

FLETCHER GROUP ECONOMIC CALCULATOR

RESULTS REPORT

PREPARED FOR: EXAMPLE HOUSE

2024

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INTRODUCTION

In this report, we provide results from the Fletcher Group Economic Calculator, a customizable cost-benefit analysis. The cost-benefit analysis includes economic benefits such as avoided healthcare utilization, reduced criminal justice involvement, and increased market and household productivity, as well as increased health and well-being as reflected by reduced morbidity and premature mortality. The economic costs included in the model are the annual operating costs including staffing, supplies, and programming, as well as any capital costs related to infrastructure and land purchases.

A complication of conducting cost-benefit analyses of recovery programs is modeling of the recovery process itself. SUD recovery is often not a linear process where a treatment intervention occurs, and a person enters recovery for the rest of their life. SUD is a chronic, relapsing disease and studies have shown that people seeking recovery have an average of five recovery attempts before long-term recovery is achieved.¹ Further, once long-term recovery is achieved, there may be a delay before the benefits of recovery start accruing. Research assessing different aspects of recovery across time, including recovery capital, quality of life, and psychological distress, found that many recovery indicators take between 2 and 5 years to reach levels of individuals across those aspects who do not have a SUD.² As such, we include a discount parameter to model the time-lag of recovery benefits and discuss how results may change as a result of this time lag. A full description of the methods underlying report may be found here: [Fletcher Group Economic Calculator Methods Report](#).

RESULTS

In this section, we discuss the results from the Fletcher Group Economic Calculator based on the inputs provided by the recovery program. Specifically, we overview the program characteristics, the economic benefits, costs, and return on investment under different time lag scenarios, and how these estimates may differ based on different success rate assumptions.

The recovery program characteristics provided are displayed in Table 1. These inputs underly the main results presented in Table 2.

¹Kelly JF, Greene MC, Bergman BG, White WL, Hoepfner BB. How Many Recovery Attempts Does it Take to Successfully Resolve an Alcohol or Drug Problem? Estimates and Correlates From a National Study of Recovering U.S. Adults. *Alcohol Clin Exp Res*. 2019;43(7):1533-1544. doi:10.1111/acer.14067

²Kelly JF, Greene MC, Bergman BG. Beyond Abstinence: Changes in Indices of Quality of Life with Time in Recovery in a Nationally Representative Sample of U.S. Adults. *Alcohol Clin Exp Res*. 2018;42(4):770-780. doi:10.1111/acer.13604

TABLE 1. RECOVERY HOUSE CHARACTERISTICS (MODEL INPUTS)

Annual Operating Cost	\$250,000
Start-Up Cost	\$670,000
State	Wyoming
Rural	Yes
Success Rate	35%
Number of Residents Served Annually	50
Time Horizon	15 years

First, we present a baseline set of results that involve no time lag of benefits (Table 2).

TABLE 2. MAIN RESULTS FROM MODEL

Variable	Output
<i>Total Residents Served</i>	750
<i>Total Benefits</i>	\$186,811,859
<i>Total Costs</i>	\$3,197,919
<i>Net Benefits</i>	\$183,613,940
<i>Avoided Criminal Justice Costs</i>	\$6,812,967
<i>Avoided Healthcare Costs</i>	\$4,285,577
<i>Avoided Productivity Costs</i>	\$11,713,312
<i>Reduced Premature Mortality/Morbidity</i>	\$164,000,003
<i>Total Return on Investment</i>	\$57.42

Over the course of 15 years, Example House serves approximately 750 residents. The total present value of economic benefits is approximately \$187 million. Of these benefits, approximately 4% are due to avoided criminal justice costs (\$6.8 million), 2% are due to avoided healthcare costs (\$4.3 million), 6% are due to avoided productivity costs (\$11.7 million), and

88% are due to other benefits in the form of reduced premature mortality and morbidity (\$164 million). The present value of total costs is approximately \$3.2 million. The present value of the net benefits (i.e., the total benefits minus the total costs) is approximately \$183.6 million over 15 years. The total return on investment of the program over the course of 15 years is \$57 dollars per dollar invested.

Next, we show how our results from the model will change based on more conservative modelling of the recovery process.

TABLE 3. RESULTS ACROSS DIFFERENT MODELS OF RECOVERY

Variable	No Lag	2-Year Lag	5-Year Lag
<i>Total Benefits</i>	\$186,811,859	\$174,119,085	\$128,734,711
<i>Total Costs</i>	\$3,197,919	\$3,197,919	\$3,197,919
<i>Net Benefits</i>	\$183,613,940	\$170,921,166	\$125,536,792
<i>Avoided Criminal Justice Costs</i>	\$6,812,967	\$6,350,066	\$4,694,913
<i>Avoided Healthcare Costs</i>	\$4,285,577	\$3,994,397	\$2,953,252
<i>Avoided Productivity Costs</i>	\$11,713,312	\$10,917,461	\$8,071,810
<i>Other Benefits</i>	\$164,000,003	\$152,857,161	\$113,014,736
<i>Total Return on Investment</i>	\$57.42	\$53.45	\$39.26

Accounting for the lag in benefits that may be associated with recovery decreases the net benefits of the program by approximately 7% under the two-year time lag assumption or approximately 32% under the 5-year time lag assumption. However, even under the most conservative modelling of recovery involving a 5-year time lag of benefits, the net benefits of the program are positive at \$125.5 million and the return on investment is \$39 per dollar invested.

As the success rate of the program can be the most difficult to estimate accurately and is often most important to funders, we also calculate the present value of net benefits and total return on investment for different success rates (Table 4). In this analysis, we use the baseline recovery model that does not incorporate any lag in benefits.

TABLE 4. NET BENEFITS AND TOTAL RETURN ON INVESTMENT ACROSS DIFFERENT SUCCESS RATE ASSUMPTIONS

Success Rate (%)	Net Benefits (\$)	Total Return on Investment (\$)
0	-3,197,919	-1.00
20	103,551,700	32.38
40	210,301,300	65.76
60	317,051,000	99.14
80	423,800,600	132.52
100	530,550,200	165.90

FIGURE 1. RETURN ON INVESTMENT ACROSS DIFFERENT SUCCESS RATE ASSUMPTIONS

