

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**

Chief Executive Office
Service Integration Branch
Research and Evaluation Services Unit

Written at the Request of the Chief Executive Office's *Ad Hoc* Homeless Initiative

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The Services Homeless Single Adults Use and their Associated Costs: Executive Summary

Background

This executive summary provides a synopsis of a report the Chief Executive Office's Research and Evaluation Services unit (CEO/RES) has prepared on the costs associated with services homeless single adults used through six County agencies in Fiscal Year (FY) 2014-15. The analysis informing RES's cost estimates was conducted at the direction of the CEO's *ad hoc* Homeless Initiative, which is tasked with developing a coordinated set of recommended County strategies to combat homelessness. RES's report is based on a study population of almost 150,000 single adults who experienced homelessness for varying periods of time during the 12-month observation period. The findings offer an overview of the fiscal significance of homelessness for the County in general, as well as from the point of view of the individual County agencies most intensively involved with the provision of services to homeless men and women. In doing so, the analyses establish a basis in empirical data for the recommended strategies the Homeless Initiative will deliver to the Board of Supervisors.

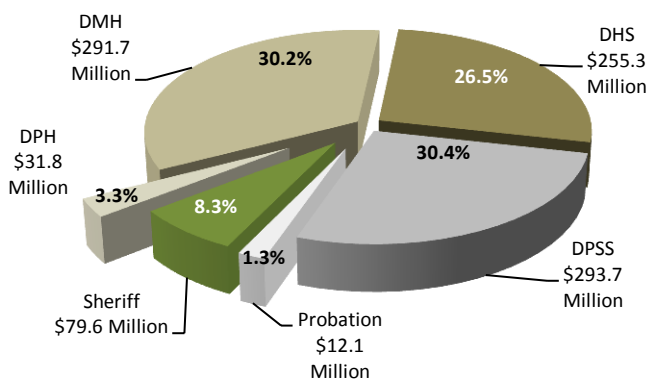
Overall Utilization and its Costs

The development of a strategic approach to homelessness for Los Angeles County reflects the Board's recognition of the problem's urgency both as a growing humanitarian crisis and as an ongoing strain on limited public resources. With respect to the latter, RES's report is consistent with a mounting body of research showing the stark fiscal implications homelessness presents for public administrators and the agencies and programs they manage. The report examines Los Angeles County's departments of Health Services (DHS), Mental Health (DMH), Public Health (DPH), Public Social Services (DPSS), the Sheriff, and Probation, six agencies that in FY 2014-15 spent an estimated combined total of \$965 million in providing services, benefits and care to the population of homeless single adults that forms the basis for RES's analyses (Figure 1).

Utilization and Spending by General Service Area

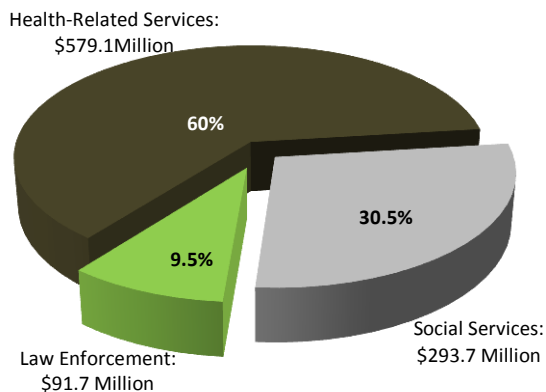
As shown in Figure 2, three-fifths of the County's estimated spending on the study population in FY 2014-15 paid for health-related services provided through the County's three health agencies (\$579.1 Million). DMH accounted for more than half of this health expenditure (\$291.7 Million), and DMH and DHS combined accounted

**Figure1. Expenditures on Homeless Single Adults,
by County Agency, FY 2014-15***



*Estimated Gross Total Expenditure: \$965 Million

**Figure 2. Expenditures on Homeless Single Adults
by General Service Area, FY 2014-15***



*Estimated Gross Total Expenditure: \$965 Million

for all but roughly 5%. DPSS incurred the largest costs of any of the six agencies (\$293.7 million) in providing cash benefits and homeless services through the General Relief (GR) Program, as well as Food Stamps benefits through the CalFresh program. Law enforcement spending on Sheriff's Department arrests and jail days, along with rehabilitative services provided through Probation, accounted for 9.5% of the total combined expenditure.

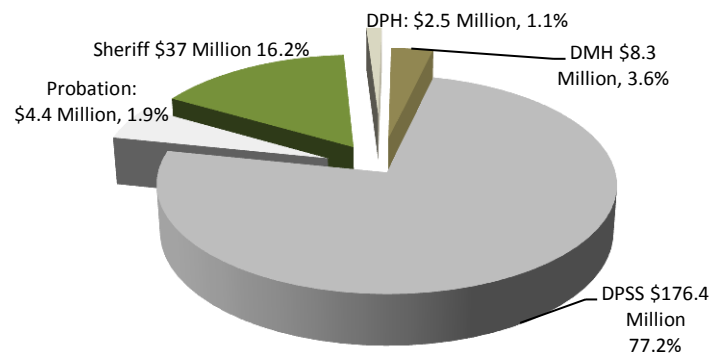
Net County Costs

Given the expansion of Medi-Cal at the State level on January 1 of 2014, there may be some temptation to take comfort in the relative prominence of health-related expenditures observed in these costs and the presumed revenue this might suggest. However, while it is true that health expenditures comprise 60% of the costs shown in Figure 2, RES's report estimates that roughly one-third of the spending across five of the six agencies examined – \$228.6 million out of \$710 million – was Net County Cost (NCC), which refers to spending that is not based on revenue and therefore represents charges to the County's General Fund.¹ Largely due to payment of GR benefits, which are entirely NCC, DPSS incurred the most NCC among the agencies considered (\$176.4 million). The \$37 million in NCC attached to Sheriff's Department arrests and jail stays comprises 16.2% of the total, and when these dollars are combined with Probation's NCC for the fiscal year (\$4.4 million), law enforcement accounts for close to 18% of the total NCC. The two health agencies included in the calculations – DMH and DPH – account for the remaining \$10.8 million, 5% of the total NCC for the fiscal year.

Figure 3. Net County Cost+ Expenditures on Homeless Single Adults, by Agency, FY 2014-15*

+Estimated Combined NCC: \$228.6 Million*

*The Percentages given are of this Combined Total NCC



Study Population

These cost estimates are based on a study population comprised of 148,815 single adults who each experienced at least one spell of homelessness between July 2014 and June 2015 (Table 1). The study group was assembled in a collaborative effort involving three County agencies – DHS, DPSS and Probation – each of which, upon request, provided files of single-adult clients who were flagged for being homeless in a service record during FY 2014-15.

Table 1. Homeless Single Adult Master File Data Sources

Agency	Data Source	Clients to Study Group+
DPSS	LEADER / GR	114,037
LAHSA	HMIS	34,640
DHS	EDR/ORCHID	47,431
Probation	Probation Systems	2,795

+ These are counts of *unique clients by agency*

*The homeless DHS, Probation and DCFS clients added to the master file were encrypted and transferred using ELP protocols but were obtained through special requests because the homeless data flags in the administrative records kept by these agencies are not captured in ELP.

¹DHS's FY 2014-15 costs and NCC are not included in this calculation for reasons described in section 2.2.1 of the full-length report.

The Los Angeles Homeless Services Authority also contributed a file of single adults with at least one record in the Homeless Management Information System (HMIS) of homeless services utilization during the 12-month observation period (Table 1). Clients in the files from the four agencies were assimilated into a composite file and then unduplicated, a process yielding the master study population of 148,815 single adults.

Data on Service Utilization and Service Costs

The estimates presented in RES's report consider three different types of services and costs:

Direct Services and Benefits are those that can be directly attributed to individual utilizers of services such as costs associated with inpatient and outpatient health services, booking and jail day costs, and benefit payments to GR recipients. Records of the direct services costs included in the analyses are available to RES through the Enterprise Linkages Project (ELP) data warehouse and other data sources across the six County agencies considered in the analyses. Table 2 shows RES's direct service cost estimates for services provided to the study population in FY 2014-15, by agency.

Agency	Clients	Services	Costs	
			NCC	Total
DMH	39,073	1,044,874	\$6,161,044	\$252,245,388
*DHS	47,431	113,189	+	\$246,647,125
DPH	6,939	10,276	\$0	\$22,120,417
DPSS	114,037	688,766	\$176,443,752	\$241,060,006
Sheriff	14,754	19,433	\$32,824,849	\$74,133,443
*Probation	2,795	21,726	\$4,409,780	\$12,098,348
Total	148,815	1,898,264	\$219,839,425	\$848,304,728
+Section 2.2.1 provides an explanation for why DHS's NCC is excluded from this report.				
+These expenditures include administrative costs.				

Non-Individualized Program Costs are expenditures attached to programs for which utilization of services at an individual level is either not recorded, not reliable, or was not available at the time this report was being prepared. Examples include the costs attributed to providing patients with supportive housing through DHS's Housing for Health Program and the cost of services provided through the Sheriff's Community Transition Unit (CTU). For these types of

A total expenditure amount for FY 2014-15 was obtained and, to the extent possible, counts of the numbers of clients and numbers of *homeless* clients using services through these programs during the fiscal year were used to produce an estimate of the portion of the program costs attributable to homeless single adults. Table 3 shows the non-individualized expenditures added to RES's cost estimates, by agency.

Agency	Total	NCC	
		\$	%
DHS	\$8,616,167	+	+
DMH	\$18,495,731	\$1,135,000	6.1
DPH	\$8,363,528	\$2,514,024	30.0
DPSS	\$21,771,000	\$8,186,000	37.6
Sheriff	\$ 2,562,841	\$720,967	28.1
Total	\$59,809,267	\$12,555,991	21.0
+Section 2.2.1 of the full report provides an explanation for why DHS's NCC is excluded from this report.			

Administration: The third type of cost included in RES's estimates is administrative costs. All County agencies have stand-alone administrative appropriations in their annual budgets. These types of expenditures are an often overlooked but nevertheless critical component of the overall costs County agencies incur in providing services to their clients. The methods used to include these costs in RES's estimates varied depending on the type of information that was readily available.² Table 4 shows the administrative costs added to RES cost estimates, by agency.

Table 4. Study Group Administrative Cost Estimates				
Agency	Total	NCC		
		\$	%	
DHS	\$50,797,395	+		+
DMH	\$20,961,592	\$962,137		4.6
DPH	\$1,659,031	\$0		0
DPSS	\$30,884,710	\$16,040,466		51.9
Sheriff	\$2,914,459	\$2,701,703		92.7
*Probation	\$1,863,146	\$1,620,937		
Total	\$109,080,333	\$21,325,243		19.6
+Section 2.2.1 of the full report provides an explanation for why DHS's NCC is excluded from this report.				
*The estimated administrative costs for Probation, as well as the NCC attached to these costs replicate the proportions shown in the County's Recommended FY 2014-15 Budget, where administrative costs are 15.4% of the department's gross appropriation for the year and are 87% NCC.				

Figure 4. Distribution of Study Population Costs by Cost Type, FY 2014-15⁵

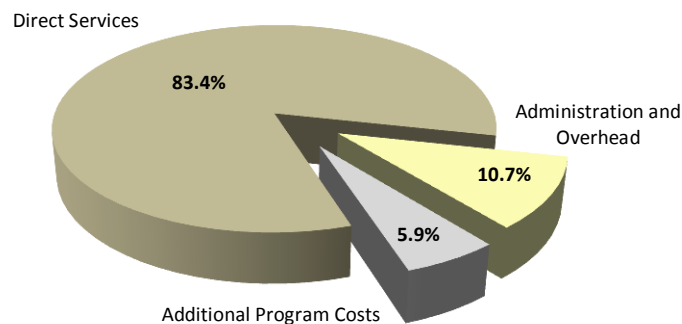


Table 5 summarizes the full cost estimates presented in the report. The six agencies examined spent an estimated combined total of \$964.5 million in providing services to the study population in FY 2014-15. The average cost per person over 12 months was \$6,481. DPSS spent the most in terms of Net County Cost (\$176.4 million), almost five times more than the Sheriff (roughly \$37 million). This is largely driven by GR, which is almost entirely NCC, as well as the high proportion of study population subjects who are GR recipients.

²For DHS and Probation, administrative costs are included in other service costs that are part of our estimates and, as a result of this, no additional calculation or extrapolation is needed. In the case of DPSS, FY 2014-15 administrative costs for GR and Calfresh were made available and RES performed some extrapolations to estimate the portion of these costs attributable to adults in the study population who utilized these benefits. For DMH, DPH and the Sheriff, administrative costs were not available to RES directly, which necessitated extrapolations based on information provided in the County's FY 2014-15 Recommended Budget.

Table 5. Costs for Services Provided to Homeless Single Adults in Los Angeles County, FY 2014-15

	*Client N=	% Study Population+	Estimated Expenditures			
			Direct Services**	TOTAL	NCC	Average Per Person
DHS	47,431	31.8	\$246,647,125	\$255,263,292	+++	\$5,381
DMH	39,073	26.3	\$252,245,388	\$291,702,711	\$8,258,181	\$7,466
DPH	6,939	4.7	\$22,120,417	\$32,142,976	\$2,514,024	\$4,632
DPSS	114,037	76.6	\$241,060,006	\$293,715,716	\$176,443,752	\$2,576
Sheriff	14,754	9.9	\$74,133,443	\$79,610,743	\$36,968,486	\$5,397
Probation	2,795	1.8	\$12,098,348	\$12,098,348	\$4,409,780	\$4,328
OVERALL TOTAL	148,815	100	\$848,304,728	\$964,533,787	\$228,612,438	\$6,481
Most Costly 5%	7,441	5.0	\$370,288,623	\$381,181,654	\$12,671,254	\$51,227
Most Costly 10%	14,882	10.0	\$476,865,568	\$499,132,698	\$27,474,588	\$33,539
Most Costly 20%	29,763	20.0	\$591,976,118	\$635,675,239	\$55,499,664	\$21,358
HMIS Chronic Homeless	7,675	5.2	\$54,747,979	\$60,467,810	\$5,134,767	\$7,879

*These are Unique Totals

+These percentages are based on the full study population, $n=148,815$

++In this context, the *Direct Services* category is intended to exclude both administrative expenditures and costs associated with programs that are recorded at an aggregate level in terms of utilization of the services they provide.

+++Section 2.2.1 of the full-length report provides an explanation for why DHS's NCC is excluded from this report.

Key Findings

The Significance of Mental Health and Substance Abuse Services

The spread separating DMH from DHS and the Sheriff with respect to cost *per capita* is close to 40%. This is particularly remarkable given that close to one quarter of DHS's inpatient and outpatient costs with respect to the study population were expenditures on psychiatric emergencies and hospitalizations (roughly \$58 million of \$246.6 million). The sum of DHS's estimated psychiatric-related costs and DMH's total costs - roughly \$350 million over 12 months - suggests that 60% of the County's health spending on homeless single adults and more than one-third of the County's overall spending on this population – are funds that pay for mental health treatment (Figure 5). When the study population's DPH/SAPC costs (\$23.8 million) are added to the mental health/psychiatric total, the resulting implication is that close to 65% of the County's health spending on homeless single adults and two fifths of the County's overall spending on this population funds services for mental health and/or substance abuse treatment (Figures 5 and 6).

Figure 5. Combined Mental Health and Substance Abuse Costs+ in Relation to Health Costs Overall* for Services Provided to the Study Population, FY 2014-15

*Estimated Total Health Expenditure: \$579.1 Million

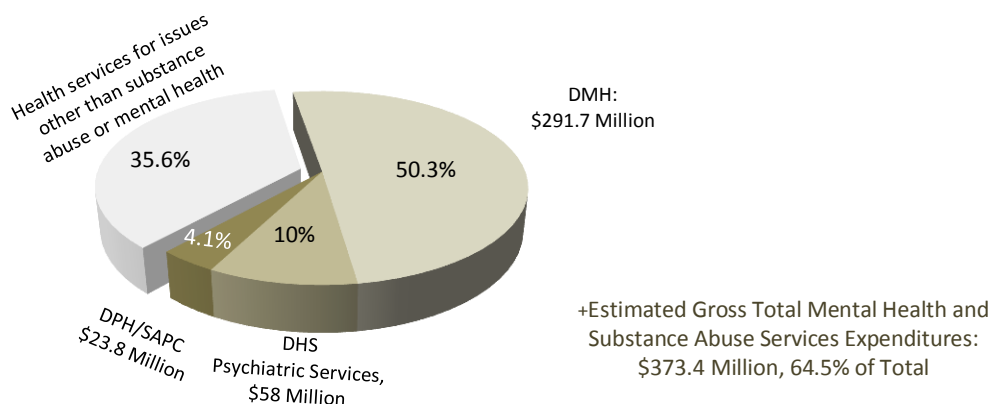
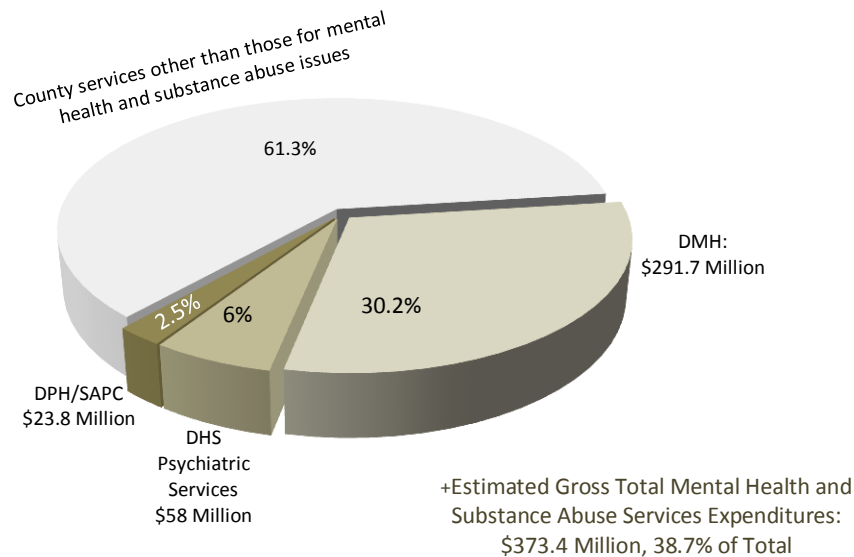


Figure 6. Estimated County Mental Health and Substance Abuse Expenditures+ in Relation to Overall Costs, FY 2014-15*

*Estimated Gross Total Expenditure Overall: \$964.5



Inpatient and Emergency Services

From the point of view of general service areas, mental health treatment is the biggest single component of the County's costs with respect to homeless adults. Within the domain of mental health services, inpatient and emergency treatments are the primary factors driving spending. While only 13% of the DMH patients in RES's study population required acute inpatient and/or residential services ($n=5,291$ adults), these patients accounted for roughly one-fifth of the DMH inpatient and outpatient costs for the study population over the observation period, at an average cost per patient (\$9,316) roughly 25% higher than the average for all the DMH patients in the study population. Psychiatric hospitalizations accounted for roughly 30% of DHS's inpatient costs and psychiatric emergencies accounted for close to 38% of the department's emergency costs.

Inmates and Probationers

RES's analysis of County law enforcement data suggests one in ten adults in the study population were arrested by the Sheriff's Department in FY 2014-15 ($n=14,754$ arrestees). The Department spent an average of \$5,396 on these arrestees in over 12 months and close to \$80 million overall (\$37 million NCC, 46.5% NCC). These expenditures paid for booking, jail days, medical services provided through the jail ward, and transitional services provided through the department's Community Transitions Unit. Approximately seven in ten of the study population arrests involved time in custody that lasted no more than one month, but more than one in ten led to jail stays that lasted more than three months, and these lengthier stays accounted for more than half the jail costs for the study population (\$38.4 Million out of \$74.1 million). The costs of arrests and jail stays accounted for almost all of the law enforcement costs associated with the study population, as less than 2% of the study group received services through Probation during FY 2014-15.

DPSS, the Primary Source of Basic Survival for the County's Homeless Adults

DPSS incurred the largest overall costs among the agencies RES examined (\$293.7 Million). Almost four of every five adults in the study population was a DPSS client in FY 2014-15. As the provider of both a monthly cash stipend through the GR program and the distributor of Federal Food Stamp benefits through the CalFresh program, DPSS is the main source of basic subsistence for the homeless single adults in the County and a critical system of last resort. More than 7 out of 10 adults who received GR benefits during FY 2014-15 experienced a spell of homelessness at some point over the 12-months period. Two-thirds of these recipients experienced a disability that prevented them from participating in the GR program's job- readiness activities for at least part of the time they received benefits, and more than 40% were coded by the department as unemployable during all the months in which they received benefits.

High-Volume Service Users, the Most Significant Driver of the Costs Associated with Homelessness

The concentration of spending on a small minority of high-volume service users is both the most striking aspect of RES's results and one that is consistent with the current state of knowledge on the costs associated with homelessness. This pattern, as shown in Figure 7, is one observed from the standpoint of the County as a whole, as well as that of individual County agencies. While the average cost per person for the full study group across the six County agencies was \$6,481 for the 12-month observation period, the average among the most expensive 5% ($n=7,441$ adults) was eight times higher (\$51,227). The adults in this 5% subgroup accounted for \$381.1 Million in service costs, which is almost 40% of the total County expenditure on the study population. The intensity of concentrated spending slows somewhat thereafter, but the most expensive fifth of the study population ($n=29,763$ adults) nevertheless accounts for two-thirds of the County's overall cost for the fiscal year.

Figure 7. County Expenditures* on the Most Expensive Adults in the Study Population, FY 2014-15+



*The average cost per person shown in the figure is based on expenditures across all six County agencies combined.

+DPSS and Probation are not shown because their benefits and services are fixed and provided on a recurrent and routine basis such that their costs per person do not vary dramatically (in contrast to the four departments included in Figure 7).

Fairly similar spending and utilization patterns are observed in looking at DMH, DPH and the Sheriff. In the case of DHS, the concentration is considerably more intensified. DHS's average cost per person for the most costly 5% of its patients in the study population ($n=4,743$ adults) is \$80,015. This subgroup, which comprises only 3.2% of RES's full study population, consumed \$189.8 million in DHS services, which is almost three-quarters of the department's expenditures on all the patients in the study group and roughly one-fifth of the County's costs on the entire study group. The most expensive 20% account for all but a small fraction of DHS's costs for services provided to the study population.

The Chronically-Homeless Subgroup

The chronically-homeless subgroup within the study population consists of 7,675 adults.³ Although there is some overlap between this subgroup and the most costly segments of the study population, the concentration of spending on the chronically homeless group is considerably less intensive. At the same time, however, this subgroup's average cost per person in looking at County services overall (\$7,879) is 21.6% higher than average and expenditures on these persons (\$60.5 million) constitute 6.3% of the County's overall spending on the study population.

Homeless Costs in the Context of Overall Departmental Resources

For each agency included in the report, RES measured the estimated expenditures in relation to a larger pool – or denominator - of departmental funding for services provided to adults. This was done to convey a sense of the relative impact of homelessness on departmental resources. This relational aspect of the overall analysis is imperfect and its intent is limited to a general approximation of the fiscal and financial significance of homelessness in Los Angeles County.⁴

³The HMIS file LAHSA made available to RES for the report included 7,675 persons flagged in the system because they met the federal Housing and Urban Development (HUD) criteria for categorization as *chronically homeless*. These adults comprise 5.2% of the study population. As adopted by HUD, the most up-to-date Federal definition of a *chronically homeless* person is one who: (a) is "homeless and lives in a place not meant for human habitation, a safe haven, or in an emergency shelter; (b) Has been homeless and living or residing in a place not meant for human habitation, a safe haven, or in an emergency shelter continuously for at least one year or on at least four separate occasions in the last 3 years; and (c) Can be diagnosed with one or more of the following conditions: substance use disorder, serious mental illness, developmental disability, post-traumatic stress disorder, cognitive impairments resulting from brain injury, or chronic physical illness or disability." This definition includes any "individual who has been residing in an institutional care facility, including a jail, substance abuse or mental health treatment facility, hospital, or other similar facility, for fewer than 90 days and met all of the criteria [a, b and c] before entering that facility"

⁴In making decisions about the inclusion and exclusion of funds from these larger gross financial denominators, a number of complexities prevent the uniform application of a standard set of business rules to all departments. Moreover, it is important to emphasize that budgets are related but analytically distinct from actual expenditures. In the case of DMH, as well as for part of the analysis of Probation, RES was able to build a larger departmental denominators based on information provided the unit received actual expenditures. For the other four other agencies, however, the funding denominators relied on information provided in the County's Recommended Budget for FY 2014-15. In these latter cases, RES proceeded with the assumption that budgets could be approached as a reasonable proxy for expenditures for the purposes of producing general estimates.

Figure 8. Combined Spending on the Study Group across Six County Agencies in Relation to their Approximate Total Expenditures on Adults Overall, FY 2014-15

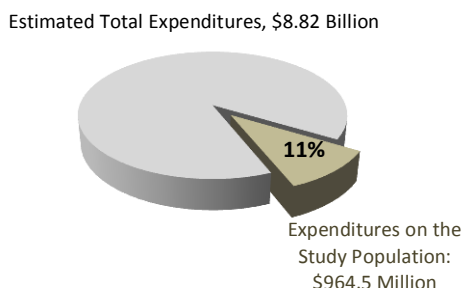
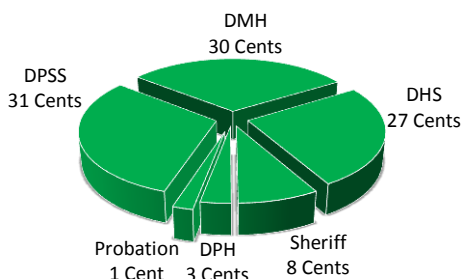


Figure 9. Estimated Distribution of Every County Dollar Spent on Providing Services to Homeless Single Adults, FY 2014-15



Given this caveat, the sum of these six departmental denominators, represented in Figure 8, is RES's best effort to produce a reasonable approximation of the combined funding these agencies deployed in providing services to adults during FY 2014-15. Within this universe of overall spending, slightly more than \$1 out of every \$9 was spent on services provided to the study population. DPSS and DMH each account for about 30 cents on this dollar and DHS's share is 27 cents. There is a significant spread separating these three agencies from the others. The Sheriff's share is about 8 cents on the dollar, DPH accounts for three cents, and Probation accounts for a penny (Figure 9).

Maximizing the Effectiveness of County Service Dollars

The most general fiscal implication of RES's report is that Los Angeles County spends close to \$1 Billion per year through the 6 departments included in the analyses in providing services and benefits to single adults who experience varying spells of homelessness in the course of a 12-month period. Additional, smaller costs are incurred by departments that are not included in this report. The establishment of a coordinated policy and

program environment that makes the most effective use of these resources is one of the fundamental objectives for the CEO's *ad hoc* Homeless Initiative in delivering a set of coordinated County strategies to combat homelessness. RES's analyses suggest that 5% of the homeless single adult population in the County - roughly 1 out of every 20 - consumes 40 cents of every dollar spent on the full population. Making inroads into the utilization patterns of this small segment of the population could ultimately free up funds to be reinvested strategically in ongoing efforts to combat homelessness. Accomplishing this will necessitate the implementation of more efficient and lasting alternatives that break repetitive cycles of Emergency Room visits, hospitalizations, expensive psychiatric inpatient treatments, arrests and re-arrests, etc.

Homelessness is not merely a problem of dollars and cents but, more importantly, one of the defining humanitarian issues Los Angeles County faces. Reducing and eventually ending the problem will not be easy or painless but is consistent with basic values of citizenship, fairness and decency. In forming the *ad hoc* Homeless Initiative, the Board of Supervisors and the County's Chief Executive Officer have taken a decisive step in the process. The goal in preparing the report has been to arm the Initiative with information needed to present the Board with an effectively coordinated set of recommendations, one that provides the County with guidance in facing the difficult but worthwhile challenges that lay ahead and leads to enduring solutions.

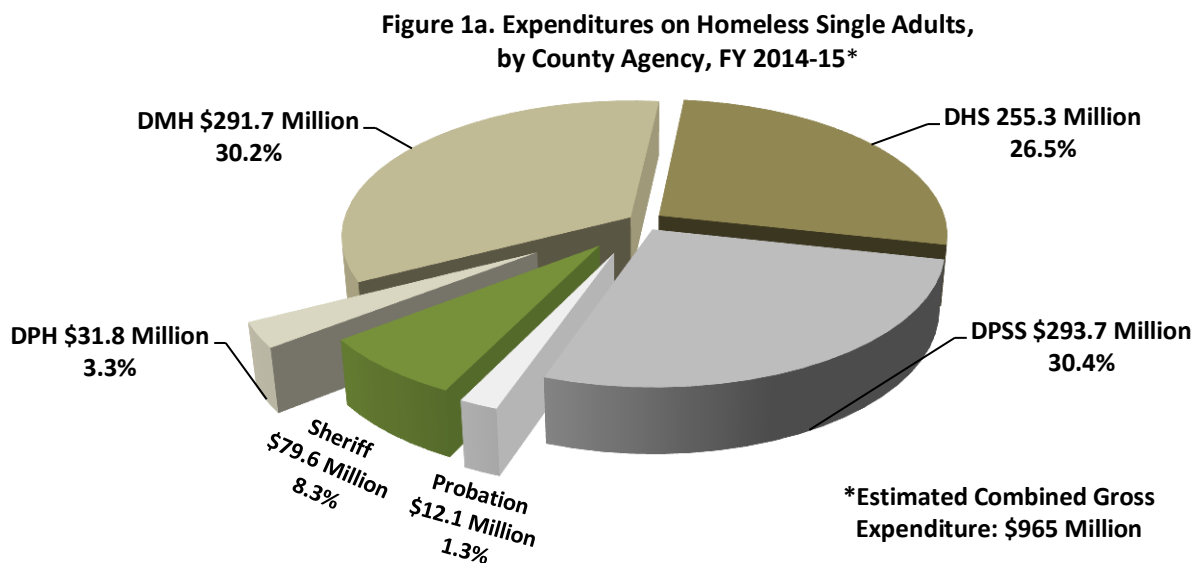
1. Introduction

This report presents estimates of the costs six Los Angeles County agencies incurred in providing services to roughly 150,000 single adults who experienced homelessness for varying periods of time during Fiscal Year (FY) 2014-15. The analysis informing the estimates was conducted at the direction of the Chief Executive Office's (CEO's) *Ad Hoc* Homeless Initiative, which is tasked with developing a coordinated set of recommended County strategies to combat homelessness. The information provided in what follows offers an overview of the fiscal significance of homelessness for the County as a whole, as well as from the point of view of the individual County agencies most intensively involved with the provision of services to homeless men and women. The analyses establish a basis in empirical data for the recommended strategies the Homeless Initiative will deliver to the Board of Supervisors.

1.1. Estimated Gross Total Expenditure in FY 2014-15

The development of a strategic approach to homelessness for Los Angeles County reflects the Board's recognition of the problem's urgency both as a growing humanitarian crisis and as an ongoing strain on limited public resources. With respect to the latter, this report is consistent with a growing body of research showing the stark fiscal implications homelessness presents for public administrators and the agencies and programs they manage. In the chapters that follow, we examine Los Angeles County's departments of Health Services (DHS), Mental Health (DMH), Public Health (DPH), Public Social Services (DPSS), the Sheriff, and Probation. In FY 2014-15, these six agencies spent an estimated combined gross total of \$965 million in providing services, benefits and care to the population of homeless single adults that forms the basis for our analyses (Figure 1a).

From the standpoint of all six agencies combined, the average cost per person over the 12 months of observation was \$6,481. Most significantly, however, the average cost among the most costly 5% of these service users ($n=7,441$ homeless single adults) was \$51,227 and these subjects accounted for almost 40% of the total combined annual gross costs. As will be discussed in detail in the final chapter of this report, a small minority of high-volume service users are the most impactful driver of the overall expenditures reflected in our estimates.



1.2. Spending within General Service Areas

As shown in Figure 1b, three-fifths of the estimated gross spending on single adults in the County who experienced homelessness in FY 2014-15 paid for health-related services provided through the County's three health agencies (\$579.1 Million). DMH accounted for more than half of this health expenditure (\$291.7 Million), and DMH and DHS combined accounted for all but about 5%. DPSS incurred the largest costs of any of the six agencies (\$293.7 million) in providing cash benefits and homeless services through the General Relief Program, as well as Food Stamps benefits through the CalFresh program. Law enforcement spending on Sheriff's Department arrests and jail days, along with rehabilitative services provided through Probation, accounted for 9.5% of the total combined expenditure.

1.3. Net County Costs

Given the expansion of Medi-Cal at the State level on January 1 of 2014, there may be some temptation to take comfort in the relative prominence of health-related expenditures observed in these costs and the presumed revenue this might suggest. However, while it is true that health expenditures comprise approximately 60% of the costs shown in Figure 1b, we estimate that roughly one-third of the spending across five of the six agencies examined – \$228.6 million out of \$710 million – was Net County Cost (NCC), referring to spending that is not driven by net revenue and therefore represents charges to the County's General Fund.⁵ Largely due to payment of General Relief Benefits, which are almost entirely NCC, DPSS incurred the most NCC among the agencies considered (\$176.4 million). The \$37 million in NCC attached to Sheriff's Department arrests and jail stays comprise 16.2% of the total, and when these dollars are combined with Probation's NCC

Figure 1b. Expenditures on Homeless Single Adults by General Service Area, FY 2014-15

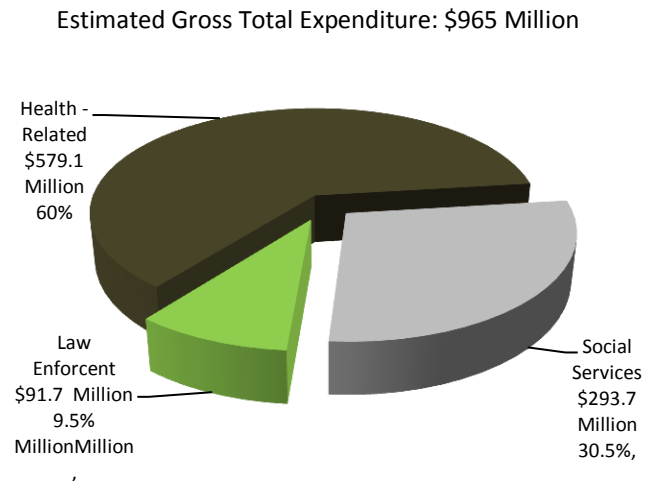
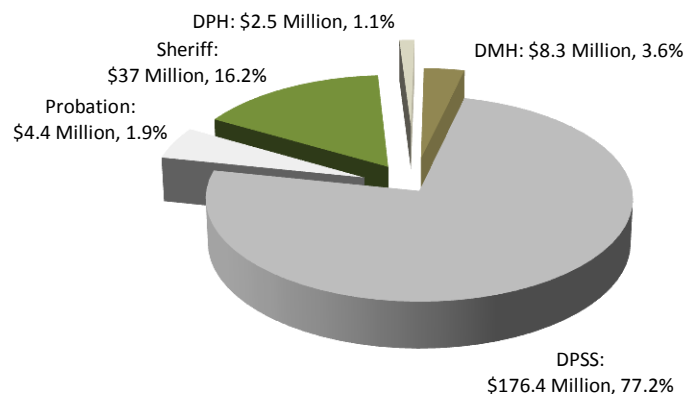


Figure 1C. Net County Cost Expenditures on Homeless Single Adults, by Agency+

Estimated Combined NCC: \$228.6 Million



*The Percentages given are of the combined total NCC

+Section 2.2.1 provides an explanation for why DHS's NCC is excluded from

⁵ DHS's NCC is not included in this calculation for reasons that will be described in Chapter 2 of this report (Section 2.2.1).

for the fiscal year (\$4.4 million), law enforcement accounts for close to 18% of the total NCC. The two health agencies included in the calculations – DMH and DPH – account for the remaining \$10.8 million, which comprises close to 5% of the total NCC for the fiscal year.

1.4. The Study Population

Table 1a. Homeless Single Adult Master File Data Sources		
Agency	Data Source	Clients to Study Group+
DPSS	LEADER / GR	114,037
LAHSA	HMIS	34,640
DHS	EDR/ORCHID	47,431
Probation	Probation Systems	2,795
+ These are counts of <i>unique clients by agency</i>		
*The homeless DHS and Probation clients added to the master file were encrypted and transferred using ELP protocols but were obtained through special requests because the homeless data flags in the administrative records kept by these agencies are not captured in ELP		

These cost estimates are based on a study population comprised of 148,815 unaccompanied adults who each experienced at least one spell of homelessness between July 2015 and June 2015 (Table 1a). The study group was assembled in a collaborative effort with three County agencies – DHS, DPSS and Probation – each of which, upon request, provided files of single-adult clients who were flagged as

being homeless in a service record during FY 2014-15. The Los Angeles Homeless Services Authority similarly provided a file of adults with at least one record in the Homeless Management Information System (HMIS) of using homeless services during the 12-month observation period (Table 1a). Clients in the files from the four agencies were assimilated into a composite file and then unduplicated. This process yielded a master study population file of 148,815 single adults who experienced homelessness in FY 2014-15.

1.4.1. Demographic Composition

Table 1b shows the study population's demographic composition. Close to 70% of the subjects are male and their average age during the study period was 41, with almost four-fifths of the group was 27 years of age or older.⁶ Slightly more than 40% is African-American, 35% is White, close to 20 percent is Hispanic, and roughly 5% are "other," a category which includes Asian and Pacific Islanders and American Indians.

Table 1b. Study Group Demographic Characteristics.		
Total Study Group N=148,815		
Age (Average = 41)	#	% of Study Group
18 to 26 (TAY)	32,555	21.87
27 to 45	57,028	38.34
46 to 64	55,347	37.20
65+	3,858	2.57
Gender	#	% of Study Group
Male	102,646	68.98
Female	45,115	30.32
Other	1,054	0.71
Race/Ethnicity	#	% of Study Group
White	51,993	34.81
African American	59,714	40.39
Hispanic	29,558	19.57
Others	7,550	5.23

1.4.2. The Exhaustiveness of the Study Population

To date, there is no uniformly applied homeless indicator in County service records, nor has a countywide mandate been imposed on service providers to ask their clients if they are homeless and to flag those who

⁶ This is the average age of the study population subjects based on the earliest record in FY 2014-15 that led to their inclusion in the study population (i.e. either DHS, DPSS or Probation service record in which they were flagged for homelessness or a record of using services recorded in HMIS).

say they are in agency-level service records. A sufficiently-sized study population therefore had to be built on data from the limited group of County agencies that track homelessness within their client populations. However, subjects were only included in the study group insofar as they used services these agencies provided during FY 2014-15 *and* were recorded as being homeless at the point in time of at least one of the service episodes.

1.4.2.1. A Comparison with LAHSA's Homeless Population Estimate

Table 1c. Study Population versus LAHSA 2015 Estimate		
	<i>n</i> =	
Study Population	148,815 single adults who experienced Homelessness in Los Angeles County during FY 2014-15.	
LAHSA Estimate	139,769 unaccompanied adults who experienced homelessness in the Greater Los Angeles COC in 2015	
Study Pop.	#	%
Difference	+9,046	+6.5%

A number challenges with respect to knowing how exhaustive and/or representative our study population is of the full universe of single adults who experienced homeless episodes within our 12-month observation window. However, efforts made by LAHSA to produce annual estimates offer some helpful clues. While

there are some key distinctions that should be noted, the roughly 150,000 single adults in our master study population is within 10,000 and 7% of LAHSA's estimate of unaccompanied adults within the Greater Los Angeles Continuum of Care (COC) who were homeless during 2015 (Table 1c).⁴ The difference is likely due in large part to the more restrictive HUD definition of a homeless person and the smaller geographic area the LAHSA estimate covers, which does not include the cities of Long Beach, Pasadena, Glendale or Santa Monica.

1.5. Data and the Components of the Cost Estimates

1.5.1. Direct Service Costs

The estimates presented in this report consider three different types of costs. The first type, shown in Table 1d, is expenditure on services and benefits. That can be directly attributed to individual utilizers of services such as costs associated with inpatient and outpatient health services, booking and jail day costs, and benefit payments to

Table 1d Study Population Share of Direct Services Costs				
Agency	Clients	Services	Costs	
			NCC	Total
DMH	39,073	1,044,874	\$6,161,044	\$252,245,388
*DHS	47,431	113,189	+	\$246,647,125
DPH	6,939	10,276	\$0	\$22,120,417
DPSS	114,037	688,766	\$176,443,752	\$241,060,006
Sheriff	14,754	19,433	\$32,824,849	\$74,133,443
*Probation	2,795	21,726	\$4,409,780	\$12,098,348
Total	148,815	1,898,264	\$219,839,425	\$848,304,728
+Section 2.2.1 provides an explanation for why DHS's NCC is excluded from this report.				
+These expenditures include administrative costs.				

⁷ To produce its estimate, LAHSA uses the point-in-time (PIT) results produced through its annual homeless count in combination with demographic information to produce an annualized estimate. The point-in-time count is parsed into persons who are homeless throughout the year and persons who recently became homeless. An extrapolation is then made to estimate the number of additional people who will likely become homeless over the year after the PIT count is completed. The initial estimate of (*n*=162,769) includes family members. In response to follow up inquiries about an estimate of the single adults in this larger count, LAHSA indicated that the PIT count includes 15,000 children, from which they project 7,000 families, meaning that between roughly 22,000 and 23,000 persons in the estimate are family members. The 139,769 estimate attributed to LAHSA in Table 2d is therefore the initial estimate minus the extrapolated family members (162,769-23,000 =139,769).

GR recipients. In all these examples, records documenting the delivery of the services and costs are structured so as to capture individual consumption in discrete episodes. Records of the direct services costs included in our analysis are available to us through the Enterprise Linkages Project (ELP) data warehouse and other data sources across the six County agencies considered in our analyses. All client-level service records examined for this report were encrypted and matched to our similarly encrypted master file of approximately 148,815 homeless single adults known to have experienced homelessness in FY 2014-15.

1.5.2. Non-Individualized Program Costs

Table 1e. Additional Homeless Program Costs			
Agency	Total	NCC	
		\$	%
DHS	\$8,616,167	+	n/a
DMH	\$18,495,731	\$1,135,000	6.1
DPH	\$8,363,528	\$2,514,024	30.0
DPSS	\$21,771,000	\$8,186,000	37.6
Sheriff	\$ 2,562,841	\$720,967	28.1
Total	\$59,809,267	\$12,555,991	21.0
+Section 2.2.1 provides an explanation for why DHS's NCC is excluded from this report.			

The second type of cost is expenditure on programs for which utilization of services at an individual level is either not recorded, not reliable, or not available as of this writing. Examples include the costs attributed to providing patients with supportive housing through DHS's Housing for Health Program and the cost of providing jailed inmates with transitional services through the Sheriff's Community Transition Unit. For these types of programs, a total

expenditure amount for FY 2014-15 was obtained and, to the extent possible, counts of the numbers of clients and numbers of *homeless* clients using services through these programs during the fiscal year were used to produce an estimate of the portion of the program costs attributable to homeless single adults. Table 1e shows the non-individualized expenditures added to RES's cost estimates, by agency.

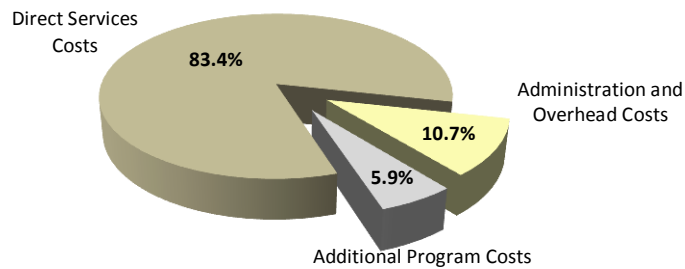
1.5.3. Administrative Costs

Table 1f. Study Group Administrative Cost Estimates			
Agency	Total	NCC	
		\$	%
DHS	\$50,797,395	+	+
DMH	\$20,961,592	\$962,137	4.6
DPH	\$1,659,031	\$0	0
DPSS	\$30,884,710	\$16,040,466	51.9
Sheriff	\$2,914,459	\$2,701,703	92.7
*Probation	\$1,863,146	\$1,620,937	
Total	\$109,080,333	\$21,325,243	19.6
Section 2.2.1 provides an explanation for why DHS's NCC is excluded from this report.			
*The estimated administrative costs for Probation, as well as the NCC attached to these costs replicate the proportions shown in the County's Recommended FY 2014-15 Budget, where administrative costs are 15.4% of the department's gross appropriation for the year and are 87% NCC.			

The third type cost included in our estimates is administrative expenditures (Table 1f). All County agencies have stand-alone administrative appropriations in their annual budgets. These types of expenditures are an often overlooked but nevertheless a critical component of the overall costs County agencies incur in providing services to their clients. The methods used to include these costs in our estimates vary depending on a number of factors. For DHS and Probation, administrative and overhead costs are included in other service costs included in our estimates and, as a result of this, no

additional calculation or extrapolation is needed.⁸ In the case of DPSS, FY 2014-15 administrative costs for GR and CalFresh were made available and we performed some extrapolations to estimate the portion of these costs attributable to adults in the study population who utilized these benefits. For DMH, DPH and the Sheriff, administrative costs were not available to us directly, which necessitated extrapolations based on information provided in the County's FY 2014-15 Recommended Budget.

Figure 1d. Distribution of Study Population FY 2014-15 Costs, by Cost Type⁹



1.6. Study Period

FY 2014-15 was selected as the study period for several reasons. Since this report will be used to inform recommendations on how to maximize the effectiveness and cost efficiency of resources allocated to Los Angeles County's strategy to reduce homelessness, the Homeless Initiative directed RES to produce an annualized set of cost estimates based on the most recent Fiscal Year for which there is complete data.

1.7. The Limitations of Our Approach

A number of factors endemic to homelessness create challenges in attempting to produce a fully comprehensive account of services homeless people use and the costs associated with this utilization. Given the basic difficulties they encounter and the unpredictability of their lives from one day to the next, including the physical and mental disabilities often linked to extended periods of homelessness, the first step in conducting research on homeless men and women is to recognize that the population in question is more difficult to track with consistency and systematic rigor than is the case for persons who are observable within the mainstream currents of daily life. That only three of the six County agencies covered in this report even attempt to keep track of homelessness in their administrative records is a testament to this. Within this context, our approach in preparing this report was to examine the available information pragmatically and with as much flexibility as permissible without compromising the general validity of our analysis and calculations. It must be emphasized upfront that our analyses produce reasonably accurate *estimates*. Although these analyses are based on empirical data and are replicable, the resulting estimates are distinct from precision accounting or recordkeeping.

⁸For this reason, estimated administrative/overhead costs for Probation and DHS are shown in Table 1f but are not applied as an additional cost in the sections of this report that discuss services provided by DHS and Probation.

⁹The denominator for this figure is 5.4% larger than the total costs shown in this report because administrative/overhead costs for DHS and Probation are double-counted so as to avoid the overly speculative calculations that would be required to fully disaggregate them from the direct services costs.

These considerations are especially important with respect to the manner in which we assembled the master file for this report. The study group consists of persons who were homeless *at the time of a particular service episode* but not necessarily *at the time of all the services they used over the course of the full 12-month observation period*. On the one hand this means that there is an indeterminate amount of cost added to our estimates that corresponds to utilization that took place while the subjects in question were not homeless. On the other hand, however, our analysis does not capture services used by homeless persons who were not flagged for homelessness in the records of the four agencies that collaborated with us in building our master study population. This has significance, in particular, for the cost estimates we present for DMH, DPH's Substance Abuse Prevention and Control (SAPC) program, and the Sheriff's Department. Since these three agencies were not able to provide us with homeless client files for our study population, their homeless single adult clients are only included in our analysis if they also used services provided by one of the four agencies whose clients comprise our study population (DHS, DPSS, Probation and LAHSA). Given the size of the study group, we proceeded with the assumption that these countervailing tendencies towards over- and under-estimation would balance one another to an extent that makes our estimates valid aggregate approximations.

1.8. The Chapters and Organization of this Report

The chapters of this report are organized by general service area. Chapter 2 examines health-related services utilized through DHS, DMH and DPH. Chapter 3 focusses on law enforcement expenditures attached to arrests made by the Sheriff, jail days at Sheriff's facilities, and services provided through Probation. Chapter 4 examines DPSS's gross costs in providing the study population cash assistance and homeless services through GR and food stamps benefits through CalFresh. The concluding chapter considers the broad implications of the estimates described in Chapters 2, 3 and 4, and we examine the impact of the heaviest and most expensive service users in the study population.

2. Estimates of Expenditures on Health-Related Services

This chapter examines expenditures on services utilized through DHS, DMH and DPH. In FY 2014-15, these three agencies spent an estimated gross total of \$579.1 million in providing roughly 1.2 million health-related services to almost 77,000 unique homeless adults, more than half our study population. Patients in our study group used an average of 15.2 services through the three health agencies at an average of \$7,522 per patient over the year (Table 2a). The cost estimates provided in this chapter include additional administrative and program expenditures.

Table 2a. The Study Group's Overall Use of Health-Related Services, FY 2014-15

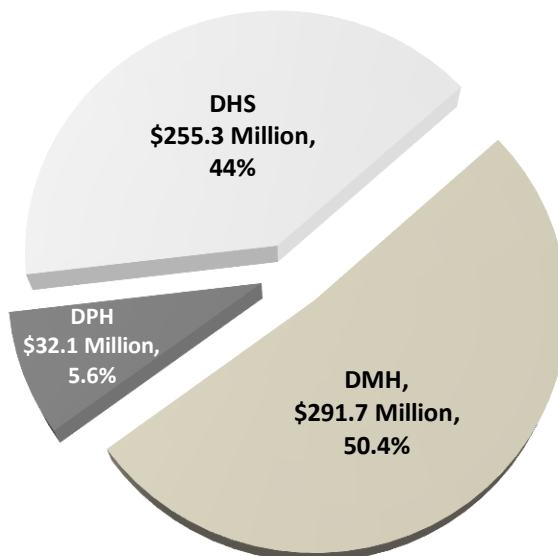
	# Patients	# Services	Average Cost Per+ Service	Costs+		Cost Per Patient+	
				NCC	Total	NCC	Total
DHS	47,431	113,189	\$2,255	*	\$255,263,292	*	\$5,382
DMH	39,073	1,044,874	\$279	\$8,258,181	\$291,702,711	\$211	\$7,466
DPH	6,939	10,276	\$3,128	\$2,514,024	\$32,142,976	\$362	\$4,632
Health Total	76,987	1,168,339	\$496	\$10,772,205	\$579,108,979	\$140	\$7,522
Top 5% in Cost	3,849	345,650	\$808	\$772,723	\$279,269,844	\$201	\$72,556
Top 10% in Cost	7,700	571,083	\$626	\$1,685,977	\$357,598,015	\$219	\$46,441
Top 20% in Cost	15,398	840,067	\$539	\$3,445,225	\$444,126,801	\$224	\$28,843
Chronic Homeless	7,467	121,131	\$444	\$920,244	\$53,730,618	\$123	\$7,196
%NCC: 3.3 (calculated based on DMH and DPH only)							
+Section 2.2.1 provides an explanation for why DHS's NCC is excluded from this report.							

2.1. Health Expenditures Overall

As shown in Figure 2a, DMH accounts for more than half the study population's total health costs for FY 2014-15, with expenditures summing to \$291.7 million. Less than 3% of these DMH costs are estimated to be NCC (\$8.3 million). DHS spent an estimated \$255.3 million, comprising 44% of the combined health expenditure on the study group. Finally, we estimate DPH spent \$32.1 million in providing treatment to the study population, amounting to 5.6% of the combined total health costs. While more than 7.8% of these DPH costs were NCC (\$2.5 million), expenditures associated with services provided through the department's Substance Abuse Prevention and Control (SAPC) program comprise three-quarters of our DPH estimate, (\$23.8 million), are 0% NCC.

Figure 2a. Health Expenditure on the Homeless Study Population, FY 2014-15

Estimated Combined Expenditure: \$579 million



2.2. DHS Expenditures

The estimated sum total of the costs DHS incurred in providing services to our study population in FY 2014-15 is \$255.3 million, an amount that includes \$50.8 million in administrative and overhead expenditures (19.9%). The DHS estimate is based on a data match against DHS records that yielded 47,431 patients who received services over the 12-month period of observation, a match rate of 31.9% of the study population (Table 2b).

2b. The Study Group's Overall DHS Utilization and the Associated Costs, FY 2014-15					
	# Patients	# Services	Average Cost Per Service+	Costs+ Total	Cost Per Patient+ Total
DHS In/Outp Subtotal 1	47,431	113,189	2,179	\$246,647,125	\$5,200
Psychiatric	10,544	14,689	3,946	\$57,968,235	\$5,498
Top 5% in Cost	2,372	20,221	9,386	\$189,795,876	\$80,015
Top 10% in Cost	4,743	40,494	5,384	\$218,036,545	\$45,970
Top 20% in Cost	9,486	68,551	3,563	\$244,274,202	\$25,751
HMIS Chronic Homeless	3,908	11,882	2,507	\$29,793,467	\$7,624
*Additional Programs	47,431	n/a	n/a	\$8,616,167	\$182
DHS Grand Total				\$255,263,292	\$5,381

2.2.1. Overview for DHS data

The projected costs and assumptions reflected in this report for the Department of Health Services (DHS) are based patient utilization records and the Department's FY 2014-15 average cost per workload. Therefore the cost amounts in this report for DHS reflect estimates and may not reflect actual costs. This is important to note in regard to possible planning exercises that focus on the DHS costs for the homeless population included in this study.

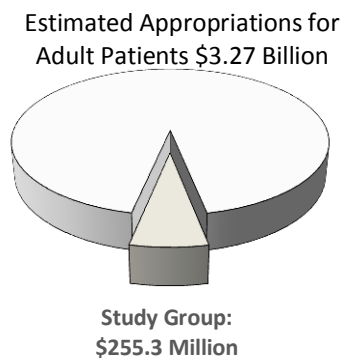
Further, there are additional considerations regarding the DHS costs that must be carefully reviewed prior to using the DHS data in future studies, such as the impact of Assembly Bill 85 (amended by SB 98), which implemented the Affordable Care Act in California and governs the County's minimum contribution to DHS for its total operations (aka "maintenance of effort" requirements).

2.2.2. DHS's Estimated Overall Costs

The DHS patients in our study population used roughly 113,000 outpatient and inpatient services, including emergency room visits and psychiatric emergencies and hospitalizations, for an average of 2.4 services and \$5,381 per person over 12 months. The \$246.6 million DHS inpatient and outpatient service subtotal comprises 96.6% of the grand total. The additional program expenditures, discussed further in section 2.3.2 total to \$8.6 million. The \$255.3 million grand total comprises 7.8% of the \$3.27 billion in DHS's adjusted budget allocation for services provided to adults.¹⁰

¹⁰To obtain an approximation of funds that pay for services provided to adults, we an overall FY 2014-15 budget allocation provided for us by DHS (\$3.88 Billion), which was then reduced 12%, to reflect the percentage of records in the ELP data warehouse of DJS services provided between 2010 and 2014 to unique DHS patients who were under the age of 18 at the time the services were delivered. While estimates of DHS expenditures presented in this chapter are based on the department's average workload cost calculations or FY 2014-15, by service type, the overall adult estimate represented in Figure 2b (\$3.27 Billion) is based on the department's adjusted budget allocation for FY 2014-

Figure 2b. DHS Expenditures on Adult Patients in Relation to the Department's Estimated Budget Allocation, FY 2014-15



More than one-fifth of the patients in our DHS data match results received Psychiatric Emergency Services (PES) and/or was hospitalized at a DHS facility for psychiatric conditions. The total cost of the psychiatric inpatient and emergency services provided through DHS amounts to an estimated \$58 million, which is close to one quarter of the total DHS inpatient and outpatient cost for our study group, and is about 22.7% of the total DHS expenditure on the study population for the fiscal year.

The most costly 5% of the study group's DHS patients in terms of inpatient and outpatient services ($n=2,372$ patients) are particularly striking. This segment of the study population consumed more three quarters of DHS's inpatient and outpatient expenditures on the study group at an average cost of approximately \$80,000 per patient. The most costly fifth ($n=9,486$) consumed all but a small fraction of the inpatient and outpatient expenditures, at an average cost of roughly \$26,000 per patient.

2.2.3. Inpatient, Outpatient and Emergency Costs

A total of 3,970 adults, 8.4% of the DHS patients in our study group, were hospitalized and received roughly 41,000 days of inpatient treatment, an average inpatient stay of 10.5 days at an average cost of \$38,500 per inpatient episode. The total cost of these episodes is \$153.2 million. This means that less than 10% of the DHS patients in our study group, by virtue of their receipt of inpatient services alone, consumed approximately 60% of the study population's total DHS expenditures for the fiscal year (Table 2c).

Table 2c Study Group Utilization of DHS Inpatient Services, FY 2014-15

	# Patients*	# Inpatient Days	Average Cost Per Service+	Costs	Cost Per Patient
				Total	Total
DHS Inpatient Subtotal 2	3,970	41,723	32,025	\$153,211,605	\$38,592
Psychiatric Inpatient	777	12,323	51,716	\$45,354,772	\$58,372
Top 5% in Cost	199	19,979	155,963	\$73,770,589	\$370,706
Top 10% in Cost	397	27,511	120,485	\$101,328,261	\$255,235
Top 20% in Cost	794	36,193	85,839	\$132,965,109	\$167,462
HMIS Chronic Homeless	415	5,199	27,288	\$19,237,799	\$45,356

Almost 30% of the study group's inpatient days in FY 2014-15 were hospitalizations for psychiatric issues. The patients involved in these service episodes ($n=777$ patients) comprise less than 20% of the patients receiving inpatient services during the fiscal year, and less than 2% of the DHS patients in our study group,

15 and not actual expenditures. The denominator and numerator in the figure and accompanying discussion are therefore not fully standardized. For this reason, we emphasize that the inferences drawn are only intended to provide an approximation of how DHS's expenditures on homeless single adults stand in relation to the department's larger budget.

but they consumed 18% of the total DHS estimated expenditure on the study group. The average psychiatric inpatient cost per person (\$58,372) is 50% higher than the study group's average inpatient cost per person.

More than one-third of the DHS patients in our study population were involved in 25,395 Emergency Room (ER) episodes during FY 2014-15 ($n=16,526$ patients), an average of 1.5 visits per ER patient at a total cost of \$33.2 million, 13% of the overall DHS expenditure on the study population for the fiscal year. More than 60% of the patients visiting DHS ERs received Psychiatric Emergency Services (PES) at a total cost of \$12.6 million, which accounts for more than 37% of the study group's emergency expenditures overall.

2.2.4. Additional DHS Costs

As shown in Table 2b, we add \$8.6 million to our DHS estimate based on expenditures attached to additional programs. These are estimated costs associated with Housing for Health with and Recuperative Care of \$5.8 Million and \$2.8 million, respectively, for the Fiscal Year.

2.3. DMH Expenditures

The bulk of our analysis of the study group's use of DMH services is based on comprehensive datasets of outpatient, crisis stabilization, acute inpatient and residential services records, which were prepared by DMH's Clinical Informatics division. A data match linking our study population to these records produced 39,073 patients who received mental health treatment through the department in FY 2014-15, a match rate of 26.3%. These patients used more than 1 million inpatient and outpatient services for a total cost of \$252.2 million. When additional programming and estimated administrative expenditures are included, the grand total estimate for the fiscal year is \$291.7 million, an average of \$7,466 per patient. We additionally estimate that \$8.3 million (2.8%) of the total expenditure was NCC

Table 2d. The Study Group's Overall DMH Utilization and the Associated Costs, FY 2014-15

	#* Patients	# Services	Average Cost Per Service	Costs+		Cost Per Patient+	
				NCC	Total	NCC	Total
DMH OP&IP Subtotal	39,073	1,044,874	\$241	\$6,161,044	\$252,245,388	\$158	\$6,524
Top 10% in Cost	3,907	441,652	\$278	\$2,623,238	\$122,765,101	\$671	\$31,422
Top 20% in Cost	7,814	649,821	\$260	\$3,800,588	\$169,009,319	\$486	\$21,629
HMIS Chronic Homeless	5,987	190,525	\$243	\$1,261,388	\$46,317,928	\$211	\$7,736
Additional DMH Services				\$1,135,000	\$18,495,731	\$29	\$473
**Non-Administrative Subtotal				\$7,296,044	\$270,741,119	\$187	\$6,878
Estimated Administrative Subtotal				\$962,137	\$20,961,592	\$25	\$536
DMH Grand Total				\$8,258,181	\$291,702,711	\$211	\$7,466

%NCC: 2.8%

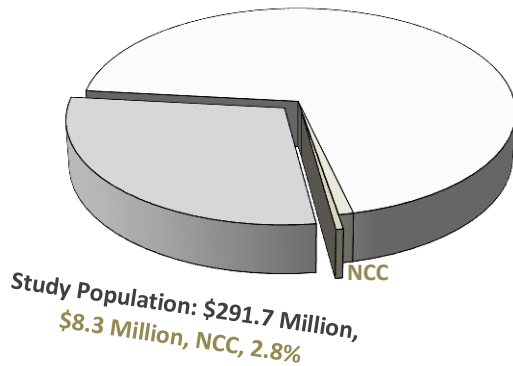
*A count of unique patients can be produced by un-duplicating based on either the DMH patient ID ($n=40,868$) or the master file ID (*Cohort_PID*) we created for our analysis of the full study group across all the agencies included in this report ($n=39,073$ DMH patient). This reduces the count by 4%. We use cohort PID for the sake of maintain consistency throughout the report and, relatedly, because parts of the report will merge and un-duplicate client across multiple agencies. Additionally, some of patients may have multiple DMH IDs.

+Cost Estimates are rounded to the nearest dollar.

**This row includes the programs tabulated separately in Table 3k. The administrative costs for those programs are not disaggregated from their total costs. For this reason, the costs of those programs are not included in the expenditure totals we use to estimate DMH's administrative expenditures associated with providing services to our study population.

**Figure 2c. DMH Expenditures on Adult Patients,
Overall and for the Study Group, FY 2014-15**

Estimated Adult Portion of DMH Budget
\$937.1 Million (\$28.6 Million NCC, 3.1%)



Based on calculations that draw on information DMH shared with us and the DMH section of Los Angeles County's Recommended Budget for FY 2014-15, the department's costs with respect to the study population comprise 31.1% of the \$937.1 million we estimate to be the adult share of DMH's total budgeted appropriations for the fiscal year. This suggests that \$1.50 out of every \$5.00 DMH spends on adults pays for treatment provided to homeless patients.

Expenditures on the top 10% of the group in terms of total outpatient and inpatient costs (3,907 patients at a cost of \$122.8 million) were 4.6 times higher than for the study group as a whole. Patients in this top decile accounted for 42.3% of the total services used over the year and close to half the costs. The top fifth (7,814 patients at a total cost of \$169 million) consumed roughly 62% of the total outpatient and inpatient services provided to the study population and accounted for two-thirds of their overall costs.¹¹

2.3.1. Inpatient and Outpatient Services

DMH spent \$203 million in providing more than one million outpatient services to the patients in the study population, including crisis stabilization services, during FY 2014-15. (Table 2e). These expenditures account for 80.5% of the total FY 2014-15 DMH inpatient and outpatient service costs for the study population and 69.2% of the total expenditure on the study population.¹²

The most expensive 5% of the DMH patients in the study population (1,894 patients requiring expenditures of \$62.9 million) consumed 31% of both total outpatient services and outpatient costs. The 12-month cost per patient within this subgroup (\$33,185) is more than six times the average for all patients in the study population using outpatient services (\$5,356). Among the top 20% (7,578 patients at a total cost of \$130.5 million), the outpatient cost per patient (\$17,222) is more than three times the average.

¹¹In reviewing this report prior to its release, DMH asked us to include the following caveat: "The DMH expenditures on adult patients and the related costs presented in this summary do not fully capture all costs associated with serving this population. Therefore, should this report lead to further action, DMH recommends a more comprehensive and comparable analysis be conducted before action is taken."

¹²Although Psychiatric Emergency Services (PES) provided at County Hospitals are Department of Health Services (DHS) treatments in terms of their provision and associated costs, they are captured in DMH data. To avoid double counting their costs in our report, we filtered PES episodes from the DMH service records for this analysis. Per DMH's instructions, these service episodes were eliminated from the data by excluding all Mode 10 (SFC 24) services from the three DHS billing providers in the DMH services data we used for our analysis. The billing providers are (1) 1953 LAC-OLIVE VIEW/UCLA MEDICAL C; (2) 1962 LAC HARBOR UCLA MEDICAL CTR; (3) 1956 LAC/USC MEDICAL CENTER. Please note that Mode 15 services from these providers were retained in the data and counted. A total of 11,683 PES services were filtered out based on these guidelines.

Table 2e. Study Group Utilization of DMH Outpatient and Crisis Stabilization Services, FY 2014-15

	# Patients*	# Services	Average Cost Per Service	Costs+		Cost Per Patient+	
				NCC++	Total	NCC++	Total
Outpatient	36,644	1,017,071	\$193	\$0	\$195,843,119	\$0	\$5,344
Crisis Stabilization	5,715	15,181	\$469	\$0	\$7,113,919	\$0	\$1,245
DMH Subtotal 1	37,890	1,032,252	\$197	\$0	\$202,957,038	\$0	\$5,356
Top 5% in Cost	1,894	318,245	\$197	\$0	\$62,851,516	\$0	\$33,185
Top 10% in Cost	3,789	475,622	\$196	\$0	\$93,056,998	\$0	\$24,560
Top 20% in Cost	7,578	670,337	\$195	\$0	\$130,508,444	\$0	\$17,222
HMIS Chronic Homeless	5,890	187,755	\$193	\$0	\$36,226,828	\$0	\$6,151
%NCC:: 0%							
*The sum of the numbers of patients who used outpatient services and crisis stabilization is larger than the subtotal, because the subtotal captures total unique clients and a patient can use both services multiple times.							
**The gross costs of the outpatient and crisis stabilization services shown in Table 2 are provided by service in the DMH data.							
+Cost Estimates are rounded to the nearest dollar.							
++According to information provided by DMH none or almost none of the costs shown in Table 2 would be NCC. For the purpose of making estimates, we assumed these costs to be 0% NCC.							

Inpatient services comprise less than 2% of the study group's observed service episodes in the DMH data, but this is not especially meaningful since these services last multiple days (Table 2f). If service days are compared as opposed to service episodes – with one-day outpatient services counted as 1 day each - then inpatient services account for close to 12% of the total inpatient and outpatient service days observed for FY 2014-15.¹³ More than 12% of the observed DMH patients ($n=5,291$) received 121,487 days of inpatient care over 12 months, an average of 23 inpatient days per person, though the distinction between this average of cumulative *total inpatient days* per patient and the average duration of *discrete service episodes* should be underscored. The study population's average length per acute inpatient episode is 6 days, and the average length per residential service episode is 46 days. Looking at the two types of inpatient services combined, the average length is 10 days.¹⁴

An estimated \$49.3 million was spent in providing inpatient services to the observed DMH patients, which includes residential services (Table 2f). Inpatient costs therefore constitute about one-fifth (19.5%) of DMH's total inpatient and outpatient expenditures on the study group in FY 2014-15, and they comprise close to 17% of DMH's overall study group expenditures. The \$41.4 million spent on *acute inpatient* services amounts to 84% of the inpatient expenditures and 14% of the overall expenditures over 12 months.

¹³ Psychiatric inpatient services provided at DHS facilities were deleted using the same criteria for the deletion of Psychiatric Emergency Services at DHS facilities to ensure costs are not double counted, i.e. Mode 10 services from the same three billing providers: (1) 1953 LAC-OLIVE VIEW/UCLA MEDICAL C; (2) 1962 LAC HARBOR UCLA MEDICAL CTR; (3) 1956 LAC/USC MEDICAL CENTER. Per DMH's guidance, we verified that these services are captured in the DHS data we receive through the Enterprise Linkages Project (ELP data warehouse). A total of 849 DHS psychiatric inpatient services were deleted from the data.

¹⁴ For cases where the discharge date for an inpatient service episode is missing, we adhered to DMH's instructions to calculate a proxy length of service equal to the average service duration for the facility in question. In cases where the actual discharge date was after the end of FY 2014-15, inpatient days were only counted through June 30, 2015.

Table 2f. Study Group Utilization of DMH Inpatient and Residential Services, FY 2014-15

	# Patients*	# Inpatient Days	Average Cost Per Service+	Costs+		Cost Per Patient+	
				NCC	Total	NCC	Total
Acute Inpatient	4,829	69,034	\$3,605	\$5,177,550	\$41,420,400	\$1,072	\$8,577
Residential	956	52,453	\$6,957	\$983,494	\$7,867,950	\$1,029	\$8,230
DMH Subtotal 2	5,291	121,487	\$3,905	\$6,161,044	\$49,288,350	\$1,164	\$9,316
Top 5% in Cost	265	40,452	\$5,389	\$1,672,650	\$13,381,200	\$6,312	\$50,495
Top 10% in Cost	529	60,118	\$5,233	\$2,623,238	\$20,985,900	\$4,959	\$39,671
Top 20% in Cost	1,058	81,717	\$4,864	\$3,800,588	\$30,404,700	\$3,600	\$28,738
HMIS Chronic Homeless	853	24,704	\$3,643	\$1,261,388	\$10,091,100	\$1,479	\$11,830
%NCC: 12.5%							
*The sum of the numbers of patients who used outpatient services and crisis stabilization is larger than the subtotal, because the subtotal capture total unique clients and a patient can use both services multiple times.							
+Deriving exact inpatient costs for DMH is complex due to the variety of contract types, reimbursement mechanisms, and authorization processes involved. For this study, inpatient and residential services costs were standardized and estimated by multiplying the inpatient length of stay by a \$600/day for acute inpatient services and \$150/day for residential services. The \$600 day rate for acute inpatient treatment was the LACDMH Medi-Cal inpatient Fee for Service for individuals aged 22 to 64 who used these services in FY14-15. The \$150 day rate for residential services is a FY 2014-15 proxy estimate provided by DMH. The tabulated cost estimates are rounded to the nearest dollar.							

2.3.2. Additional DMH Services and Administrative Costs

The technical appendix to this report shows DMH programs not captured in the data available through the ELP data warehouse or other sources but that have homeless-related costs added to the DMH total for the study population.¹⁵ The total cost of these programs is roughly \$18.5 million, which is equal to 6.3% of DMH's total expenditures on the study population. Since the overlap between patients participating in these programs and patients in our study group is not known, the addition of their costs to the overall DMH estimate may inflate cost per person estimate by a maximum of \$474 (6.3%).¹⁶

In DMH's FY 2014-15 budget, funds allocated to administration (\$156.7 million) are equal to 8.3% of the gross total appropriation for the fiscal year (\$1.88 billion).¹⁷ This is the basis for our estimated administrative costs for the study population of almost \$21 million, which is equal to 8.3% of the combined inpatient and outpatient subtotal shown in Table 2d.

¹⁵The technical appendix is available upon request. For an electronic copy, please contact Max Stevens at maxbstevens@ceo.lacounty.gov.

¹⁶Since the costs of these programs are not included in our calculation of administrative costs, the maximum overstatement they produce per person can be derived by subtracting their combined total (\$18.5 million) from the grand total shown in Table 2d (\$291.7 Million) and (a) dividing the difference (\$273,206,980) by the number of DMH patients in the study population and (b) subtracting this new cost per patient (\$6,992) from the cost per patient with the eight programs included in the denominator: \$7,466 – \$6,992=\$474 = maximum overstatement assuming none of the patients in the added programs are included in the outpatient and inpatient data match. However, this maximum overstatement is what would be the case if none of the DMH patients in our study group participated in the additional programs, which is highly unlikely.

¹⁷ This proportionality is retained in our estimate of the adult portion of the budget, where \$71.9 million are assumed to be the administrative costs attached to an \$865.2 million gross appropriation because all budget categories were reduced by the same degree in making the adult adjustment.

2.3.3. Net County Costs

The DMH section of Los Angeles County's Recommended Budget for FY 2014-15 indicates that 1.4% of the \$1.6 billion gross appropriation for DMH outpatient services is NCC. However, based on more specific information we received from DMH, a 0% NCC assumption was deemed to be appropriate for expenditures on the study group's DMH outpatient services utilization.¹⁸

The Recommended Budget categorizes 12.5% of psychiatric (DMH's) hospitalization costs as NCC. This is applied to the inpatient and residential costs for our study group (\$49.3 million), producing an estimate of \$6.2 million NCC. We additionally add the \$1.1 million NCC shown in Table 3k and slightly less than 1 million in administrative NCC for a total study group NCC of \$8.3 million, comprising 2.9% of the total DMH expenditure on the study population.

2.4. DPH Expenditures

DPH spent an estimated \$32.1 million, (\$2.5 million NCC, 7.8%) on patients in our study population. This result is based on a data match linking the study population to records of roughly \$23.8 million in services provided through the agency's Substance Abuse Prevention and Control (SAPC) program, as well as on information provided by DPH on its Community Health Services (CHS), HIV and STD, and Tuberculosis Control programs, which add a combined total of approximately \$8.4 million to the grand total (Table 2g). However, since necessary information on these three programs was only available for FY 2013-14, the funds they add to the estimate are imputed expenditures and assume that the volume of utilization and the associated costs would not differ significantly over two consecutive years.

2.4.1 Total SAPC Expenditures

Table 2g summarizes DPH's FY 2014-15 expenditures on SAPC patients in the study population, which sum to \$23.8 million, all of which is net revenue. The costs comprising this estimate funded the provision of substance use disorder treatment to almost 7,000 patients who initiated and used 10,276 services over the course of 12 months, an average of roughly 1.5 services per person and \$2,314 per service. DPH informs us that the SAPC service episodes captured in ELP are 0% NCC and that this extends to the program's administrative costs, which means that 100% of the program's expenditures – direct services and overhead

¹⁸DMH informs us that almost all outpatient services received by the types of adults in our study population are non-NCC, even if no revenue is generated. To illustrate the complexities involved, DMH notes the following: "if an adult client has Medi-Cal based on disability, then DMH would receive 50% of the cost as Medi-Cal revenue (Federal Financial Participation – FFP), but more than likely we would use MHSA dollars that [DMH] draws down to cover a 50% 'local match'. If the client did not have Medicare, Medi-Cal or other health coverage, the services may well be covered 100% by MHSA. However, DMH also receives several million dollars each year through a SAMSHA Block Grant, which under certain conditions would be used to cover the cost of care to indigent clients in lieu of using MHSA. The cost of acute inpatient stays in Fee For Service facilities is covered by the State, acute PDP's however are NCC. IMD's, a subset of the non-acute residential, on the other hand would be exclusively true NCC. I also believe that the State Hospital stays are NCC. For non-IMD non-acute residential facilities, it is even more complex but would involve a mix of MHSA, Medi-Cal, AB109, etc." *Authors note:* The County's Recommended Budget for FY 2014-15 categorizes 1.4% of DMH's appropriations for outpatient services as NCC (\$22.7 million out of \$1.64 billion). Alternatively categorizing 1.4% of the study group's outpatient costs as NCC would increase the total NCC for the year by (\$195.8 million*0.014=) \$2.7 million for FY 2014-15, increasing the total NCC for DMH to \$11 million, which would mean that 3.8% of the expenditures on the DMH patients in our study group were NCC.

– are net revenue. SAPC services available to adults receiving General Relief, which are provided through DPSS’s Mandatory Substance Abuse Recovery Program (MSARP), are not included here but are included in the administrative costs for the GR program, which are a component of the estimates we produce for DPSS’s FY 2014-15 expenditures.

2g DPH Cost Estimate for the Study Population, Overall and by Program FY 2014-15						
Overall	Patients	Costs		Cost Per Patient*		
		NCC	Total	NCC	Total	
Grand Total	6,939	\$2,514,024	\$32,142,976	\$362	\$4,632	
NCC: 7.8%						
SAPC	Patients	Costs		Cost Per Patient		
		NCC	Total	NCC	Total	
Non-Administrative Total	6,939	\$0	\$22,120,417	\$0	\$3,188	
Administrative Costs	6,939	\$0	\$1,659,031	\$0	\$239	
DPH Subtotal A (SAPC Total)	6,939	\$0	\$23,779,448	\$0	\$3,427	
NCC: 0%						
**Additional Programs	Patients	Costs		Cost Per Patient		
		NCC	Total	NCC	Total	
DPH Subtotal B	Unknown	\$2,514,024	\$8,363,528	n/a	n/a	
Community Health Services	unknown	\$2,305,028	\$2,305,028	n/a	n/a	
HIV and STD Programs Homeless	3,339	\$0	\$5,575,120	\$0	\$1,670	
Tuberculosis Control Homeless-Lodging	75	\$44,296	\$280,034	\$591	\$3,734	
Tuberculosis Control Incentives	328	\$164,700	\$203,346	\$502	\$620	
Tuberculosis Control Total	403	\$208,996	\$483,380	\$519	\$1,119	
NCC:30.1%						
*Since the SAPC patient count is used in the calculation of overall costs per patient, these costs will be inflated to the extent that there are non-SAPC patients among those in the study population using services through CHS Tuberculosis Control HIV and STD Programs. The number of non-overlapping patients is not known.						
**The study group cost totals for these programs include their administrative costs						

The provision and measurement of substance use disorder services is distinct from the manner in which other health services are typically delivered and recorded in that service episodes frequently remain open over several months and incur repeated costs over this period. Measures of utilization consequently appear to be more dispersed among the patient population than what is observed in looking at the DHS and DMH patients in our study population, though the total cost remains fairly concentrated among the most expensive patients. As shown in Table 2h, the most costly 5% of the study population’s SAPC patients ($n=347$) account for only 6.2% of the services used but roughly 37% of the total costs (\$8 million out of \$23.8 million). The cost per service among these patients is 4.5 times higher than the average for all the observed SAPC patients in the study group and their cost per person is 7.4 times higher than the average. The most expensive fifth of the confirmed DPH patients consumed less than one quarter of the services, but more than three quarters of the total cost.

Table 2h. The Study Population's Utilization of DPH/SAPC Services Overall , FY 2014-15

	# Patients	# Services	Cost Per Service	Costs+		Cost Per Patient+	
				NCC	Total	NCC	Total
Non-Admin Total	6,939	10,276	\$2,153	\$0	\$22,120,417	\$0	\$3,188
Administrative Costs	6,939	n/a	n/a	\$0	\$1,659,031	\$158	\$239
SAPC Total	6,939	10,276	\$2,314	\$0	\$23,779,448	\$0	\$3,427
*Top 5% in Cost	347	636	\$13,844	\$0	\$8,804,528	\$0	25,373
*Top 10% in Cost	694	1,268	\$10,418	\$0	\$13,209,810	\$0	19,034
*Top 20% in Cost	1,388	2,494	\$7,251	\$0	\$18,083,088	\$0	13,028
*HMIS Chronic Homeless	761	2,087	\$2,236	\$0	\$4,666,684	\$0	6,132
NCC: 0%							

2.4.2. SAPC Expenditures by Service Type.

The \$22 million in expenditures on residential services account for 85% of the study population's SAPC costs. As shown in Table 2i, the most expensive 20% of patients using these services consumed about two-thirds (\$14.5 million) of the total cost of residential services in FY 2014-15. Table 2i additionally shows the costs associated with Narcotic Treatment Program Services, which generate daily methadone dosage costs.

Table 2i Study Group Utilization of SAPC Narcotic Treatment and Residential Services, FY 2014-15*

	# Patients*	# Service Days	# of services	Average Cost Per Episode	Costs+		Cost Per Patient+	
					NCC	Total	NCC	Total
**Narcotic & Detox	1,331	9,987	1,728	690	\$0	\$1,192,039	\$0	896
+Narcotic Only	1,391	208,136	1,961	1,061	\$0	\$2,081,360	\$0	1,496
++Residential	2,032	162,650	2,386	7,855	\$0	\$18,742,532	\$0	9,224
DPH Subtotal 2:	4,089	380,773	6,075	3,624	\$0	\$22,015,930	\$0	5,384
Top 5% in Cost	204	53,274	339	18,060	\$0	\$6,122,400	\$0	30,012
Top 10% in Cost	409	85,687	643	15,189	\$0	\$9,766,428	\$0	23,879
Top 20% in Cost	818	127,077	1,201	12,045	\$0	\$14,465,700	\$0	17,684
HMIS Chronic Homeless	463	83,714	1,270	3,659	\$0	\$4,646,554	\$0	10,036
NCC: 0%								

*The costs calculated in this table are based on average service costs, by service type, which were calculated for us by SAPC program personnel. For service episodes that commenced prior to FY 2013-14 and/or continued beyond the end of the fiscal year, costs incurred during our 12-month observation window are applied.

**The costs applied to the SAPC Narcotic Treatment Program Services with no Detox component added are methadone dosage charges of \$10 per day.

+SAPC Narcotic Program Treatment Services are assigned the average cost of a SAPC outpatient service in FY 2014-15 (\$), as well as a \$10 per day methadone dosage cost for the duration of the service episode or 220 days, whichever is shorter.

++The average cost applied to the observed SAPC residential services are \$140.91 on the day of admission and \$114.85 on each additional bed day.

SAPC Outpatient and Day treatments and costs are added to our overall SAPC/DPH total but are not shown in a tabulation. While half the observed SAPC patients in the study population used these services, their total costs (\$104,487) account for less than one-half of one percent of the estimated total FY 2014-15 expenditures on the SAPC patients in our study population.

2.4.3. Additional DPH Programs and Costs

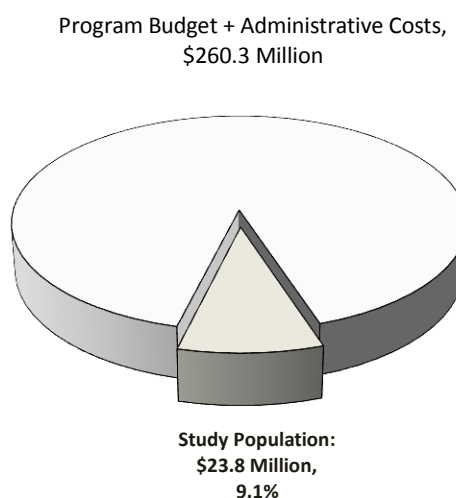
The costs attached to the three other DPH programs shown in Table 2g - CHS, (\$2.3million), HIV and STD Programs (\$5.6 million), and the Tuberculosis Control program (roughly \$483,380) - add \$8.4 million to the overall estimate of the costs associated with the study population's use of DPH services in FY 2014-15. These costs are assumed to include their associated administrative expenditures.¹⁹ As noted previously, the amounts these programs add to the overall estimate reflect data from 2013-14 and are therefore imputed and assumed to be approximately unchanged in FY 2014-15.

2.4.4. DPH Expenditures Relative to Overall Appropriations

DPH notes that the identification of the adult portion of the agency's budget is ill-advised because annual appropriations are not structured around quantifiable patient encounters, which means DPH is not able to parse expenditures by age group. The agency points out that its approach to the provision of health services is generally community-based as opposed to being centered on services provided to individual patients. To be consistent with this characterization, RES made no adult-based adjustments in producing an estimate of the portion of DPH's budget accounted for by the study population.

Based on the full FY 2014-15 gross appropriation for DPH as a whole in the County's Recommended Budget (\$909 million), the estimated \$32.1 million in expenditures on the study population suggests that 3.5% the agency's costs over the year provided treatment to homeless single adults. However, since SAPC costs comprise three-quarters of the DPH cost estimate for the study population, and since SAPC services are accounted for in DPH administrative records as services provided to individual patients, a more meaningful perspective is gained by noting that the \$23.8 million in SAPC expenditures on the study group comprise 9.1% of the SPAC's FY 2014-15 budget (roughly \$260.3 million with estimated administrative costs added, Figure 2d).

Figure 2d. Study Population Use of SAPC Services in Relation to the Program's Overall FY 2014-15 Budget



¹⁹ The costs added to the DPH estimate from these programs are based on expenditures associated with services and treatment provided to homeless patients. Information on these homeless-related expenditures was provided to us by DPH.

3. Law Enforcement Expenditures

This chapter provides estimates of the costs associated with the study population's consumption of law enforcement resources through the Los Angeles County Sheriff's and Probation departments. In particular, the costs related to Sheriff's Department arrests are examined, including jail day maintenance costs and stays in the jail ward, which is the mechanism through which medical services are provided to inmates. It is important to re-emphasize that because the Sheriff's Department was not one of the agencies contributing a client file to the construction of the study population, homeless arrestees are only included in the match results if they also utilized services through LAHSA, DPSS, DHS and/or Probation at some point during the 12-month period of observation since these are the four agencies whose clients comprise the master study population file. In the case of Probation, the service records available through the ELP data warehouse are restricted to start and end dates. This limitation, coupled with the difficulties involved in assigning costs to the department's services at the client level, necessitated using information provided by Probation indicating that approximately 5.5% of the agency's client population at any given time is homeless. This percentage was used to produce *pro rata* estimates for Probation's FY 2014-15 expenditures with respect to the study population.

3.1. Combined Total Law Enforcement Expenditures.

As shown in Table 3a, the combined FY 2014-15 law enforcement cost estimate for the study population is \$91.7 million, 44.4% of which is NCC (\$40.7 million). A unique total of 15,855 adults accounted for these expenditures, an average of \$5,781 per person. Roughly 87% of the total law enforcement expenditures were costs associated with arrests and jail days (\$79.6 million). The remaining 13% of the combined cost is our prorated estimate of funds spent over 12 months in providing the probationers in the study population with rehabilitative services (\$12.1 million).

Table 3a. Study Group Overall Law Enforcement Costs, FY 2014-15						
	Clients+	*Cost	Costs		Cost Per Person	
		Per Service	NCC	Total	NCC	Total
Sheriff	14,754	\$4,097	\$36,247,519	\$79,610,743	\$2,457	\$5,396
Probation	2,795	\$4,311	\$4,409,780	\$12,048,578	\$1,578	\$4,311
Law Enforcement Total	15,855	\$4,124	\$40,675,514	\$91,659,321	\$2,565	\$5,781
NCC: 44.4 %						
+These are unique row totals, which is why the law enforcement (overall) total is not equal to the sum of the individual agency row totals.						
*For the Sheriff, the service used as the basis for the cost per service is the total number of FY 2014-15 arrests involving subjects in the study population. In the case of Probation, the service used is the total number of cases. Since there is almost always one case per person, the cost per service and the cost per person for Probation are equal. Costs per service are rounded to the nearest dollar.						
+Costs per service are rounded to the nearest dollar as shown, but differ slightly from the cost basis of the calculations.						

3.2. The Sheriff's Department

3.2.1. Overall Sheriff's Department Expenditures in FY 2014-15

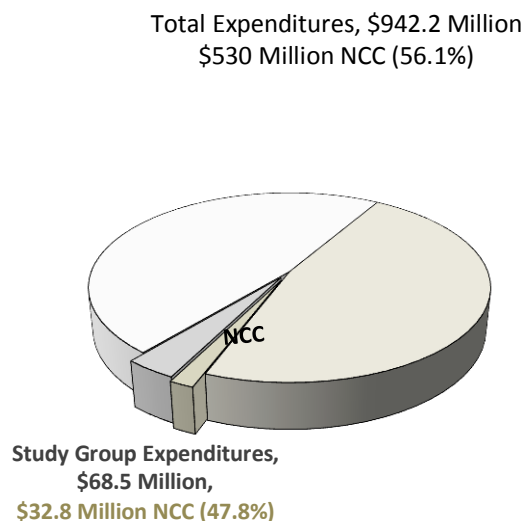
A total of 14,754 adults in the study population (10%) were arrested and booked 19,433 times in FY 2014-15. The estimated cost of these arrests, inclusive of booking costs, jail day maintenance expenditures, jail ward costs, and services provided through the Sheriff's Community Transition Unit, is \$76.7 million. Administrative costs add another \$2.9 million for a grand total of \$79.6 million, of which \$37 million (46.4%) is NCC (Table 3b).

	# Arrestees	# Arrests	+Total Cost Per Arrest	Costs		Cost Per Arrestee	
				NCC	Total	NCC	Total
**CTU	14,754	19,433	\$139	\$720,967	\$2,562,841	\$52	\$186
Non-Admin Subtotal	14,754	19,433	\$3,946	\$34,266,783	\$76,696,284	\$2,322	\$5,198
Top 5% Cost	738	1,003	\$21,411	\$9,384,649	\$21,475,169	\$2,716	\$29,099
Top 10% Cost	1,475	2,159	\$15,719	\$14,830,501	\$33,937,073	\$10,054	\$23,008
Top 20% Cost	2,951	4,571	\$10,817	\$21,607,219	\$49,444,436	\$7,321	\$16,755
Chronic Homeless	964	1,881	\$4,530	\$3,723,820	\$8,521,328	\$3,863	\$8,840
CTU	14,754	n/a	n/a	\$720,967	\$2,562,841	\$49	\$174
Administrative Costs	14,754	19,433	\$150	\$2,701,703	\$2,914,459	\$183	\$198
Sheriff's Grand Total	14,754	19,433	\$4,097	\$36,968,486	\$79,610,743	\$2,457	\$5,396
*NCC: 46.4%							
*The study population's non-administrative expenditures are 44.6% NCC, The addition of administrative costs raises the NCC proportion to 46.5%.							
+Costs per arrest are rounded to the nearest dollar as shown, but differ slightly from the cost basis of the calculations.							
**The CTU costs per arrestee are calculated based on the number of arrestees who were jailed ($n=13,805$). Although the CTU's services are not utilized by all inmates, the program places considerable emphasis on connecting homeless inmates to housing and supportive services. For these reasons, we add the full program amount provided to us by the Sheriff's Department.							

These total costs comprise 3.1% of the \$2.6 Billion in Sheriff Department's gross total budgetary appropriations for FY 2014-15 (adjusted), an amount that includes all items in the Sheriff's budget with the exception of the General Support item (484.7 Million, \$358.1 Million NCC), the subtraction of which in turn reduces the funds allocated for administrative expenditures by \$19 Million.

However, since the bulk of the costs shown in this section are those generated by jail days, a more accurate perspective on the fiscal significance of homelessness for the Sheriff is gained by looking more narrowly at the study population's share of Sheriff's Department FY 2014-15 appropriations for custody expenditures and Medical Department costs, which sum to \$942.2 million, not including administrative expenditures. We estimate the study populations jail day maintenance and jail ward (medical) costs for the same period to be \$68.5 million, 7.3% of the total funds the County allocated for these services over the year, suggesting that \$1 of every \$13.75 the Sheriff's Department spends in maintaining inmates at jail facilities is spent on homeless single adults (Figure 3a).²⁰

Figure 3a. Sheriff's Expenditures on Inmate Maintenance at Los Angeles County Jail Facilities, for the Study Group and Overall, FY 2014-15



The top 5% most costly arrestees ($n=738$) in the study group in terms of booking, jail day maintenance, and jail ward costs, account for roughly 30% of total arrest costs (\$21.5 million) and have costs per arrest (\$21,411) and per arrestee (\$29,099) that are each close to six times the average for the study population. The top fifth consumed two-thirds of the expenditures associated with arrests and jail days for the year (\$49.4 Million) at a cost per arrestee more than three times the study group average.

3.2.2. Booking Costs

Table 3c shows the booking costs for the arrestees in our study group, which are the flat \$287 (in FY 2014-15) charges incurred each time an arrestee is taken into custody and booked at a Sheriff's Department jail facility. The 19,433 arrests of persons in our study population during the fiscal year generated \$5.6 million in booking costs, which is 7% of the \$79.6 million in Sheriff's expenditures on the study population over the 12 months of observation.

²⁰ The data match results linking the study population to records of Sheriff's Department arrests and jail stays show that the study population's jail maintenance costs in FY 2014-15 amounted to \$65.5 million (Table 3D), and its jail ward costs were \$3.1 million (Table 3e). The sum of these costs is \$68.5 million. Information in the County's FY 2014-15 Recommended Budget indicates that the *combined gross* total appropriation for Sheriff's Custody services (\$720.5 million) and Medical Services Bureau (\$221.8 million) is \$942.2 million. The study group therefore consumed 7.3% of the Sheriff's non-administrative jail maintenance costs for the fiscal year ($68.5/\$942.2 = .073$). However, the Sheriff's Department notes that there may be some volatility and fluctuation in arrests of homeless persons from one year to the next.

Table 3c. Study Group Arrests and Booking Costs, FY 2014-15

	# Arrestees	# Arrests	Booking Cost	Costs		Cost Per Arrestee	
				NCC	Total	NCC	Total
Sheriff Subtotal 1	14,754	19,433	\$287	\$1,524,717	\$5,585,044	\$103	\$379
Top 5% Most Arrests	738	2,694	\$287	\$211,372	\$774,256	\$286	\$1,049
Top 10% Most Arrests	1,475	4,384	\$287	\$343,970	1,259,962	\$233	\$854
Top 20% Most Arrests	2,951	7,336	\$287	\$575,584	\$2,108,366	\$195	\$714
HMIS Chronic Homeless	964	1,881	\$287	\$147,584	\$540,599	\$151	\$561
%NCC:: 27.3%							

3.2.3. Jail Stay Durations and Jail Day Maintenance Costs

The bulk of Sheriff's costs are generated by the daily maintenance costs attached to jail days. Roughly 94% of the arrestees in the study group were jailed ($n=13,805$). These inmates comprise 9.3% of the full study population and consumed 647,784 jail days in FY 2014-15, an average of 47 cumulative days per person jailed. Among the larger group of arrestees, which include those arrested but not jailed ($n=14,754$), the average time in jail drops only slightly to 44 days per arrestee. The average jail stay attached to arrests, where the divisor is the 19,433 arrests logged for the study population in FY 2014-15 was roughly 33 days, inclusive of episodes in which arrestees are taken into custody and released on the same day, and is 36.3 days if the calculation is restricted to only those arrests that lead to days in jail. (Table 3d). However, the *median* length of stay, which is more resistant to atypical observations, is shorter by close to one month, 7 days with zero-day stays included and 9 days with zero days excluded, which indicates that a comparatively small proportion of study group inmates had lengthy stays.

Table 3d Study Group Jail Days and Jail Maintenance Costs, FY 2014-15

	Jailed	Days	+Cost per Jail Day	+Costs		+Cost Per Inmate	
				NCC	Total	NCC	Total
Men	11,000	532,408	\$96	\$22,063,924	\$51,073,899	\$2,006	\$4,643
Women	2,805	115,376	\$125	\$6,221,332	\$14,401,232	\$2,218	\$5,134
Sheriff Subtotal 2	13,805	647,784	\$101	\$28,285,257	\$65,475,132	\$2,049	\$4,743
Top 5% Cost	690	180,834	\$104	\$8,117,017	\$18,789,392	\$11,818	\$27,231
Top 10% Cost	1,381	297,619	\$102	\$13,178,372	\$30,505,490	\$9,543	\$22,089
Top 20% Cost	2,761	445,936	\$102	\$19,583,622	\$45,332,459	\$7,093	\$16,419
Chronic Homeless	912	46,680	\$100	\$2,026,569	\$4,691,134	\$2,210	\$5,144
%NCC::43.4%							
+Costs are rounded to the nearest dollar differ slightly from the cost basis of the calculations.							

The study population's total jail day maintenance costs for the 12-month observation period, not including costs associated with time spent in the jail ward, is \$65.5 million. Men and women are subject to different day rates. Women are detained at only one facility (Pitchess South), which charges a daily maintenance rate \$30 higher per day than the average at facilities for men. Male inmates in the study population consumed roughly 78% of the total maintenance costs (\$51.1 million).

3.2.4. The Jail Ward

Inmates in need of medical services while incarcerated receive treatment through the Jail ward, which charges a flat daily cost for all services that is close to 30 times higher than the standard daily jail maintenance rate (\$2,802 per day in FY 2014-15). As shown in Table 3e, 251 of the inmates in study population consumed almost 11,000 jail ward days in FY 2014-15, an average of 4.4 days per jail ward stay and \$12,196 per inmate. The total cost of these services was roughly \$3.1 million over 12 months.

Table 3e. Study Group Utilization of Jail Ward Services, FY 2014-15

	# Inmates	# Jail Ward Days	Daily Jail Ward Costs	Costs+		Cost Per inmate	
				NCC	Total	NCC	Total
Sheriff Subtotal 3	251	1,097	2,802	\$3,014,875	3,073,267	\$12,011	12,196
Top 5% Cost	13	384	2,802	\$1,055,344	1,075,784	\$81,180	82,753
Top 10% Cost	25	536	2,802	\$1,473,084	1,501,615	\$58,923	60,065
Top 20% Cost	50	712	2,802	\$1,956,783	1,994,682	\$39,136	39,894
Chronic Homeless	22	254	2,802	\$698,066	\$711,586	\$32,344	32,345
%NCC:: 98.1%							

3.2.5. Arrest Costs by the Duration of Jail Stays

Table 3f, shows the costs associated with the study population's *discrete* arrests, by the duration of jail stays in FY 2014. The costs shown are the \$74.1 Million in expenditures associated with arrests and jail days, including jail ward day but not administrative costs or CTU programmatic expenditures shown in Table 3b.

Table 3f. Arrest Costs by Length of Jail Stay, n=14,754 Persons in the Study Population Arrested in Fy 2014-15

Duration of Jail Stay	Arrested*	Arrests		Total Jail Days		Costs				
		###	% of Total	Count	% of Total	NCC	Total	% of Total	Per Person	Per Arrest
0-30 Days	10,932	13,803	71.0	88,716	13.6	6.1M	\$13.6M	18.4	\$1,240	\$982
31-45 Days	1,183	1,216	6.3	45,193	7.0	\$2.3M	\$5.1M	6.9	\$4,359	\$4,240
46-60 Days	860	871	4.5	45,778	7.0	\$2.2M	5.0M	6.8	\$5,833	\$5,759
61-75 Days	702	715	3.7	48,405	7.5	\$2.4M	\$5.2M	7.0	\$7,448	\$7,313
75-90 Days	730	762	3.9	62,006	9.5	\$3.0M	\$6.8M	9.2	\$9,303	\$8,912
91-120 Days	571	576	2.9	60,639	9.4	\$3.0M	\$6.7M	9.0	\$11,699	11,598
121-150 Days	398	401	2.1	54,065	8.3	\$2.6M	\$5.8M	7.8	\$14,601	14,492
151-180 days	349	350	1.8	58,511	9.0	\$2.7M	\$6.1M	8.2	\$17,565	\$17,515
181+ Days	739	739	3.8	186,043	28.7	\$8.8M	\$19.8M	26.7	\$26,740	\$26,740
Total	14,754	19,433	100	647,784	100	\$33.1	\$74.1M	100	\$5,025	
NCC: 44.7%										

*Counts of persons arrested are unduplicated by row but *not within the column*. An arrestee with multiple jail stays of varying lengths is counted a maximum of one time in each horizontal row. Arrestees will be counted a minimum of two times in the vertical column (in cases where a person is arrested once and therefore counted once in the appropriate duration row and once in the total row), and a maximum of ten times (since there are nine duration intervals and one total row). For these reasons, the number in the total row is not equal to the sum of the arrestees counted in duration rows but is rather the count of the arrestees in our study population (n=14,754)

**Arrests are counted once for each time they occur including multiple times in the same row, where appropriate. The total row is therefore the sum of the duration rows and is equal to the number of FY 2014-15 arrests for the arrestees in our study population (n=19,443)

More than 18% of the expenditure on the study population is accounted for by persons who are arrested and released within 30 days and almost half is accounted for by those whose jail stays were less than four months. Jail stays lasting five or more months account for just above one third of the total expenditures, and stays lasting more than six months account for 28.7% of the total expenditures.

3.2.6. The Community Transition Unit and Administrative Costs

Additional costs in the amount of approximately \$2.6 million (\$720,967, NCC) are added to the overall Sheriff's estimate from the Department's Community Transition Unit. Additionally the study population's estimated share of Sheriff's administrative costs is \$2.9 Million (\$2.7 Million NCC).

3.2.7. Net County Costs

Our estimates of the NCC portion of the study population's arrest and jail expenditures are based on information provided in the County's Recommended FY 2014-15 budget and by the Sheriff's Department. The total amount appropriated for the items relevant to arrests and bookings in the Sheriff's FY 2014-15 budget is \$1.5 billion, of which 27.3% is NCC, and this is the proportion of the booking costs we identified as NCC in Table 3c.²¹ Estimates of the NCC portion of the study population's jail day maintenance expenditures (Table 3d) replicate the NCC portion of appropriations for the *custody* budget item identified in the FY2014-15 Recommended Budget (\$312.5 million of \$720.5 million, 43.4%). Similarly, the basis for RES's estimate that 98.1% of jail ward costs (Table 3e) and 92.7% of administrative costs are NCC (described in section 3.2.6) is based on the proportions shown in the Recommended Budget for the Medical Services Bureau and administrative expenditures.²² NCC for the Community Transition unit was identified for us by the Sheriff's Department. The sum of the NCC subtotals shown in Tables 3c, 3d, 3e, plus the additional NCC discussed in Section 3.1.7 and 4f is \$37 million, which is 46.5% of the total Sheriff's expenditures for the study population in FY 2014-15.

²¹Since Sheriff's Department bookings are processes that involve any number of budgeted activities in the Sheriff's annual appropriations, we calculate the NCC proportion of the booking costs shown in Table 3c based on the NCC for all non-administrative budget items combined other than custody and medical services, which are captured in the jail day and jail ward costs.

²²Information obtained from the Sheriff's Department indicates that the jail ward is the mechanism through which inmates receive medical attention. Since the Jail ward is not itemized with an appropriation in the County's Recommended Budget, we assumed that the NCC portion of jail ward day costs would replicate the NCC portion of the Medical Services Bureau NCC: In the FY 2014-15 Recommended budget, the gross appropriation for LASD's Medical Services Bureau is \$221.8 Million, of which \$217.5 Million is NCC ($\$217.5 \text{ million} / \$221.8 \text{ Million} = 0.981$). This is our basis for categorizing 98.1% of the jail ward costs shown in Table 3e as NCC. Similarly the FY 2014-15 Recommended Budget indicates that \$103.9 of the \$112million gross appropriation for administrative costs is NCC ($\$103.9 \text{ Million} / \$112 \text{ Million} = 0.927$); As such, we categorize 92.7% of the administrative costs discussed in section 3.2.6 as NCC.

3.3. Probation

Probation's ability to identify persons within the agency's client population who are homeless is aided by two factors. Firstly, the Probation Systems database includes a homeless flag. All probationers coded as *transient* in FY 2014-15 service records are included in our study population ($n=1,952$ adults). Secondly the agency provides housing and targeted services to clients who meet the eligibility criteria for programs such as Healthright 360, which is offered to non-violent felons who are homeless and who would have been under the supervision of State-level corrections agencies prior to passage and implementation of AB 109. A total of 843 probationers in our study population received homeless-related services through the Healthright 360 contract, bringing the total number of probationers in our study population to 2,795 adults, 1.9% of the study population.

From an administrative and financing point of view, Probation separates adult felony probationers and clients receiving services through Healthright 360, which the department categorizes as the AB 109 segment of its overall client population, as two separate groups. However, since CEO budget was able to produce an overall total of the department's actual expenditures that combines the two populations, they are grouped together in RES's estimates.

3.3.1. Homeless Probationers

		Months on Probation		Average Time on Probation Per Person	
		FY 14-15	Total	FY 14-15	Total
Healthright 360	843	6,696	14,285	7.9	16.95
Other Programs	1,952	15,030	55,205	7.7	22.5
Total	2,795	21,726	69,490	7.8	21.1

Table 3g shows the homeless probationers in our study population, i.e. those included either as a result of their use of services through Healthright 360 during FY 2014-15 and/or those who were identified as homeless in Probation's database. In all, these clients were on probation during the

fiscal year for a total of 21,726 months, an average of 7.8 months per person. Almost 40% of those tabulated had no case closure date in their records, in which case we assumed that the cases were ongoing beyond the observation period.²³

3.3.2. A Prorated Estimate of Study Population Probation Costs

Given the difficulties involved in attempting to attach client-specific costs to the Probation data available to us through the ELP data warehouse, a prorated expenditure estimate was produced based on a combination of data match results, expenditure information produced by the CEO's budget office, and information supplied to us by Probation.

Probation provided rehabilitative services to 36,375 adult felon probationers in FY 2014-15. The 1,952 homeless probationers in the study group therefore comprise 5.4% of the department's adult felon

²³ Imposing a June 30, 2015 closure date on these cases enables us to compute the average amount of time a client is on Probation *during the observation period*. However, since the observation period is fixed, more elaborate time-to-event methods of analysis would be required to control for the distorting effect a client's entry date otherwise has on the observed average *length of a case*.

population. Additionally, 14,437 adults received services through Healthright 360, which means that the 843 adults who in the study population because they used homeless services made available through the contract constitute 5.8% of the department's FY 2014-15 Healthright 360 population. Although adult felon probationers and Healthright 360 clients are, from Probation's point of view, separate populations, the CEO's budget office provided RES with Probation's actual FY 2014-15 expenditures, inclusive of costs associated with both populations, which total to \$219.3 million.

The 2,795 probationers in our study population comprise 5.5% of the total number of probationers in the adult felony and Healthright 360 groups combined. Proportional expenditures are therefore assumed for the study population, which amount to \$12.1 million, 5.5% of the \$219.1 million in total expenditures according to the CEO budget office. In relation to the data match results, the prorated calculation for the study group suggests that the department spends about \$1 million per month on its homeless adult clients, \$4,311 per client over the course of their time on Probation, which is an average of \$557 per client, per month (Table 3i)²⁴

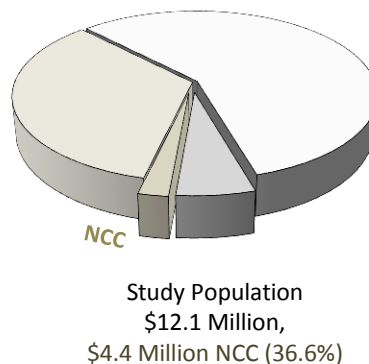
3.3.3. Net County Costs

Our estimate of the Net County Cost for the Probation clients in the study population is based on the FY 2014-15 Recommended Budget, where the gross appropriation for adult services is \$184.5 million, of which \$67.4 million is NCC (36.6%). Based on this proportion it is assumed that \$4.4 million (i.e. \$12.1 million*0.366) of the total expenditure on the probation clients in the study population is NCC.

Table 3i. Estimated Probation Costs, FY 2014-15, n=2,795 Clients				
NCC	Overall Cost	Total Per Month	Total Per Client	Monthly Per Client
\$4,409,780	\$12,048,578	\$1,004,048	\$4,311	\$555

Figure 3b. Probation Costs for Adult Felony Probationers and Healthright 360 Clients

Estimated Expenditures on Adults Overall: 219.3 Million



²⁴The average cost per client, per month is derived by dividing the overall study population cost for the fiscal year by the total number of Probation months for FY 2014-15, as shown in Table 3g: (12.1 Million/21,726 months = \$557.

4. Social Services

The social services expenditures summarized in this chapter are based on 114,037 DPSS clients who received GR and food stamps benefits through CalFresh during FY 2014-15. These clients comprise 77% of our study population and accounted for an estimated \$293.7 million in DPSS costs over the fiscal year, roughly three-fifths of which (\$176.4 million) is NCC (Table 4a). This estimate does not include expenditures associated with DPSS's provision of Medi-Cal eligibility services.

	#	Total Months Receipt*	Cost per Person, per Month*	Costs+		Cost Per Person	
Unique Recipients				NCC+	Total	NCC	Total
*CalFresh, & GR	114,037	688,766	\$382	\$160,403,286	\$262,831,006	\$1,407	\$2,305
Administrative Costs	114,037	688,766	\$43	\$16,040,466	\$30,884,710	140	\$261
DPSS Grand Total	114,037	688,766	\$426	\$176,443,752	\$293,715,716	\$1,547	\$2,566
NCC: 60.1%							
*The GR costs component of the total cost shown in this row includes \$21.8 million allocated in DPSS's FY 2014-15 budget to GR Anti-Homelessness Programming (\$8.2 Million NCC)							

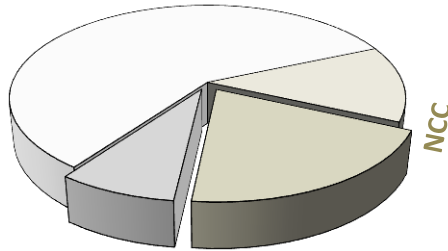
CalFresh and GR provide most of the benefits and services utilized by DPSS's single-adult clients. Producing an estimate of DPSS's total expenditures on single adults in FY 2014-15, including the associated administrative costs, necessitates calculating a prorated approximation of DPSS's costs in providing single adults with CalFresh benefits. The sum of these *approximated* CalFresh costs (\$630.3 million) and GR-related expenditures (\$253 million) is \$883.3 million, which is treated as an estimate of DPSS's total single-adult funding for FY 2014-15, excluding costs associated with Medi-Cal eligibility services and In-Home Supportive Services. It is further estimated \$248.6 million of these funds (28%) to be NCC.²⁵²⁶

Examined in relationship to each other, the single adult expenditure estimate and the study population's share of these costs, as summarized in Table 4a, suggest that one-third of DPSS's gross expenditures on single adults in FY 2014-15 were costs accounted for by homeless clients (Figure 4a). While the GR-related funds in the overall single adult estimate (\$253 million) account for 6.6% of the \$3.83 billion in DPSS's Recommended FY 2014-15 budget, they also account for two-thirds of the \$383.4 million NCC in the budget. By extension, 60.1% of the single adult NCC is accounted for by homeless clients (\$176.4 million out of \$293.7 million). In sum, although costs related to single adults are a small fraction of DPSS's gross annual expenditure, the majority of this spending is not net revenue. Moreover, the majority of the department's single-adult costs and Net County Costs are associated with providing services to homeless adults.

²⁵ Direct benefit costs are assumed 100% NCC for GR and 0% NCC for CalFresh. The NCC portion of the \$21.8 million in the funds allocated to GR Anti-homelessness programming (\$8.2 million) is the amount identified as such in the County's FY 2014-15 budget. Additionally, DPSS's The Cash Assistance Program for Immigrants (CAPI) also provides benefits to single adults. Although CAPI is administratively subsumed under GR, the program is given its own budget item and funding allocation in the DPSS budget. CAPI is excluded from the our total FY 2014-15 single-adult expenditure estimate because a budgeted amount is available for the program, but we do not have the information necessary to determine the degree to which the program provided benefits to adults in our study population. The inclusion of CAPI appropriations would therefore dilute our calculations insofar as the budgeted amount would be included in our denominator but the study group's share of these funds would not be represented in the numerator.

Figure 4a Estimated DPSS Expenditures on Single Adults, FY 2014-15

Estimated Expenditures on Adults Overall: \$883.3 Million,
248.6 Million NCC (28.1%)



Study Population Expenditures:
\$293.7 Million,
\$176.4 Million NCC (60.1%)

To produce a DPSS cost estimate for FY 2014-15, the study population was matched against records of monthly benefits received through CalFresh in FY 2014-15. A data match for the purpose of determining the extent of GR receipt within the study population was not necessary since an exhaustive dataset of FY 2014-15 GR receipt was built into the master file created for this report. The calculations additionally drew from program and cost information provided by DPSS, as well as from the County's FY 2014-15 budget.

4.1. Monthly Benefits: General Relief and CalFresh

DPSS paid 114,037 of its clients in our study group a total of \$241.1 million in monthly GR and CalFresh benefits over a net total of 688,766 months in FY 2014-15, an average annual cost of \$1,335 per person (Table 4b). These clients received GR benefits for a cumulative average of about six months per person at \$221 per month for a total in FY 2014-15 of \$152.2 million, 100% of which is NCC (Table 4b).

The GR recipients in the study population were also linked to employability status records in additional LEADER tables available to RES, which revealed that an average of roughly two-thirds of the recipients in the active monthly caseloads were categorized by DPSS as *unemployable* at some point during the observation period. Moreover, about 41% of the GR recipients in the study population ($n=46,528$) were coded as unemployable in all months during which they received GR benefits, including more than two-thirds of those in the chronically homeless subgroup ($n=1,343$). Employability status is significant with respect to DPSS's monthly payment obligations insofar as these obligations are 100% NCC and those who are categorized as *unemployable* are exempt from otherwise mandatory participation in welfare-to-work program components, as well as from time limits on receipt of monthly benefits, for as long as they can demonstrate that their disabilities prevent them from working.

Table 4b. Study Group Receipt of General Relief and CalFresh, FY 2014-15

		# Unique Recipients	Total Months Receipt*	Average Cost per Person, per Month*	Costs+		Cost Per Person	
					NCC+	Total	NCC	Total
	GR	114,037	688,766	\$221	\$152,217,286	\$152,217,286	\$1,335	\$1,335
	Chronic Homeless	1,976	15,999	\$221	\$3,535,779	\$3,535,779	\$1,789	\$1,789
	CalFRESH	71,910	555,267	\$160	\$0	\$88,842,720	\$0	\$1,235
	DPSS Subtotal 1	114,037	688,766	\$350	\$152,217,286	\$241,060,006	\$1,335	\$2,114
%NCC:: 63.1%								

*The total number of months receipt shown in the table is an unduplicated net total, as opposed to a gross total. The net cumulative total months is more meaningful than a gross total ($n=1,244,033$ months) because the net total can be applied as a divisor to the total benefit payments to produce an average cost per person, per month. It should be noted, however, that the average cost per person, per month is not equal to 1/12 of the total cost per person because recipients do not GR and CalFresh for the same amount of time, but since all clients who received food stamps at some point in the 12-month observation period also received GR during the year, we use the total months of GR receipt ($n=688,766$) and the total number of GR recipients in the dataset ($n=114,038$) as the basis for our aggregate cost per-person and cost per month estimates.

Table 4b also shows our study population's total receipt of food stamp benefits, which are available through the CalFresh program and funded almost entirely by the Federal government with the remainder of the benefits funded by the State through the California Food Assistance Program for legal immigrants. A data match linking the study group to DPSS records of CalFresh receipt yielded 71,910 clients who received food benefits for at least one month in FY 2014-15, a match rate of 48.3%. These persons consumed benefits in the amount of \$88.8 million over 555,267 months of receipt, an average of close to eight months per recipient at roughly \$1,235 per person for the year and \$160 per month.

4.2. Additional Costs

The DPSS budget for FY 2014-15 includes \$21.8 million allocated to GR Anti-Homelessness programming, (\$8.2 Million NCC), all of which is added to our estimate. The basis for the estimate of GR and CalFresh administrative costs, which total to \$30.9 Million, is shown in the appendix to this report.

5. Summary and implications

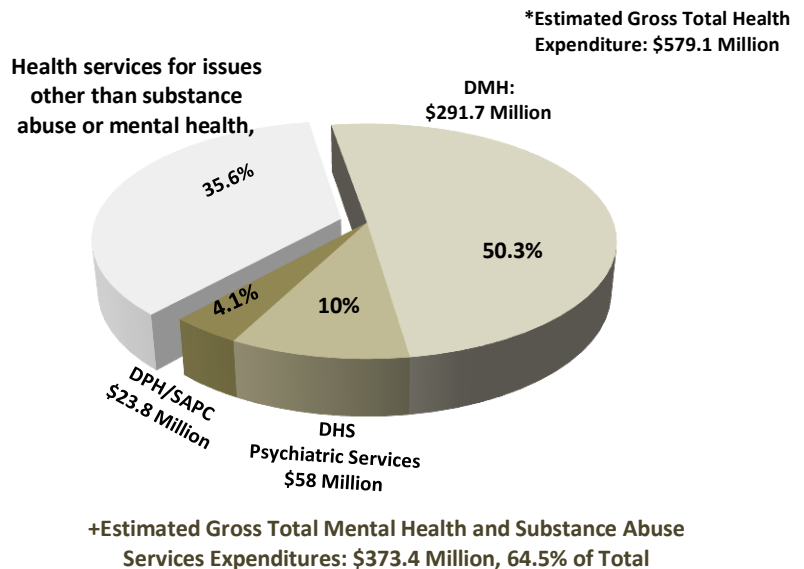
Table 5a summarizes the cost estimates discussed in this report. The six agencies we examined spent an estimated combined gross total of \$964.5 million in providing services to the study population in FY 2014-15. DPSS spent the most in terms of Net County Cost (\$176.4 Million), almost five times more than the Sheriff (roughly \$37 million). This is largely driven by GR, which is almost entirely NCC, as well as the high proportion of subjects in the study population who are GR recipients.

	*Client N=	% Study Population+	Estimated Expenditures			
			Direct Services**	TOTAL	NCC	Average Per Person
DHS	47,431	31.8	\$246,647,125	\$255,263,292	+++	\$5,381
DMH	39,073	26.3	\$252,245,388	\$291,702,711	\$8,258,181	\$7,466
DPH	6,939	4.7	\$22,120,417	\$32,142,976	\$2,514,024	\$4,632
DPSS	114,037	76.6	\$241,060,006	\$293,715,716	\$176,443,752	\$2,576
Sheriff	14,754	9.9	\$74,133,443	\$79,610,743	\$36,968,486	\$5,397
Probation	2,795	1.8	\$12,098,348	\$12,098,348	\$4,409,780	\$4,328
OVERALL TOTAL	148,815	100	\$848,304,728	\$964,533,787	\$228,612,438	\$6,481
Most Costly 5%	7,441	5.0	\$370,288,623	\$381,181,654	\$12,671,254	\$51,227
Most Costly 10%	14,882	10.0	\$476,865,568	\$499,132,698	\$27,474,588	\$33,539
Most Costly 20%	29,763	20.0	\$591,976,118	\$635,675,239	\$55,499,664	\$21,358
HMIS Chronic Homeless	7,675	5.2	\$54,747,979	\$60,467,810	\$5,134,767	\$7,879
*These are Unique Totals						
+These percentages are based on the full study population, <i>n</i> =148,815						
++In this context, the <i>Direct Services</i> category is intended to exclude both administrative expenditures and costs associated with programs that are either only recorded at an aggregate level in terms of utilization or are only available in an aggregated format.						
+++ Section 2.2.1 provides an explanation for why DHS's NCC is excluded from this report.						

5.1. The Significance of Mental Health and Substance Abuse Services

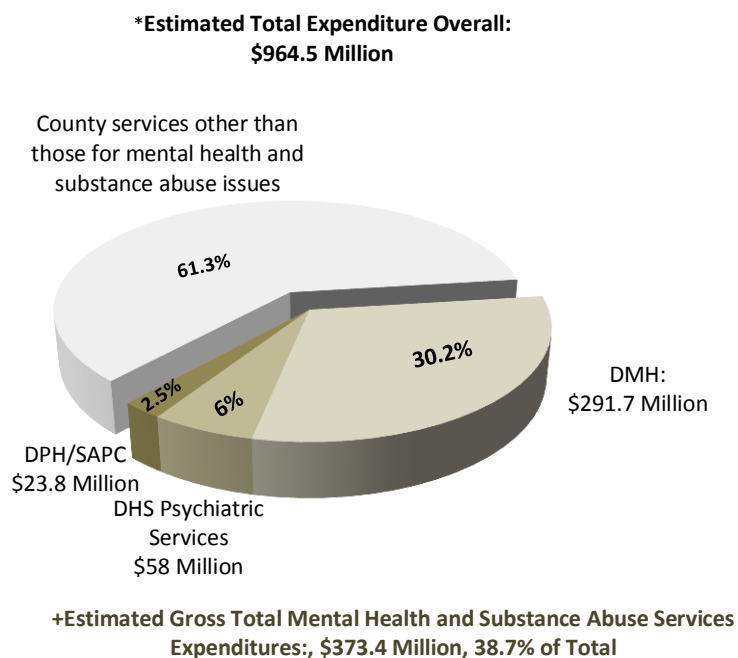
Looking more specifically at expenditures *per capita*, the spread separating DMH from DHS and the Sheriff is close to 40%. This is particularly remarkable given that close to one quarter of DHS's inpatient and outpatient costs with respect to the study population were expenditures on psychiatric emergencies and hospitalizations (roughly \$58 million of \$246.6 million). The sum of DHS's estimated psychiatric-related costs and DMH's total costs - roughly \$350 million over 12 months - suggests that 60% of the County's health spending and more than

Table 5a Estimated County Mental Health and Substance Abuse Expenditures+ in Relation to Health Expenditures Overall, FY 2014-15*



one-third of the County spending on homeless single adults overall – are funds that pay for mental health treatment. When the study population’s DPH/SAPC costs (\$23.8 million) are added to the mental health/psychiatric expenditures, the resulting implication is that more than three-fifths of the County’s health spending on homeless single adults and two fifths of the County’s overall spending on this population funds services for mental health and/or substance abuse treatment (Figures 5a and 5b). Moreover, to the extent that the composition of our study population underrepresents homeless SAPC and DMH patients, the proportions may be even higher.

Table 5b. Estimated County Mental Health and Substance Abuse Expenditures+ in Relation to Overall Costs, FY 2014-15*



5.1.1. Inpatient and Emergency Services

From the point of view of general service areas, mental health utilization is the biggest driver of the County’s costs with respect to homeless adults. Within the domain of mental health services, inpatient and emergency utilization - including residential services, inpatient hospitalizations and psychiatric ER visits – are the primary factor driving spending on homeless patients. While only 13% of the DMH patients in our study population required acute inpatient and/or residential services ($n=5,291$ adults), these patients accounted for roughly one-fifth of the DMH inpatient and outpatient costs for the study population and their average cost per patient (\$9,316) was roughly 25% higher than the average for all the DMH patients in the study population. Psychiatric hospitalizations accounted for roughly 30% of DHS’s inpatient costs and psychiatric emergencies accounted for close to 38% of the department’s emergency costs.

5.2. Inmates and Probationers

Although the data match results suggest that one in 10 of the adults in the study population were arrested by the Sheriff’s Department, the composition of the study population is such that this proportion is likely an underrepresentation of the extent to which law enforcement resources are utilized in arresting and jailing homeless persons. Nevertheless, the Sheriff spent an average of \$5,396 on those arrestees and inmates captured in our FY 2014-15 data match for an estimated total of \$80 million overall (\$37 million NCC, 46.5% NCC). Approximately seven in ten of the arrests involved time in custody that lasted no more than one month, but more than one in ten lead to jail stays that lasted more than three months, and these longer stays account for more than half the jail maintenance costs for the study population (\$38.4 Million out of \$74.1 million).

While the costs of arrests and jail stays are a key factor in the County costs associated with homeless single adults, less than 2% of the study population received services through Probation during the fiscal year.

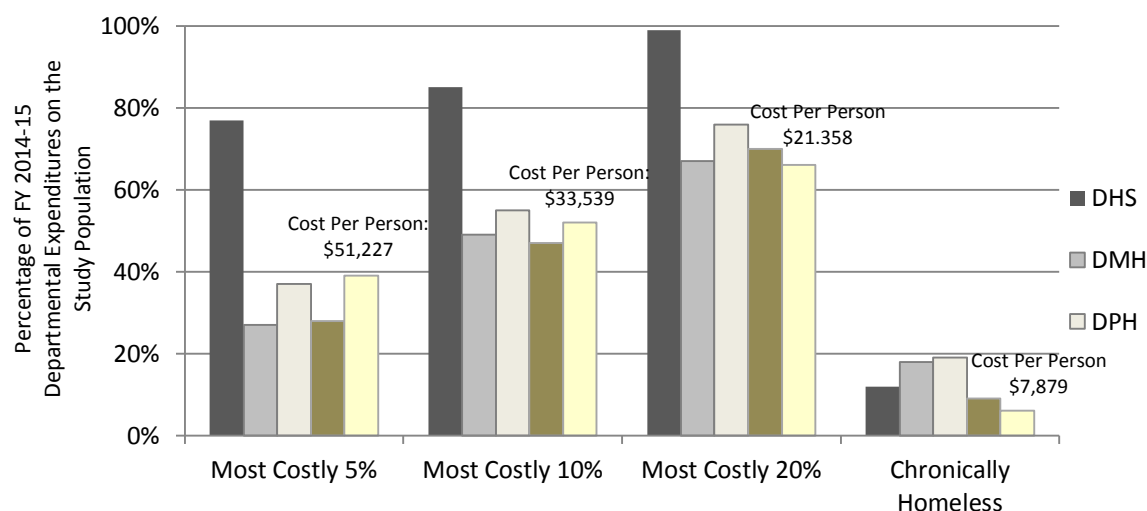
5.3. DPSS, the Primary Source of Basic Survival for the County's Unaccompanied Homeless Adults

DPSS incurred the largest gross costs among the six agencies examined (\$293.7 Million). Almost four of every five adults in the study population was a DPSS client in FY 2014-15. As the provider of both a monthly cash stipend through the GR program and the distributor of Federal Food Stamps benefits through the CalFresh program, DPSS is the main source of basic subsistence for homeless single adults in the County and is, as such, a critical system of last resort. More than 7 out of 10 adults in the study group who received GR benefits during FY 2014-15 experienced a spell of homelessness at some point over 12 months. Two-thirds of these recipients experienced a disability that prevented them from participating in the GR program's job readiness activities for at least part of the time they received benefits, and more than 40% were coded by the department as unemployable during all the months in which they received benefits.

5.4. High-Volume Service Users, the Most Significant Driver of the Costs Associated with Homelessness

The concentration of spending on a small minority of high-volume service users is both the most striking aspect of the results and one that is consistent with the current state of knowledge on the costs associated with homelessness. This pattern, as shown in Figure 5c, is one observed for the County as a whole, as well for individual County agencies. While the average cost per person for the full study group across the six County agencies was \$6,481 for the 12-month observation period, the average among the most expensive 5% ($n=7,441$ adults) was \$51,227, eight times the average. The adults in this subgroup accounted for \$381.1 million in combined service costs, which is almost 40% of the total County expenditure on the study population. The intensity of concentrated spending slows somewhat thereafter, but the most expensive fifth of the study population ($n=29,763$ adults) nevertheless accounts for two-thirds of the County's overall cost for the Fiscal Year.

**Figure 5c. County Expenditures* on the Most Expensive Adults
In the Study Population, FY 2014-15+**



*The average cost per person shown in the figure is based on expenditures across all six County agencies combined.

+DPSS and Probation are not shown because their benefits and services are fixed and provided on a recurrent and routine basis such that their costs per person do not vary dramatically by person (in contrast to the four departments included in Figure 5c).

Fairly similar spending and utilization patterns are observed in looking at DMH, DPH and the Sheriff. In the case of DHS, the concentration is considerably more intensified. DHS's average expenditure per person for the most costly 5% of the patients in the study population ($n=4,743$ adults) is \$80,015. This subgroup, which comprises only 3.2% of our full study population, consumed \$189.8 million in DHS service costs, which is almost three quarters of DHS expenditures on all the patients in our study group and roughly one-fifth of the County's costs on the entire study population. The most expensive 20% account for all but a small fraction of DHS's costs in providing services to the study population.

5.4.1. The Chronically-Homeless Subgroup

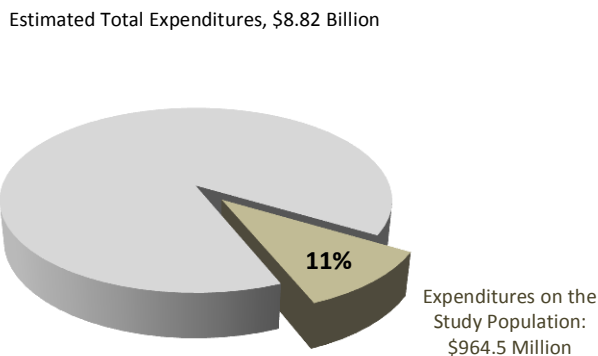
Although there is some overlap between the most costly segments of the study population and the chronically homeless subgroup ($n=7,675$ adults), the concentration of spending on the latter is considerably less intensive. At the same time, however, the chronically homeless subgroup's average cost per person in looking at County services overall (\$7,879) is 21.6% higher than average and expenditures on these persons (\$60.5 million) constitute 6.3% of the County's overall spending on the study population.

5.5. Homeless Costs in the Context of Overall Departmental Resources

For each agency included in this report, estimated costs were measured in relation to a larger pool – or denominator - of departmental funding for services provided to adults. This was done to convey a sense of the relative impact of homelessness on departmental resources. However, this relational aspect of the analyses is imperfect and its intent is limited to a general approximation of the fiscal and financial significance of homelessness in Los Angeles County. In making decisions about the inclusion and exclusion of funds from these larger gross financial denominators, a number of complexities prevent the uniform application of a standard set of business rules to all departments. Moreover, it is important to underscore that budgets are related but analytically distinct from actual expenditures. In the case of DMH, as well as for part of the analysis of Probation, larger departmental denominators were built from information provided to RES on actual expenditures. DHS provided an adjusted budget allocation for FY 2014-15. For the other three agencies, however, the funding denominators relied on information provided in the County's Recommended Budget for FY 2014-15. In these latter cases, RES proceeded with the assumption that budgets could be approached as a reasonable proxy for expenditures for the purposes of producing general estimates.

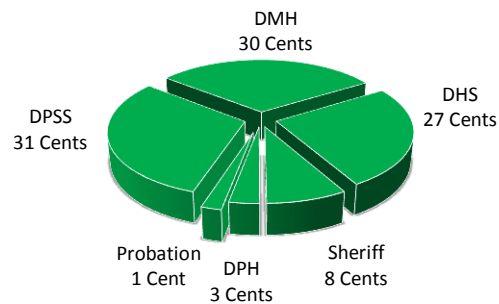
Given these limitations, the sum of these six departmental denominators, represented in Figure 5d, is our best effort to produce a reasonable approximation of the combined gross funding these agencies deployed in providing services to adults during FY 2014-15 (\$8.82 Billion) Within this universe of overall spending, slightly more than \$1 out of every \$9 was spent on services provided to our homeless study population.

Figure 5d Combined Spending on the Study Group across Six County Agencies in Relation to their Approximate Total Expenditures on Adults Overall, FY 2014-15



DPSS and DMH each account for about 30 cents on this dollar and DHS's share is 27 cents. There is a significant spread separating these three agencies from the others. The Sheriff's share is about 8 cents on the dollar, DPH accounts for three cents and Probation accounts for a penny (Figure 5e).

Figure 5e. Estimated Distribution of Every County Dollar Spent in Providing Services to Homeless Single Adults



5.6. Maximizing the Effectiveness of County Service Dollars

Los Angeles County spends close to \$1 Billion per year in providing services and benefits to single adults who experience varying spells of homelessness in the course of 12 months. The establishment of a coordinated policy and program environment that makes the most effective use of these resources is one of the fundamental objectives for the CEO's *ad hoc* Homeless Initiative. Our analysis suggests that 5% of the single homeless adults in the County – roughly 1 out of every 20 of these adults - consume 40 cents out of every dollar spent in providing services to this homeless population as a whole. Making inroads into the utilization patterns of this small segment will ultimately free up funds that could in turn be reinvested strategically in the ongoing efforts to reduce homelessness. Doing so will necessitate the implementation of more efficient and lasting alternatives that break repetitive cycles of Emergency room visits, hospitalizations, expensive psychiatric inpatient treatments, arrests and re-arrests, etc. Our analyses further suggest that coordinated interventions addressing tri-morbidity among the County's homeless men and women – i.e. adults with (often interrelated) combinations of mental health, substance use disorder and physical health issues – should be closely linked to efforts to provide safe, subsidized housing.

Homelessness is not merely a problem of dollars and cents but, more importantly, one of the defining humanitarian issues Los Angeles County faces. Reducing and eventually ending the problem will not be easy or painless but is consistent with basic values of citizenship, fairness and decency. In forming the *ad hoc* Homeless Initiative, the Board of Supervisors and the County's Chief Executive Officer have taken a decisive step in the process. Our hope is that this report will arm the Initiative with information needed to present the Board with an effectively coordinated set of recommendations, one that provides the County with guidance in facing the difficult but worthwhile challenges that lay ahead and leads to enduring solutions.