USING PAY FOR SUCCESS TO IMPROVE OUTCOMES FOR THE PERSISTENTLY HOMELESS IN SACRAMENTO

Spring 2018



EXECUTIVE SUMMARY

There is a large and growing movement in Sacramento to reduce homelessness. And yet, doing so is remarkably difficult. In part, this is due to the multifaceted nature of the challenge. Those living on the streets are there for both individual reasons and for impersonal, macroeconomic reasons: because they can't find work and can't afford rent; because the housing market is tight and getting tighter, driving up prices; because they have uncontrolled substance use disorders or other acute behavioral health challenges; because they're fleeing from domestic violence; because they are not eligible for housing programs.

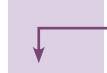
Homelessness is an individual tragedy, but it is also costly to communities. Some costs, like shelters and housing programs, are reasonably well understood. Others are more opaque, like the expenses to the criminal justice and healthcare systems. These costs accrue to the County, its cities, the State, the Federal government, local businesses, and the homeless themselves.

The wide dispersion of these costs makes prevention and remediation complicated. More than other community challenges, homelessness reaches across government agencies, networks of nonprofits, clinics, and hospitals, and their arbitrary divides.

This report attempts to better understand these costs in Sacramento. To do so, the Social Finance team—with invaluable support from partners in County and City agencies, and with the close partnership of Sacramento Steps Forward—integrated data on program utilization from Sacramento's system of care for the homeless, the County's behavioral health services and jail system, and the City's public ambulances and Police IMPACT team. We found that costs were concentrated in a relatively small group of individuals. *The top 250 highest-utilizing "persistently homeless" individuals cost the City and County over \$11M in 2016 alone, or over \$45,000 per person.* And these figures are conservative; they do not represent the full breadth of County and City services, and they are focused on local (versus State or Federal) expenses.²

These findings echo research conducted elsewhere in California. Los Angeles County, a pio-

neer in targeting services toward high-volume service utilizers, found that the top 5% \$45,000 "most expensive" individuals averaged over \$50,000 per year to the County, nearly SACRAMENTO eight times more than other homeless individuals.3 In Santa Clara County, a 2015 report identified 2,800 persistently homeless individuals that cost the County ~\$83,000 each per year. 4 While each study (and others like them nationwide) includes somewhat different target populations and data sources,5 each point

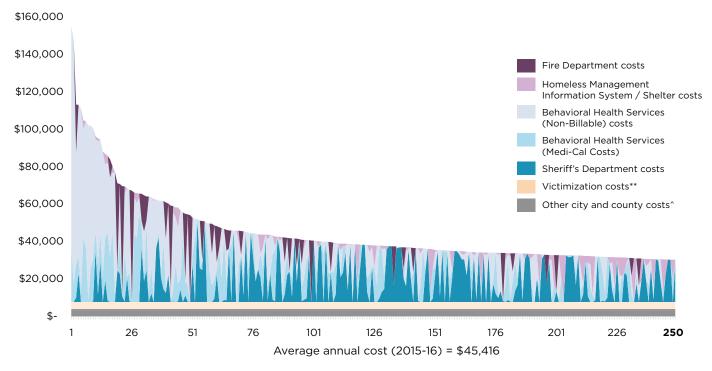


Throughout this report, we use the term "persistently homeless" to describe a population of individuals that have long-term challenges with homeless, are frequent utilizers of the County and City's services, and are highly vulnerable. This population overlaps with but is more expansive than HUD's definition for "chronically homeless," which entails a documented disability and continuous homelessness for a year (or homelessness four or more times totaling at least 12 month over the past 3 years).

to significant concentrations of emergency resources being spent on a narrow population of persistently homeless individuals.

In Sacramento, as elsewhere, those highest-utilizing individuals were costly to local systems, and often touched multiple systems in a given year.

Figure 1 Average annual cost to Sacramento County and City public systems across top 250 individuals (2015–16)67



Permanent Supportive Housing (PSH) begins with affordable, safe housing and combines it with: linkages to wraparound services targeting mental illness, substance use disorder, physical health, and employment readiness; a "housing first" philosophy that does not require sobriety or participation in services as a condition of tenancy; no limits on length of tenancy, so long as lease terms and conditions are met; and coordination with local community partners that help individuals continue to address their challenges and promote housing stability.

This concentration of cost within such a limited population suggests that even highly intensive, and expensive, interventions may ultimately create benefits—both economic and social—for the County and the City if they are effective. Tertiary prevention strategies⁸ can help to avoid expensive emergency costs, while improving outcomes for the most vulnerable homeless individuals.⁹

To better assess that proposition in Sacramento, Social Finance reviewed a wide set of interventions appropriate for this population, and the evidence associated with each. In the course of our review, we prioritized interventions with strong evidence of effectiveness, and with codified program models that could be replicated with fidelity to that evidence. We highlight in this report one highly evidenced, intensive intervention, Permanent Supportive Housing with Assertive Community Treatment. Through multiple randomized and observational studies, and across decades of research, these interventions have demonstrated consistent impact on housing stability, behavioral health, hospitalizations, and criminal justice outcomes for homeless individuals.

Permanent Supportive Housing, as the name suggests, is composed of both permanent, affordable housing and wraparound supportive services. Housing often leverages both existing units and new development and draws together a variety of funding streams, including federal housing subsidies. Supportive services typically include intensive, often on-site, case management, along with clinical care, substance use counseling, behavioral health treatment, assistance in securing and retaining employment, and more. Permanent Supportive Housing programs typically offer choices of decent, safe, and affordable housing; bring together integrated teams of care providers; and use a "housing first" approach that avoids preconditions, such as sobriety or mandatory participation in services. Assertive Community Treatment is a team-based model of providing supportive services, often bringing together social workers, skilled nurses, substance use counselors, and coaches. It uses low ratios of caregivers to participants, and typically involves significant in-home treatment, and a "whatever-it-takes" approach to avoid escalating everyday challenges into crisis situations.

Permanent Supportive Housing models have demonstrated significant evidence of impact. In a 2007 randomized controlled trial of over 400 adults in Chicago, those in the intervention group exhibited lower need for residential substance use treatment, emergency room visits, and prison days over 18 months. A meta-analysis the same year uncovered six randomized trials suggesting that ACT demonstrated large effects in reduced homelessness and psychiatric symptoms. Observational studies have found greater effects still: a study of Permanent Supportive Housing for 100 chronically homeless individuals in Denver, for example, resulted in a 76% reduction in jail days. Dozens of studies have demonstrated the impact of Permanent Supportive Housing on housing sta-

ONE KEY OUTCOME:
ESTIMATED

40%
REDUCTION IN
BOOKINGS AND
JAIL BED DAYS



bility and a variety of other participant outcomes.¹³ Other exciting models have recently been launched: in Los Angeles, for example, the Department of Health Services has developed a program that brings together Permanent Supportive Housing, intensive case management, and a flexible housing coordination system in a program called Housing for Health. In the three years since launch, it is on track to provide housing for ~2,500 individuals.¹⁴

Sacramento has been active in scaling these kinds of models. A number of Permanent Supportive Housing programs, such as the Department of Veterans Affairs' VASH program or the County's Shelter Plus Care, are in place, as are intensive case management programs, such as Sacramento's Full Service Partnerships. And new initiatives are underway to increase access to such programs. Yet, they are not targeted specifically toward the highest-cost persistently homeless individuals.

Based on our review of the evidence supporting Permanent Supportive Housing models matched with intensive case management (in particular, Assertive Community Treatment), we modeled the potential value of scaling this program to reach 250 of Sacramento's highest-utilizing homeless individuals. The results of that analysis are broadly encouraging: a reasonable estimate of the program's impact suggests that it is likely to reduce reliance on shelters, inpatient psychiatric hospital care, jail bookings, days incarcerated, ambulance rides, and rates of crime and victimization. On average, we expect that the total value of these improvements to the City and County is over \$13,000 per person per year, while their expected incremental local cost is likely ~\$11,000.\frac{15,16}{2}

Figure 2 Estimated impact of permanent supportive housing with intensive case management on key County / City costs

	BASELINE COST ¹⁷ X	EXPECTED CHANGE =	=	ESTIMATED BENEFIT
Shelter system	\$2,130	70% decrease in shelter days		\$1,490
Criminal justice	\$11,160	43% decrease in incarcerated days / booki	ngs	\$4,800
Victimization costs	\$3,760	43% reduction in victimization costs		\$1,620
Behavioral health	\$21,370	25% reduction in psychiatric hospital days	S	\$3,770
EMS transports	\$2,940	25% reduction in EMS transports		\$740
Additional expected City and County costs	\$4,060	20% reduction in additional costs		\$830
TOTAL	\$45,420			\$13,250
		EXPECTED DELIVERY COST		\$11,000
		NET BENEFIT		\$2,250

This finding comes with crucial caveats. First, baseline costs from which this figure is derived are not comprehensive: they do not include, for example, correctional health costs, which would accrue to the County; the costs from other cities within Sacramento; or major State and Federal costs, most importantly the expense of physical healthcare. It follows, then, that the estimated benefit of intervention is similarly understated. Second, the actual benefits of such a program could be significantly higher or lower than the midpoint derived from prior studies. Quality of implementation, local demographics, and economic context all influence the effect actually achieved. Finally, estimates vary depending on the characterizes of the individuals



served: while the above assumes a joint City-County view of costs and targeting, separate jurisdictional programs could pursue their own programs and approaches to targeting individuals, and doing so will change the overall cost-benefit equation. We present a breakdown of these estimates and sensitivities later in the report.¹⁸

The cost of scaling up such a program is significant. While our research suggests that intensive treatment services typically range from ~\$7,000-10,000, and permanent housing and placement typically costs ~\$10,000-12,000 per year, many of these costs are supported in part through State and Federal programs, including Medi-Cal and Housing Choice Vouchers (HCVs). In a reasonable scenario, in which approximately half of case management service costs are reimbursed by Medi-Cal and 150 HCVs are used, we estimate that the model would cost local government ~\$11,000 per per-

son—15% less than the ~\$13,000 in expected value generated through the program.

The primary cost-benefit analysis described above was developed around a joint targeting approach, in which the City and County jointly establish the list of high-utilizers, and engage in a coordinated outreach and enrollment. Such an approach would focus on the highest-cost utilizers across the widest distributions of cost—finding where the concentrations are greatest, and would therefore produce the strongest cost-benefit. However, if Sacramento County and the City of Sacramento pursue separate targeting approaches, we believe each likewise has the potential to create significant value to its respective jurisdiction.

The economics of targeting individuals using County-only costs look broadly similar to the joint methodology, because County-level costs are key drivers of the total local costs of homelessness. The average annual cost for a high-utilizer from the County-only perspective was ~\$42,000 over calendar years 2015-2016 (versus ~\$45,000 for a joint targeting approach). The County would also continue to benefit from the majority of the intervention's impact (with the exception that it would benefit less from shelter reductions than in the joint approach, because the City funds part of Sacramento's shelters, and would not benefit from City ambulance use reductions). The County's proposed Flexible Supportive Rehousing Program, similar in many ways to the Housing for Health program outlined above, and leveraging a similar targeting approach to that described here, is well positioned to capture these benefits. On the whole, we estimate the net cost-benefit for the County to be slightly less than break-even—noting again that these estimates do not include the potential benefits to correctional health, other County agencies, or other jurisdictions—while producing significantly better outcomes for the persistently homeless.¹⁹

A City-centered targeting approach would significantly change the project economics and targeting, focusing on individuals who are frequent users of City Fire's ambulances and/or frequently use the shelter system. On average, this population costs the City ~\$19,000 per year. Much of the local benefit of a program oriented toward this population would accrue to the Federal and State government (via Medi-Cal and reductions in incarceration to prison) and to the County (via reductions in behavioral health and jail costs). The estimated benefit to the City, then, of scaling a program like the one we describe would offset about \$0.30 for every dollar spent.²⁰ Such a program could create better outcomes for the persistently homeless, but those benefits would not nearly offset program costs.

The overlay of **Whole Person Care** changes this dynamic. While focused on high utilizers of medical services, the City's recently proposed program intends to scale a program of Permanent Supportive Housing and intensive case management. As currently envisioned, Whole Person Care leverages a ~2.5: I match from local health plans, and a I: I Medi-Cal match against the combined local funding. To the extent that medical-oriented targeting can reach frequent ambulance riders and help to reduce shelter use (in addition to its core focus on emergency department utilization), the City should be able to lower the net costs of persistent homelessness

Whole Person Care is a statewide pilot program intended to focus preventative resources highly vulnerable populations and reduce need for high-cost services.

at a reasonable price, while improving outcomes.

Ultimately, then, our research suggests that investing in permanent housing and intensive support services can improve outcomes for the persistently homeless without adding significant net cost to the City or County. This conclusion reflects the examples set by other cities and counties around the country in targeting high-utilizing homeless populations with intensive supports.

Program quality is at the heart of a successful program expansion. A suite of novel contracting strategies are

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With Pay for Success, government funds effective social services through a performance-based contract, allowing taxpayers to pay only for what works in improving their communities.

enabling a growing cadre of forward-thinking public leaders to ensure quality—by paying only for measured outcomes, rather than for services. **Pay for Success**, a form of performance-based contracting in which up to 100% of payments are made based on measured outcomes, is among the most advanced of these tools. Rather than pay for programs up-front, the jurisdiction pays only if programs are found to be successful at improving outcomes for the persistently homeless over time.

We believe that Permanent Supportive Housing with intensive supports (such as Assertive Community Treatment) has sufficient evidence of impact to lend itself to advanced performance-based contracting. The need within the County and City is both large enough to justify structuring such a contract and concentrated enough to warrant intensive intervention. Relevant, accessible data exist to identify high-utilizing individuals. Finally, we have identified a set of relevant metrics—housing stability, in conjunction with behavioral health, criminal justice, and/or medical outcomes—that are relevant to local stakeholders, linked to the intervention's evidence, and measurable over a reasonable timeframe.

With that in mind, Social Finance recommends that both the City and County pursue performance-based funding options. These options vary in their structures.



Our feasibility analysis suggests that Pay for Success may be a good option for either jurisdiction, or for a joint program. Either jurisdiction could follow the models of Santa Clara, Denver, and others in developing a Social Impact Bond, in which private funders provide the working capital for program scale-up, and the County or City repays those funders only to the extent that positive outcomes—defined in advance, and measured by a third party—are achieved. Doing so focuses all parties on outcomes: if the intended results aren't achieved, the government doesn't pay. For the City, this could involve asking private funders and investors to finance the City-funded portion of Whole Person Care—some \$2.3 million per year over 4 years, of ~\$9.2 million total—and only repaying those funds, with a modest return, if the intervention is successful at achieving predefined housing and utilization outcomes. Likewise, for the County, this could involve private

investment covering some portion of the jurisdiction's ~\$3.4 million annual ongoing expenses for the proposed Flexible Supportive Rehousing Program, similarly repaid by the County on a performance basis.

Other kinds of performance-based contracts can likewise incentivize better results. Carefully designed outcomes-based contracts with small degrees of incentives—often incorporating both small penalties for underperformance and bonuses for success—can help to improve perfor-

mance.²¹ However, appropriate caution and thoughtful design are essential in developing any outcomes-based contract. Most providers, lacking a third-party investor, cannot afford to take on too much financial risk, so rates of contingent payment should be carefully moderated.²² At the same time, thoughtful outcomes definition and measurement are crucial to avoiding unintended perverse incentives or outsized external influences in measuring performance.²³

OUR RESEARCH AND EXPERIENCE SUGGEST THAT ACHIEVING SUCCESSFUL OUTCOMES FOR THE PERSISTENTLY HOMELESS REQUIRES MORE THAN JUST FUNDING. IT ALSO REQUIRES:

CONSISTENT ENGAGEMENT and input from providers, philanthropy, civic leaders, government, and community members;

CLEAR PROJECT GOALS, with metrics and measurement plans aligned against them;

SUPPORTIVE DATA SYSTEMS leveraging continuous cross-program data integration, accessibility tailored to relevant stakeholder, and a user-friendly interface;

A STAGED IMPLEMENTATION PLAN, allowing for project ramp-up, testing, and rapid adaptation;

Careful service provider due diligence, procurement focused on scaling the highest-quality organizations, and SHARED OWNERSHIP OF / COMMITMENT TO PROJECT GOALS;

ONGOING ACTIVE PERFORMANCE MANAGEMENT, distilling insights from live project data and using them to troubleshoot challenges, improve service provider performance, and help those who are able to "move on" from supportive housing; and

CONSISTENT OVERSIGHT AND COMMITMENT from senior administrators and elected officials.

A number of initiatives are underway—across the City and County, in partnership with the Continuum of Care, with health plans and health systems and other nonprofits—to engage the persistently homeless and connect them to permanent housing. Partnerships are essential to their success. Particularly as the City and County develop new programs focused on using Permanent Supportive Housing to stabilize high-utilizing persistently homeless individuals, policymakers should be proactive in communicating eligibility, coordinating outreach, and sharing learnings across these and other programs. Doing otherwise increases the risk of overlapping City and County programs competing for available units, identifying and enrolling the same homeless individuals, and confusing both service recipients and providers of housing and support services.

Sacramento is privileged to have a community dedicated to preventing homelessness, public officials committed to using data to target resources toward those who need them most, and providers keenly focused on scaling up well-evidenced interventions. This study ultimately supports the City and County's proposed efforts to expand programming for high utilizers. In quantifying the historical costs of this population, and by estimating the potential value of new investment, it suggests that Sacramento's commitment will pay dividends—not only in avoided suffering, but in systemic improvements in effectiveness. It also offers options for how to finance and manage new programs. We recommend that County and City strongly consider implementing thoughtfully designed outcomes-based contracts around housing stability, in order to incentivize quality and promote provider flexibility and innovation. Such contracts may either be paid fully on performance, in the form of Pay for Success contracts, or be developed with smaller amounts of shared risk and reward. We further recommend that these programs should take advantage of their data—data they are planning to use both for targeting

and outcomes tracking—to develop active, statistically infused performance management processes, regularly bringing together administrators and providers to analyze performance data, troubleshoot challenges, and improve programs. Finally, we recommend continued collaboration, mutual support, and active knowledge sharing between various Permanent Supportive Housing programs as they grow to reach more of the highest-utilizing persistently homeless individuals and families in Sacramento.

FINDINGS AND NEXT STEPS

Homelessness troubles the dignity of our most vulnerable citizens and challenges the social fabric of our communities. It is also remarkably expensive. Persistently homeless individuals too often frequent Sacramento's inpatient psychiatric facilities and jails, or are transported by firefighters in ambulances to emergency departments.

New, promising programs in the County and City are poised to change that reality for many of Sacramento's highest-utilizing homeless individuals. This represents a new strategy: targeting especially intensive, integrated support and housing services toward those who are the most expensive to treat. This kind of strategy can help to avoid future emergency services—and open those services up to others.

- SACRAMENTO SHOULD INCREASE ACCESS TO INTENSIVE PERMANENT SUPPORTIVE HOUSING FOR HIGH-UTILIZING POPULATIONS, WHICH CAN SIGNIFICANTLY IMPROVE OUTCOMES AND LARGELY OFFSET COSTS.

 Social Finance's retrospective cost analysis has shown that significant costs are concentrated in these highest-utilizers. At the same time, our literature review and expert interviews indicate a reasonably strong base of evidence suggesting that Permanent Supportive Housing and intensive case management (such as Assertive Community Treatment) can have meaningful social and fiscal impact for these most vulnerable individuals.
- NEW PROGRAMS SHOULD INCORPORATE SIGNIFICANT PERFORMANCE COMPONENTS INTO PROVIDER COMPENSATION.

 Sacramento's high-utilizer programs are well suited to performance-based contracts: the proposed interventions are well supported by academic evidence; clear outcome metrics—particularly housing stability, supported by service utilization rates from jails, inpatient psychiatric care, or emergency departments—are measurable, meaningful, and linked to important local policy priorities; and a number of providers are ready to pursue shared-risk models. Contracts designed with financial incentives tied directly to performance are feasible, and can help to achieve better outcomes.
- BOTH THE COUNTY AND CITY SHOULD CONSIDER PAY FOR SUCCESS CONTRACTS, WHICH CAN BE FEASIBLY BUILT AROUND HOUSING STABILITY AS A CORE METRIC. Pay for Success—a contract in which most or even all payment is contingent on performance—is a viable option in Sacramento. We believe that funders are willing to take on the performance risk of achieving housing stability (and, to a lesser extent, supplementary outcomes such as jail intakes / day or in-patient psychiatric visits) for ultra-high-utilizing homeless individuals treated with Permanent Supportive Housing and intensive case management. Pay for Success, then, would be a natural fit to fund the operating cost of the County's Flexible Supportive Rehousing Pool. It is less-well-suited to fund the City's full contribution for Whole Person Care: funders are unlikely to take on the broad outcomes and risks associated with the pilot writ large. However, assuming the City is successful in accessing and integrating relevant medical data, a Pay for Success project could be structured more narrowly—as a sub-component of the broader pilot—around high-utilizing individuals achieving stable housing and lowering emergency department visits.
- PROGRAMS SHOULD AVOID POTENTIAL UNINTENDED CONSEQUENCES BY DEFIN-ING SUCCESS DIFFERENTLY FOR DIFFERENT POPULATION SEGMENTS, AND BY CAREFULLY DEFINING CONTINGENCIES.

Building thoughtful performance-based contracts is valuable, but it's not easy. Without careful population segmentation, they can drive providers toward easier-to-serve populations. Lacking appropriate controls, they can be plagued by gaming behavior or short-termism. Even good performance-based contracts can be dogged by external influences, unless their performance targets are built to be flexible against changing macroeconomic changes and policy shifts. Paying for performance can drive better outcomes, but only if contracts are designed to avoid perverse incentives and withstand the challenges of time and change.

CITY AND COUNTY SHOULD INVEST IN ENSURING PROVIDER ACCESS TO ADMINISTRATIVE DATA AND SUPPORT PROGRAMS WITH CAREFUL, ONGOING PERFORMANCE MANAGEMENT.

The right contract sets up a program for success, but continuous support and performance management is what helps to achieve it. Unlocking administrative data is crucial for targeting, and for performance evaluation, but it's equally important for providers themselves to understand how they're doing and make changes. Access to data for those providers, then, is an important feature across all stages of a good project: to define the problem, set goals, target beneficiaries, manage the program, and evaluate the results.

PROGRAMS SHOULD COORDINATE TO MAXIMIZE THEIR VALUE.

Programs in the City and County should be thoughtful and proactive in communicating eligibility, coordinating outreach, and sharing learnings. Wherever possible, they should reduce duplication and maximize their joint value—reducing competition between programs for units, homeless individuals, and service providers.



Ultimately, this analysis supports where Sacramento's leaders are heading: toward more, and more intensive, housing options for the most vulnerable. We recommend using an integrated approach toward utilization of public systems—as demonstrated in this work—to direct Permanent Supportive Housing and intensive case management to those who are, or are likely to be, the highest-cost utilizers of the social safety net. Our analysis suggests that doing so will largely offset the cost of the program, while significantly improving outcomes for the persistently homeless. Achieving those twin goals will be a product not only of scaling up these interventions, though; it is also about choosing the right providers, developing thoughtful performance-based contracts, and cultivating new approaches to data that build a culture of active performance management; recommendations in this report are intended to support each of this objectives. Finally, we recommend continued collaboration, mutual support, and active knowledge sharing between various Permanent Supporting Housing programs as they grow to reach more of the highest-utilizing persistently homeless individuals and families in Sacramento.

ABOUT THIS REPORT

This report is the result of a study commissioned jointly by the City of Sacramento, Supervisor Patrick Kennedy of Sacramento County, and Sutter Health. It is an attempt to better understand a key segment of the homeless population in Sacramento—those who are high utilizers of the County and City's services—and assess the value of scaling up intensive supports for that population.

ABOUT SOCIAL FINANCE

Social Finance is a 501(c)(3) nonprofit organization dedicated to mobilizing capital to drive social progress. We believe that everyone deserves the opportunity to thrive, and that social impact financing can play a catalytic role in creating these opportunities. We design and manage public-private partnerships that tackle complex social challenges, such as achievement gaps, health disparities, and prisoner recidivism.

Core to our work is the development of Pay for Success financing, also referred to as Social Impact Bonds. An innovative funding model, Pay for Success helps to measurably improve the lives of people in need by driving resources toward better, more effective programs.

ACKNOWLEDGEMENTS

This work has benefited greatly from the support of our partners in the County and City, the input of Sacramento's homelessness services providers, and feedback from national policy and thought leaders. Special thanks goes to Cindy Cavanaugh, Director of Homeless Initiatives for Sacramento County, and Emily Halcon, Homeless Services Coordinator for the City of Sacramento, for their guidance, enthusiasm, and leadership. We are grateful, too, for the remarkable efforts and problem-solving of County, City, and Continuum of Care data managers, in particular Manjit Kaur with Sacramento Steps Forward, Lisa Sabillo and Dawn Williams with Behavioral Health Services, Mike Herman and Lt. Dan Morrissey with the Sheriff's Department, Chad Augustin and Derek Parker with Sacramento Fire, and Sgt. Greg Galliano with the Police IMPACT team. Finally, we are grateful for the vision and support of Supervisor Patrick Kennedy, Councilmembers Jay Schenirer and Jeff Harris, and Sutter Health's Keri Thomas.









ENDNOTES

- I See report for more detail on methodology of these estimates. Cost estimates derived separately for each system, using various program costing methods. Baseline costs also include two relatively small "non-specific" costs—that is, those not identified at the individual level, but rather averaged across the population. Approximately \$4,000 are derived from the average per-person homeless impacts to various City and County general programs, such as Parks and Recreation or the District Attorney's office; another ~\$3,800 is derived from victimization costs, capturing the cost to society of various criminal acts, including both "tangible" costs (e.g., direct economic losses, property damage) and "intangible" costs (e.g., productivity loss, quality of life).
- 2 This analysis does not include certain local costs (e.g., correctional health, policing and patrol, probation, child welfare, and others), benefits that accrue to the State and Federal governments or to private stakeholders (e.g., emergency medicine, state prisons, and others), or many social benefits for individuals and the wider community (e.g., the economic impact of homelessness, both to local businesses and to homeless individuals themselves).
- 3 See, for example, Dr. Fei Wu and Dr. Max Stevens, "<u>The Services Homeless Single Adults Use and their Associated Costs: An Examination of Utilization Patterns and Expenditures in Los Angeles County over One Fiscal Year," Los Angeles Chief Executive Office Service Integration Branch, Research and Evaluation Services Unit, 2016.</u>
- 4 Daniel Flaming et al., "Home Not Found: The Cost of Homelessness in Silicon Valley," Economic Roundtable, 2015.
- The examples cited define "high utilizers" somewhat differently both in terms of population definitions (e.g., whether the population is defined as "chronically homeless") and services included within "utilization." In terms of costs, both LA and Santa Clara include some degree of physical health costs as well, as reflected in the costs of their public hospitals and health systems, whereas these estimates do not. We do, like LA, reflect some degree of non-County spend in the cost concentration analysis (see footnote below), particularly with regards to shelter costs and billable behavioral health costs, but remove these during the cost-benefit analysis.
- Average annual cost calculated by averaging individual costs across analyzed systems in 2015 and 2016. Note, per above, that cost estimates are not exhaustive. Notable omissions include physical healthcare (deprioritized in part due to limited expected County/City budget impact), correctional health costs (which we were not able to access during this analysis), and any reflection of impact on economic development. While costs are primarily locally focused, some (such as billable BHS costs) may be reflective of other jurisdictional budgets; in the cost-benefit analysis, these costs are removed. "PSH-fit" estimated by reviewing 2015-2016 HMIS records, excluding individuals with any days spent in permanent supportive housing over the past 12 months, as well as those lacking (non-PSH) HMIS interactions in last 12 months, and focusing on those with longer and more-acute needs exhibited by a chronically homeless flag in HMIS and/or a recorded VI-SPDAT score >14 and/or a history of homelessness greater than one year.

- Graphic inset notes: (**) Victimization estimates intended to calculate the cost to society of various criminal acts, both "tangible" costs (e.g., direct economic losses, property damage) and "intangible" costs (e.g., productivity loss, quality of life). Total victimization costs based on list of primary charges for top 250 highest utilizing persistently homeless individuals in 2015-16; for the sake of clarity (to smooth otherwise highly variable data), they have been averaged among this population, rather than applied to the relatively limited set of specific individuals to whom these victimization costs can be attributed. (Note that many charges, including most drug- and alcohol-related charges, do not incur a direct victimization cost.) Average victimization cost based on estimates from McCollister et al., "The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation," Drug Alcohol Depend, 2010; 108(1-2): 98-109. (^) Assumes that high-utilizing homeless populations generate at least average costs to other County and City agencies. Includes non-specific core County costs (such as DHA-Admin, DHA-Aid Payments, Code Enforcement, Regional Parks, District Attorney) and City costs (Police IMPACT team, Parks and Recreation, City Manager) averaged across 2016 point-in-time count population. Key sources: Sacramento Steps Forward, Sacramento Sheriff's Department, Sacramento Behavioral Health Services, Sacramento City and County Cost of Homelessness Estimates, McCollister
- 8 Primary prevention strategies which prevent homelessness in the first place, or secondary prevention strategies which rapidly reconnect families and individuals to housing before they become high utilizers, have significant promise as well. However, for the proposed target population—the persistently homeless who are most costly to Sacramento—a focus on reducing the impact of chronic, complex challenges is likely the right first step toward self-sufficiency.
- 9 See "Intervention and target population assessment" section for additional detail on the evidence underlying this intervention.
- IO Anirban Basu et al., "Comparative Cost Analysis of Housing and Case Management Program for Chronically Ill Homeless Adults Compared to Usual Care," Health Serv Res. 2012 Feb: 523–543.
- II Dr. Craig Coldwell et al., "<u>The Effectiveness of Assertive</u> <u>Community Treatment for Homeless Populations With Severe</u> <u>Mental Illness: A Meta-Analysis</u>," The American Journal of Psychiatry, Volume 164, Issue 3, March 2007: 393-399.
- 12 Reference accessed from The Corporation for Supportive Housing, "Pay for Success Feasibility Report: ECHO Austin/Travis County," 2016.
- 13 For a comprehensive summary of relevant literature, see Substance Abuse and Mental Health Services Administration, "Permanent Supportive Housing: The Evidence," US Department of Health and Human Services, 2010.
- 14 LA County Housing for Health, "Flexible Supportive Housing Pool."
- 15 The expected benefit calculation of this analysis works from the baseline costs collected in the methodology described

above, and applies an effect size extracted from the intervention literature. The expected impact assumptions, and therefore the expected benefit shown below, represent mid-range estimates from the literature; as outlined in the Appendix, a range of effect sizes have been found for each of the outcomes detailed. In this calculation, effect sizes are applied only to outcomes that the literature suggests Permanent Supportive Housing can impact. Thus, not all baseline costs will be impacted. For example, the majority of the County's behavioral health costs are not emergency services, but rather outpatient supports; we see no compelling evidence that these costs will go down. Indeed, due to the nature of the intervention, the total costs spend on outpatient services will increase, driven by new resources with will come with scaling services for permanent housing. On the other hand, many inpatient services will see a decrease, as more persistently homeless individuals are moved into stable housing and given access to intensive supports.

16 23,000 per year. Delivery costs estimated from Sacramento stakeholder and service provider interviews, and: LA County's Flexible Housing Subsidy Pool, which estimates that the total rental subsidy and rental administrative fee for clients is ~\$12,600 per year, and total cost of high-acuity care (at 20:1 ratios) is ~\$5,400 per year. Abt Associates, "Flexible Housing Subsidy Pool Brief: Evaluation of the Conrad N. Hilton Foundation Chronic Homelessness Initiative," 2017. Researchers at Columbia estimated that in New York City, the total cost of affordable housing, rental subsidy, and services was ~\$23,200. Dr. Angela Aidala et al., "Frequent Users Service Enhancement - 'Fuse' Initiative: New York City Fuse II Evaluation Report," Columbia University Mailman School of Public Health, 2014. On the higher end of the spectrum, researchers at CSH estimate that, in Austin Texas, the cost of an intensive permanent supportive housing program is ~\$28,550, unadjusted for rental subsidies or Medicaid reimbursement. The Corporation for Supportive Housing, "Pay for Success Feasibility Report: ECHO Austin/Travis County," 2016. Sacramento's Fair Market Rent (2017) is ~\$8,650 for an efficiency unit, and \$9,850 for a 1 bedroom. County estimates suggest that such a program would require ~\$5,400 per year in services support, and \$8,180 per person in property related services and housing subsidies. Sacramento County Board of Supervisors, "County of Sacramento Initiatives To Reduce Homelessness," 21 March 2017. In our analysis, we assumed that a 250-person intervention would have access to 150 HCVs; that housing in Sacramento could require a modest "top-up" and a housing services coordinator in order to secure rental in a tight market; that some individuals particularly individuals who would not be otherwise eligible for permanent supportive housing, such as those who have spent significant time in jail or prison, or those without documented disabilities—will require the full cost of housing; and that ~50% of supportive services will be billable to Medi-Cal. Medi-Cal billing rates come from experiences of national permanent housing thought leaders, including those implementing Pay for Success projects around the country. Note that these costs do not include a specific allocation for administration, technology services, or other startup costs.

17 Average annual costs to relevant systems by persistently homeless individuals across calendar years 2015-16.

- 18 See, "Return on investment approach" section for additional details, jurisdictional estimates, and sensitivities.
- 19 We estimated total costs of the model to be ~\$11,000 per person as described above. Benefits to the County are based on medium-level effect sizes from the literature, and spread across impacts to the jail system (bookings and bed days), behavioral health system (psychiatric inpatient days), shelter system (emergency shelter days), and additional costs (victimization and miscellaneous). Total benefits of this program accruing to the County estimated at ~\$10,000. Assumes County receives 20% of total emergency shelter benefit, 50% of total victimization benefit, and 75% of miscellaneous benefits.
- We estimated total costs of the model to be ~\$11,000 per person as described above. Benefits to the City are based on medium-range effect sizes from the literature, and spread across impacts to the shelter system (emergency shelter days), City Fire Department (EMS transports) and additional costs (victimization and miscellaneous). Total benefits of this program are ~\$11,000 per person based on reductions to the aforementioned services against baseline utilization for high utilizers of City systems. Even without accounting for distribution of benefit accrual, this figure is noticeably lower than the benefits accrued by high utilizers to County systems, and lower still than those to high utilizers of County and City systems jointly. We estimate that ~\$3,300 of these total benefits will accrue to the City, as shelter (assumed City received 20% of total emergency shelter benefit), victimization (assumed City received 50% of total victimization benefit) and miscellaneous benefits (assumed City received 25% of misc. benefits) are shared with other jurisdictions (e.g. County, State, Federal).
- 2I See, for example, The Beeck Center, "<u>Funding for Results:</u> <u>How Governments Can Pay for Outcomes</u>," November 2015; and, Emma Thompkinson, "<u>Outcome-based contracting for human services</u>," Evidence Base, issue I: 2016.
- See, for example, Steven G. Klein, "<u>Using Performance-Based Funding to Incentivize Change</u>," RTI International, January 2015.
- 23 For an excellent overview of potential challenges associated with performance-based contracts, see Patrick Lester, "<u>The Promise and Peril of an 'Outcomes Mindset</u>," Stanford Social Innovation Review, January 2016.

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