Good morning Chair Dolan, Vice Chair Gavarone, Ranking Member Sykes and members of the committee.

The Refuge is humbled to submit testimony in support of the amendment to the States Main Operating budget to support facility improvements for The Refuge. My name is Austin Hill and I am a Director in the Refuge. The Refuge is a Columbus-based addiction recovery organization. I believe and I know we have a life saving solution in a time of great need.

[Amendment is Located in the Dept of Mental Health, Continuum of Care Services, Section 337.40, starting in line 77409]

The Refuge is among only a handful of organizations in all of Ohio with residential addiction recovery programs that are more than one-year in length, and offered free-of-charge. We have been at this work for 21 years now, and in that time have assisted nearly 3000 men and women. The amendment under consideration would go towards expanding the residential capacity of The Refuge by approximately 50% from current levels. The Refuge serves around 300 men and women and women annually, after our expansion this number would grow to be closer to 500. Based on our recent Impact and Value Report, which was developed by a professional and independent third-party evaluator, this investment stands to save the State of Ohio millions of dollars in taxpayer and community monies. (To be expanded upon in further comments) *[Measurement Resources in February 2021]* 

That empirical outcomes data, defines the potential savings to the State and serves at placing The Refuge among the best addiction recovery organizations both in Ohio and nationally. This independent study found that over a 3 year period for every \$1 dollar of money invested in The Refuge, there is an estimated \$2.88 return to the community through reduced societal costs.

In real dollar terms, this equated to The Refuge having saved communities and taxpayers over \$2.5 million This savings was realized by eliminating the cost to society had our folks not reduced or ended their substance abuse by going through The Refuge.

We have a solution. Even more exciting and personal is the real life change experienced by the men and women in The Refuge.

# Of the former addicts and alcoholics who came to The Refuge, upon completing our 13month residential program that, again, are offered free-of-charge:

- 66% reported being continuously clean & sober and free from the compulsion to drink or use drugs
- 92% reported working continuously in full-time jobs producing a living wage. *The average annual income for the 3-year period of the study was \$35,424*
- 86% reported living in safe & affordable housing
- 94% reported food security
- 87% reported having a reliable form of transportation
- 90% reported not having used emergency rooms or hospitals for drug or alcohol-related reasons
- 96% reported having had no involvement in the criminal justice system

Still further, and what is most inspiring to me and most deeply impactful to them;

 90% reported being more trusted and relied upon by their children and people who mattered most to them

We are a relationally focused, fiscally audited and time-tested organization. What's more, we offer and produce hope in a time of great need.

We respectfully ask that you support this amendment.

Thank you for your time and I would love to answer any and all of your questions. Thank you.



# **Impact & Value Report**



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# **Report Summary**

Measurement Resources Company, an independent third-party evaluator, had the opportunity to analyze the survey results related to outcomes data for The Refuge's residential addiction recovery program. The high-level results of this analysis show that The Refuge:

- has been successful in achieving its organizational goals of inspiring transformational change in its program graduates and has helped those graduates launch new and purposeful lives free from addiction.
- achieves high levels of success in assisting program graduates in becoming continuously clean and sober and free from the compulsion to drink or use drugs.
- has been highly effective in assisting program participants successfully address the key social determinants of health including continuous employment, housing stability, reliable transportation, reducing the use of emergency rooms for substance-related reasons, and reducing involvement in the justice system.
- delivers compelling value to donors and grantmakers through the social return on investment (SROI) and the social impact generated by its program.

Additionally, the data show that the program's Christ-centered approach is central to its success in that:

• Graduates who report living a more purposeful Christ-centered life are significantly more likely to remain continuously clean and sober.

The following report details the impact and value of The Refuge's residential addiction recovery program.

# **Impact & Value of The Refuge**

The Refuge is a four-phase, 13-month residential addiction recovery program that changes the lives of men and women affected by addiction through Christ. At The Refuge, individuals live in a structured group environment designed to facilitate transformational change. Additionally, the group environment provides intentional opportunities for mentoring, life coaching, job training and building comradery among participants. Led and staffed by individuals with lived experience in recovery, many of whom completed

The Refuge, this program offers a unique, personal, and safe environment for long-term recovery and personal growth.

In the first month, participants have no outside contact to foster self-focus and are introduced to The Seven Principles of The Refuge. The Seven Principles of The Refuge are designed to guide a Christ-centered life:

- 1. Commitment to God
- 2. Relationship with others
- 3. Willingness to be taught
- 4. Honesty and authenticity
- 5. Gratitude and thankfulness
- 6. Work ethic and stewardship
- 7. Courage and faith

In months two through five of the program, participants focus on relational growth with themselves, others, and God and work part-time in Columbus. Months six through nine include applying what has been learned while living and working full-time in Columbus. Finally, in months 10 through 13, participants prepare to live a functional life by securing full-time employment, safe housing, reliable transportation, and community connections.

In 2020, The Refuge partnered with Measurement Resources Company, an independent research and evaluation firm, to quantify the impact and value of the 13-month program. Using data from an internally conducted alumni survey of men who graduated in 2018, 2019 and 2020, as well as secondary data regarding community costs of addiction, this report highlights the positive impact The Refuge has on men who graduate and social return on investment (SROI).

# **SUCCESS**

When participants come into the program, they are struggling with addiction, experiencing homelessness and have poor quality relationships.

In an alumni survey of men who graduated from The Refuge in 2018, 2019, and 2020, graduates reported:

- Enjoying growing, quality relationships with people and with Christ
- Living transformed lives

### 9 out of 10 are

- Employed
- Stably housed
- Food secure
- Not utilizing hospitals or ERs for alcohol or drug related reasons
- Not involved with the justice system

### 66%

Reported being continuously clean and sober and free from the compulsion to drink or use drugs

### **Social Return on Investment**

-

188% Social Return on Investment

\$2.6 Million Societal Cost Savings Over Three Years

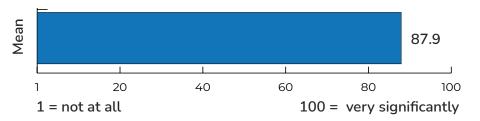
## **Program Impact**

Program impact is measured by the self-reported outcomes from graduates in the alumni survey. It should also be noted that these results were obtained during the COVID-19 pandemic. In addition to sobriety, relationship growth and improvements in social determinants of health described below, graduates of The Refuge experience a range of spiritual, relational and recovery outcomes. See Appendix A for data tables of the other notable outcomes.

### Transformational Change

Through personal reflection, Christ-centered discipleship and one-on-one coaching, participants learn a new way of thinking, a new set of values and purpose for their lives. Survey data shows that The Refuge is inspiring this type of transformational change. On average, graduates rated their level of transformational change an 87.9 on a 100-point scale (Figure 1). This transformational change is driven by living a purposeful life in Christ<sup>1</sup> and following with guidance of Christian beliefs.<sup>2</sup> In other words, as a participant's understanding of their purpose in Christ grows, so does their degree of transformational change. In the same way, as a participant adopts the guidance of Christian beliefs and values, their level of transformational change grows. This suggests that a sense of a Christ-centered transformation is key to the success of The Refuge's program.

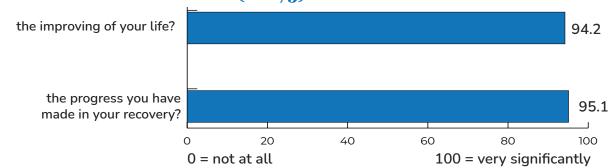
### Figure 1. By going through The Refuge, how much do you feel you experienced transformational change? (n = 74)



### Living Purposeful Lives Free From Addiction

The cornerstone of The Refuge is the role of Christ in one's recovery. Graduates rated the perceptions of the role of Christ in recovery and improving one's life very high (mean 95.1 and 94.2 on a 100-point scale, respectively) (Figure 2). On average, graduates rate the degree to which they are living a purposeful Christ-centered life a 75.8 (Figure 3) and a person who reports living a more purposeful Christ-centered life is significantly more likely to remain continuously clean and sober.<sup>3</sup> Interestingly, the perceptions of the role of Christ in recovery and improving one's life were not attributed to continuous sobriety. This may suggest the extent to which a person has internalized the power of Christ, and subsequently takes ownership of his actions, increasing the likelihood of remaining continuously clean and sober.

# Figure 2. To what extent would you attribute your relationship with Christ to... (n = 75)



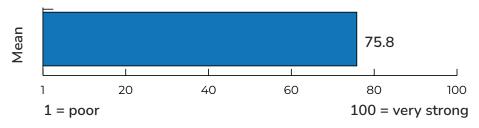
<sup>1</sup> Specifically, for every 10-unit increase in perceptions of living a purposeful, Christ-centered life on a 100-point scale, experiences of transformational change increases by 2.8 units. Simple linear regression model, b = 2.8, p < .05

 $^{2}$  Specifically, for every 10-unit increase in following the guidance provided by Christian beliefs on a 100-point scale, experiences of transformational change increases by 2.5 units. Simple linear regression model, b = 2.5, p < .05

<sup>3</sup> For every 10-unit unit increase in reporting a purposeful life that is Christ-centered on a 100-point scale, the odds of remaining continuously clean and sober are 1.52 times as large. (Logistic regression results: b = .42, p < .05, exp(B) = 1.52). However, it should be cautioned that this data is not causal.

# Figure 3. Since completing The Refuge, how would you rate the degree to which you are living a purposeful life which is Christ-centered?





#### Successful Recovery

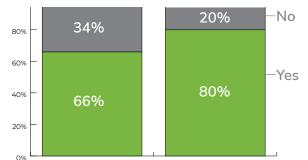
Commitment to sobriety. On average, 80% of the men who completed The Refuge continue to desire sustained abstinence and 66% remained continuously clean and sober and free from the compulsion to drink or use drugs (Figure 4). Minor relapses can be expected but the desire for sobriety, even after a minor relapse, is a sign of transformational change.

Of the 34% who reported not being continuously sober after The Refuge, more than half remained abstinent for one or more years (Figure 5). Alcohol was the most reported substance that broke abstinence.

Improved relationships and relationship quality. Graduates experience relational growth during and after their time in the program. Most notably, graduates of The Refuge report their relationships have improved very significantly since coming to The Refuge (average score is a 91 out of 100 with 100 being "very significantly"). Similarly, the quality of relationships is rated an 86 (out of 100 with 100 being "excellent"). Additionally, graduates report feeling more trusted and relied upon by those who matter most to them and have changed their friends to be consistent with their post-Refuge lifestyle (Figure 6).

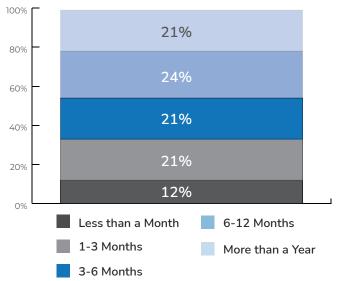


### **Figure 4. Sobriety Outcomes**

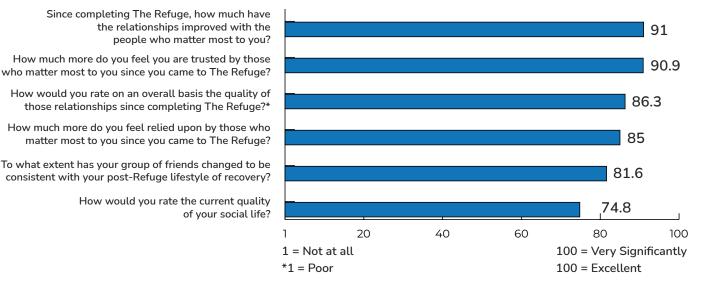


Since leaving The Refuge, have Are you continuing to desire you been continously clean/sober? sustained abstinence? (n = 71)(n = 40)

### **Figure 5. What is the longest** period of abstinence from use you have achieved? (n = 33)



## Figure 6. Relationship Outcomes (n = 71)



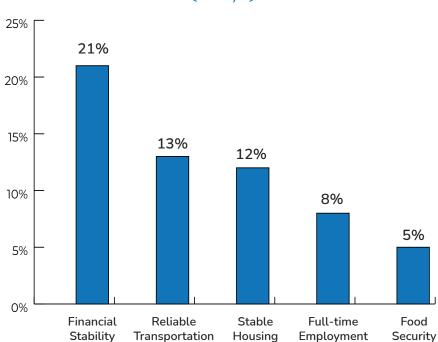
Stability in social determinants of health and other key recovery outcomes. To support a recovery lifestyle, The Refuge knows the importance of addressing social determinants of health (SDOH). Social determinants of health are social and environmental factors that increase the likelihood of poor physical and behavioral health outcomes when left unaddressed.<sup>4</sup> Based on the alumni survey, the majority sustain key SDOH and other recovery outcomes after graduating The Refuge.



<sup>4</sup> Franklin County Public Health Social Determinants of Health Framework. https://myfcph.org/health-systems-planning/chip/

Even with The Refuge's efforts in helping participants address these basic needs while in the program, one third of the men who graduate experience one or more of these hardships while living independently. Of those who graduated, 21% indicated financial instability (Figure 7). These SDOH conditions compound challenges for successful recovery as individuals experience stress related to not having a job or a safe place to live, going hungry, not being able to pay bills or find reliable transportation. Though The Refuge cannot control what the men experience after leaving the program, being aware of the struggles may provide insight into strategies for preparing men for launching out independently and postprogram resources that could be made available.

## Figure 7. Percent of Graduates Reporting Instability in SDOH (n = 71)





### Cost Per Success

With an estimated success rate of 90%, the estimated cost per successful outcome is \$52,324.

Another powerful way to look at The Refuge's success is through the cost per success. The Refuge's cost per success is a measure of effectiveness and efficiency. It communicates the cost of getting a single client to achieve a desired outcome (i.e., positive change or benefit to the client).

For this cost-per-success calculation, successful recovery is sustained sobriety during the program and for two years post-program (with perhaps a minor relapse lasting less than one month with the desire to remain clean and sober). Based on alumni survey data on the cohort of men who graduated in 2018, the success rate was 90% (i.e., of the 21 survey responses, 19 individuals reported success). The total program costs for 2018 was \$1,562,250. Table 1 provides an evaluation of The Refuge's cost per success, and the formula below was used to capture the cost per success.

Table 1. The Refuge Cost Per Success						
Measure of Success	Program Costs	Number Served	Success Rate	Cost Per Success		
Continued abstinence from substance use or a minor relapse with retained committed to sobriety	\$1,562,250	33	90.48%	\$52,324		

### Cost per Success = Total Program Costs / (Number served \* Success Rate)

#### Cost per Success: \$1,562,250 / (33 \* 90.48%) = \$52,324

Overall, it costs The Refuge \$52,324 to help one man achieve sobriety (during the 13-month program and for two years post-graduation with perhaps a minor relapse lasting less than one month with commitment to remaining clean and sober).

### Social Return on Investment

Substance abuse not only negatively impacts the health and well-being of those who abuse substances and their families, but also leads to high societal costs. The National Institute on Drug Abuse estimates that abuse of tobacco, alcohol, and illicit drugs costs the United States more than \$740 billion annually through costs related to crime, lost work productivity, and health care.<sup>5</sup> A solution that not only benefits the health and well-being of those struggling with drug abuse and addiction but also lowers public costs is connecting individuals to drug addiction treatment, such as The Refuge's four-phase, 13-month residential addiction recovery program.

The following sections outline how Measurement Resources Company (MRC) quantified the monetary value of The Refuge's impact using MRC's social return on investment (SROI) formula:

#### SROI = Total Societal Costs without The Refuge – (Total Program Costs + Societal Costs of Relapses)

#### Total Program Costs + Societal Costs of Relapses

A complete technical write-up of the SROI can be found in Appendix B.

### Total Societal Costs Without The Refuge

To estimate the community costs (i.e., costs without The Refuge) The Refuge's alumni survey data was used to determine clients' use of substances and experiences of homelessness prior to The Refuge. Then, secondary data were gathered to estimate the societal cost associated with homelessness and with using each substance on an annual basis (see Table 2). The annual estimates were then multiplied by the amount of time elapsed since individuals entered The Refuge, averaging 3.4 years across 2018 alumni who completed the survey.<sup>6</sup> Using these data, on average, the total societal cost for substance use *per person* had individuals not gone to The Refuge was \$133,106 with an additional estimated cost of \$30,000 *per person* among those who were experiencing homelessness. In summing estimated societal costs associated with substance use and homelessness, the total estimated societal cost is \$4.6 million, over a three-year period, had individuals not gone through The Refuge.

# Table 2. Estimated Societal Costs Associated with Homelessness and Each Substance

	Estimated Societal Annual Cost	Number of Clients Indicating Use Prior to The Refuge	Total Estimated Cost (Annual Cost x Length of Sobriety x Number of Clients)
Homelessness	\$30,000.00 <sup>7</sup>	7	\$210,000.00
Alcohol	\$739.00 <sup>8</sup>	2	\$4,865.08
Marijuana	\$9,716.54 <sup>9,10,11</sup>	3	\$101,213.96
Cocaine	\$9,716.54	9	\$284,208.80
Heroin	\$9,716.54	15	\$502,021.23
Prescription opioids	\$29,452.0012,13	15	\$1,506,960.67
Methamphetamine	\$9,716.54	6	\$200,808.49
Benzodiazepines	\$9,716.54	0	\$NA
Amphetamines	\$9,716.54	2	\$63,967.22
Hallucinogens	\$9,716.54	1	\$34,007.89
Other prescription drugs not prescribed or directed	\$9,716.54	3	\$97,165.40
Imputed average for individuals with no survey data	\$133,105.65	12	\$1,597,267.85
	Total Commun	ity Costs over 3 years	\$4.6 million

<sup>6</sup> Length of time since entering the program was calculated based on the number of months elapsed from alumni's reported program exit date and survey completion date, plus 13 months for the length of time alumni were in the program.

<sup>9</sup> https://www.justice.gov/archive/ndic/pubs44/44849/44849p.pdf

<sup>&</sup>lt;sup>7</sup> https://www.usich.gov/resources/uploads/asset\_library/Ending\_Chronic\_Homelessness\_in\_2017.pdf

<sup>&</sup>lt;sup>8</sup> Estimated Annual Cost per person for alcohol abuse in Ohio https://www.cdc.gov/alcohol/features/excessivedrinking.html?C-DC\_AA\_refVal=https%3A%2F%2Fwww.cdc.gov%2Ffeatures%2Fcostsofdrinking%2Findex.html

<sup>&</sup>lt;sup>10</sup> https://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf

<sup>&</sup>lt;sup>11</sup> The U.S. Department of Justice's total societal costs associated with illicit drug use in 2007 was divided by the prevalence of illicit drug use provided by SAMHSA in 2007  $$1,930,000,000/(248,288,000 \times .08) = $9,716.54$ 

<sup>&</sup>lt;sup>12</sup> Florence, CS et al. The Economic Burden of Prescription Opioid Overdose, Abuse, and Dependence in the United States, 2013; Medical Care. Volume 54, Number 10, October 2016.

<sup>&</sup>lt;sup>13</sup> Total nonfatal societal costs were divided by the number of individuals with Prescription Opioid Abuse and Dependence (\$56,990 billion/1.93 million individuals = \$29,452)

### Total Program Costs and Societal Costs After The Refuge

In 2018, the program's budget totaled \$1,562,250. Further, some individuals experienced relapses after completion of the program. However, a minor relapse after the program with sustained commitment to sobriety is a successful outcome. Therefore, because even a minor relapse has a cost to the community, that cost should be factored into the total costs during/after The Refuge. Using secondary data as described above, the total costs to society associated with those relapses was \$37,699. In sum, the estimated costs of the program and relapses after the program totaled \$1,599,949.

#### **Return on Investment**

#### The Refuge has a 188% social return on investment.

For every \$1 invested in The Refuge, there is an estimated \$2.88 benefit (or 188% return on investment) to the community through reduced societal costs over three years (i.e., through costs related to crime, lost work productivity, and health care). Thus, the SROI provides further evidence that drug addiction treatment programs, like The Refuge, provide cost savings to the community by linking individuals to the resources needed to return to productive functioning in the family, workplace, and community.

#### ((Total societal costs without The Refuge – Total Costs During and After The Refuge) / Total Costs During and After The Refuge)) \* 100%

((\$4,602,487 - \$1,599,949) / \$1,599,949) \* 100% = 188%

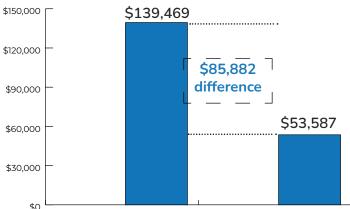
Investing to expand The Refuge would produce even greater impact. Funders can invest with confidence knowing that there will be a social return on their investments.

#### **Community Cost Savings**

To quantify the community cost savings, the cost per successful outcome in The Refuge was compared to the average cost per person to society over a three-year period had the individuals not reduced their substance use by going through the program. As shown in Figure 8, this cost savings is \$85,882. Put another way, by investing \$53,587 now in The Refuge, it would buy one man's longterm sobriety and save the community \$85,882 per person over three years.

# The total three-year estimated savings to the community is \$2,564,206.

### Figure 8. Estimated Costs Per Client



Without The Refuge

Costs for The Refuge



<sup>14</sup> https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/frequent-ly-asked-questions/how-effective-drug-addiction-treatment

<sup>15</sup> (Cost per person without The Refuge - Cost per success) \* (Success \* Number Served)

# Appendix A. Spiritual, Relational and Recovery Outcomes

Program Objectives

Table A1. Stated Objectives (0-100-point scale)			
	Mean (Out of 100)		
By going through The Refuge, how much do you feel you experienced transformational change? (Based on your progressing towards new beliefs, values, and purpose) (n = 74, 1=not at all, 100 = very significantly)	87.9		
The Seven Principles are intended to serve as lasting guidance for living a Christ-centered life. How would you rate their assistance in providing you guidance towards this goal? (n = 74, 1=poor, 100 = excellent)	86.6		
Since completing The Refuge, how strongly do you follow the guidance provided by Christian beliefs? (n = 74, 1=poor, 100 = very strong)	77.7		
Since completing The Refuge, how strongly do you follow the guidance provided by Christian values? (n = 74, 1=poor, 100 = very strong)	78.1		
Since completing The Refuge, how would you rate the degree to which you are living a purposeful life which is Christ-centered? (n = 74, 1=poor, 100 = very strong)	75.8		

Table A2. Additional Stated Objectives (Yes/No)				
	Yes	No		
Would you recommend The Refuge to others whose lives have been affected by addiction? (n = $71$ )	100%	0%		
Since completing The Refuge, would you consider yourself as honoring the resolution you signed upon completion? ( $n = 71$ )	86%	14%		
Since completing The Refuge, would you consider yourself as living within the framework The Seven Principles provide for living a Christ-centered life? (n = 74)	82%	18%		

**Kingdom Outcomes** 

Table A3. Additional Stated Objectives (Yes/No)			
	Yes	No	
Since completing The Refuge, do you honor the Lord in your home? (n = 74)	100%	0%	
Do you belong to a church? (n = 74)	82%	18%	
Since completing The Refuge, have you been regularly attending church? (n = 74)	73%	27%	
Did you have a relationship with Christ prior to coming to The Refuge? ( $n = 74$ )	57%	43%	
Do you regularly tithe? (n = 74)	50%	50%	
Since completing The Refuge, did you bring your spouse to the Lord? (n = 21)	23%	76%	
If you have children, since completing The Refuge, have you been raising your chil- dren in the Christian faith? (n = 40)	75%	25%	

Table A4. Personal and Spiritual Outcomes	
	Mean (Out of 100)
To what extent would you attribute your relationship with Christ to the progress you have made in your recovery? (n= 74, 1=not at all, 100 = very significantly)	95.1
To what extent would you attribute your relationship with Christ to the improving of your life? (n= 74, 1=not at all, 100 = very significantly)	94.2
How much do you feel The Refuge helped you in making a new beginning? (n= 74, 1= not at all, 100 =very significantly)	91.9
How do you feel about the new beginning and the transformational change you experienced as a result of going through The Refuge? (n= 74, 1=poorly, 100=excellent)	91.2
How much do you feel your life has improved in relation to before you came to The Refuge? (n= 74, 1=not at all, 100 = very significantly)	90.1
Since coming to The Refuge, how much has your relationship with Christ grown? (n= 74, 1=not at all, 100=very significantly)	83.9
How would you rate the strength of your current relationship with God? (n= 74, 1=poor, 100 = very strong)	76.4
Since completing The Refuge, to what extent have you been sharing Christ with others? (n= 74, 1=not at all, 100=very significantly)	69.1
Since completing The Refuge, how active have you been in trying to bring others to Christ? (n= 73, 1=not at all, 100=very significantly)	64.1

Table A5. Brought Others to Christ							
	None	One	Two	Three	Four	Five	More than Five
Since completing The Refuge, if you feel you have brought others to Christ, if able, how many do you think you may have helped be saved? (n = $74$ ) <sup>16</sup>	16%	8%	23%	16%	5%	3%	27%

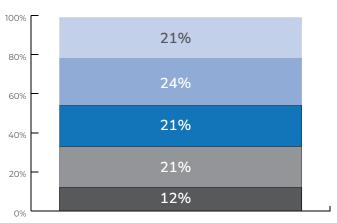
Secular Outcomes

Table A6. Abstinence and Use		
	Yes	No
Since leaving The Refuge, have you been continuously clean/sober? (n = 71)	66%	34%
Are you continuing to desire sustained abstinence? ( $n = 40$ )	80%	20%
If you have used/drank since completing The Refuge, would you consider yourself now cycling between using and trying again to abstain from use? (n = 33)	27%	73%
Since completing The Refuge, do you feel you're at the point of your recovery where you are free of the compulsion to drink or use? ( $n = 70$ )	66%	34%
Since completing The Refuge, have you gone through or are currently in treatment from an organization other than The Refuge? (n = 71)	6%	94%
Do you want to talk to a Director at The Refuge about your use or coming back into The Refuge? (n = $71$ )	0%	100%

 $^{\rm 16}$  Does not sum to 100% due to rounding.

Table A7. Substance Use Pre/Post		
What was your drug of choice before you came to The Refuge? (Pre) Since completing The Refuge, if you are using or used again, what drug/alcohol did you pick up again? (Post)	Pre (n = 71)	Post (n = 71)
Did not use since leaving The Refuge	-	54%
Alcohol	35%	37%
Heroin	59%	14%
Cocaine	35%	13%
Marijuana	27%	13%
Prescription Opioids	45%	7%
Methamphetamine	35%	7%
Other prescription drugs not prescribed or directed	13%	4%
Hallucinogens	10%	4%
Benzodiazepines	17%	1%
Amphetamines	11%	1%

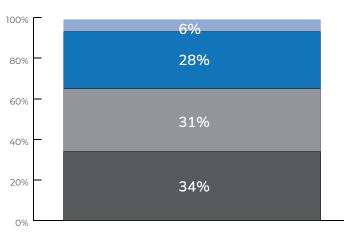
### Figure A1. Sobriety Longevity/ Duration (n = 33)



If you have used/drank since completing The Refuge, what is the longest period of abstinence from use you



## Figure A2. Relapse Intensity (n = 32)



If you have used/drank since completing The Refuge, how would you categorize the intensity of your relapse?

Extreme, Back in Treatment

Serious with Negative Impacts

Troubling Enough to Spark Concern/Fear

Minor with No Consequences

#### Aftercare and Compliance

Table A8. Continuing Care							
	Therapists, Psychologist, Counselor, etc.	Alcoholics Anonymous	Narcotics Anonymous	Community Group	Other Support Group	None	
Which kinds of continuing care or self-help groups are you still active in? (n = 71)	11%	13%	7%	35%	35%	35%	

Table A9. Aftercare	
	Mean (Out of 100)
How much would you say the aftercare measures you committed to (AA, NA, counseling, community group, etc.) have contributed to your sustained abstinence from the use of drugs and/or alcohol? (n = 71, 1=not at all, 100=very significantly)	48.3
How much would you say the aftercare measures you committed to (AA, NA, counseling, community group, etc.) contributed to your overall recovery? (n = 71, 1=not at all, 100=very significantly)	47.8

Table A10. Recovery Support Attendance					
	Never, or have stopped attending	Once per month or less	Several times per month	At least once per week	Regularly before COVID
Since completing The Refuge, how often do you attend continuing care and self- help groups? (n = 71)	35%	18%	13%	20%	14%

## Personal Life and Relationships

Table A11. Family and Relationships		
	Yes	No
Are you married? (n = 74)	19%	81%
Were you married before completing The Refuge? (When were you married?) (n = 20)	65%	-
Were you married after completing The Refuge? (When were you married?) (n = 20)	35%	-
Since coming into The Refuge have you gotten divorced? (n = 71)	10%	90%

Table A12. Child Support		
	Yes	No
Are you currently required to pay child support? ( $n = 71$ )	13%	87%
If you are required to pay child support, are you current with your payments? $(n = 11)$	55%	45%

Table A13. Relationship with Children		
	Mean (Out of 100)	
If you have children, how much has your relationship with your children improved since coming to The Refuge? (n = 36, 1 = not at all, 10=very significantly)	7.1	

Table A14. Number of Children					
	No Children	One	Two	Three	Four or More
How many children do you have? (n = 74)	47%	24%	14%	9%	5%
Since completing The Refuge, have you fathered any children out of wedlock? (n = 71)	93%	4%	1%	1%	0%

Table A15. General Relationships	
	Mean (Out of 100)
Since completing The Refuge, how would you rate on an overall basis the quality of the relationships you maintain with the people in your life that matter most to you? (n = 71, 1=poor, 100=excellent)	86.3
How much have those relationships improved since you came to The Refuge? (n = 71, 1=not at all, 100=very significantly)	91.0
How much more do you feel you are trusted by those that matter most to you since you came to The Refuge? (n = 71, 1=not at all, 100=very significantly)	90.8
How much more do you feel relied upon by those that matter most to you since you came to The Refuge? (n = 71, 1=not at all, 100=very significantly)	85.0
How would you rate the current quality of your social life? (n = 71, 1=poor, 100=excellent)	74.8
To what extent has your group of friends changed to be consistent with your post-Refuge lifestyle of recovery? (n = 71, 1=not at all, 100=very significantly)	81.6

Table A16. Community Involvement				
	Never, or have stopped volunteering	Once per month or less	Several times per month	At least once per week
Do you volunteer for community organizations, causes, or events on a regular basis? (n = 71)	25%	38%	21%	15%

# **Employment and Financial Matters**

Table A17. Finances/Employment		
	Yes	No
Do you consider yourself financially stable? ( $n = 71$ )	79%	21%
Since leaving The Refuge, have you been continuously employed in a full-time job(s)? (n = 71) (half of the "No" answers are due to COVID-19 layoffs: 4%)	92%	8%
Have you received any unemployment benefits since leaving The Refuge? (n = 71)	4%	96%

Table A18. Income	
	Mean (Out of 100)
How much do you think you will earn from employment in 2020? (n = 59) (Responses greater than zero)	\$35,424

# **Figure A3. How Much Do You Think You Will Earn from Employment in 2020?**

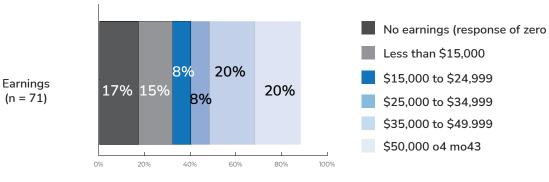


Table A19. Work Performance	
	Mean (Out of 100)
How would you rate your performance at work? (n = 71, 1=poor, 100=excellent)	91.8

Education

Table A20. Education		
	Yes	No
Since leaving The Refuge, have you completed/obtained a GED, associate, bachelor's or master's degree or been certified/accredited in a skilled vocational trade or professional field? (n = 71)	15%	85%
Are you currently enrolled at an institution of higher learning, vocational school, or participating in some form of online accredited curriculum? (n = 71)	14%	86%
If yes, are you enrolled full or part time? (n = 10) (full time)	30%	-
If yes, are you enrolled full or part time? ( $n = 10$ ) (part time)	70%	-
While pursuing your degree/certification/accreditation, are you working? (n = 18) (full time)	94%	_
While pursuing your degree/certification/accreditation, are you working? (n = 18) (part time)	6%	-

Table A21. Continued Education Sought					
	GED	Certification/ Accreditation	Associate Degree	Bachelor's Degree	
If you have completed/obtained, what did you obtain: a GED, associate, bachelor's or master's degree or been certified/accredited in a skilled vocational trade or professional field? (n = 9)	44%	56%	0%	0%	
If you are currently enrolled at an institution of higher learning, vocational school, or participating in some form of online accredited curriculum, what sort of degree/certification are you working towards? (n = 16)	13%	44%	6%	38%	

# Physical and Mental Health

Table A22. Healthy Living and Access		
	Yes	No
Do you feel you are 'food secure'? (n = 71)	94%	6%
Do you emphasize good nutrition in your diet? (n = 70)	71%	29%
Do you have a personal policy of engaging only in 'safe sex'? ( $n = 71$ )	75%	25%
Do you currently have a reliable form of transportation? ( $n = 71$ )	87%	13%
Since completing The Refuge, have you been hospitalized in any manner for a mental health condition? (n = $71$ )	1%	99%
Since completing The Refuge, have you received treatment services or counseling for any mental health-specific matters? (n = 71)	10%	90%
Are you continuing with any of those treatment services on an ongoing basis? (n = 14)	36%	64%
Since completing The Refuge, have you begun taking any prescription medication specific to a diagnosed mental health condition? (n = 14)	21%	79%

Table A23. Health Ratings		
	Mean (Out of 100)	
How much would you say your quality of life has improved since coming into The Refuge? (n = 71, 1=not at all, 100=very significantly)	93.0	
How would you rate your overall quality of life now? (n = 71, 1=poor, 100=excellent)	84.7	
Since completing The Refuge, how much better are you taking care of your physical well-being than before you came to The Refuge? (n = 71, 1=not at all, 100=very significantly)	83.2	
How would you rate your physical health? (n = 71, 1=poor, 100=excellent)	80.5	
How much has your physical health improved since coming into The Refuge? (n = 71, 1=not at all, 100 very significantly)	77.9	

Table A24. Emergency Room Visits and Admittance					
	Never	Once	Twice	Three Times	Four or More Times
Since completing The Refuge, if you have gone to the Emergency Room for any drug or alcohol- related reasons, how many times have you gone? (n = 71)	86%	10%	3%	0%	1%
Since completing The Refuge, how many times have you been admitted for hospital stays for any drug or alcohol-related reasons? (n = 71)	93%	4%	1%	1%	-

## Legal Affairs

Table A25. Justice Involvement		
	Ever	Post The Refuge
Have you been convicted of a misdemeanor or a felony? (n = 71)	76%	7%
Have you been placed on probation or parole? (n = 71)	68%	6%
Have you served any time in jail or prison? (n = 71)	70%	4%
Since completing The Refuge, have you had any involvement at all, arrest or otherwise, with the criminal justice system? (Excluding traffic violations or similar minor civil offenses) (n = 71)	-	4%

# Housing

Table A26. Housing and Homelessness		
	Yes	No
Do you live in 614 housing or with other Refuge alumni? (n = 74)	28%	72%
Before entering The Refuge, were you homeless? (n = 71)	56%	44%
Since completing The Refuge, have you experienced homelessness? (n = 71)	6%	94%
Since completing The Refuge, have you been living in stable and/or sober housing continuously? (n = 71)	86%	14%
Are you currently living in stable and/or sober housing? (n = 71)	87%	13%
Do you rent your current residence? (n = 71)	87%	_
Do you own your current residence? (n = 71)	13%	_

# Appendix B. The Refuge Social Return on Investment Methodology

#### Overview

To estimate the SROI, The Refuge administered a survey in 2020 to clients who completed the program from 2018 through 2020. As part of this survey, individuals were asked to report their drug(s) of choice prior to coming to The Refuge, as well as report on how their recovery had progressed since leaving the program (i.e., did individuals relapse? If so, how extreme was the relapse and which types of substances were used). Individuals were also asked to report on whether they were homeless prior to and after leaving the program. Using estimates of the annual, per person societal costs associated with use of various substances and experiencing homelessness, the SROI estimated societal costs had individuals not entered The Refuge (i.e., annual societal costs multiplied by length of time individuals reported sobriety and stable housing) and the costs associated with running the program as well as costs associated with individuals' relapses after leaving the program. Then, a cost per successful outcome in The Refuge was calculated and compared to the average cost per person to society had the individuals not reduced their substance use by going through the program. Because the costs to society had individuals who completed the program in 2018 were included in the SROI calculation as the other individuals had not been out of the program long enough to understand the long-term impacts on their substance use.

### The Calculations

To calculate the SROI of The Refuge, the costs associated with clients' use of substances and experiences of homelessness were estimated based on self-reported substances used and homelessness experienced prior to their entry into the program. For each substance, secondary data were gathered to estimate the societal cost associated with using each substance on an annual basis. The annual estimates were then multiplied by the amount of time each person indicated sobriety, averaging 3.4 years across 2018 alumni who completed the survey.<sup>17</sup> To calculate the costs of The Refuge, total 2018 operating costs, and costs associated with clients' relapses were summed.<sup>18</sup> Table B1 details the estimated annual societal cost for each substance/homelessness, the number of clients indicating use of each substance, and the resulting total estimated societal cost.



<sup>17</sup> Length of time sober was calculated based on the number of months elapsed from alumni's reported program exit date and survey completion date, plus 13 months for the length of time alumni were in the program.
<sup>18</sup> If individuals relapsed after completion of the program, the annual societal cost associated with that substance was weighted by the length of time the individuals' relapse lasted. For example, the estimated annual societal cost associated with illicit drugs is \$9,716.54; if an individual indicated that their relapse lasted less than one month, the annual cost was divided by 12 (\$9,716.54/12 = \$809.71)

Table B1. Estimated Annual Societal Costs Associated with Each Substance/Homelessness			
	Estimated Societal Annual Cost	Number of Clients Indicating Use Prior to The Refuge	Total Estimated Cost (Annual Cost x Length of Sobriety x Number of Clients)
Homelessness	\$30,000.00 <sup>19</sup>	7	\$210,000.00
Alcohol	\$739.00 <sup>20</sup>	2	\$4,865.08
Marijuana	\$9,716.54 <sup>21, 22, 23</sup>	3	\$101,213.96
Cocaine	\$9,716.54	9	\$284,208.80
Heroin	\$9,716.54	15	\$502,021.23
Prescription opioids	\$29,452.00 <sup>24, 25</sup>	15	\$1,506,960.67
Methamphetamine	\$9,716.54	6	\$200,808.49
Benzodiazepines	\$9,716.54	0	\$NA
Amphetamines	\$9,716.54	2	\$63,967.22
Hallucinogens	\$9,716.54	1	\$34,007.89
Other prescription drugs not prescribed or directed	\$9,716.54	3	\$97,165.40
Imputed average for individuals with no survey data	\$133,105.65	12	\$1,597,267.85
	Total Comm	unity Costs Over 3 Years	\$4.6 million

### Estimating Costs to Society without The Refuge

Because some individuals who completed the program in 2018 did not complete the survey, the average cost to society per person prior to The Refuge was imputed for those without survey data (33 individuals completed the program, but only 21 completed the survey; average estimates were imputed for 12 individuals). On average, the total societal cost for substance use per person without The Refuge was \$133,106 with an additional estimated cost of \$30,000<sup>26</sup> per person among those who were experiencing homelessness. In summing estimated societal costs associated with substance use and homelessness, the total estimated societal costs had individuals not gone through The Refuge is \$4.6 million over three years (Table B2).

 $^{23}$  The U.S. Department of Justice's total societal costs associated with illicit drug use in 2007 was divided by the prevalence of illicit drug use provided by SAMHSA in 2007 \$1,930,000,000/(248,288,000 x .08) = \$9,716.54

<sup>&</sup>lt;sup>19</sup> https://www.usich.gov/resources/uploads/asset\_library/Ending\_Chronic\_Homelessness\_in\_2017.pdf

<sup>&</sup>lt;sup>20</sup> Estimated Annual Cost per person for alcohol abuse in Ohio https://www.cdc.gov/alcohol/features/excessivedrinking.html?C-DC\_AA\_refVal=https%3A%2F%2Fwww.cdc.gov%2Ffeatures%2Fcostsofdrinking%2Findex.html

<sup>&</sup>lt;sup>21</sup> https://www.justice.gov/archive/ndic/pubs44/44849/44849p.pdf

<sup>&</sup>lt;sup>22</sup> https://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf

<sup>&</sup>lt;sup>24</sup> Florence, CS et al. The Economic Burden of Prescription Opioid Overdose, Abuse, and Dependence in the United States, 2013; Medical Care. Volume 54, Number 10, October 2016.

<sup>&</sup>lt;sup>25</sup> Total nonfatal societal costs were divided by the number of individuals with Prescription Opioid Abuse and Dependence (\$56,990 billion/1.93 million individuals = \$29,452)

<sup>&</sup>lt;sup>26</sup> https://www.usich.gov/resources/uploads/asset\_library/Ending\_Chronic\_Homelessness\_in\_2017.pdf

### Estimating costs during and after The Refuge

To estimate costs associated with running The Refuge program as well as costs associated with individuals' relapses after completion of the program, The Refuge total annual budget and secondary data associated with drug use were utilized. In 2018, the program's budget totaled \$1,562,250 (Table B2 #16). Further, some individuals experienced minor relapses (substance use that lasted less than one month with a commitment to sustained abstinence) after completion of the program. In sum, estimated costs during/after The Refuge totaled \$1,599,949. With an estimated success rate of 90% (i.e., of the 21 survey responses, 19 individuals had successful outcomes meaning they abstained from substances for two years post-program or experienced a minor relapse lasting less than one month), the estimated cost (societal and The Refuge costs) per successful outcome is \$53,587. With this total cost per successful outcome, the overall estimated community cost savings The Refuge provides over, approximately, a three-year period is \$2,564,206; for every \$1 invested in The Refuge, there is an estimated \$2.88 benefit to the community over three years through reduced societal costs associated with criminal activity, health care, and reduced work productivity.



Table B2. SROI and Cost per Success Estimates	
Estimated Costs without The Refuge	2018
Estimated societal costs without The Refuge - Drug Use (Raw Data)	\$2,795,218.74
Average Estimated Annual Cost, per person (Substance Use)	\$39,152.52
Average Estimated Total Cost for Substances, per person without The Ref- uge (Annual Cost x Length of Sobriety)	\$133,105.70
Number of Individuals Completing The Refuge	33
Number of Completed Survey Responses	21
Average Length of Time of Sobriety	3.4
Estimated total imputed societal costs for missing data	\$1,597,267.85
Number of homeless prior (estimated cost per Homeless \$30,000)	7
Estimated societal costs prior to The Refuge - Homeless	\$210,000.00
Raw Total Costs	\$3,005,218.74
Estimated Total societal costs without The Refuge (Raw + Imputed Data)	\$4,602,486.59
Estimated Total societal costs without The Refuge per person	\$139,469.29
Estimated Costs During/After The Refuge	2018
Estimated societal costs after The Refuge (relapses)	\$37,699.02
Number homeless after	0
Estimated societal costs after The Refuge - Homeless	\$-
The Refuge Residential Addiction Recovery Programs Annual Budget	\$1,562,250.00
Total Number Completed The Refuge	33
Total Number of Successful Outcomes Raw Data (Abstinence or minor relapse lasting less than one month)	19
	19 90.476%
minor relapse lasting less than one month)	
minor relapse lasting less than one month) Success Rate Estimated Number of Residents with Successful Outcome (Success rate x	90.476%
minor relapse lasting less than one month) Success Rate Estimated Number of Residents with Successful Outcome (Success rate x number completing program)	90.476% 29.857
minor relapse lasting less than one month) Success Rate Estimated Number of Residents with Successful Outcome (Success rate x number completing program) Total Costs (Operational Costs + Costs for Relapses)	90.476% 29.857 \$1,599,949.02
minor relapse lasting less than one month) Success Rate Estimated Number of Residents with Successful Outcome (Success rate x number completing program) Total Costs (Operational Costs + Costs for Relapses) SROI	90.476% 29.857 \$1,599,949.02 <b>2018</b>

## Using the total values in Table B2, the SROI was calculated using the following formula:

((Total societal costs without The Refuge – Total Costs During and After The Refuge) / Total Costs During and After The Refuge)) \* 100%

((\$4,602,487 - \$1,599,949) / \$1,599,949) \* 100% = 188%



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