

2016

**Social Innovation Fund  
Pay for Success**  
Feasibility Report:  
**ECHO**  
Austin/Travis County

*Pay for Success Technical Assistance  
Focused on Supportive Housing for  
Super Utilizers*



## About CSH

CSH is a national nonprofit organization and Community Development Financial Institution that transforms how communities use housing solutions to improve the lives of the most vulnerable people.

CSH offers capital, expertise, information and innovation that allow our partners to use supportive housing to achieve stability, strength and success for the people in most need. CSH blends 25 years of experience and dedication with a practical and entrepreneurial spirit, making us the source for housing solutions. CSH is an industry leader with national influence and deep connections in a growing number of local communities. We are headquartered in New York City with staff stationed in more than 20 locations around the country. For more information about CSH's work related to Pay for Success, please see [www.csh.org/pfs](http://www.csh.org/pfs)

## Acknowledgments

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This feasibility technical assistance is possible through funding received through the Pay for Success initiative of the Social Innovation Fund. The Social Innovation Fund is a program of the Corporation for National and Community Service, a federal agency that engages millions of Americans in service through its AmeriCorps, Senior Corps, Social Innovation Fund (SIF), and Volunteer Generation Fund programs, and leads the President's national call to service initiative, United We Serve. For more information, visit [NationalService.gov](http://NationalService.gov).

In 2009, President Obama authorized the creation of the Social Innovation Fund as part of the Corporation for National & Community Service to find solutions that work, and make them work for more people – by proving, improving and scaling effective models. SIF and its non-federal partners have invested nearly \$1 billion in effective community solutions since the program's inception. Launched in 2014, the SIF Pay for Success (PFS) program is designed to help cities, states, and nonprofits develop Pay for Success projects where governments pay service providers only when there are demonstrable results.



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## Inquiries

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## EXECUTIVE SUMMARY

Pay for Success is an innovative financing model that refers to the concept of paying for positive social impact, rather than paying solely for services performed. Under this model, impact is measured rigorously and “success payments” are made based on agreed-upon metrics. Pay for Success works especially well when paired with an evidence-based practice, such as supportive housing, that has a demonstrated history of generating positive outcomes for a particular target population such as persons experiencing homelessness who are super utilizers of crisis systems of care.

Through the federal Social Innovation Fund, a program of the Corporation for National and Community Service, CSH received funding to provide technical assistance to communities to determine the feasibility of a PFS model focused on supportive housing and vulnerable populations. ECHO applied for this assistance as part of CSH’s first round of competition and was selected as a participating community in March 2015. Over the past year, ECHO and its partners have actively worked with CSH to build the components of a feasible PFS model. **CSH concludes that the project is feasible based on the factors outlined in this report and noting recommendations that will maximize the project’s chance of success in moving ahead.**

Austin/Travis County has demonstrated a commitment to being at the forefront of innovation and to finding creative solutions to the needs of its most vulnerable citizens by engaging in a Pay for Success (PFS) feasibility process. Diverse stakeholders have shown an admirable willingness to learn more about PFS and collaborate in the interest of creating supportive housing for persons experiencing homelessness. During the feasibility process, ECHO, CSH and their partners worked through the following components as outlined in this report:

- **Convene and engage multiple cross-department stakeholders**
  - In addition to ECHO, the following stakeholders have been critically important members of the PFS leadership team: the City of Austin Health and Human Services and Neighborhood Housing departments, Travis County Health and Human Services and Justice Planning departments, Central Health, and Seton Healthcare Family.
- **Use data to clearly define the target population and conduct cost benefit analysis**
  - Preliminary analysis by ECHO and CSH showed that the 250 most ‘expensive’ homeless individuals incur average annual public costs of \$222,603 per person. Averaging the most costly 500 individuals *overall* with the 500 most costly *based on jail bookings*, yields an average annual public service cost of \$95,929. This average calculation is based on the interest of the PFS team to ensure that the target population includes persons who are high utilizers of the criminal justice system, not solely those that are high utilizers based on cost alone. To arrive at an estimated cost-benefit of the initiative, anticipated cost reductions are deducted from these status quo costs, giving an estimated cost offset from the PSH intervention. After subsequently deducting housing and service costs, the initiative results in a total cost savings of \$49,601 per person per year.
- **Develop a preliminary financial model and framework**
  - The preliminary financial model and framework outlined in this report shows a PFS investment of \$17M over 5 years with **an expected total net cost avoidance after all success payments are made of \$42.8M.**

- **Design the intervention and structure for quality supportive housing**
  - Participating tenants will have access to flexible and comprehensive supportive services delivered through an intensive case management program such as an Assertive Community Treatment (ACT) team or similar model.
  - For this initiative, it is anticipated that approximately 250 units of housing will come on line over the first 2-3 year period of the PFS initiative from new units that are being developed as supportive housing as well as scattered site units made affordable via several different subsidy sources.
  - It is anticipated that the PFS investment would primarily fund services only with some ancillary financial supports. It will not fund capital construction of new housing and will fund operating support only to a limited degree.
- **Engage end payors and define project success with all stakeholders**
  - The City of Austin, Travis County and Central Health have all explicitly expressed their interest in entering a more formal transaction-structuring phase with an eye to establishing acceptable terms for participation as end payors in the contemplated PFS project. Moving forward with three potential end payors may present challenges but also has a high potential to foster true strategic alignment and system reform.

CSH believes that the PFS transaction outlined in this report is feasible, and the Austin/Travis County community has a unique opportunity to be a PFS national leader. To maximize this potential it should consider the following recommendations:

- Continue to leverage the strength that ECHO and the community have in terms of data to deepen the analysis of those individuals that are the highest cost users across the homelessness, health, and criminal justice systems. Specifically, **finalize efforts with Travis County to obtain data on high cost frequent users of the criminal justice system** so that this can be cross-matched with healthcare data to create an integrated cross-system picture of super utilizers in Austin/Travis County.
- **Select a third-party evaluator**, and work to determine how best to use existing data to create the eligibility criteria and enrollment strategy for the initiative.
- **Enter into intentional program design and negotiation with the three potential end payors**—City of Austin, Travis County, and the Travis County Healthcare District, dba Central Health—and continue to develop a clear understanding of where outcomes and incentives can be aligned across the three payors.
- **Identify the key decision makers for each end payor** who should be involved in the next phase discussions of targeted outcomes, success payment amount and structure, and any related approval processes.
- Through an RFQ or RFP process, **quickly select the service providers** for this initiative and work closely with them and the broader stakeholder group to finalize the relevant details of the program design and enrollment/eligibility process in partnership with the selected evaluator. This will also allow the overall PFS initiative financial model to continue being refined and improved as service and housing costs and strategies are finalized.
- Further vet and **solidify the housing strategy** that will identify what subsidies or units can be made available for this initiative and over what period.

The participants in the feasibility process have designed the framework for a successful PFS initiative that sets the stage to move into the transaction structuring phase in which the specifics of the transaction are further refined, partners are procured, and contractual agreements are produced, and the community has the capacity and partnerships required to implement it quickly and thoughtfully. CSH encourages the community to build on the momentum generated through this process and leverage it to drive toward the successful implementation of PFS. This project provides an opportunity to end homelessness and improve outcomes for the highest utilizers of the homelessness, healthcare, and criminal justice systems in Austin/Travis County.

## INTRODUCTION AND BACKGROUND

CSH is pleased to present this report to ECHO and the PFS Leadership Team. CSH commends the team for making the strategic decision to explore whether, and to what extent, Pay for Success can serve as a tool to scale supportive housing for vulnerable populations, simultaneously shifting systems toward a focus on investing in what works. Through the engagement and dedication of the members of the leadership team and the organizations each member represented, CSH witnessed a diverse and collaborative group that made significant decisions and substantial progress toward designing a feasible PFS transaction. We have attempted to capture both the spirit and results of the process in this document. CSH also appreciates the willingness of the PFS Leadership Team to undertake the feasibility technical assistance process as a way to evaluate and set the stage for a PFS transaction that will create additional units of supportive housing in Austin/Travis County.

ECHO's initiative would create supportive housing and promote improved outcomes for homeless high cost users of multiple systems. For these individuals - who cycle in and out of hospitals, jails, and shelters - supportive housing works to end homelessness and reduce the unnecessary use of crisis systems of care.

### **About the Partners**

ECHO has gathered City, County and Central Health leadership to complete this feasibility study. Participants represent City of Austin's Neighborhood Housing and Community Development and Health and Human Services departments, Travis County's Health and Human Services and Justice Planning departments and Central Health's Strategic Initiatives and Analytic staff.

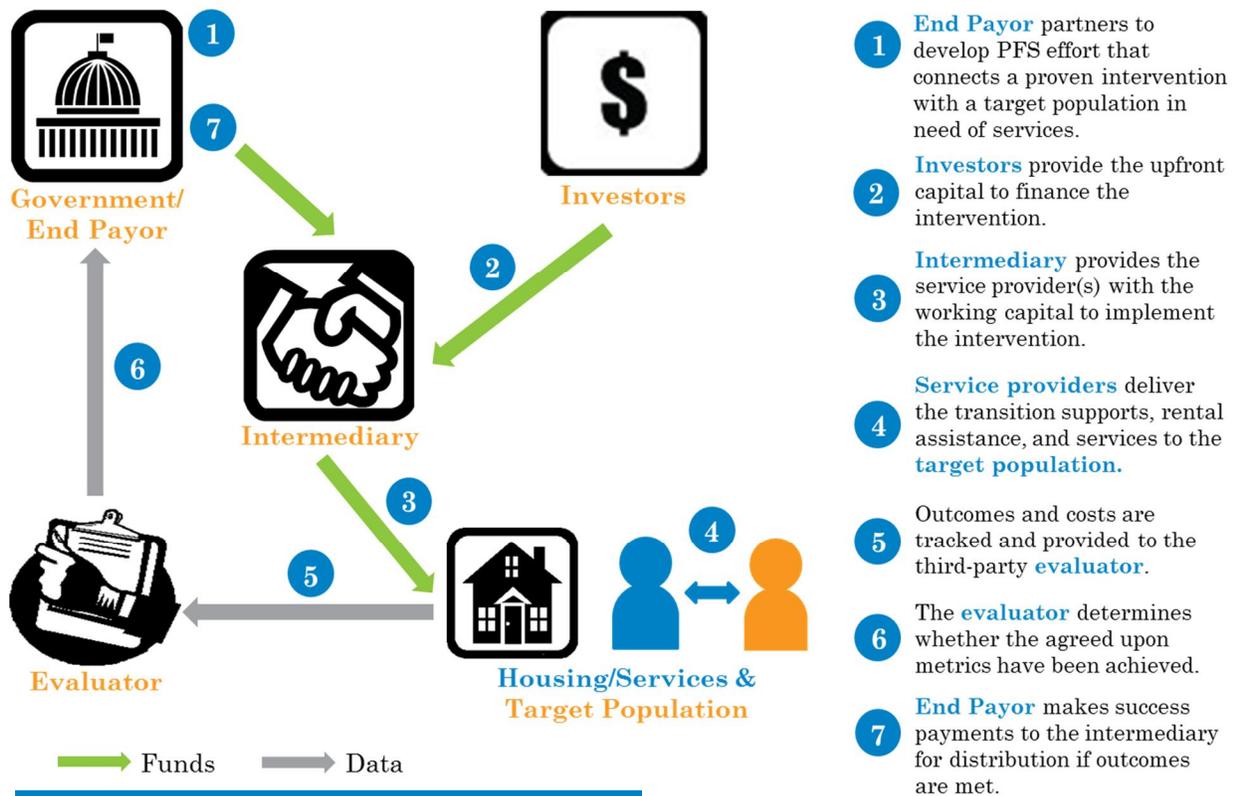
### **Summary of the Proposed PFS Initiative**

Austin/Travis County is using PFS as an innovative tool to expand access to supportive housing by creating an additional 250 units targeted to homeless individuals whose cumulative criminal justice, healthcare, shelter, and emergency medical services costs place them in a cohort of roughly the top 500 most expensive homeless users of public services. Implementing the intervention of supportive housing for this target population is expected to increase housing stability and avoid some health care, criminal justice and shelter costs. Results will be measured over an anticipated 5-year period using a rigorous third-party evaluation. PFS financing will be used to fund the gaps in existing housing and service resources for this population to allow approximately 250 individuals to transition from homelessness into supportive housing over the first two to three years of the transaction.

## OVERVIEW OF PAY FOR SUCCESS

Pay for Success refers to the concept of paying for positive social impact, rather than paying solely for services performed. Under this model, impact is measured rigorously and “success payments” are made based on agreed-upon metrics. Pay for Success typically includes performance-based contracting between an entity paying for the achievement of outcomes (the ‘end payor’), often governmental entities, and the organizations responsible for implementing a given intervention, often non-profit organizations. Pay for Success financing varies, but most structures support Pay for Success programs by providing working capital to implement and/or scale an intervention that has been proven to produce desired outcomes, such as cost savings over time. This upfront capital investment can be provided by a variety of investors and/or philanthropic sources, which typically receive repayment via the success payments, along with a modest return on investment. In exchange for this, investors accept the repayment risk associated with the possibility that the project does not produce the required outcomes.

Figure 1: Example of a Pay for Success Model



## ENVIRONMENT AND OPPORTUNITY

As a community, Austin/Travis County is already working on many fronts to end homelessness. Supportive housing is Austin’s key strategy to address chronic homelessness for individuals who cannot otherwise access and maintain housing. Austin City Council initially adopted this strategy in 2010 with a focus on closing the 1,900-unit gap for supportive housing. The initial production goal of 350-units focused on individuals experiencing chronic homelessness, and was achieved in 2014. Based on the success of the initial effort, the City Council renewed this commitment by setting a new goal to create 400 units by year-end 2018, with at least 200 units implementing a “housing first” approach. The housing first approach intentionally minimizes barriers to housing access such as strict screening for criminal background, requirements of sobriety, minimum incomes, or credit history.

Supportive housing is a relatively-resource intensive intervention, and rapid creation of capacity is typically constrained by local jurisdiction's budgetary limitations. Pay for success strategies have the potential to address this shortage of working capital. In Austin, a confluence of critical factors creates a ripe opportunity to aggressively advance the creation of supportive housing. The business and development community are supportive and engaged. A local and state focus on health systems reform (including implementation of Medicaid 1115 Waiver DSRIP programs, the emerging Community Care Collaborative integrated health delivery system, and the new Dell Medical School) have opened space to implement innovative population-based interventions. Increased local and state awareness and efforts around the affordable housing shortage in general and supportive housing specifically have led to newly dedicated capital resources. Austin's robust and growing social finance community is hungry for effective investing opportunities.

Examples of opportunities emerging from these parallel initiatives include:

- Approval of \$75M in City of Austin affordable housing bonds which can be used for gap financing in capital developments,
- Dedicated public housing authority vouchers,
- Successful implementation of a Medicaid 1115 Waiver-funded supportive housing project,
- A partnership between ECHO and United Healthcare to locate Medicaid clients who need housing,
- Regular meetings with healthcare stakeholders to address improvements in delivery of services to the homeless population, and
- A Pay for Success Task Force charged with exploring and advancing pay for success community-wide.

These assets, along with the sustained commitment by incumbent and new elected officials and agency leadership, galvanize positive pressure for advancing a PFS transaction. With so many stakeholders and initiatives working on different pieces to the puzzle of ending homelessness, Austin seems poised to take advantage of national interest in the PFS model and available venture capital to support a PFS project.

## DEFINITION OF AND EVIDENCE BASE FOR SUPPORTIVE HOUSING

### Definition of Supportive Housing

Supportive housing is a combination of affordable housing and supportive services designed to help vulnerable individuals and families use stable housing as a platform for health, recovery and personal growth. It focuses on balancing three distinct components of the model — housing, supportive services, and property and housing management. These three components can be viewed as a “three-legged stool,” in which each part must bear equal weight to have a balanced project. Supportive housing, however, should not be isolated from the larger community. A project’s relationship to the community adds a vital fourth leg, turning the stool into a community table at which supportive housing providers must have a seat.

Quality supportive housing projects are as diverse as the communities in which they are located. Despite these differences, all supportive housing:

- Targets households whose heads of household are experiencing homelessness, are at risk of homelessness, or are inappropriately staying in an institution. They may be facing multiple barriers to employment and housing stability, including mental illness, substance use, and/or other disabling or chronic health conditions;
- Is affordable, meaning the tenant household ideally pays no more than 30% of its income toward rent;
- Provides tenant households with a lease or sublease identical to non-supportive housing — with no limits on length of tenancy, as long as lease terms and conditions are met;
- Proactively engages members of the tenant household in a flexible and comprehensive array of supportive services, without requiring participation in services as a condition of ongoing tenancy;
- Effectively coordinates with key partners to address issues resulting from substance use, mental health and other crises, with a focus on fostering housing stability; and
- Supports tenants in connecting with community-based resources and activities, interacting with diverse individuals including those without disabilities, and building strong social support networks.

### Evidence Base for Supportive Housing

In dozens of studies across the country over the last 20 years<sup>1</sup>, supportive housing has repeatedly been proven as an effective intervention that improves housing stability, reduces the use of expensive crisis care, and improves health and social outcomes even for the most vulnerable individuals with complex needs. Based on this body of research, the Substance Abuse and Mental Health Services Administration (SAMHSA) has long regarded supportive housing as an evidence-based practice that is “the most potent” intervention to impact housing stability and one that consistently helps people with disabilities achieve their desired goals

### **Supportive housing has a positive impact on housing retention, even among tenants with long histories of homelessness and the most severe psychiatric, substance abuse and health challenges.**

- The evaluation of the Closer to Home Initiative – a project targeted to people who were chronically homeless – found that 83% of the tenants were still in supportive housing after one year and 77% after two years. The retention rate was high even among those tenants with the most severe psychiatric and substance use disorders – 79% were still housed one year after placement.<sup>2</sup>
- Similarly, an evaluation of two supportive housing projects in San Francisco, also targeting chronically homeless individuals, found that 81% of tenants remained in housing for at least one

year. The large majority of the tenants in these two projects had dual psychiatric and substance use disorders.<sup>3</sup>

- The 2014 HUD Annual Homeless Assessment Report shows that out of 285,403 people in permanent supportive housing, more than 75% had stayed one year or longer with 24% having stayed more than five years.<sup>4</sup>

**Supportive housing results in dramatic reductions in hospitalizations, emergency department usage, and criminal justice encounters with complex co-occurring disorders including chronic health conditions, mental illness and substance abuse disorders.**

- In Los Angeles County, 10% of the homeless population accounts for 72% of homeless healthcare costs. When comparing the year before and after entering supportive housing among this group:
  - Emergency Department visits decreased 71% from 9.8 to 2.8 visits per person per year on average;
  - Inpatient readmissions dropped 85% from 8.5 to 1.2 admits;
  - Inpatient days decreased 81% from 28.6 to 5.5 days; and,
  - On average cost avoidance per person per year was \$59,416 with a total cost decrease of 81%.<sup>5</sup>
- In Massachusetts, a statewide pilot of chronically homeless individuals showed a reduction in mean Medicaid costs from \$26,124 per person annually before entering supportive housing to \$8,499 in the year after entering supportive housing.<sup>6</sup>
- Among chronically homeless persons with physical and/or psychiatric conditions in Seattle, overall Medicaid charges were reduced by 41% in the year after entering supportive housing.<sup>7</sup>
- The Chicago Housing for Health Partnership study found a 41% reduction in nursing home days used (from 10,023 to 5,900) when comparing the years pre and post supportive housing.<sup>8</sup>
- A study by the Urban Institute in Ohio found that the treatment group of supportive housing participants was 40% less likely to be re-arrested and 60% less likely to be re-incarcerated within a year of initial prison release as compared to the control group.
- A study of 100 chronically homeless individuals in Denver found that supportive housing led to a 76% reduction in the number of days spent in jail. Supportive housing resulted in total cost offsets of \$31,545 per person over a two-year period.<sup>9</sup>
- **Supportive housing results in improved health and mental health for individuals when comparing the period before and after they enter supportive housing.**
- In Denver, a study found 50% of tenants placed into supportive housing experienced improved health status, 43% had improved mental health outcomes, and 15% reduced substance use.<sup>10</sup>
- The Minnesota Supportive Housing and Managed Care Pilot demonstrated that after 18 months participants experienced fewer mental health symptoms, decreased their use of alcohol and/or other drugs and improved their housing stability. They also reported a greater sense of safety and improved quality of life.<sup>11</sup>

Local Austin/Travis County supportive housing initiatives have observed results similar to those detailed from the national research summarized above. **Supportive housing targeted to similar populations in Austin/Travis County demonstrated<sup>1213</sup>:**

- 70% or more reductions in emergency room visits, EMS transports and inpatient and psychiatric hospitalizations after six months in the program;
- 50% reductions in jail bookings in the year following entry into housing;
- 68% reduction in jail bed days in the two years following supportive housing entry;
- 80% reductions in Downtown Austin Community Court cases in the year after housing; and
- 75% reduction in emergency shelter utilization.

## TARGET POPULATION DESCRIPTION AND DATA

As with supportive housing overall, in a PFS initiative it is critically important to begin and sustain a clear focus on the individuals that would be served. This involves using data to understand the characteristics of the members of the potential target population, as well as the costs they are incurring in the community while homeless. Austin/Travis County was chosen as one of the locations to receive feasibility technical assistance in part due to its long history as a leader in the use of data access and analysis. Through the feasibility process, ECHO and CSH worked with local partners and governments to match administrative data from the following systems: a) the community’s Health Information Exchange (“HIE”), Integrated Care Collaboration (“ICC”), which tracks encounters in both public and private emergency departments, hospital inpatient settings, outpatient clinics, and emergency medical services; b) the Travis County Sheriff Office’s database, which includes booking and jail bed days in the county jail; and c) ECHO’s Homeless Information Management System (“HMIS”), which includes shelter utilization data. While public cost estimates will be further refined during the transaction structuring phase, our feasibility analysis indicates that there is a large homeless population with frequent public system encounters, at extraordinarily high cost to local jurisdictions. After matching 10,000 people in total across the health care, criminal justice, and shelter systems, the costs of the top 250 most ‘expensive’ homeless individuals were analyzed and determined to be an average of \$222,603 per person in annual public costs.

The following table includes estimated annual encounters and costs for the top 250 highest cost users as calculated using emergency room visits, inpatient hospital stays, Emergency Medical Service (EMS) transports, and jail bookings.

**Table 1: Summary of 250 Highest Cost Users**

Usage/Costs	Emergency Department Visits	Inpatient Bed Days	EMS Transports	Jail Bookings	Combined Systems
Average Annual Encounters	21.82	37.10	8.60	0.85	68.37
Estimated Per Unit Cost	\$1,400	\$4,800	\$876	\$153	N/A
Total Average Annual Cost	\$30,542.40	\$178,074	\$13,857.15	\$129.91	\$222,603
Range	0 - 194 Visits	0-183 Days	0-191 Transports	0-9 Bookings	\$188,220 to \$905,286 in annual costs

*Source: Joint Analysis conducted by Central Health Joint Technology Team, Travis County Justice Planning department and ECHO, November 2015*

As an indicator of target population conditions, the diagnoses of 741 distinct homeless patients **who had 25 or more health encounters** between January 1, 2014 and July 31, 2015 were analyzed. These data show extremely high prevalence of co-occurring substance use disorders and mental illness, as well as a substantial population with other medical conditions. In this population, the rate of co-morbidity for substance use disorder and mental illness approaches 71%, and approximately 27% exhibit tri-morbidity:

co-occurring substance use disorder, mental illness, and primary medical conditions. Top emergency department diagnoses were also identified.

TOP EMERGENCY ROOM DIAGNOSES
<ol style="list-style-type: none"> <li>1. Substance- related disorders</li> <li>2. Injuries</li> <li>3. Abdominal pain</li> <li>4. Sprains &amp; strains</li> <li>5. Schizophrenia &amp; other psychotic disorders</li> </ol>

Source: Analysis conducted by Central Health, Joint Technology Team, November 2015

The summary as noted above does not yet include full information on encounters and costs related to the criminal justice system such as jail bed days and thus underrepresents the potential cost savings that could occur related to reductions in such encounters. Conversely, the summary above could overrepresent potential cost savings as it is likely that the eligibility pool for this PFS initiative will include more than just the top 250 users. To partially address both of these challenges, a further analysis was conducted which includes the top 500 users of the healthcare system and averages their encounters and costs with the top 500 users of the criminal justice system as captured through jail bookings. This analysis helps to further flesh out the overall costs savings anticipated in this initiative and is important given that Travis County as a potential end payor primarily stands to realize cost savings from reduced criminal justice costs. The results of this analysis are summarized in Table 2 and further reflected in the Cost Benefit Analysis section.

**Table 2: Average of Top 500 by Total Cost and Top 500 by Bookings**

Usage/Costs	Emergency Department Visits	Inpatient Bed Days	EMS Transports	Jail Bookings	Combined Systems
Average Annual Encounters	13.27	14.38	9.03	2.63	39.32
Estimated Per Unit Cost	\$1,400	\$4,800	\$876	\$153	N/A
Total Average Annual Cost	\$18,578	\$69,024	\$7,910	\$402	\$95,914
Range	0 - 194 Visits	0-183 Days	0-191 Transports	0-18 Bookings	\$61,140 to \$794,742 in annual costs

Source: Joint Analysis conducted by Central Health Joint Technology Team, Travis County Justice Planning department and ECHO, November 2015

## COST BENEFIT ANALYSIS AND FINANCIAL MODEL

In order to create a preliminary cost benefit analysis and financial model for a PFS transaction, we built upon the status quo costs as outlined in Table 2 and used local and national data to make assumptions about how these costs would change if individuals were given access to the intervention of supportive housing. We then reviewed the anticipated costs of the intervention and PFS transaction, including any costs that will be leveraged from existing sources, to create a summary of the overall PFS transaction. The status quo and post-intervention data in Table 3 below is based on the averages from Table 2 above, the data included in ECHO’s 2014 report “Permanent Supportive Housing (PSH) in Austin, Texas,” preliminary results from the Assertive Community Treatment for Permanent Supportive Housing (ACT for PSH) RHP 7 DSRIP Project as of April 2015, and national data where local information was not available. These numbers can be adjusted as updated information about the unit costs or encounters is received or as data on expected reductions after the target population is connected with supportive housing is refined. This analysis represents an individual who could be targeted through this initiative and is a high utilizer across the health care and criminal justice systems. Based on this analysis, there is a projected cost reduction of \$78,158 per person per year.

**Table 3: Projected Costs/Person/Year Before and After Supportive Housing**

Cost Driver	Unit Description	Unit Cost	Status Quo Units	Status Quo Cost	Post-Intervention Units	Post-Intervention Cost	Cost Reduction
<b>Emergency Shelter</b>	Day of Shelter	\$20	30	\$600	0	\$0	\$600
<b>Emergency Room</b>	Visit	\$1,400	13	\$18,578	5	\$7,000	\$11,578
<b>EMS</b>	Call w/Txfr	\$876	9	\$7,910	5	\$3,955	\$3,955
<b>Hospital Inpatient</b>	Days	\$4,800	14	\$69,024	2	\$9,663	\$59,361
<b>Downtown Austin Community Court</b>	Case	\$32	11	\$352	2	\$64	\$288
<b>Jail</b>	Bed Days	\$97	45	\$4,352	23	\$2,176	\$2,176
<b>Jail</b>	Booking	\$153	3	\$402	1	\$201	\$201
<b>Total</b>				<b>\$101,218</b>	<b>Total</b>	<b>\$23,059</b>	<b>\$78,158</b>

The next stage in this analysis is to project the costs to implement the intervention of supportive housing and compare it to the cost reductions outlined above. In this scenario, the estimated system savings generated through applying the intervention of supportive housing *after deducting* all costs of housing and services is \$49,601 per person.

**Table 4: Estimated Intervention Costs and Project Net Cost Avoidance/Person/Year**

<b>Intervention Costs</b>	<b>Person/Year</b>
<b>Rental Subsidy</b>	\$10,800
<b>Rental Assistance Administration</b>	\$69
<b>Intensive Case Management/ACT</b>	\$14,000
<b>Transition Costs</b>	\$1,000
<b>Intermediary Costs</b>	\$600
<b>Data Tracking and Evaluation</b>	\$600
<b>Legal</b>	\$68
<b>Interest Payments, Blended Rate at 3.3%</b>	\$1,420
<b>Total</b>	<b>\$28,557</b>
<b>Project Net Cost Avoidance/Person/Year</b>	<b>-\$49,601</b>

It is important to note that actual savings in the overall PFS model are likely to be greater as some of the costs of the project will be covered by other sources: rental subsidies will likely be provided through the public housing authority vouchers, and costs may be further reduced by Medicaid reimbursement, or third-party funding of elements of the transaction budget, such as legal, evaluation, and/or intermediary costs.

Conducting this analysis will be an iterative process as we continue to refine details about the target population, costs that accrue to different systems and costs that will be paid for through the PFS financing versus leveraged through other resources. The table below shows preliminary estimates of gross cost avoidance per person as they accrue to different system stakeholders/potential end payers.

**Table 5: Gross Cost Avoidance by Public System**

<b>Per Person Health Care District/Hospital Cost Avoidance</b>	<b>\$70,939</b>
<b>Per Person Travis County Cost Avoidance</b>	\$2,377
<b>Per Person City of Austin Cost Avoidance</b>	\$4,843
<b>Total</b>	<b>\$78,158</b>

Although still preliminary, the following page contains an overall summary of what a financial model for Austin’s PFS transaction could look like based on the details captured in this feasibility report. This model will continue to be refined as the project moves forward into the transaction-structuring phase and demonstrates an overall PFS investment of \$17M and potential savings of \$42.8M after investors are repaid based on success.



## Supportive Housing Model for PFS Initiative

Based on the specific target population and the definition of quality supportive housing as described in the prior sections of this report, the Austin PFS team has been working to define the key components of the supportive housing design for the PFS initiative.

### Supportive Services

In Austin's PFS project, participating tenants will have access to flexible and comprehensive supportive services delivered through an intensive case management program such as an Assertive Community Treatment (ACT) team or similar model. This would provide individualized, flexible, and comprehensive treatment, support and rehabilitation services with a small staff to client ratio. Participation in the services must be voluntary, and tenants should have easy access to behavioral health services and primary care. The models impose no arbitrary time limits on the receipt of services, and services may be delivered onsite at a supportive housing property, or through mobile service teams that proactively work to engage tenants scattered throughout the community. In addition to the use of an intensive case management model, it is anticipated that participating service providers will also adhere to the following evidence based-practices: housing first, harm reduction, trauma-informed care, and supported employment. In addition, ECHO and its partners will work closely with criminal justice partners to identify services critical to serving frequent users of the criminal justice system including cognitive behavioral therapy, collaboration with probation and parole officers, and other reintegration strategies.

### Housing

Since access to housing can be a significant limiting factor to the successful implementation of a PFS initiative focused on supportive housing, feasibility efforts work to identify potential opportunities to leverage existing housing that is in the community already or in the development pipeline. This analysis also helps to determine whether and to what extent PFS financing resources need to be used to fill an identified gap in available rental assistance for the initiative.

In crafting a PFS housing strategy, it is important to think through the responses to the following questions:

- How many total units will we need?
- How quickly do we need them?
- Where should they be located?
- What is the source of the units? Will they be leveraged or funded through the PFS initiative?

For this initiative it is anticipated that approximately 250 units of housing will need to be created over the first 2-3 year period of the PFS initiative. This housing ramp up strategy will need to balance connecting individuals with supportive housing as quickly as possible so that positive outcomes can begin being generated but also balance the actual availability of housing on the ground. Based on its knowledge of the current housing landscape in Austin, ECHO is projecting that the housing will need to come from new units that are being developed as dedicated supportive housing as well as scattered site units made affordable via several different subsidy sources.

This approach will continue to be refined as this PFS initiative moves forward, but ECHO is currently projecting that the operating subsidies for the 250 units are projected to be secured as follows:

- Project based vouchers via the Housing Authority of the City of Austin (HACA): 100
- Project based vouchers via the Travis County Housing Authority: 50
- Existing HACA homeless preference for tenant-based vouchers: 50
- New HUD Continuum of Care vouchers: 20
- New capacity in Continuum of Care voucher pool created by moving current tenants to Housing Choice Vouchers (HCV) tenant-based vouchers: 30

The chart below reflects what implementing this strategy on a quarterly basis over the first three years of a five year PFS transaction could look like. Although not specifically noted above, the model below includes the creation of 20 rental subsidies through the SIB itself to fill any gaps that might exist in accessing the projected existing resources or to house individuals that do not meet the eligibility criteria for the available sources.

**Table 2: Example Housing Ramp-Up Plan for Austin PFS Initiative**

Month	Project-Based Units, Travis County	Project-Based Units, HACA	Tenant-Based, HCV	Tenant-Based, CoC	Tenant-Based, PFS	Total Monthly Placements	Cumulative
Q1				10		10	10
Q2			10			10	20
Q3	25					25	45
Q4	20			5	5	30	75
Q5			15		2	17	92
Q6		23			2	25	117
Q7		22		5	3	30	147
Q8			15	10	3	28	175
Q9			5	5	3	13	188
Q10		25			2	27	215
Q11		25				25	240
Q12				10		10	250
Q13						0	250
Q14						0	250
Q15						0	250
Q16						0	250
Q17						0	250
Q18						0	250
Q19						0	250
Q20						0	250
Total	45	95	45	45	20	250	250

## END PAYOR COMMITMENT

No PFS effort can be determined to be feasible without the commitment of one or more entities to serve as an end payor that will make success payments should agreed upon outcomes be achieved. Much of the work of this feasibility process with ECHO in Austin/Travis County has been laying the groundwork for these end payor commitments. These partners recently coalesced around an application to HUD/DOJ that would provide both funding for the transaction structuring work to move this initiative forward as well as for success payments. For this application, the City of Austin, Travis County and Central Health all provided letters establishing their intent to enter into intentional planning with an eye to serving as end payors for the PFS transaction outlined in this report. The next section will further outline the discussions with regard to the specific outcomes that are of interest to each particular end payor. The identified end payors have been actively engaged throughout the feasibility process and this engagement is expected to continue as the project moves forward into the transaction-structuring phase.

## SUCCESS METRICS

The feasibility study focused on the outcomes metrics below, which are expected to be incorporated into the PFS project, subject to further negotiations during the transaction structuring process.

- **Promote housing stability:** Provide an estimated 250 individuals with access to stable supportive housing in the community with the goal of keeping at least 80% of project participants housed for at least 12 months. There is ample evidence to support that supportive housing has a positive impact on housing retention, even among tenants with long histories of homelessness and the most severe psychiatric, substance abuse and health challenges. This is also expected to result in a reduction in shelter utilization.
- **Reduce jail system usage and police interaction:** Reduce the usage of the public safety and criminal justice systems by members of the target population as evidenced by reductions in police interactions, jail days and arrests. Exact targets for these reductions will be determined in partnership with the project end payors during transaction structuring.
- **Reduction in emergency room usage, emergency medical services, and inpatient costs:** Reduce inappropriate usage of the emergency and inpatient resources by members of the target population, and promote the usage of appropriate preventive or primary care services.

While the potential cost savings as described in the cost benefit analysis section may serve as the foundation for working through a Pay for Success transaction, success metrics and/or payment triggers do not have to be based on cost avoidance or savings alone. Some cost reductions can be difficult to document directly, particularly in the relatively short timeframe in which investors may want to receive payments. Cost savings may also occur across systems or over a period of time that extends past the term of a PFS contract.

As such, it is important to consider outcomes that have value for our target population that could be incentivized through a Pay for Success contract. These may also be measures that are associated with cost savings, sometimes called “proxy” metrics, such as using housing stability as a proxy metric to represent expected cost savings to an end payor. Housing stability is currently being used as a payment trigger in the three closed supportive housing PFS transactions in Santa Clara County, California, Massachusetts, and Denver, Colorado.

Each end payor has had specific conversations as part of the feasibility process and identified those outcomes of greatest interest to them as follows:

- **City of Austin:** In discussions to date, the City identified housing stability, reductions of EMS calls, and reductions in Austin Police Department interactions as the potential outcome measures on which they would be most interested in basing success payments.
- **Travis County:** Travis County is most interested in using the PFS initiative as an opportunity to promote housing stability and correspondingly reduce jail bookings and jail bed days among members of the target population.
- **Central Health:** Central Health, potentially in conjunction with Seton Healthcare Family through the Community Care Collaborative, may consider making Success Payments based on improved health care outcomes, such as reducing expensive emergency room visits and inpatient stays to drive a more efficient and effective health care system that provides appropriate care at the appropriate time preferably in community-based settings. This could potentially also include housing stability as a measure given its relationship to the desired outcomes as noted with the outcomes related to the criminal justice system.

## KEY OBSERVATIONS AND RECOMMENDATIONS

Through our collaboration with ECHO and its partners throughout the feasibility technical assistance process, CSH had the opportunity to identify existing strengths that should be built upon in the next phase of the PFS process and recommendations to consider when moving forward.

### Strengths

- **Strong and engaged community stakeholders and end payors:** Austin/Travis County has had a strong and diverse stakeholder group engaged in this effort from the beginning of the feasibility process. This has ensured that key feedback has been received from parties such as Travis County and Central Health as needed throughout the process. These relationships, led by ECHO, are even more important moving into transaction structuring, the next phase of the PFS process. As detailed in this report, this initiative has three potential end payors that are willing to come to the table to determine an outcome and success payment strategy that works for all stakeholders.
- **Clear connection to overall community efforts to address homelessness and create supportive housing:** The PFS initiative benefits from the role that ECHO serves, driving the community's broader efforts to end homelessness. Austin/Travis County has also identified a need for 1,900 units of supportive housing, and established interim production goals. This initiative dovetails with those plans. This allows the PFS model to be grounded within existing efforts, but serve as an innovative tool to scale supportive housing and meet a clearly identified gap. The housing strategy for the PFS initiative will also be able to leverage supportive housing units that are currently in the pipeline and additional units that are in pre-development. Further, Austin/Travis County has a strong community of housing and service providers that may wish to participate in this initiative including, but not limited to, Austin/Travis County Integral Care, Caritas, Foundation Communities, Front Steps, Green Doors, Housing Authority of the City of Austin, Lifeworks, SafePlace, and Salvation Army.
- **Data access and analysis capacity:** The Austin/Travis County community has a strong capacity to access, share and match data for the purpose of understanding the status quo outcomes and costs of members of the target population. The community began the feasibility process with an existing health information exchange, the Integrated Care Collaboration, which brings together health related data across a wide variety of providers. When combined with access to criminal justice data from the county and robust HMIS data, the community is able to gain a full picture of the top

utilizers of the health, criminal justice and homeless systems. Although ECHO will continue to work with its partners to expand upon and deepen this analysis in the transaction-structuring phase, it is clear there is a compelling case to be made for connecting these vulnerable individuals with supportive housing via a PFS model.

### **Recommendations**

As noted above, CSH considers the outlined PFS initiative to be feasible and recommends that Austin/Travis county **move forward into the transaction-structuring phase** for this initiative. This phase will allow ECHO to work with its partners to formalize agreements and move to implementation. To maximize this potential it should consider the following recommendations:

- ECHO should continue to **identify and respond to opportunities related to transaction structuring support** such as those anticipated from the Nonprofit Finance Fund while awaiting the results of the application it recently submitted to HUD/DOJ in partnership with Social Finance and CSH.
- Austin/Travis County has the potential to be the first national PFS project to include multiple end payors. The buy-in on the part of the City of Austin, Travis County and Central Health, helps to bring together all stakeholders that stand to see improved outcomes and/or cost savings if the projected outcomes are achieved for the target population. Given the challenges that working with multiple end payors may pose, **ECHO should carefully balance the value of a multi-payor project with promoting the need for a pragmatic transaction design that minimizes burdensome complexity.**
- **Solidify the commitment and role of each potential end payor** and find the best way to leverage their interest and desired outcomes without creating an unreasonably complex transaction. Consider whether there is a payment trigger like housing stability that is associated with all the outcomes desired by the three end payors that could serve as the primary marker of whether success has been achieved. Specifically consider the following with regard to each potential end payor:
  - **City of Austin**
    - The City of Austin should work closely with ECHO and its partners to further explore how and on what basis it can make success payments as part of a PFS initiative serving the target population outlined in this report. In doing so, **the City should consider the value it may assign to specific reductions in EMS calls, Austin Police Department interactions, and shelter usage, but also the overall value in promoting the use of an innovative model like PFS in Austin** and shifting its resources toward paying for outcomes that generate results. This consideration may result in a success payment amount that is not solely based on actualized cost reductions. As the PFS work moves to this next phase, it is important to identify the key staff members, departments and decision makers that need to be involved in this exploration as well as the process for approving the City's role as end payor.
  - **Travis County**
    - **Travis County has a critically important role to play in expanding the data analysis outlined in this report to provide data on high cost frequent users of the jail.** Ideally, this data could be cross matched with the list of high cost users of health care data so that one overall list that includes the full picture of criminal justice and healthcare costs can be generated. The current

analysis is missing data on the costs related to jail bed days as well as jail specific healthcare costs. As it works with ECHO to provide this data, **Travis County should consider the value it may assign to specific reductions in criminal justice costs, but also the overall value in promoting housing stability and improving cross-system outcomes for a vulnerable population.** This consideration may result in a success payment amount that is not solely based on actualized cost reductions. As with the City of Austin, it is important to identify the key staff members, departments and decision makers that need to be involved in the discussion about success payments and targeted outcomes as well as the process for approving the County's anticipated role as end payor.

- **Central Health**

- **Central Health** as the majority owner of the **Community Care Collaborative** in partnership with Seton Healthcare Family, **should further explore how it can make Success Payments based on improved health care outcomes, such as reducing expensive emergency room visits and inpatient stays to drive a more efficient and effective health care delivery in community settings.** As with the City and the County, it is important to identify the key staff members and decision makers that need to be involved in the discussion about success payments and targeted outcomes as well as the best structure for continuing this exploration whether through Central Health directly or through its role as part of the Community Care Collaborative or both.
- Engage with and educate the service and housing provider community about the initiative. **Develop an RFQ and/or RFP process to select the partners that will be involved in further developing the transaction and expected to deliver the intervention.** Work with the selected service provider partner and government partners to establish the expected cost of the services to be delivered and understand what portion of those services can be covered by existing sources such as Medicaid.
- **Create a process to select an evaluation partner** so that they can begin informing the eligibility criteria and enrollment process discussion sooner rather than later.
- Continue engaging with the supportive and affordable housing development community and pipeline to **identify opportunities to connect planned units and rental subsidies with this transaction.**

## CONCLUSION

The feasibility analysis process brings together the key partners and information needed to determine if PFS can be a viable and useful financing tool for a community to address a particular social problem. For Austin/Travis County, this process has created a strong framework for advancing the use of PFS as a cross-jurisdictional tool; PFS financing has robust potential to scale supportive housing for the highest utilizers of the homelessness, healthcare, and criminal justice systems. CSH appreciates the opportunity to present the observations and recommendations in this report for consideration by the Austin/Travis County community, and looks forward to continuing to collaborate in moving this exciting effort forward.

## END NOTES

- <sup>1</sup> Rog, D., Marshall, T., Dougherty, R., et al. (2013). Permanent supportive housing: Assessing the evidence. *Psychiatric Services*. Retrieved from <http://ps.psychiatryonline.org/article.aspx?articleid=1790640>
- <sup>2</sup> Flaming, D., Lee, S., Burns, P., & Sumner G. (2013). Getting home: Outcomes from housing high-cost homeless hospital patients. Retrieved from [http://www.csh.org/wp-content/uploads/2013/09/Getting\\_Home\\_2013.pdf](http://www.csh.org/wp-content/uploads/2013/09/Getting_Home_2013.pdf)
- <sup>3</sup> Massachusetts Shelter and Housing Alliance. (2007). Home and health for good: A statewide pilot housing first program. Retrieved from <http://www.mhsa.net/matriarch/documents/HHG%20June%20report%20FINAL.pdf>
- <sup>4</sup> Larimer, M., Malone, D., Garner, M. et al. (2009). Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. *JAMA*. 2009; 301(13):1349-1357.
- <sup>5</sup> CSH. (2011). Supportive housing: Reducing Medicaid costs and improving health outcomes. Retrieved from [http://www.csh.org/wp-content/uploads/2011/12/6\\_9Presentation.pdf](http://www.csh.org/wp-content/uploads/2011/12/6_9Presentation.pdf)
- <sup>6</sup> CSH. (2011). Returning home: Emerging evidence and lessons learned. Retrieved from [http://www.csh.org/wp-content/uploads/2011/12/RHIUpdateReport\\_FINALpdf.pdf](http://www.csh.org/wp-content/uploads/2011/12/RHIUpdateReport_FINALpdf.pdf)
- <sup>7</sup> Perlman, J. & Parvensky, J. (2006). Cost benefit analysis and program outcomes report. Retrieved from [http://www.denversroadhome.org/files/FinalDHFCCostStudy\\_1.pdf](http://www.denversroadhome.org/files/FinalDHFCCostStudy_1.pdf)
- <sup>8</sup> National Center on Family Homelessness. (2009). The Minnesota supportive housing and managed care pilot: Evaluation summary. Retrieved from <http://www.hearthconnection.org/storage/files/Pilot%20-%20Evaluation%20Summary.pdf>
- <sup>9</sup> Barrow, S., Soto, G., & Cordova, P. (2004). Final report on the evaluation of the Closer to Home Initiative. Retrieved from [http://www.csh.org/wp-content/uploads/2011/12/Report\\_cth\\_final1.pdf](http://www.csh.org/wp-content/uploads/2011/12/Report_cth_final1.pdf)
- <sup>10</sup> Martinez, T. & Burt, M. (2006). Impact of permanent supportive housing on the use of acute care services by homeless adults. *Psychiatric Services*, 57, 992-999.
- <sup>11</sup> Solari, C., Althoff, S., & Bishop, K. et al. (2015). The 2014 annual homeless assessment report to congress. Retrieved from <https://www.hudexchange.info/onecpd/assets/File/2014-AHAR-Part-2-About-This-Report.pdf>
- <sup>12</sup> Ending Community Homelessness Coalition (ECHO). Permanent Supportive Housing (PSH) in Austin, Texas: Successes, Challenges and Future Implications for the City's 2010 Permanent Supportive Housing (PSH) Strategy. August 5th, 2014. Accessed online February 8, 2016 at <http://austinecho.org/wp-content/uploads/2014/08/PSH-Evaluation-by-ECHO-2014.pdf>.
- <sup>13</sup> Preliminary results from the Assertive Community Treatment for Permanent Supportive Housing (ACT for PSH) RHP 7 DSRIP Project as of April 2015