# IMPROVING EMPLOYMENT OUTCOMES FOR INDIVIDUALS IN TREATMENT OF SUBSTANCE USE DISORDER

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# **Executive Summary**

In rural regions like Dickenson County, the economic costs of substance use disorder (SUD) are not just abstract statistics, they manifest in lost job opportunities, cycles of poverty, and the lack of access to vital recovery supports. Substance use disorder (SUD) continues to impose an extraordinary burden on individuals, families, and public systems across the United States. In 2023, the economic cost of substance use exceeded \$2.7 trillion, representing nearly 10% of national GDP (The White House, 2025). A significant portion of these losses results from decreased labor productivity and premature death, highlighting the need for employment-based recovery supports.

This research report evaluates three evidence-informed interventions that aim to improve employment outcomes for individuals undergoing substance abuse treatment (SAT) at the soon-to-be-established Wildwood Recovery Center in Dickenson County. These alternatives — Individual Placement and Support (IPS), Vocational Rehabilitation (VR), and the Good News Garage (GNG) model were selected based on stakeholder consultations and a review of relevant literature. Each alternative addresses key barriers to employment for people in recovery, such as stigma, transportation, legal challenges, and skills deficits. To determine the most effective and feasible option for the region, each intervention is evaluated using a common framework of four criteria: effectiveness, cost, feasibility, and capacity.

Alternative 1: Individual Placement and Support (IPS)

IPS is a highly structured, evidence-based employment model initially developed for individuals with serious mental illness and later adapted for those with SUD. It prioritizes competitive employment, rapid job search, and integration with behavioral health services. The program places employment specialists at treatment centers to deliver personalized job development services, promote inclusive hiring practices, and provide ongoing workplace support.

Numerous randomized controlled trials and longitudinal studies have demonstrated IPS's effectiveness in helping individuals achieve and retain competitive employment. Participants in IPS programs have been shown to be 11 times more likely to gain employment than control groups (Lones et al., 2017). Estimated cost for implementing IPS over three years for 112 participants in Dickenson County is \$1,656,033, adjusted for inflation. While IPS is politically and financially feasible through braided federal and state funding streams (e.g., Medicaid, SAMHSA), its success in Dickenson County may be moderated by stigma and limited employer networks in rural settings.

#### Alternative 2: Vocational Rehabilitation (VR)

VR is a state-run, federally supported program designed to help individuals with disabilities—including SUD—achieve job readiness and long-term employment. VR services include vocational assessment, skill development, internships, assistive technology, and return-to-work plans, typically culminating in job placement and follow-up support. In Dickenson County, VR could be administered in partnership with DARS and local employers to support treatment-to-work transitions.

Studies suggest VR programs increase employment by 7% to 12% depending on duration and structure (Leinonen et al., 2019). VR is less resource-intensive than IPS, with a total implementation cost of approximately \$1,077,533 over three years. However, it places more emphasis on long-term skill-building than immediate job placement and may require significant time before participants see tangible outcomes. VR's success hinges on funding continuity, coordinated service delivery, and employer buy-in—factors that are variably present in the local context.

#### Alternative 3: Good News Garage (GNG) Transportation Model

The GNG model addresses a unique but critical structural barrier to employment in rural Appalachia: transportation. Through vehicle donation, repair, and redistribution, GNG provides reliable transportation to individuals who otherwise lack access to jobs, training, or recovery services. Participants must have valid licenses and commit to deferred payment plans post-employment.

Research shows that individuals with access to a car are 80% more likely to be employed (Bastiaanssen et al., 2020). The total one-time cost of implementing the GNG model for 112 participants is \$870,015, including vehicle repairs, insurance, license reinstatement, and personnel. Unlike IPS and VR, GNG requires limited external funding and is not dependent on federal appropriations, making it a highly viable intervention in a region facing uncertainty in SAMHSA and Medicaid support. Employers in the area also view transportation as a signal of reliability, further enhancing the model's local relevance and support.

After weighing the alternatives through the established evaluation criteria, this report recommends the implementation of the Good News Garage model in Dickenson County. While IPS and VR have proven effectiveness in other contexts, both are significantly reliant on federal funding, multi-year capacity-building, and strong employer networks. The GNG model, by contrast, offers a direct, cost-effective, and logistically feasible solution to the most pressing barrier identified by stakeholders: lack of reliable transportation. It also enjoys strong community support potential and aligns well with local infrastructure and workforce needs.

This recommendation does not preclude future integration of IPS or VR as complementary interventions. Rather, it reflects a phased strategy that prioritizes immediate barriers to employment while laying the groundwork for more comprehensive workforce integration. By investing in the GNG model, Dickenson County can make a meaningful, cost-conscious impact on recovery, employment, and long-term economic revitalization.

# Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

# Acknowledgements and Dedication

This project represents the culmination of months of research, reflection, and personal growth, and it would not have been possible without the unwavering support and guidance I received along the way.

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To my client, Dickenson County, I am sincerely grateful for the opportunity to work with your community. Special thanks to Dana Cronkhite for her time, insight, and commitment to addressing complex issues with compassion and vision. Your work is inspiring, and it was an honor to contribute in a small way to your ongoing efforts to build a healthier, stronger Southwest Virginia.

To my family and friends thank you for being my steadfast support system. Your patience, encouragement, and belief in me kept me grounded through long nights, difficult questions, and moments of self-doubt. Your presence, whether near or far, was felt and appreciated more than words can express.

This project reflects the contributions of many people who care deeply about justice, recovery, and opportunity. I am incredibly grateful to have had the chance to learn from you and to grow through this work.

With heartfelt thanks, Mohammed Sanni Mariama

# Introduction

In 2023, substance use disorders cost the United States more than \$2.7 trillion equivalent to 9.7% of the nation's GDP (The White House, 2025). Of this staggering amount, 41% (\$1.1 trillion) was attributed to premature death, 49% (\$1.34 trillion) to reduced quality of life, and 10% (\$277 billion) to healthcare costs, crime-related expenses, and diminished labor productivity—of which \$107 billion stemmed from lost productivity alone. These figures highlight not only the economic burden of substance use but also its profound human impact. For individuals undergoing substance use treatment, employment remains one of the most essential components of sustained recovery. Yet, barriers such as transportation limitations, social stigma, and criminal history often prevent access to meaningful work.

This report investigates the persistent problem of employment inaccessibility among individuals in substance abuse treatment (SAT) in Dickenson County, Virginia. These challenges are especially pronounced in rural regions like Southwest Virginia, where infrastructure gaps, entrenched stigma, and barriers such as lack of reliable transportation, low educational attainment, and criminal records significantly hinder access to meaningful employment, despite its critical role in achieving economic independence and preventing relapse (Martinson et al., 2020; Ware et al., 2021).

The primary purpose of this report is to evaluate three policy alternatives that aim to improve employment outcomes for individuals on SAT: Individual Placement and Support (IPS), Vocational Rehabilitation (VR), and the Good News Garage (GNG) transportation model. These alternatives are assessed through four evaluative criteria—effectiveness, cost, feasibility, and capacity—to determine which intervention is best suited to Dickenson County's specific challenges and assets.

The report begins with a comprehensive overview of the problem and its root causes, followed by a detailed description of each policy alternative and the methodology for evaluating them. It then presents an evidence-based comparison, offers a tailored implementation plan, and concludes with a recommendation for local stakeholders and

policymakers. By addressing employment as both a recovery tool and a public health strategy, this report aims to contribute actionable solutions to a complex regional issue with national implications.

# **Problem Statement**

Despite extensive research and numerous interventions over the years, the prevalence of substance use disorders (SUD) has not significantly decreased. Traditional treatment methods often fall short in achieving sustained abstinence and recovery for individuals with SUD. However, integrating employment opportunities with conventional treatment approaches has shown the potential to improve recovery rates and enhance the quality of life for those affected by SUD (Rumrill & Bishop, 2023). Individuals recovering from SUD face significant barriers to employment, including transportation issues, lack of education or skills, criminal history, and stigma and discrimination leading to increased relapse

# **Client Overview**

Dickenson County, located in Southwest Virginia, is a rural community part of the Appalachian region. Despite its natural beauty and cultural heritage, the county faces significant challenges, including economic development and public health disparities. One of the most pressing issues is the impact of substance use disorder (SUD), which has deeply affected individuals, families, and the local economy. In response, Dickenson County is taking a bold step forward by building the Wildwood Recovery Center, a facility designed to address the substance use crisis and provide comprehensive recovery services to its residents.

The Wildwood Recovery Center represents a transformative opportunity for Dickenson County to improve public health and strengthen its community. The center's mission is to deliver integrated, evidence-based treatment programs that address the medical, mental health, and social needs of individuals recovering from SUD. In addition to treatment, the

center focuses on long-term recovery by offering life skills training, vocational education, and pathways to employment. This approach empowers individuals to rebuild their lives and reintegrate into the community as productive, independent members (Addiction Recovery Care, 2023).

The impact of the Wildwood Recovery Center extends beyond individual recovery. The facility is positioned to play a pivotal role in the county's overall well-being by addressing systemic issues tied to SUD. First, it aims to improve public health by enhancing access to recovery services in a region where resources have historically been limited. Second, the center will contribute to workforce development by supporting individuals in recovery through vocational rehabilitation and job placement programs. This approach not only aids in personal recovery but also strengthens the local economy by increasing employability and productivity. Finally, the center seeks to reduce the stigma surrounding SUD through community education initiatives, fostering greater understanding and acceptance of recovery as a pathway to personal and societal growth (Addiction Recovery Care, 2023). While the Wildwood Recovery Center presents significant opportunities, it also faces notable challenges. Transportation barriers are a primary concern, as many individuals in rural areas may struggle to access the facility and related services. Additionally, creating sustainable employment opportunities for individuals in recovery will require robust partnerships with local employers. Another challenge is the need to combat stigma, which often discourages individuals from seeking help or reentering the workforce. Addressing these barriers will be crucial to ensuring the success and inclusivity of the recovery center's programs.

The Wildwood Recovery Center is a vital initiative that emphasizes Dickenson County's commitment to fostering a healthier, more resilient community. By focusing on comprehensive treatment, long-term recovery, and community reintegration, the center is poised to transform lives and serve as a model for addressing substance use disorder in rural areas. With strategic planning and collaboration, the Wildwood Recovery Center has the potential to create lasting positive change, not only for individuals in recovery but for the entire county (Addiction Recovery Care, 2023).

# Background of the Problem

Southwest Virginia, part of the Central Appalachian region, has long experienced disproportionate rates of substance use disorder (SUD), particularly since the onset of the opioid crisis in the United States. In 2017, the region's drug mortality rate was 72% higher than the national average, reflecting an entrenched public health crisis (Horn et al., 2024). Several structural and socioeconomic factors have contributed to the persistence and severity of substance use in Appalachia, including widespread poverty, a labor market dominated by injury-prone manual jobs, aggressive marketing and overprescription of opioids, and limited access to specialized treatment services (Beatty et al., 2019).

Historically, treatment for SUD has centered on short-term interventions such as behavioral therapies, counseling, and medication-assisted treatment (MAT). While these strategies can be effective in the immediate aftermath of substance use, long-term abstinence remains elusive for many. According to the National Institute on Drug Abuse, as many as 85% of individuals relapse within one year of completing treatment, with approximately 66% relapsing within a matter of weeks (Rumrill & Bishop, 2023). This high relapse rate points to the inadequacy of conventional treatment models in sustaining recovery beyond the clinical setting.

Employment is increasingly recognized as a critical factor in promoting long-term recovery. Work provides financial stability, daily structure, social interaction, and a renewed sense of purpose—all of which contribute to sustained abstinence and reduce the likelihood of relapse (Martinson et al., 2020). Despite its importance, many individuals in SUD treatment face persistent barriers to employment, including lack of reliable transportation, limited education or vocational skills, a history of incarceration, and enduring social stigma.

#### Transportation as a Structural Barrier

Transportation stands out as a pivotal determinant of employment outcomes for individuals in recovery, particularly in rural regions like Dickenson County. Inadequate access to reliable transportation significantly limits opportunities for job search, attendance, and retention.

Ware et al. (2021) found that individuals with access to a vehicle or valid driver's license had notably higher employment rates. Conversely, those without consistent transportation struggled to maintain employment or treatment attendance, increasing the risk of relapse (Martinson et al., 2020). Transportation barriers—ranging from suspended licenses and unaffordable vehicle costs to the near absence of public transit—compound the difficulties faced by individuals in SUD treatment.

#### Stigma and Discrimination

Stigma associated with SUD continues to impede reintegration, particularly within employment settings. Individuals with SUD are frequently viewed as unreliable or dangerous, discouraging employers from offering them jobs (Atlam & Coşkunol, 2021). This stigma is often institutionalized through background checks and hiring policies that exclude candidates with histories of substance use or criminal offenses (Augustine et al., 2020). On a personal level, individuals in recovery may internalize these attitudes, leading to diminished confidence and hesitancy to seek employment.

#### Educational and Skill Deficits

Education and soft skills are essential for job acquisition and retention. However, individuals recovering from SUD often experience educational deficits and lack workplace readiness. Sigurdsson et al. (2011) highlight the challenges that limited education and poor interpersonal skills present, including difficulty navigating job interviews, workplace conflicts, and long-term career development.

#### Criminal History and Legal Barriers

A significant percentage of individuals with SUD have criminal records due to drug-related offenses. In 2022, 21% of arrests in the U.S. were drug felonies (Drug Policy Facts, 2022). Eddie et al. (2020) found that employment rates were considerably lower among individuals with multiple arrests, with each additional arrest reducing employment likelihood by 5%. Legal restrictions, employer discrimination, and the stigma of a criminal record pose additional hurdles to reentry into the labor force. These barriers are compounded by legal

restrictions, employer hesitancy, and the pervasive stigma associated with criminal records. Importantly, employers' aversion to hiring individuals with criminal backgrounds often reflects societal stereotypes rather than legitimate concerns about job performance or recidivism risk (Augustine et al., 2020).

The employment challenges facing individuals in SUD treatment in Southwest Virginia are multifaceted and deeply embedded in broader social and economic structures. From transportation and educational barriers to stigma and criminal history, these obstacles contribute to cycles of relapse, poverty, and marginalization. Effective policy interventions must address these barriers holistically to support employment outcomes of individuals receiving MAT.

# Consequences Of the Problem

Substance use disorder (SUD) carries profound economic consequences for individuals, households, and society at large, particularly through its effect on labor productivity. The U.S. Department of Justice's National Drug Intelligence Center (NDIC) estimated that the total economic cost of illicit drug use in the United States reached \$193 billion in 2007. Of this, approximately \$120 billion—more than 60%—was attributed to lost productivity stemming from decreased labor force participation, absenteeism, incarceration, treatment participation, and premature death (NDIC, 2011). These losses highlight a significant public policy concern because of the positive externalities tied to individual productivity, including greater tax revenues, reduced dependency on public assistance, and stronger community engagement.

In addition to productivity losses, crime-related costs totaled over \$61 billion, and healthcare expenditures exceeded \$11 billion, with the largest share of medical costs resulting from hospitalizations and emergency department visits for nonhomicide cases. In a more inclusive scenario where incarceration and homicide-related productivity losses are classified as crime costs, the estimated crime burden rose to \$113 billion, while productivity

losses were recalculated at \$68 billion (NDIC, 2011). These staggering figures underscore the multifaceted societal burden of SUD, reaffirming the importance of employment-focused recovery programs as essential tools for mitigating long-term economic harm.

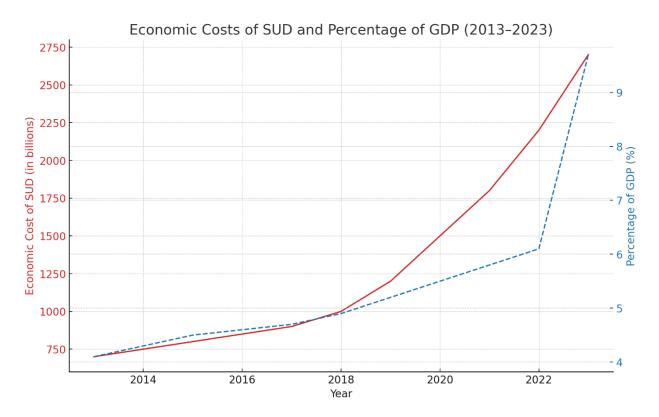


Figure1

Source: Office of National Drug Control Policy

# Alternatives and Criteria for Evaluation

Given the significant barriers individuals in recovery face, such as lack of reliable transportation and stigma, the following policy alternatives offer targeted solutions.

#### Alternative 1: Individual Placement and Support

Individual Placement and Support (IPS) is an evidence-based employment model originally developed to assist individuals with severe mental illness but has since been adapted for individuals undergoing substance use disorder (SUD) treatment. IPS distinguishes itself from traditional vocational programs by promoting rapid employment in competitive job settings, integrating with behavioral health services, and offering personalized, ongoing support. At its core, IPS rejects lengthy pre-vocational training and embraces a "zero-exclusion" principle—individuals are not turned away based on the severity of their diagnosis, employment history, or perceived readiness (Harrison et al., 2020; Lones et al., 2017).

In Dickenson County, the Economic Development Authority (EDA) plans to adopt the IPS model to support individuals currently in substance abuse treatment (SAT). The program will embed employment specialists at the Wildwood Recovery Center, where they will provide client-centered job search assistance, coordinate with treatment teams, and tailor employment placements to align with participants' goals and capabilities. This integration ensures continuity between recovery efforts and employment support. Employers will be engaged through systematic job development, with employment specialists actively fostering inclusive hiring practices and educating businesses about the value of supporting individuals in treatment.

The IPS model is structured around eight core principles: (1) focus on competitive employment; (2) zero-exclusion policy; (3) rapid job search; (4) integration with treatment; (5) person-centered approach; (6) systematic job development; (7) individualized, on-the-job support; and (8) time-unlimited follow-up (Magura & Marshall, 2020). These principles

make IPS highly adaptable, particularly in underserved regions where employment and behavioral health resources must be closely aligned.

Numerous studies have evaluated IPS's effectiveness. A randomized controlled trial (RCT) by Lones et al. (2017) found that individuals in a methadone treatment program who received IPS were 11 times more likely to gain employment than those on a waitlist. Mueser et al. (2011) reported that 60% of IPS participants secured competitive employment by 18 months, compared to just 24% in a control group. Additional observational and cohort studies, including those by (Frounfelker et al., 2011; Rosenheck & Mares, 2007), reinforce these findings, noting improved earnings, job retention, and hours worked for IPS participants compared to those receiving traditional employment services. This body of evidence highlights IPS's versatility and scalability across diverse populations, including individuals with co-occurring mental health and substance use disorders.

#### Alternative 2: Vocational Rehabilitation

Vocational Rehabilitation (VR) is a structured, evidence-informed intervention designed to support individuals with disabilities, including those in substance use disorder (SUD) treatment, in achieving competitive employment. VR services focus on enhancing job readiness, career counseling, skill development, and long-term job retention by integrating employment services with social and health supports (Chamberlain et al., 2009; Frank, 2016). Vocational Rehabilitation operates as a public workforce strategy, often funded through state-federal partnerships, and emphasizes individualized service plans tailored to participants' capabilities and employment goals.

In Dickenson County, the Economic Development Authority (EDA) would implement VR by collaborating with local rehabilitation providers and treatment centers to assist individuals in SUD treatment. The model involves a coordinated approach, beginning with vocational assessments and readiness preparation—such as internships, assistive technology, and life-skills training—before transitioning individuals to job placement services. Once employed, participants receive on-the-job support and post-placement services aimed at improving retention and career advancement. For those returning to work after treatment-

related absences, VR programs offer Return-to-Work (RTW) plans that include flexible work arrangements, job modifications, and long-term support.

Evidence supporting VR's effectiveness spans diverse populations and program designs. For instance, Chamberlain et al. (2009) found that multidisciplinary VR models significantly improved return-to-work rates for individuals with psychiatric and physical conditions, achieving up to 80% job resumption within four months. Huang et al. (2013) demonstrated that job placement services, on-the-job training, and sustained support substantially improved employment outcomes for people with cerebral palsy. Similarly, (Leinonen et al., 2019) using a difference-in-differences analysis, found that participation in VR increased employment by 11.8 percentage points after one year and continued to show moderate gains over time. These findings underscore VR's capacity to promote employment among individuals with complex recovery and disability needs.

The applicability of VR to individuals with SUD is further demonstrated in programs like the Nassau Day Training Program (Jaeger et al., 2006) and case studies in the UK (Frank, 2016), where VR services facilitated gradual re-entry into the workforce, supported job retention, and addressed stigma through employer engagement and workplace modifications. The model is highly adaptable, making it particularly suited for communities like Dickenson County where local economic development efforts intersect with public health and rehabilitation goals.

# Alternative 3: The Good News Garage Model

Reliable transportation is a critical determinant of employment outcomes for individuals undergoing substance abuse treatment (SAT), especially in rural regions like Southwest Virginia where public transit is limited or nonexistent. Lack of mobility directly hinders access to job opportunities, treatment appointments, and recovery-support services, thereby perpetuating cycles of unemployment and instability (Ware et al., 2021). To address these structural barriers, this alternative proposes implementing a vehicle donation and refurbishment program modeled after the Good News Garage (GNG)—an initiative that has

demonstrated success in increasing employment among low-income and marginalized populations.

Under this model, donated vehicles are refurbished and distributed at low or no cost to eligible SAT participants who meet baseline requirements, such as possessing a valid driver's license and demonstrating financial responsibility. The Wildwood Recovery Center will serve as the coordinating hub, managing vehicle intake, documentation, inspection, and allocation. Partnerships will be established with local garages and towing companies to streamline vehicle repairs and ensure roadworthiness. Once vehicles are deemed safe and functional, beneficiaries will receive orientation on vehicle ownership, maintenance, and safe driving practices.

This model builds on the success of the GNG program, which has placed more than 6,000 vehicles since its founding in 1996, helping families transition from public assistance to economic self-sufficiency. (Lucas & Nicholson, 2003)Lucas and Nicholson (2003) found that recipients of GNG vehicles were 19% more likely to report earned income, demonstrating that access to a personal vehicle significantly enhances both employment acquisition and retention. Similar programs in the United Kingdom, such as the Trevithick Link and Wythenshawe Local Link, have shown that targeted transportation interventions resulted in 67% of users securing employment and 30% maintaining jobs (Lucas et al., 2009).

A growing body of literature confirms that vehicle ownership improves labor market outcomes. Bastiaanssen et al. (2020), in a comprehensive meta-analysis, reported that individuals with access to a car had an odds ratio of 1.8 for being employed, indicating nearly 80% greater employment likelihood than those without. Even those living in multi-car households had significantly improved employment prospects, reflecting the broader value of reliable transportation within a household or community context.

The implications for Dickenson County are clear. Implementing a GNG-style model addresses immediate and long-term transportation needs, empowering individuals in recovery to achieve economic independence. Unlike ridesharing programs, which may offer short-term benefits, vehicle ownership ensures autonomy, stability, and the ability to meet

both employment and treatment obligations. Furthermore, employers are more likely to hire individuals with reliable transportation, viewing it as a proxy for reliability and punctuality (Martinson et al., 2020).

In conclusion, the GNG vehicle donation model offers a scalable, community-based intervention that directly mitigates transportation barriers faced by individuals in substance abuse treatment. By investing in this model, Dickenson County can create a sustainable infrastructure that fosters job access, enhances recovery outcomes, and contributes to long-term workforce participation.

#### **Evaluation Criteria for Employment Interventions**

To identify the most viable policy intervention to improve employment outcomes for individuals undergoing substance use disorder (SUD) treatment in Dickenson County, this analysis applies a unified set of four evaluation criteria across all three alternatives: effectiveness, cost, feasibility, and community and employer support. These criteria are designed to assess each alternative's impact on employment, the resources required, and the likelihood of successful implementation within the local context.

#### **Effectiveness**

Effectiveness refers to the degree to which an alternative increases employment rates and job stability among individuals in SUD treatment. This criterion assesses metrics such as job acquisition rates, duration of job retention, number of hours worked per week, and overall earnings. Evidence from prior randomized controlled trials, cohort studies, and program evaluations will be used to estimate likely employment outcomes for each intervention. The generalizability of findings to rural Southwest Virginia will also be considered, with adjustments for contextual variables such as employer engagement and transportation access.

#### Cost

Cost includes both **direct** and **indirect** expenditures required to implement and maintain each intervention. Direct costs encompass salaries of program coordinators and

specialists, training, service delivery (e.g., job coaching or vehicle repair), infrastructure, and administrative oversight. Indirect costs consider the additional workload on existing staff and operational integration within treatment facilities. Where applicable, inflation-adjusted projections over multi-year periods will be used to estimate long-term financial sustainability. Each alternative's cost-effectiveness will be evaluated by comparing implementation costs to projected employment outcomes per participant.

# Feasibility

Feasibility evaluates the likelihood of successful implementation based on two components:

- Political Feasibility: This examines alignment with current federal and state policy
  priorities, including legislation such as the Workforce Innovation and Opportunity Act
  (WIOA) and funding availability through agencies like SAMHSA, Medicaid, and State
  Vocational Rehabilitation Agencies. It also considers the degree of bipartisan support
  and legislative stability, especially in light of recent funding cuts that may impact
  implementation.
- Community and Employer Support: Since SUD carries significant stigma—
  especially in rural communities—this component assesses whether local employers
  and community members are likely to engage with the intervention. Factors include
  employer willingness to hire individuals in recovery, potential stigma, and the role of
  public awareness campaigns and incentives such as tax credits or wage subsidies in
  overcoming these barriers. Interventions that include active employer engagement
  and stigma-reduction strategies will be rated more favorably.

# **Analysis of Criteria**

# Cost Analysis of IPS

Several U.S. studies have analyzed the annual cost of IPS, with estimates adjusted to 2022 dollars. The comprehensive cost per client ranged from \$4,000 and \$7,500, with an average of approximately \$6,000 per client (Bond, 2023). On average, individuals participate in IPS services for eight months, with an estimated cost of \$4,000 during this period. When adjusted for inflation to 2025, this eight-month cost rises to approximately \$4,281.32. In addition to program costs, personnel expenses include an employment coordinator with an annual salary of \$45,000 and an additional \$15,000 allocated for benefits such as retirement, health insurance, and payroll taxes. This brings the total coordinator-related cost to \$60,000 annually. The Wildwood Recovery Center has 112 participants, therefore the overall cost of IPS for the Wildwood recovery Center is \$1,656,033.06 over the period of three years.

#### Effectiveness Analysis of IPS

The major goal of IPS is for participants to obtain competitive employment. The effectiveness of IPS is calculated based on how many people gained competitive employment during the IPS implementation, with follow-ups at six, 12, 18, and 24 months. In a randomized controlled trial (RCT) at six months follow-up, Lones et al. (2017) found that 50% of participants in a methadone treatment gained employment compared to 4% in the control group. At 18 months follow-up, Mueser et al., (2011) conducted a quasi-experimental longitudinal study and found that 60% of IPS participants had gained competitive employment and worked more hours compared to 24% of the control group. At 24 months, Rosenheck & Mares (2007) Rosenheck & Mares (2007) used an observational study with statistical controls for work history and estimated that approximately 55–65% of IPS participants had secured competitive employment, working an average of 8.4 days per month, compared to 7.3 days per month in the comparison cohort. While these studies vary in research design, the consistency of employment gains across different methodologies suggests that IPS is highly effective. Although these studies primarily focused on urban populations, their findings are still relevant to Wildwood, where individuals in recovery face similar employment barriers, stigma, and access challenges.

Considering these studies and their methodologies, IPS has demonstrated a consistent employment gain of 50–65% across different populations. Given that Wildwood serves individuals in rural settings where transportation and employer engagement are challenges, a conservative estimate for employment success with IPS at Wildwood is 60%, assuming implementation fidelity. The strongest causal evidence (Lones et al., 2017 RCT) suggests that IPS could increase employment rates by at least 46 percentage points compared to no IPS intervention. Overall, (Lones et al., 2017) RCT results showed that, participants of RCT were 11 times more likely to gain competitive employment compared to the control group.

While results may differ slightly due to contextual factors, these estimates provide a realistic projection of IPS effectiveness at Wildwood. Leaning on this study, I expect the effectiveness of IPS to be 60% at the Wildwood Recovery Center because there will be more participants (112) than there were in the sample size of the RCT by (Lones et al., 2017) which had 45 participants.

# Cost Analysis of Vocational Rehabilitation (VR)

The comprehensive cost for a successful vocational rehabilitation (VR) program for individuals with SUD can vary widely based on several factors, including the scope of services provided, geographic location, and the specific needs of the population served. According to the Social Security Administration (SSA), the cost of implementing a comprehensive VR is \$2,500 when adjusted for inflation to reflect 2025 price. To implement VR, there is a need for a coordinator to oversee the successful implementation of the program. The coordinator's salary is estimated at \$45,000 per year. Other benefits including health insurance and retirement benefits are estimated at \$15,000 per year. Therefore, the total cost for the coordinator is approximately \$60,000 per year. This brings us to a grand total of \$1,043,979.86 in the period of three years.

#### Effectiveness of Vocational Rehabilitation

While randomized clinical trials for state-run VR services are not feasible, the Rehabilitation Act requires research to evaluate their impact on employment outcomes. Level 3 evidence, derived from well-designed trials without randomization, and level 4 evidence, based on nonexperimental studies across multiple research centers, strongly support VR as an

effective intervention for improving employment outcomes for individuals with disability (Pruett et al., 2008).

In fiscal year 1995, 60% participants exiting a VR program were considered fully rehabilitated (In the context of VR, "rehabilitated" is often defined as being employed at the time of case closure). This 60% employment rate for VR participants in 1995 stands in contrast to the general employment rate for people with disabilities at that time. This rehabilitation rate was significantly higher than the 33% employment rate for people with disabilities in the general population (Pruett et al., 2008).

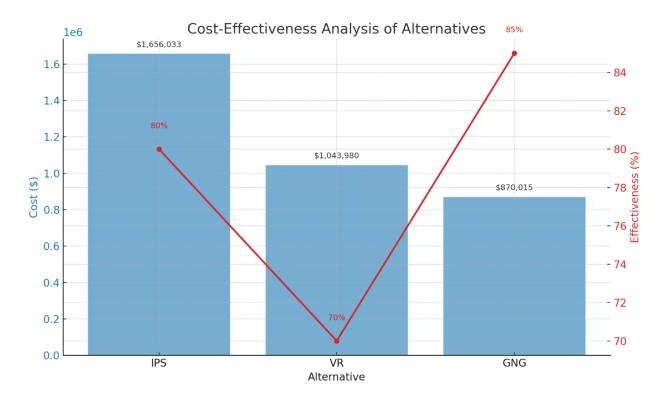


Figure 2

Source: Author's own figure

# The feasibility of IPS and VR

While Individual Placement and Support (IPS) and Vocational Rehabilitation (VR) have distinct programmatic goals - IPS focuses on rapid placement into competitive employment with ongoing support, whereas VR emphasizes skill development and training prior to job placement - both interventions share similar feasibility considerations. These include the need for sustained political

support, reliable and diversified funding streams, and community and employer engagement. Given these overlapping feasibility components, the following analysis evaluates the political, financial, and community/employer feasibility jointly for both IPS and VR.

The feasibility of implementing IPS and VR in Southwest Virginia is dependent on political feasibility, financial feasibility, and community and employer support. The Political feasibility of both alternatives is the extent to which these alternatives can garner sustained support from legislators, federal and state agencies, and other relevant stakeholders within the existing political climate. Individual Placement and Support and VR have demonstrated strong bipartisan appeal over the years due to their evidence-based approach to improving employment outcomes for individuals with serious mental illness and co-occurring substance use disorders. At the federal level, multiple legislative frameworks provide explicit support for employment services that align with these models. The Workforce Innovation and Opportunity Act (WIOA) promotes coordinated workforce development and includes provisions for individuals with disabilities, thereby reinforcing the viability of IPS and as a supported employment strategy (Hunn, 2014). Similarly, the Ticket to Work and Work Incentives Improvement Act of 1999 enables individuals receiving Social Security disability benefits to access vocational rehabilitation and employment services without immediately losing benefits, facilitating smoother transitions into the workforce (SSA, 1999).

Furthermore, federal agencies such as the Substance Abuse and Mental Health Services Administration (SAMHSA) and the U.S. Department of Health and Human Services have actively invested in both IPS and VR models. For example, SAMHSA continues to issue grants to support evidence-based supported employment programs. The Department of Labor's Advancing State Policy Integration for Recovery and Employment (ASPIRE) initiative also promotes integrated employment and behavioral health strategies (U.S Department of Labor), further institutionalizing IPS and VR within federal policy priorities. Collectively, these developments indicate that IPS and VR benefit from a high degree of political feasibility, especially when aligned with national workforce and mental health policy objectives.

The financial feasibility of implementing IPS and VR in Dickenson County is reinforced by the availability of diverse and sustainable funding sources. IPS and VR programs across the United States have demonstrated success in utilizing braided funding models, which combine multiple

revenue streams to support service delivery and enhance fiscal resilience (IPS Learning Community, 2020). These braided models typically integrate federal, state, and local funding, including substantial contributions from agencies such as the Substance Abuse and Mental Health Services Administration (SAMHSA), Medicaid, and workforce development initiatives. In Fiscal Year 2023, SAMHSA allocated approximately \$4.97 million in grant funding for evidence-based supported employment programs targeting individuals with serious mental illness and co-occurring disorders (SAMHSA, 2023). Individual awards under this initiative can reach up to \$800,000 over five years, a substantial amount that could offset IPS and implementation costs if Dickenson County successfully obtains such a grant. While reliance on federal sources introduces a degree of financial uncertainty, particularly considering ongoing budgetary constraints and proposed cuts, this risk is partially mitigated by the multiplicity of funding streams.

Moreover, IPS's and VR's financial viability is strengthened by the flexibility and adaptability of its funding model, which enables the use of Medicaid reimbursements for clinical services in combination with outcome-based payments from State Vocational Rehabilitation (VR) Agencies. According to the IPS Learning Community, 71% of U.S. states have Medicaid billing in place for IPS, while 86% utilize state VR funds to support service components. Additional funding may be sourced from the Workforce Innovation and Opportunity Act (WIOA), Social Security Administration's Ticket to Work program, local government contributions, and philanthropic organizations. Counties and states have also leveraged mental health block grants, opioid response funding, and private donations to sustain IPS services. This capacity to draw upon multiple funding avenues not only enhances financial stability but also allows for customization to meet local needs, a particularly valuable feature for rural communities like Dickenson County. Taken together, these factors suggest that, despite the complexity of managing braided funding, IPS remains a financially feasible and strategically viable employment intervention.

Beyond funding, employer and community support remain critical feasibility factors (Lexén et al., 2016). Stigma toward individuals recovering from substance use disorder (SUD) remains high (Yang et al., 2017), particularly in rural Appalachia, which may limit employer participation. Many businesses express concerns regarding workplace reliability, productivity, and liability risks when hiring individuals in recovery (Lexén et al., 2016). However, IPS and VR programs address these concerns through employment specialists who actively engage employers, provide job coaching, and ensure long-term support for both employees and businesses (Lones et al., 2017). Additionally, incentives such as tax credits and wage subsidies can improve employer buy-in (Brookings, 2021).

While community resistance may persist, IPS and VR programs have successfully shifted employer perceptions through direct engagement, education campaigns, and advocacy partnerships (Lexén et al., 2016), making it a moderately feasible intervention in Dickenson County despite funding hurdles.

#### Cost Analysis of GNG Model

Implementing the Good News Garage (GNG) model in Southwest Virginia involves several key cost components necessary to ensure the program's success. Although vehicle acquisition is free—neither the donor nor GNG incurs a cost for the donation, there are still substantial expenses associated with making these vehicles roadworthy and accessible to participants. One major expense is vehicle repair. In 2020, GNG reported an average cost of \$2,500 for vehicle repairs (Good News Garage), which, when adjusted for 2025 using an inflation rate of 2.3%, amounts to approximately \$2,801 per vehicle. Additionally, GNG typically absorbs the costs of towing or picking up donated vehicles. Given the geographic spread and rural character of Southwest Virginia, an average towing distance of 80 miles is assumed. For a standard sedan weighing approximately 4,400 pounds, using a flatbed tow truck at a base rate of \$4.00 per mile, the towing cost is estimated to be \$384 per vehicle.

Beyond these transportation-related expenses, there are other recurring costs. Annual auto insurance premiums in Virginia average \$1,808 per vehicle. Each vehicle must also pass a mandatory state safety inspection, which costs \$20, and undergo a \$15 title transfer. Additionally, administrative and personnel costs are essential to the program's operation. A dedicated coordinator will be responsible for managing vehicle intake, maintenance scheduling, and car distribution to participants at the recovery center. The coordinator's annual salary is estimated at \$45,000, with an additional \$15,000 allocated for benefits, including health insurance and retirement contributions. Additionally, many individuals in the recovery center may have had their driver's licenses revoked due to drug-related offenses. Reinstating a license typically incurs an average cost of \$1,500, which covers state-mandated reinstatement fees and associated legal expenses.

To raise awareness and promote community engagement, a communications officer will be employed to oversee outreach efforts, including the use of social media and other digital platforms. The communications officer will earn an average annual salary of \$58,879, with a benefit package similar to that of the coordinator, totaling \$15,000. Complementary awareness strategies include

distributing flyers in high-traffic public areas such as shops, schools, restaurants, and offices. To officially launch the program and inform key community stakeholders, a one-day stakeholder engagement event will be hosted, estimated to cost around \$5,000. This includes venue rental, materials, and refreshments. Collectively, these costs reflect the comprehensive investment required to adapt and implement the GNG model effectively in Dickenson County.

Assuming that none of the 112 individuals currently own a vehicle or possess a valid driver's license, the total estimated cost of implementing the Good News Garage (GNG) model in 2025 is approximately \$870,015. While this figure represents the nominal cost, it is important to recognize that the real cost of implementation may vary over time due to factors such as inflation and changes in the number of participants or donated vehicles. These variables will influence future expenditures, making it essential to adjust cost projections annually to reflect evolving economic conditions and program scale.

#### Effectiveness of Vehicle Ownership on Employment Outcomes

Several researches have shown how transportation affects employment outcomes. In a systematic review and meta-analysis, (Bastiaanssen et al., 2020) found a causal relationship between owning a vehicle and employment. The study by (Baum, 2009) used a longitudinal dataset from the National Longitudinal Survey of Youth combined with an IV approach and found that single welfare mothers who owned a vehicle were 1.24 times higher than those who did not own a vehicle to find and maintain employment. This study had a 95% confidence interval and the use of IV controlled for endogeneity. Other studies have shown that -% of individuals in treatment of SUD who own a vehicle have employment. I am assuming car ownership will be 85% effective based on the causal study by Baum (2009), that did not give an exact percentage but gave an odds ratio and has a larger sample size.

# Can the GNG Model Be Implemented in Southwest Virginia?

The feasibility of implementing the Good News Garage (GNG) model in Southwest Virginia is strongly tied to sustained community engagement and participation. Since its inception in the 90's, GNG has successfully provided over 6,000 refurbished vehicles to low-income families and individuals, demonstrating a longstanding track record of community support and program viability. This precedent suggests that similar community participation could be fostered in Southwest Virginia. One key incentive for donor participation is the eligibility for a federal tax

deduction of at least \$500, with donors incurring no costs for vehicle donation or pickup—factors likely to encourage vehicle contributions.

Although the overall cost of implementing the GNG model is relatively high, it remains financially feasible, particularly because it does not rely heavily on federal funding—an important consideration given the current uncertainty in federal appropriations. Moreover, vehicle acquisition will be staggered rather than simultaneous, allowing my client to manage expenditures incrementally rather than committing the full cost upfront. Additionally, because some donated vehicles may be resold at low cost, the program offers a mechanism for maintaining partial liquidity, further supporting its financial sustainability. Employers have also indicated greater willingness to hire individuals when transportation barriers are removed. Reliable access to a personal vehicle is often seen as a signal of dependability and job readiness, increasing employers' confidence in hiring candidates who previously faced mobility challenges. By enhancing transportation reliability, the GNG model can improve job retention and reduce absenteeism, strengthening overall employer support for the program.

# Outcome Matrix: Evaluation of Policy Alternatives for Employment Interventions

Criteria	Individual Placement and Support (IPS)	Vocational Rehabilitation (VR)	Good News Garage (GNG)
Cost	High	High	Medium
Effectiveness	High	High	High
Feasibility	Medium	Medium	Medium
Community & Employer Support	Medium	Medium	Medium

# Recommendation

Based on a comprehensive evaluation of alternatives using the criteria of cost, effectiveness, feasibility, I recommend the implementation of the GNG model in Dickenson County. Across all stakeholder interviews conducted, the most frequently cited barrier to employment for individuals on SAT was the lack of reliable transportation. Public transit options in the region are limited, and in some communities, entirely unavailable, making it difficult for individuals to access job training, treatment services, or consistent employment.

While both IPS and VR have demonstrated strong employment outcomes, they are heavily reliant on braided federal and state funding—particularly from the SAMHSA. Considering current federal budget constraints and the potential for future funding reductions, implementing a program that is less dependent on fluctuating external funding is strategically advantageous for Dickenson County.

The GNG model is not only financially feasible—offering a structure that allows for incremental implementation and sustainability through community participation—but also well-suited to the specific needs of the region. It directly addresses the most immediate and practical barrier to employment while fostering long-term engagement from community members, donors, and local employers. For these reasons, GNG presents the most pragmatic and impactful alternative for supporting individuals in SUD treatment toward sustained employment and recovery.

Implementation Plan for the Good News Garage (GNG) Model in Southwest Virginia

Implementing the GNG model in Southwest Virginia will require a clearly defined sequence of steps, each interlinked and dependent on key actors, resources, and systems to ensure a smooth rollout. This implementation plan outlines the major phases of the program, identifies success dependencies, and anticipates potential risks.

#### 1. Stakeholder Engagement and Funding Allocation

The first step is securing start-up funding and engaging relevant stakeholders to build program support and sustainability. While the initial phases do not require large lump-sum investments, early funding allocation is critical for vehicle repairs, personnel costs, and operational expenses. Stakeholders include employers, local legal practitioners (to assist in license reinstatement), community advisory boards, faith-based organizations, local NGOs, the Department for Aging and Rehabilitative Services (DARS), SAMHSA, and key partner businesses such as garages, towing companies, mechanics, and auto parts vendors.

Stakeholder meetings should clearly communicate the goals of GNG, the benefits for donors (including tax deductions), and the broader community impact. Early partnerships, especially with garages and towing companies, should include agreements for discounted services in exchange for visibility and community endorsement.

**Dependency:** Program visibility, trust, and community goodwill are essential at this stage. Early buy-in from partners ensures access to discounted services and reliable logistics support.

# 2. Vehicle Donation and Pick-Up

Once stakeholder infrastructure is in place, the vehicle donation process begins. A dedicated communication officer will oversee donation intake, providing contact information and online forms for donors to submit vehicle details, photos, and location. The officer will coordinate with the partner towing company to pick up vehicles—ideally within 3–10 days of donation confirmation. All vehicles must be accompanied by a signed title.

**Dependency:** Efficient communication systems and prompt towing services are essential. Reliable logistics will build donor confidence and prevent delays in the repair pipeline.

#### 3. Vehicle Inspection and Repair Assessment

Upon collection, each vehicle is sent to a partner garage for inspection. This stage involves a comprehensive assessment to determine roadworthiness, estimate repair costs, and confirm whether the vehicle qualifies for GNG redistribution. Vehicles that cannot be refurbished may be sold for parts or scrapped, with proceeds reinvested into the program.

**Dependency:** Skilled mechanics and repair shops with capacity to assess and repair vehicles in a timely manner are critical for smooth flow and cost control.

#### 4. Documentation and Tax Letter Issuance

Within 8–12 weeks of processing, the program issues donors a tax deduction letter detailing the vehicle's disposition. If the vehicle is gifted to a participant, the donor may deduct its fair market value. For vehicles sold, donors may deduct the sale amount. In line with IRS requirements, donations exceeding \$500 will require the donor's Social Security Number.

**Dependency:** Accurate tracking and documentation systems are vital to comply with IRS requirements and maintain donor satisfaction.

#### 5. Beneficiary Orientation and Driving Eligibility

Before assigning a refurbished vehicle, eligible individuals in SUD treatment will undergo orientation. This session will cover payment plans, vehicle maintenance, legal responsibilities, and driving laws. Unlike employment programs with low exclusion thresholds, GNG must comply with strict driving laws, including sobriety requirements. Individuals must possess valid licenses and demonstrate the ability to adhere to traffic regulations.

**Dependency:** Coordination with legal aid and treatment providers is necessary to verify eligibility and ensure beneficiaries understand their responsibilities.

# 6. Vehicle Allocation and Deferred Payment Collection

Once eligibility is confirmed, the vehicle is transferred to the qualified participant. Payment plans should be deferred until six months after stable employment is achieved, allowing the participant to build income and financial stability. Vehicles will be transferred with the understanding that consistent payments help sustain the program.

**Dependency:** Employment tracking and ongoing case management are needed to ensure participants begin payment only after securing employment.

In conclusion, successful implementation of the GNG model hinges on strategic partnerships, efficient logistics, legal compliance, and strong community engagement. By following this structured sequence, Dickenson County can establish a sustainable transportation solution that directly supports employment outcomes for individuals in SUD treatment.

#### Risks and Mitigation Strategies for the Good News Garage (GNG) Model

Implementing the GNG model in Southwest Virginia, while promising, comes with several potential risks that could affect program success and sustainability. Proactively identifying and addressing these risks is essential to ensure smooth implementation and long-term impact.

#### 1. Low Community Engagement and Donor Participation

One of the most critical risks is low community involvement, particularly in terms of vehicle donations. Without a steady stream of donated vehicles, the program cannot function effectively. This risk is amplified in rural areas where awareness of such programs may be limited.

Mitigation: A strong communication strategy led by a dedicated communications officer will be vital. This includes targeted outreach through local newspapers, social media, community events, and partnerships with faith-based groups and civic organizations. Highlighting the tax benefits of vehicle donations and showcasing community impact through stories and testimonials can further motivate participation.

# 2. High Maintenance and Repair Costs for Donated Vehicles

Some donated vehicles may require extensive repairs, making them financially impractical to refurbish. This can strain the program's budget and reduce the number of vehicles available for redistribution.

Mitigation: All donated vehicles will undergo a comprehensive inspection process. Vehicles deemed unrepairable will be sold for parts or scrapped, and the proceeds reinvested into the program. Establishing service agreements with local garages for discounted repairs and prioritizing vehicles with minor repair needs will help control costs.

#### 3. Cumbersome Donation and Paperwork Process

A complicated or unclear vehicle donation process may deter potential donors. Unfamiliarity with tax documentation or title transfer procedures can also delay program activities.

Mitigation: The program will streamline the donation process by offering user-friendly digital forms, clear instructions, and responsive donor support. A program coordinator will manage all legal and administrative documentation, ensuring efficient title transfers and timely issuance of tax deduction letters.

#### 4. Risk of Participants Driving Under the Influence

A unique challenge of this model is the legal and ethical responsibility of ensuring that participants, many of whom are in SUD treatment, do not drive while impaired. This poses both safety risks and potential legal liabilities.

Mitigation: Eligibility screening will include verification of a valid driver's license and sobriety status. Beneficiaries will receive mandatory orientation on driving laws and consequences of violations. Ongoing communication with treatment providers and, if necessary, random drug testing protocols in collaboration with legal authorities may be implemented to ensure compliance.

This risk analysis demonstrates foresight in addressing foreseeable challenges and outlines realistic, actionable mitigation strategies to safeguard the program's implementation and long-term success.

#### CONCLUSION

Substance use disorder (SUD) remains one of the most pervasive public health and economic crises in the United States, with an estimated \$2.7 trillion in costs in 2023 alone—nearly 10% of the nation's gross domestic product (The White House, 2025). While this economic burden is staggering, it masks an even deeper societal cost: the lost human potential of individuals unable to reintegrate into the workforce due to stigma, structural barriers, and a lack of coordinated support. This challenge is especially urgent in rural and underserved areas like Dickenson County, Virginia, where the infrastructure required to support long-term recovery is still emerging. As Dickenson County launches the Wildwood Recovery Center, it has a unique opportunity to design employment-centered interventions that are not only therapeutic but transformative.

This report set out to evaluate three potential models for improving employment outcomes among individuals in substance abuse treatment: Individual Placement and Support (IPS), Vocational Rehabilitation (VR), and the Good News Garage (GNG) model. Each of these alternatives offers a different pathway to employment, rooted in distinct theoretical frameworks and practical applications. They were analyzed using a common set of evaluative criteria: effectiveness, cost, and feasibility—including both political support and community buy-in.

The analysis revealed that all three interventions hold substantial merit. IPS, a rigorously studied evidence-based model, demonstrates high effectiveness in helping individuals secure competitive employment, particularly through its integration with behavioral health services and its principle of zero-exclusion (Lones et al., 2017; Mueser et al., 2011). VR, while slightly less effective in the short term, offers a comprehensive suite of services geared toward building long-term employability and has been successfully implemented across various populations with disabilities, including those with SUD (Pruett et al., 2008). Both IPS and VR benefit from federal legislative backing and access to braided funding streams through the Workforce Innovation and Opportunity Act (WIOA), Medicaid, and SAMHSA.

However, these models also come with considerable challenges—most notably their reliance on continued federal funding and the capacity to build and sustain complex implementation infrastructures. In Dickenson County, which faces persistent resource limitations, fragmented employer networks, and a general lack of public transportation, the feasibility of launching IPS or VR at scale may be constrained, particularly in the short to medium term.

In contrast, the Good News Garage model addresses the most cited and tangible barrier to employment in the region: lack of reliable transportation. GNG sidesteps some of the systemic complexities of other employment interventions by providing eligible individuals in treatment with refurbished, donated vehicles. This not only enables them to access jobs, training, and treatment but also enhances their sense of autonomy and stability. The model is simple, targeted, and community-based—allowing for phased implementation and incremental cost management.

Importantly, the GNG model demonstrated the highest cost-effectiveness of the three alternatives analyzed. At a one-time cost of \$870,015, the program is both fiscally manageable and strategically aligned with the county's infrastructure and workforce development needs. The research also supports the intervention's likely impact: individuals with access to a vehicle are approximately 80% more likely to be employed (Bastiaanssen et al., 2020). Moreover, vehicle ownership is not merely a logistical solution; it sends a strong signal to employers about reliability and personal accountability, attributes that increase employability and job retention.

The conclusion of this report, therefore, is not simply a ranking of alternatives, but a strategic recommendation grounded in local context and real-world constraints. While IPS and VR remain highly valuable and may be incorporated in future program expansions, the GNG model emerges as the most immediately impactful and operationally feasible choice for Dickenson County. It directly addresses the intersection of treatment and economic empowerment and does so in a way that is culturally and logistically compatible with the rural Appalachian environment.

Investing in the GNG model would also serve as a foundation for broader workforce development. As transportation barriers are lifted and individuals gain employment, the county can begin building stronger employer partnerships, increasing local economic activity, and reducing reliance on state and federal aid. Over time, these gains can be reinvested in more comprehensive programs like IPS or VR, creating a layered continuum of care that meets individuals where they are.

In summary, addressing employment as a critical component of substance use recovery is not just a social obligation—it is an economic imperative. Dickenson County has a rare opportunity to lead in the development of innovative, community-rooted solutions that restore dignity, foster independence, and rebuild lives. By prioritizing the Good News Garage model today, the county takes a tangible, cost-effective first step toward lasting recovery and economic revitalization for its most vulnerable residents.

# **Appendix**

# Glossary of Terms

- Braided Finance: A funding approach that combines multiple sources of capital,
  often blending public, private, and philanthropic investments to achieve a more
  sustainable and impactful financial structure for projects or programs.
- Implementation Fidelity: The degree to which a program or intervention is delivered as intended by its designers. High fidelity means the program is being implemented consistently and according to the original plan, which is essential for ensuring its effectiveness.
- **SAMHSA**: The Substance Abuse and Mental Health Services Administration, a U.S. government agency within the Department of Health and Human Services. SAMHSA's mission is to reduce the impact of substance use and mental illness on communities by supporting treatment, prevention, and recovery services.
- SUD: Substance Use Disorder, a medical condition characterized by an individual's
  harmful pattern of using substances, such as alcohol or drugs, that leads to
  significant impairment or distress. SUD often requires treatment and can affect
  various aspects of an individual's life, including physical health, mental well-being,
  and social relationships.
- **Zero-Exclusion Policy**: A policy that ensures all individuals, regardless of their background or circumstances (such as criminal history, substance use, or other factors), have equal access to opportunities or services. This policy aims to eliminate barriers to participation, promoting inclusivity and fairness in areas like employment, education, or social services.

# Primary Cost Drivers of Individual Placement and Support (IPS)

The primary cost drivers of Individual Placement and Support (IPS) services include direct service costs, staffing, infrastructure, and administrative expenses. According to Bond (2023), IPS costs range between \$4,000 and \$7,500 per client annually, with an average cost of \$6,000 in 2022 dollars. Below are the key factors contributing to IPS expenses:

### 1. Staffing Costs

- Employment Specialists & Job Coaches: The largest cost driver is salaries and benefits for employment specialists, who provide job placement, coaching, and employer engagement services.
- Supervisors & Support Staff: IPS programs require supervision and oversight, which increases personnel-related expenses.

### 2. Case Management & Client Support Services

- IPS integrates with mental health and rehabilitation services, requiring continuous case management for clients.
- Job coaching, soft-skills training, and career counseling add to program costs.

#### 3. Caseload Size & Duration of Service

- IPS caseloads impact cost efficiency. Smaller caseloads increase per-client costs, while larger caseloads reduce costs per client.
- The average IPS engagement duration is 6 to 8 months, with some clients receiving support for over a year.

### 4. Infrastructure & Program Operations

- Office space, travel costs, and technology (e.g., CRM systems like Salesforce) contribute to IPS operational costs.
- Transportation stipends for clients in rural areas increase expenses.

### 5. Training & Fidelity Monitoring

•	IPS programs require ongoing training for specialists, ensuring adherence to evidence-based employment strategies.  Fidelity monitoring (ensuring program quality) is resource-intensive.
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### Detailed Costing for Individual Placement and Support (IPS)

- 1. Base Cost of IPS per Participant (2022 figure): According to Bond (2023), the average cost of IPS per participant for an eight-month period was \$4,000 in 2022.
- 2. Adjusting for Inflation to 2025: We use an annual inflation rate of 2.3% for three years (2022 to 2025).

#### Formula:

Future Value = Present Value  $\times$  (1+Inflation Rate)<sup>Years</sup> =4000 $\times$ (1.023)<sup>3</sup> = 4000 $\times$ 1.070= 4000 =\$4,281.32 per participant (2025 dollars)

3. Total IPS Program Cost for 112 Participants:

$$4,281.32 \times 112 = \$479,507.84$$

- 4. Coordinator Costs: The program includes one full-time employment coordinator.
  - Salary: \$45,000
  - Benefits (retirement, insurance, payroll taxes): \$15,000
  - Total Coordinator Cost:

$$=45,000+15,000=$60,000$$

5. Total One-Year IPS Program Cost (2025 Dollars):

If the Program Is Piloted Over Three Years:

We adjust for inflation over the next two years (2026 and 2027), again assuming a 2.3% annual inflation rate:

Year 1 (2025): \$539,507.84

Year 2 (2026):

 $539,507.84 \times 1.023 = \$551,920.51$ 

Year 3 (2027):

 $551,920.51 \times 1.023 = $564,604.71$ 

Total 3-Year Cost:

539,507.84 + 551,920.51 + 564,604.71 = \$1,656,033.06

# Detailed Costing for Vocational Rehabilitation (VR)

Per-client VR cost in 2025: \$2,500

- Number of clients: 112
- Annual coordinator cost (salary + benefits): \$60,000
- Inflation rate: 2.3% annually

Step 1: Base Year (2025) Costs

Client Services

VR cost per client

= \$2,500

Total for 112 clients =  $\$2,500 \times 112 = \$280,000$ 

**Coordinator Cost** 

Annual salary + benefits = \$60,000

Total Year 1 Cost (2025)

= \$280,000 (services) + \$60,000 (coordinator) = \$340,000

Step 2: Adjust for Inflation (2.3%)

We'll calculate the inflated costs for each year using the formula:

Future Cost = Present Cost  $\times$  (1 + Inflation Rate)<sup>n</sup> Where **n** is the number of years from 2025.

Year 2 (2026)

• Inflation factor:  $(1.023)^1 = 1.023$ 

Client Services (2026) =  $$280,000 \times 1.023 = $286,440$ Coordinator Salary (2026) =  $$60,000 \times 1.023 = $61,380$ 

Total for 2026 = \$286,440 + \$61,380 = \$347,820

Year 3 (2027)

• Inflation factor:  $(1.023)^2 = 1.047529$ 

Client Services (2027) = \$280,000  $\times$  1.047529  $\approx$  \$293,308.12 Coordinator Salary (2027) = \$60,000  $\times$  1.047529  $\approx$  \$62,851.74

Total for 2027 = \$293,308.12 + \$62,851.74 = \$356,159.86

Final Step: Add All Three Years

340,000 + 347,820 + 356,159.86 = 1,043,979.86

Cost Analysis of the Good News Garage (GNG) Model

- 1. Vehicle Repair and Towing Costs
  - Average vehicle repair cost (2025 adjusted): \$2,500 (2020 base cost)  $\times$  (1.023) $^5$   $\approx$  \$2,801 \$2,801  $\times$  112 participants = \$313,712

Towing (80) miles \$4.00/mile): cost at \$4 × 80 \$320 base, adjusted for flatbed \$384 and weight  $\$384 \times 112 = \$43,008$ 

### 2. Vehicle-Related Administrative Costs

- Auto insurance per vehicle:  $\$1,808 \times 112 = \$202,496$
- Vehicle inspection fee per vehicle:  $$20 \times 112 = $2,240$
- Title transfer fee per vehicle:  $$15 \times 112 = $1,680$
- Driver's license reinstatement fee per individual:  $$1,500 \times 112 = $168,000$

### 3. Personnel Costs

- Coordinator salary: \$45,000
- Coordinator benefits (health insurance, retirement): \$15,000
  - → Total coordinator cost: \$60,000
- Communications officer salary: \$58,879
- Communications officer benefits: \$15,000

Total communications cost: \$73,879

# 4. Community Outreach Costs

• Stakeholder engagement event (venue, materials, refreshments): \$5,000

### **Total Program Cost Calculation**

Cost Component	Amount (\$)
Vehicle repairs (112 vehicles)	\$313,712
Towing (112 vehicles)	\$43,008
Auto insurance	\$202,496
Inspection fees	\$2,240
Title transfer fees	\$1,680
License reinstatement	\$168,000

Cost Component Amount (\$)

Coordinator (salary + benefits) \$60,000

Communications officer (salary + benefits) \$73,879

Stakeholder engagement event \$5,000

Total \$870,015

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