Other funding organizations may employ different but useful standards.



# CONSTELLATION FUND

## QUANTITATIVE ANALYSIS REPORT

Organization Name:

Ujamaa Place



Impact Area: Employment

Geography: St. Paul

GRANT AMOUNT:

\$85,000

BENEFIT-COST RATIO:

\$4.92 : 1

CONSTELLATION'S IMPACT:

\$417,868

Organization Budget:

\$2,204,262

Program Budget:

N/A

Total Benefits:

\$10,539,103

### ORGANIZATION OVERVIEW

ORGANIZATION DESCRIPTION:

Ujamaa Place serves African American men between the ages of 17 and 28 experiencing barriers to employment, including undereducated (no high school degree or GED), criminal history, homelessness, mental health, and substance abuse. Ujamaa provides academic and employment skill development as well as life skill development including financial management, managing health relationships, fulfilling basic needs such as transportation, food, access to health care services and support with housing.

GRANT PURPOSE:

Funding from Constellation would be used for general operations including organizational capacity and staffing.

### BENEFITS

ANALYSIS OF BENEFIT-COST RATIO:

The program generates \$4.92 for every dollar invested. This return comes from approximately \$1 million in increased wages that 275 participants in 2018 and 148 in 2019 would earn in the three years after finishing the program. Returns also come from mental health referrals and assistance achieving GEDs. The cost of generating these additional earnings, health and education benefits is \$2.2 million. Based on existing evidence, we assume that employment training programs impact future earnings as far as three years after participation. All earnings are estimated accounting for employment and wage rates of sub-populations served by the program (e.g. previously incarcerated, disability, and race). Estimates also account for expected or observed duration of employment and hours worked. Benefits are also derived from mental health care services and educational programming leading to increased earnings and improved health.

**PROJECTED BENEFITS SUMMARY:**

ECO001. Employment programs leading to increased earnings	\$979,412
HEA020. Mental health care leading to increased quality-adjusted life years	\$574,493
EDU005. High school equivalence leading to improved health	\$4,577,994
EDU004. High school equivalence leading to lifetime earnings	\$4,017,241
HOU002. Homelessness reduction leading to increased cash assistance for adults	\$4,077
HOU007. Homelessness reduction leading to reduced hospitalizations	\$1,878
HOU003. Homelessness reduction leading to avoided deaths of unsheltered adults	\$384,008
<b>TOTAL IMPACT</b>	<b>\$10,539,103</b>

**ORGANIZATION'S BENEFIT-COST RATIO:**

Benefits:	\$10,539,103
Costs:	\$2,143,796
<b>TOTAL IMPACT</b>	<b>\$4.92: 1</b>

**CONSTELLATION'S IMPACT:**

Grant Amount:	\$85,000
Benefit-Cost Ratio:	\$4.92: 1
<b>TOTAL IMPACT</b>	<b>\$417,868</b>

## UJAMAA PLACE DATA & COMPUTATIONS

### METRICS:

METRIC	ECO001: Employment programs leading to increased earnings	TOTALS
Equation	$(\# \text{ participants who find employment due to the program}) \times (\# \text{ total time of paid work}) \times (\$ \text{ net increase in earnings})$	
Explanation	<p><b>See appendix for calculation details.</b></p> <p><b>Number of participants who find employment due to this program:</b> Included in net earnings increase calculation.</p> <p><b>Total time of paid work:</b> Included in net earnings increase calculation.</p> <p><b>Total net increase in earnings in year 1:</b> [\$919,458]  <math>(\# \text{ participants who found jobs and retained it for at least a year}) \times (\\$ \text{ Average wages before prog} - \\$ \text{ Average wages after program})</math></p> <p><b>Total net increase in earnings in years 2 and 3 (present value):</b> [\$59,954]            This includes the expected continued employment of those who found and retained jobs in year 1, as well the expected new employment among participants who did not find jobs until year 2. Year 2 and 3 expected employment is based on findings in research by Card et al. (2017).</p>	
References	<p>Card, D., Kluve, J., &amp; Weber, A. (2017). What works? A meta-analysis of recent active labor market program evaluations. National Bureau of Economic Research. Working Paper 21431. Retrieved from: <a href="http://www.nber.org/papers/w21431">http://www.nber.org/papers/w21431</a></p> <p>Council of Economic Advisers. (2016). Active labor market policies: Theory and evidence for what works. [Issue Brief]. Retrieved from <a href="https://obamawhitehouse.archives.gov/sites/default/files/page/files/20161220_active_labor_market_policies_issue_brief_cea.pdf">https://obamawhitehouse.archives.gov/sites/default/files/page/files/20161220_active_labor_market_policies_issue_brief_cea.pdf</a></p> <p>Heinrich, C. J., Mueser, P. R., Troske, K. R., Jeon, K.S., &amp; Kahvecioglu, D. C. (2013). Do public employment and training programs work? IZA Journal of Labor Economics, 2(1), 6.</p>	

	<p>Minnesota Compass. (2018). Twin Cities region neighborhood profile data: Phillips community. Retrieved from <a href="http://www.mncompass.org/profiles/communities/minneapolis/phillips">http://www.mncompass.org/profiles/communities/minneapolis/phillips</a></p> <p>U.S. Census Bureau. (2016). American Community Survey 5-year estimates – public use microdata sample, 2012-2016. Generated using Public Use Microdata Area (PUMA) in the Seven-county Twin Cities Metropolitan Area. Retrieved from <a href="http://factfinder.census.gov">http://factfinder.census.gov</a></p>	
<b>TOTAL:</b>		<b>\$979,412</b>

METRIC	HEA020: Mental healthcare leading to increased quality-adjusted life years.	TOTALS
Equation	$(\# \text{ participants}) \times (\% \text{ of participants who receive treatment solely because of the program}) \times (\# \text{ QALY increase}) \times (\$ \text{ QALY})$	
Explanation	<p><b>Number of participants:</b> [148] Provided by the program.</p> <p><b>Percentage of participants receiving treatment solely because of program:</b> [100%] Estimated by the Constellation Fund staff.</p> <p><b>QALY increase:</b> [0.16] Impact of treatment on QALY over a 4-year period from literature.</p> <p><b>\$ QALY:</b> [\$50,000] Present discounted benefits from average age of participation to life expectancy: <math>PV_{\text{annuity}} = C \times [(1 - (1+i)^{-n}) / i]</math></p>	
References	<p>Banerjee, S., Chatterji, P., &amp; Lahiri, K. (2017). Effects of psychiatric disorders on labor market outcomes: A latent variable approach using multiple clinical indicators. <i>Health Economics</i>, 26(2): 184–205.</p> <p>Berndt, E., Koran, L., Finkelstein, S., Gelenberg, A., Kornstein, S., Miller, I., Thase, M., Trapp, G. &amp; Keller, M. (2000). Lost human capital from early-onset chronic depression. <i>The American Journal of Psychiatry</i>, 157(6), 940–947.</p> <p>Kaya, C., &amp; Chan, F. (2017). Vocational rehabilitation services and outcomes for working age people with depression and other mood disorders. <i>Journal of Rehabilitation</i>, 83(3), 44–52.</p> <p>Kazak, A., Hoagwood, K., Weisz, K., Hood, J.R., Kratochwill, K., Vargas, L.A. &amp; Banez, G.A. (2010). A meta- systems approach to evidence-based practice for children and adolescents. <i>The American Psychologist</i>, 65(2), 85–97.</p> <p>McIntyre, R., Liauw, S., &amp; Taylor, V.H. (2011). Depression in the workforce: the intermediary effect of medical comorbidity. <i>Journal of Affective Disorders</i>, 128 Suppl 1, S29–36.</p>	
<b>TOTAL:</b>		<b>\$574,493</b>

METRIC	EDU005: High School equivalence leading to improved health	TOTALS
Equation	$(\# \text{ participants}) \times [(\% \text{ participants who pass the GED test}) - (\text{Counterfactual rate of passing high school equivalence test in comparable population})] \times (\$ \text{ Per participant present discounted benefits})$	
Explanation	<p><b>Number of participants:</b> [148] Provided by program.</p> <p><b>Percentage of participants who pass the high school equivalence test:</b> [100%] Provided by program.</p> <p><b>Counterfactual rate of passing high school equivalence test in comparable population:</b> [75%], GED passing rate of African Americans in Minnesota in 2013, (GED Testing Services, 2014).</p> <p><b>QALY increase:</b> [5.1] We estimate that high school graduation boosts the future health status of students by 5.1 QALYs at age 85, an estimate based on the work of Muennig, et al. (2010).</p> <p><b>\$ QALY:</b> [\$50,000].</p> <p><b>Per participant present discounted benefits from average age of participation to life expectancy:</b> [\$123,730]. Estimated using the formula: <math>PV_{\text{annuity}} = C \times [(1 - (1+i)^{-n}) / i]</math>. We assume life expectancy of 79.3 years and that benefits start realizing at average participation age 24.</p>	
References	<p>GED Testing Service. (2014). 2013 annual statistical report on the GED test. Retrieved from <a href="https://www.gedtestingservice.com/uploads/files/5b49fc887db0c075da20a68b17d313cd.pdf">https://www.gedtestingservice.com/uploads/files/5b49fc887db0c075da20a68b17d313cd.pdf</a></p> <p>Muennig, P., Fiscella, K., Tancredi, D., &amp; Franks, P. (2010). The relative health burden of selected social and behavioral risk factors in the united states: Implications for policy. American Journal of Public Health, 100(9), 1758–1764. <a href="https://doi.org/10.2105/AJPH.2009.165019">https://doi.org/10.2105/AJPH.2009.165019</a></p>	
<b>TOTAL:</b>		<b>\$4,577,994</b>

METRIC	EDU004: High school equivalence leading to lifetime earnings	TOTALS
Equation	<p> <math>(\# \text{ participants}) \times [(\% \text{ of participants who pass the high school equivalence test}) - (\text{Counterfactual rate of passing high school equivalence test in comparable population})] \times</math>  <math>\{(\\$ \text{ Additional lifetime earnings of high school equivalence vs. no high school}) \times (\% \text{ Causation factor of high school on earnings}) +</math>  <math>[(\% \text{ Counterfactual rate of college progress of high school equivalence}) \times (\\$ \text{ Additional lifetime earnings of individuals with some college vs. high school equivalence no further education}) \times (\% \text{ Causation factor of some college on earnings})] +</math>  <math>[(\text{Percentage of high school equivalence holders who obtain an associate degree}) \times (\\$ \text{ Additional lifetime earnings of individuals with an associate degree vs. high school equivalence no further education}) \times (\% \text{ Causation factor of college on earnings})] +</math>  <math>[(\text{Percentage of high school equivalence holders who obtain a bachelor's degree}) \times (\\$ \text{ Additional lifetime earnings of individuals with a bachelor's degree vs. high school equivalence no further education}) \times (\% \text{ Causation factor of college on earnings})]\}</math> </p>	
Explanation	<p>           This metric us to estimates the additional earnings associated with receiving a GED. It also allows us to estimate benefits from the subsequent increased chance of enrolling or earning a higher educational degree.         </p> <p> <b>Number of participants:</b> [148] Provided by program.         </p> <p> <b>Percentage of participants who pass the high school equivalence test:</b> [100%] Provided by program.         </p> <p> <b>Counterfactual rate of passing high school equivalence test in comparable population:</b> [75%] GED passing rate for African Americans in Minnesota in 2013, (GED Testing Services, 2014).         </p> <p> <b>GED earnings impact</b>  <b>Difference in lifetime earnings between high school equivalence vs. no high school:</b> [\$125,000] Computed using ACS data (U.S. Census Bureau, 2016). Benefits already discounted to present value.         </p> <p> <b>Causation factor of high school on earnings:</b> [0.5] Percentage of observed earnings gains caused by high school graduation. This factor measures the         </p>	



degree to which the observed difference in earnings between types of high school graduates and non-high school graduates is causal (WSIPP, 2019).

***Some college earnings impact***

***% counterfactual rate of low-income GED holders who enroll in college but do not graduate:*** [34%], this is the proportion of GED graduates who once enrolled but not at the time of survey (Heller & Mumma, 2010).

***Additional lifetime earnings of individuals with some college vs high school equivalence no further education:*** [\$186,500] Computed using ACS data (U.S. Census Bureau, 2016). Benefits already discounted to present value.

***Causation factor of some college on earnings:*** [0.56] Percentage of observed earnings gains caused by high school graduation. This factor measures the degree to which the observed difference in earnings between types of individuals with “some college” and those only with high school diploma is causal (WSIPP, 2019).

***Associate degree***

***Counterfactual rate of college graduation of high school equivalence:*** [3%], this the average proportion of GED graduates who earn a 2-year degree or a certificate estimated from Heller & Mumma (2010) and Tyler & Lofstrom (2008).

***Difference in lifetime earnings between associate degree vs. high school equivalence:*** [\$186,400] computed using ACS data (U.S. Census). Benefits already discounted to present value.

***Causation factor of some college on earnings:*** [0.56], percentage of observed earnings gains caused by an associate degree is approximated using the causation factor from “some college”. This factor measures the degree to which the observed difference in earnings between types of individuals with an associate degree and those only with high school diploma is causal (WSIPP, 2019).

***Bachelor's degree***

***Counterfactual rate of college graduation of high school equivalence:*** [3%], this the average proportion of GED graduates who earn a 4-year degree or a certificate estimated from Heller & Mumma (2010) and Tyler & Lofstrom (2008).

***Difference in lifetime earnings between bachelor's degree vs. high school equivalence:*** [\$540,000] computed using ACS data (U.S. Census). Benefits already discounted to present value.

***Causation factor of college on earnings:*** [0.46], percentage of observed earnings gains caused by a four-year college degree. This factor measures the

	<p>degree to which the observed difference in earnings between types of graduates and non-graduates is causal (WSIPP, 2019).</p>	
References	<p>GED Testing Service. (2014). 2013 annual statistical report on the GED test. Retrieved from - <a href="https://docplayer.net/62213985-2012-annual-statistical-report-on-the-ged-test.html">https://docplayer.net/62213985-2012-annual-statistical-report-on-the-ged-test.html</a>)</p> <p>Heller, B., &amp; Mumma, K. S. (2010). Is the GED a Viable Pathway to College for Adult Students? New Regression Discontinuity Evidence From Massachusetts.</p> <p>Tyler, J. H. &amp; Lofstrom, M. (2008). Is the GED an effective route to postsecondary education for school dropouts? (Working Paper No. 13816). Cambridge, MA: National Bureau of Economic Research.</p> <p>U.S. Census Bureau. (2016). American Community Survey 5-year estimates – public use microdata sample, 2012-2016. Generated using Public Use Microdata Area (PUMA) in the Seven-county Twin Cities Metropolitan Area. Retrieved from <a href="http://factfinder.census.gov">http://factfinder.census.gov</a></p> <p>Washington State Institute for Public Policy. (2019). Benefit-Cost Technical Documentation. Retrieved from: <a href="http://www.wsipp.wa.gov/TechnicalDocumentation/WsippBenefitCostTechnicalDocumentation.pdf">http://www.wsipp.wa.gov/TechnicalDocumentation/WsippBenefitCostTechnicalDocumentation.pdf</a></p>	
<b>TOTAL:</b>		<b>\$4,017,241</b>

METRIC	HOU002: Homelessness reduction leading to increased cash assistance for adults	TOTALS
Equation	$(\# \text{ adults receiving services}) \times (\% \text{ adults reduce homelessness solely because of this program}) \times (\$ \text{ Net increase in cash assistance})$	
Explanation	<p>Number of adults receiving housing: <b>[163]</b> Reported number of participants in long-term housing. [78] participants are provided housing services directly from Ujamaa and [85] were referred to long-term housing partners.</p> <p>Percent of these adults who avoid homelessness due the program: <b>[0.52]</b> For programs serving individuals at imminent risk of homelessness (e.g. individuals coming from shelters, or with eviction notices and no feasible housing alternative), we assume a 100% rate of effectiveness. To this number, we subtract the percentage of homeless individuals in the Twin Cities metropolitan area who are on a waiting list for any public housing, Section 8 housing, or some other type of housing that offers financial assistance as a counterfactual [48%] (Wilder Research, 2016).</p> <p>Net increase in cash assistance (public programs) one year after entering supportive housing by population: <b>[\$79]</b> (Wilder Research, 2017). Note: We assume one year of additional income</p> <p>Referral factor: <b>[0.25]</b> Programs that provide services through referrals are discounted to account for the portion of the programs effect that is attributable to the referral. Estimated by the Constellation Fund staff.</p>	
References	<p>Wilder Research. (2016). 2015 homeless adults and children: Minnesota statewide survey data. Retrieved from <a href="http://mnhomeless.org/minnesota-homeless-study/detailed-data-interviews/2015/HennepinCountyMN_Adult2015_Tables51-67.pdf">http://mnhomeless.org/minnesota-homeless-study/detailed-data-interviews/2015/HennepinCountyMN_Adult2015_Tables51-67.pdf</a></p> <p>Wilder Research. (2017). Homelessness in Minnesota: Youth on their own. Findings from the 2015 Minnesota Homeless Study. Retrieved from: <a href="http://mnhomeless.org/minnesota-homeless-study/reports-and-fact-sheets/2015/2015-homeless-youth-4-17.pdf">http://mnhomeless.org/minnesota-homeless-study/reports-and-fact-sheets/2015/2015-homeless-youth-4-17.pdf</a></p>	
<b>TOTAL:</b>		<b>\$4,077</b>

METRIC	HOU007: Homelessness reduction leading to reduced hospitalizations	TOTALS
Equation	$(\# \text{ participants}) \times (\% \text{ participants getting supportive housing solely because of the program}) \times (\% \text{ decrease in hospitalizations due to program}) \times (\% \text{ participants hospitalized as a result of a physical illness}) \times (\text{QALY increase}) \times (\$ \text{QALY})$	
Explanation	<p>Number of participants: <b>[163]</b> Reported number of participants in long-term housing. [78] participants are provided housing services directly from Ujamaa and [85] were referred to long-term housing partners.</p> <p>Percent of these adults who avoid homelessness due the program: <b>[0.52]</b> For programs serving individuals at imminent risk of homelessness (e.g. individuals coming from shelters, or with eviction notices and no feasible housing alternative), we assume a 100% rate of effectiveness. To this number, we subtract the percentage of homeless individuals in the Twin Cities metropolitan area who are on a waiting list for any public housing, Section 8 housing, or some other type of housing that offers financial assistance as a counterfactual [48%] (Wilder Research, 2016).</p> <p>Percentage of decrease in hospitalizations due to program: <b>[0.30]</b> Based on Culhane, Metreaux &amp; Hadley (2001); Martinez &amp; Burt (2006); and Sadowski, Kee, VanderWeele &amp; Buchanan (2009)</p> <p>Percentage of patients hospitalized as a result of physical illness: <b>[0.20]</b> For those who are housed in supportive housing and who avoided hospitalization or would have been hospitalized due to some general diagnosis, based on the findings of Salit, Kuhn, Hartz, Vu &amp; Mosso (1998).</p> <p>QALY increase: <b>[0.025]</b> Estimate for the value of avoiding hospitalization due to general illness (Lavelle, Meltzer, Gebremarian, Lamarand, Fiore &amp; Prosser, 2011).</p> <p>\$ QALY: <b>[\$50,000]</b>.</p> <p>Referral factor: <b>[0.25]</b> Programs that provide services through referrals are discounted to account for the portion of the programs effect that is attributable to the referral. Estimated by the Constellation Fund staff.</p> <p>Present discounted benefits from average age of participation to life expectancy:  <math display="block">PV\_annuity = C \times [(1 - (1+i)^{-n}) / i]</math> </p>	
References	Culhane, D. P., Metreaux, S. & Hadley, T. (2001). The impact of supportive housing for homeless people with severe mental illness on the utilization of the	

	<p>public health, correcting, and emergency shelter systems: The New York-New York Initiative. Washington, DC: Fannie Mae Foundation. Retrieved from <a href="https://www.researchgate.net/publication/228638508_The_Impact_of_Supportive_Housing_for_Homeless_People_with_Severe_Mental_Illness_on_the_Utilization_of_the_Public_Health_Corrections_and_Emergency_Shelter_Systems_The_New_York-New_York_Initiative">https://www.researchgate.net/publication/228638508_The_Impact_of_Supportive_Housing_for_Homeless_People_with_Severe_Mental_Illness_on_the_Utilization_of_the_Public_Health_Corrections_and_Emergency_Shelter_Systems_The_New_York-New_York_Initiative</a></p> <p>Lavelle, T.A., Meltzer, M. I., Gebremariam, A., Lamarand, K., Fiore, A.E. &amp; Prosser, L.A. (2011). Community-based values for 2009 pandemic influenza A H1N1 illnesses and vaccination-related adverse events. PLoS One, 6(12). E27777.</p> <p>Martinez, T. E. &amp; Burt, M. (2006). Impact of permanent supportive housing on the use of acute care health services by homeless adults. Psychiatric Services: A Journal of the American Psychiatric Association, 57(7), 992-999.</p> <p>Sadowski, L., Kee, R., VanderWeele, T. &amp; Buchanan, D. (2009). Effect of a housing and case management program on emergency department visits and hospitalizations among chronically ill homeless adults: A randomized trial. Journal of the American Medical Association, 301(17), 1771-1778.</p> <p>Salit, S., Kuhn, E., Hartz, A., Vu, J. &amp; Mosso, A. (1998). Hospitalization costs associated with homelessness in New York City. New England Journal of Medicine, 338(24), 1734-1740.</p>	
<b>TOTAL:</b>		<b>\$1,878</b>

METRIC	HOU003: Homelessness reduction leading to avoided deaths of unsheltered adults	TOTALS
Equation	$(\# \text{ unsheltered homeless adults}) \times (\% \text{ of unsheltered homeless who get assistance solely because of the program}) \times (\% \text{ who would likely die without intervention}) \times (\$ \text{ value per life saved})$	
Explanation	<p>Number of unsheltered adults experiencing homelessness: <b>[163]</b> Reported number of participants in long-term housing. [78] participants are provided housing services directly from Ujamaa and [85] were referred to long-term housing partners.</p> <p>Percentage of unsheltered adults experiencing homelessness who get assistance solely because of the program: <b>[45%]</b> This is the percentage of unsheltered homeless who would stay outside (Wilder Research, 2016).</p> <p>Percentage of unsheltered adults who would likely die without intervention: <b>[6%]</b>. Our 6% estimate is an approximation based on evidence suggesting that homelessness was associated with an all-cause mortality hazard ratio of 1.6, compared to adults not experiencing homelessness (Morrison, 2009). We estimate the probability of death between ages 15-64 to be 3.7% based on mortality statistics reported for 2016 by the Minnesota Department of Health.</p> <p>\$ value per life saved: <b>[\$146,000]</b> Based on an average age of participants around 30 years. Estimated as the present value of [\$50,000 x (Life expectancy low income - Estimated life expectancy of homeless)] This is 75 years - 58. The Constellation Fund estimates the value of a life based on a \$50,000 QALY. The life expectancy of low-income population in the Twin Cities is around 75 years (MN Compass, 2010). Homeless individuals are expected to have a life expectancy 20 to 30 years shorter than non-homeless population (CDC, 2017).</p> <p>Referral factor: <b>[0.25]</b> Programs that provide services through referrals are discounted to account for the portion of the programs effect that is attributable to the referral. Estimated by the Constellation Fund staff.</p>	
References	<p>Center for Disease Control and Prevention (2017). Retrieved from <a href="https://www.cdc.gov/features/homelessness/index.html">https://www.cdc.gov/features/homelessness/index.html</a></p> <p>Muennig, P., Glied, S. &amp; Simon, J. (2005). Estimation of the health benefits produced by Robin Hood Foundation grant recipients. Report to Robin Hood. New York, NY: Robin Hood.</p> <p>Morrison, D.S. (2009). Homelessness as an independent risk factor for mortality: results from a retrospective cohort study. International Journal of Epidemiology, 38 (3),</p>	

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Wilder Research. (2016). 2015 homeless adults and children: Minnesota statewide survey data. . . Retrieved from [http://mnhomeless.org/minnesota-homeless-](http://mnhomeless.org/minnesota-homeless-study/detailed-data-interviews/2015/HennepinCountyMN_Adult2015_Tables51-67.pdf)

[study/detailed-data-interviews/2015/HennepinCountyMN\\_Adult2015\\_Tables51-67.pdf](http://mnhomeless.org/minnesota-homeless-study/detailed-data-interviews/2015/HennepinCountyMN_Adult2015_Tables51-67.pdf)

**TOTAL:**

**\$384,008**

METRIC	ECO001: Employment programs leading to increased earnings		
Data provided by Ujaama used in metric calculations	<b>Employment levels for participants who found jobs in the first year (2019)</b>		
		<b>Counts</b>	<b>Percent</b>
	Full-time, 6 months of employment	27	39%
	Full-time, 12 months of employment	15	21%
	Half-time, 6 months of employment	18	18%
	Half-time, 12 months of employment	10	26%
	Total	70	100%
<b>Hourly wage for participants after participation (for those placed in jobs): \$11.62</b>			
<b>Number of individuals who received employment training, found jobs, and were hired (2019): 70</b>			
<b>Number individuals who received employment training (2019): 148</b>			

