

# **COST OF HOMELESSNESS IN METROPOLITAIN LOUISVILLE**

Presented By:

Gerard “Rod” Barber, PhD

Ramona Stone, PhD

Stacy Deck, MSSW

Vickie Morris

Sarah Seelye, MSSW Student

April Clark

Kent School of Social Work

University of Louisville

Louisville, KY 40292

Prepared For:

The Coalition for the Homeless

Louisville, KY 40203

Funded BY:

**LOUISVILLE METRO GOVERNMENT**

JUNE, 2008

# CONTENTS

<b><u>Section</u></b>	<b><u>Page</u></b>
Overview of Study Findings	2
Use and Costs of Homeless Services	16
Multi-Service System Use and Costs	22
High Risk Groups	28
Appendix A: Identifying Individual, Residential Homeless Clients and Costs and Linkages with Other Service Systems	52
Appendix B: Agencies and Programs Providing Information for Homeless Residential, Single Women (W) and Men (M)	53
Appendix C: References	54

**Study Reports On Use and Cost Of Residential, Homeless Services by 7180 Single Adults During 2004 And 2005**

**And Their Use and Cost of These Other Services During The Same Period:**

**Metro Jail**

**Kentucky Prisons**

**Seven Counties**

**Mental Health Services**

**Substance Abuse Services**

**Central State Hospital**

**Healing Place**

**Detoxification Services**

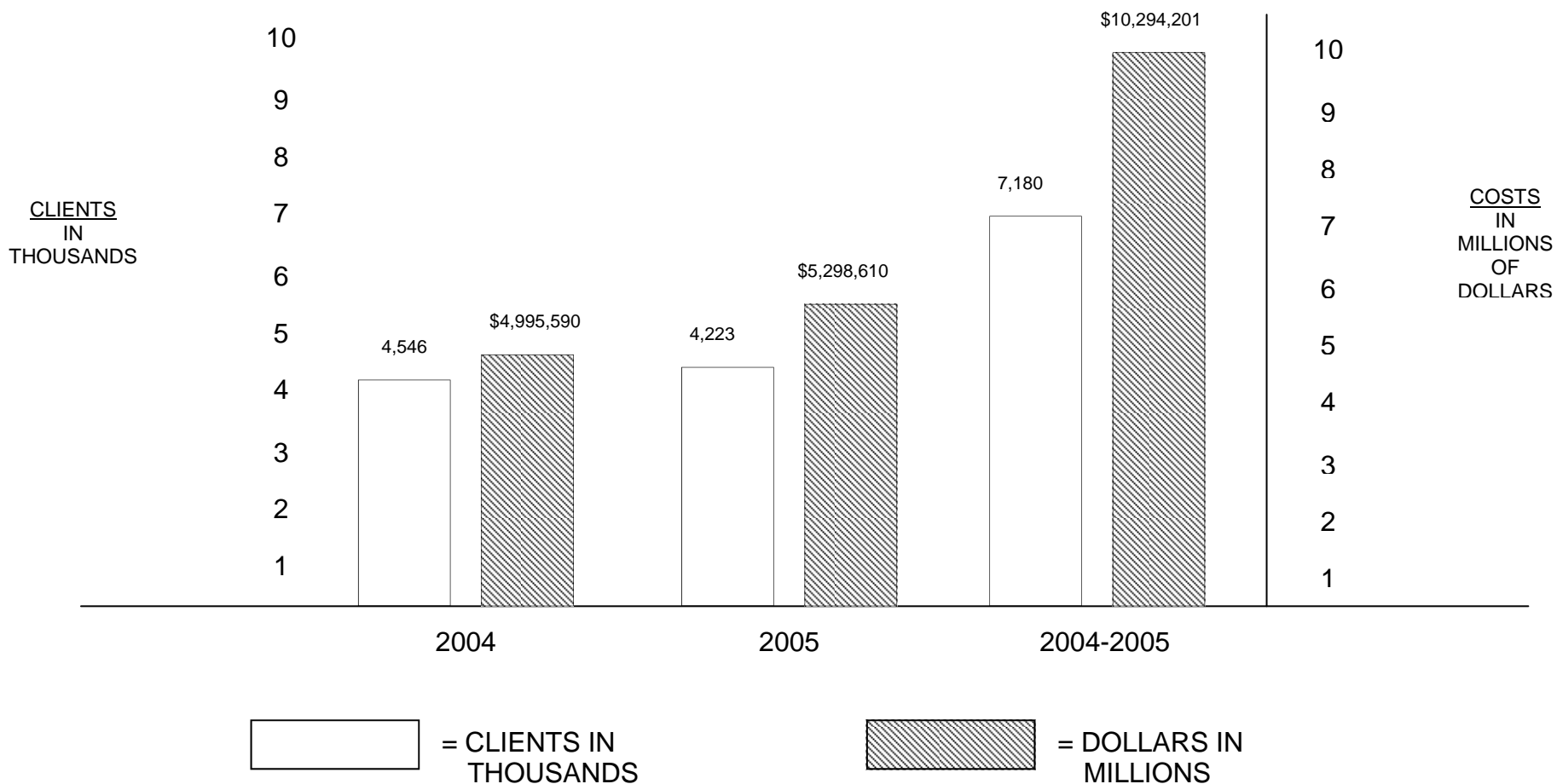
**Phoenix Health Center**

**University of Louisville Hospital**

The University of Louisville's Research Project Team and The Coalition for the Homeless greatly appreciate their help in collecting data used in this report.

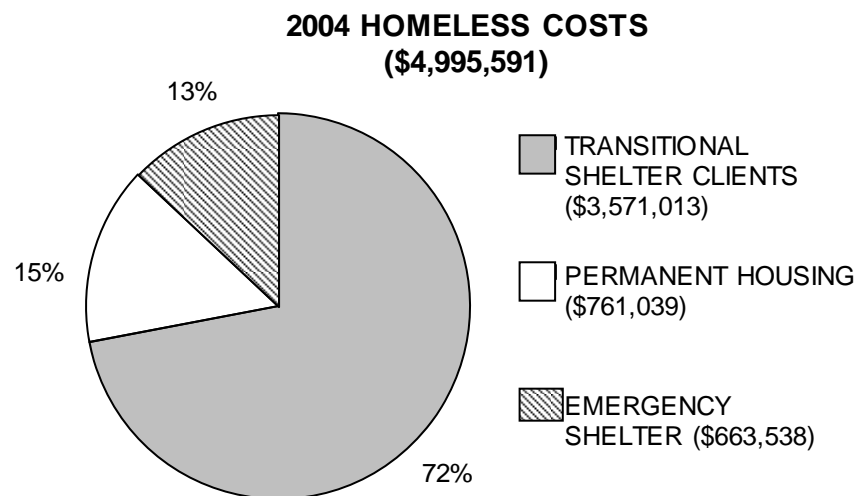
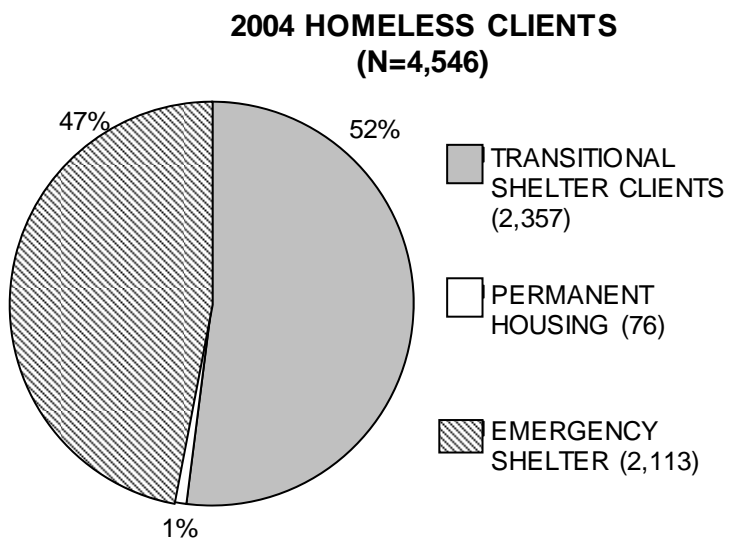
# OVERVIEW OF STUDY FINDINGS

**HOMELESS SERVICE CLIENTS AND COSTS FOR 2004-2005  
HOMELESS SERVICES**



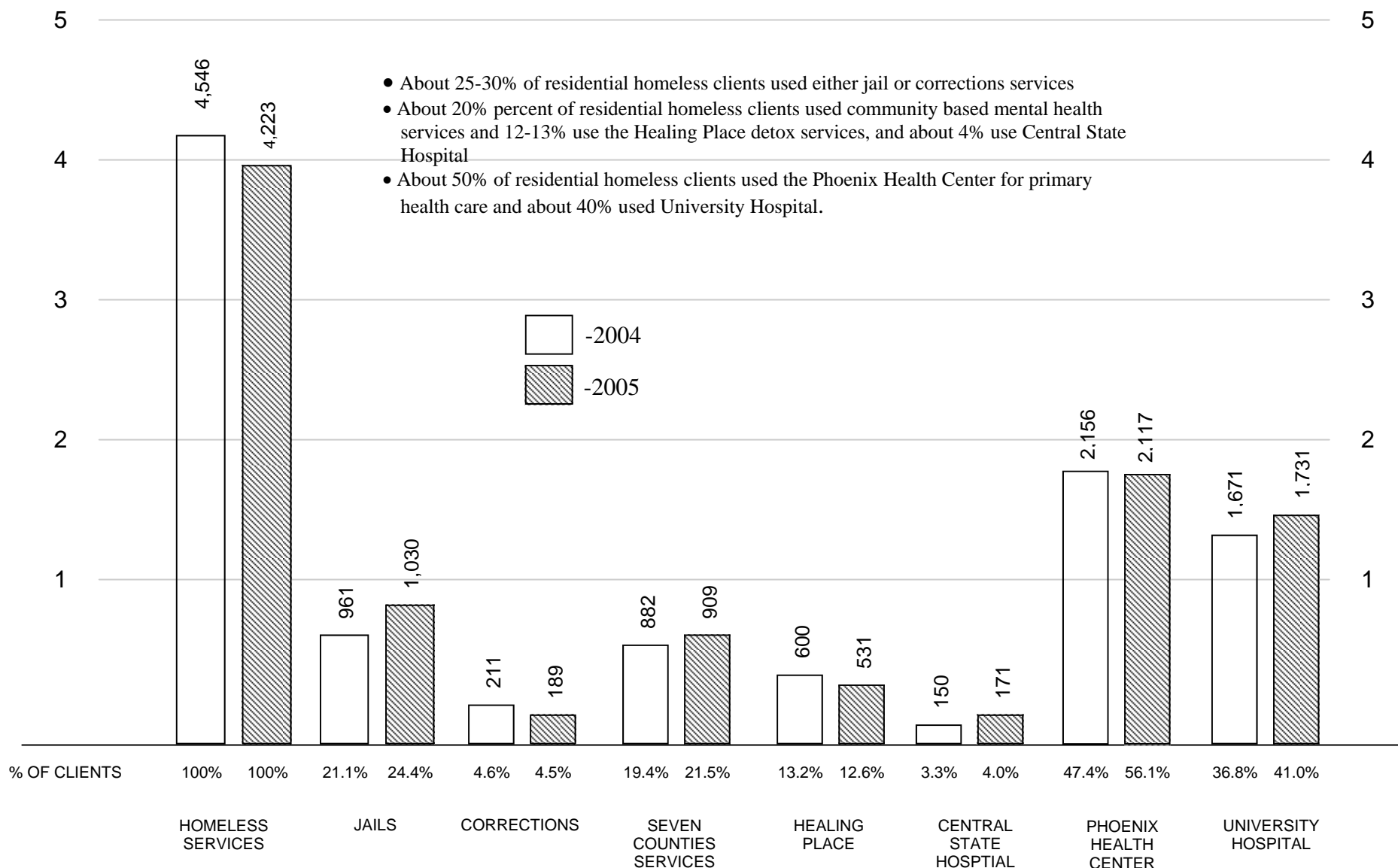
- Between 2004 and 2005 there was:  
 a 7.1% decrease in residential, homeless clients but  
 a 6.1% increase in residential, homeless service costs.
- During both years, 1,588 (or 22.1%) of the 7,180 residential homeless clients used residential, homeless services in both 2004 and 2005.

**NUMBER AND COSTS OF HOMELESS CLIENTS IN 2004  
BY TYPE OF RESIDENTIAL HOUSING**



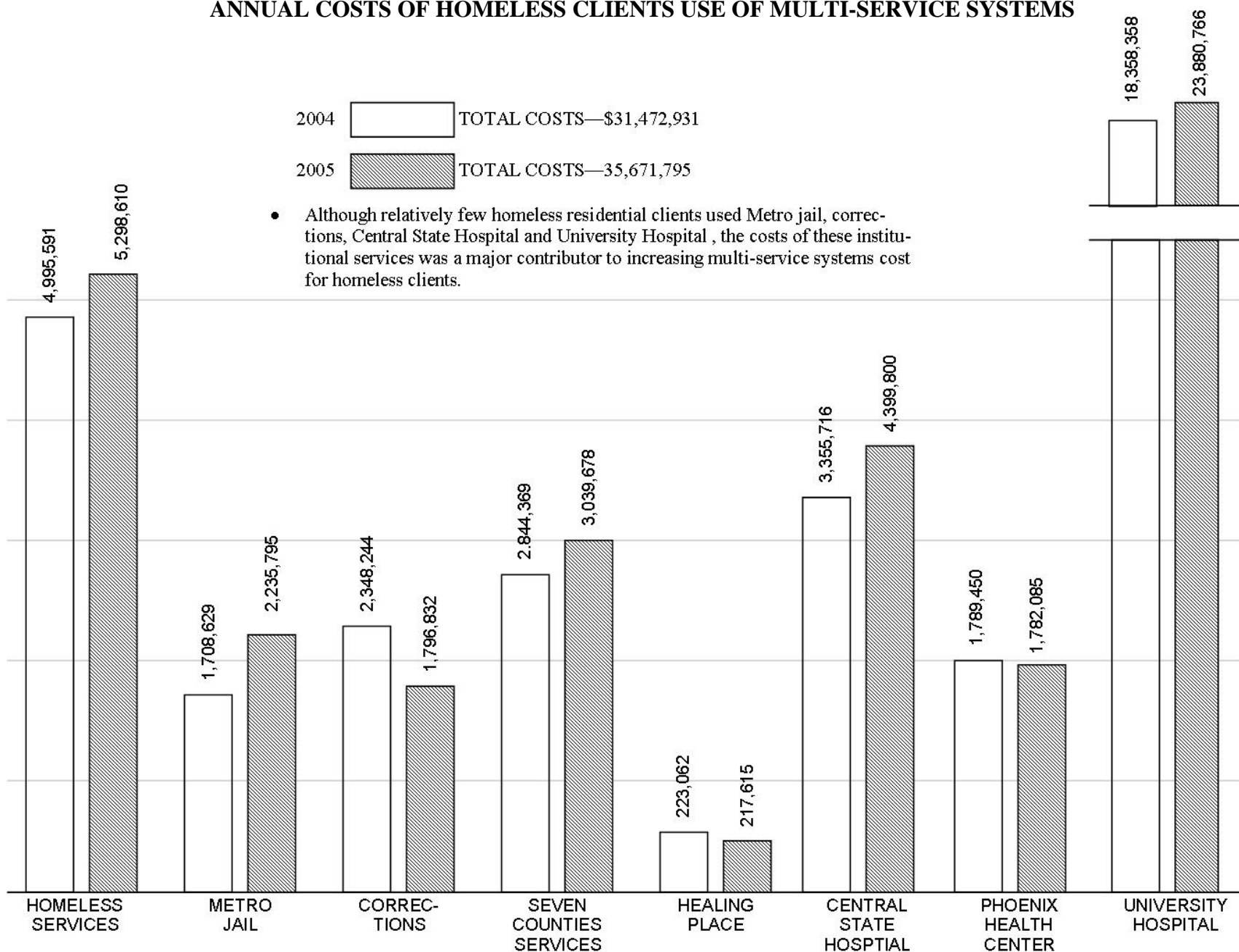
- Clients using emergency shelter services constituted 47% of clients but cost only 13% of homeless residential services in 2004.
- Clients who use transitional shelter services made up 52% of homeless clients but consumed 72% of service costs in 2004; permanent housing clients represented only 1% of homeless, residential clients but consumed 15% of homeless service cost in the same year.

**NUMBER AND PERCENT OF HOMELESS CLIENTS USE OF OTHER SERVICE SYSTEMS IN 2004 AND 2005 (IN 1,000)**



- About 25-30% of residential homeless clients used either jail or corrections services
- About 20% percent of residential homeless clients used community based mental health services and 12-13% use the Healing Place detox services, and about 4% use Central State Hospital
- About 50% of residential homeless clients used the Phoenix Health Center for primary health care and about 40% used University Hospital.

ANNUAL COSTS OF HOMELESS CLIENTS USE OF MULTI-SERVICE SYSTEMS



**2004 AND 2005 COSTS FOR MULTI-SERVICE SYSTEM USE BY TYPE OF SERVICE SYSTEM**

TYPE OF SERVICE SYSTEM	2004 COSTS		2005 COSTS		OTHER SYSTEMS COSTS FOR NON-HOMELESS YEAR**		TOTAL MULTI-SYSTEM COSTS	
	\$	%	\$	%	\$	%	\$	%
HOMELESS SHELTERS	4,995,590	15.9%	5,298,610	14.9%	0	0%	10,294,200	11.6%
METRO JAIL	1,708,629	5.4%	2,235,795	6.3%	2,109,077	9.7%	6,053,501	6.8%
CORRECTIONS	2,348,244	7.5%	1,796,832	5.0%	3,874,368	17.9%	8,019,444	9.0%
SEVEN COUNTIES SERVICES	2,844,370	9.0%	3,039,678	8.5%	1,637,627	7.6%	7,521,675	8.5%
HEALING PLACE	223,082	0.7%	217,615	0.6%	84,632	0.4%	525,329	0.6%
CENTRAL STATE HOSPITAL	3,355,716	10.7%	4,399,800	12.3%	2,823,054	13.0%	10,578,570	11.9%
PHOENIX HEALTH CENTER	1,647,115	5.2%	1,507,870	4.2%	415,550	1.9%	3,570,535	4.0%
UNIVERSITY HOSPITAL	14,350,185	45.6%	17,175,595	48.1%	10,713,346	49.5%	42,239,126	47.6%
TOTAL SYSTEMS COSTS	31,472,931	100%	35,671,795	100%	21,657,654	100%	88,802,380	100%

**\*Other Systems Costs For Non-Homeless Year** – Represents costs for other service systems for the year a homeless person was not homeless. For cases using homeless residential services in 2004 but not in 2005, this category represents other system cost for 2005; for cases using homeless residential services in 2005 but not in 2004, this represents the cost of other services for 2004.

- Homeless residential services accounted for 11.6% of two year multi-service systems costs
- Costs related to mental health and substance abuse (Seven Counties Services, Healing Place and Central State Hospital) accounted for 21% of two year multi-service systems costs
- Incarceration (metro jail and corrections) accounted for 15.8% of two year multi-service systems costs, and
- University Hospital inpatient, outpatient and emergency room use accounted for 47.6% of two-year multi-service systems costs

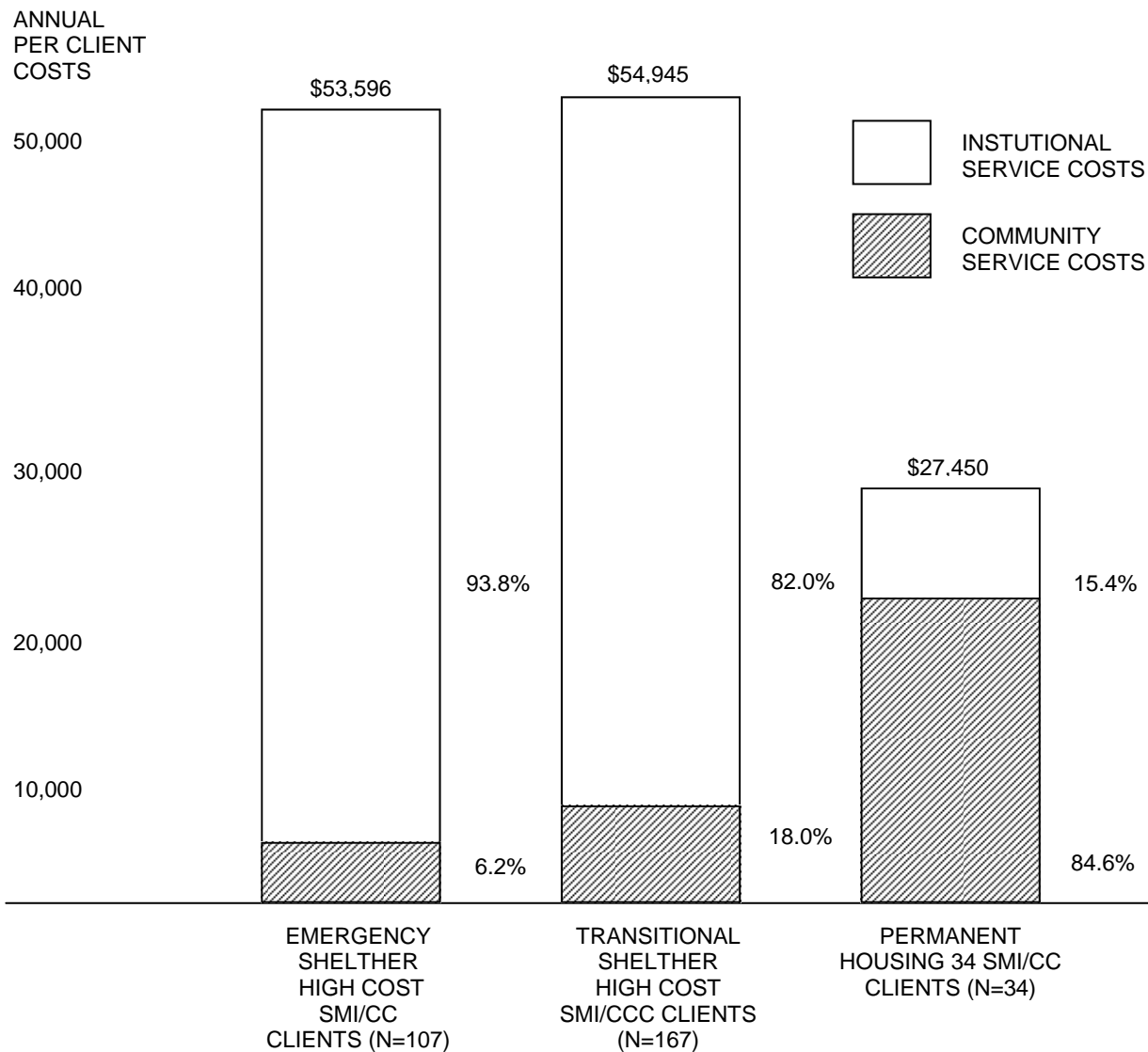


### HIGH RISK GROUPS MULTI-SERVICE SYSTEM COSTS

High Risk Group	Clients		Costs		Cost Per Homeless Client	
	#	%	\$	%	2 year costs	1 year costs
Serious Mental Illness/Co-occurring Condition (SMI/CC)	1,452	14.7%	50,482,948	56.8%	34,768	17,384
Substance Abuse (SA)	1,059	12.6%	17,651,632	19.9%	16,668	8,334
Less Serious Mental Illness (MI)	396	4.9%	4,584,091	5.2%	11,576	5,788
Other Homeless (OH)	4,273	67.8%	16,083,708	18.1%	3,764	1,882
<b>Total</b>	<b>7,180</b>	<b>100%</b>	<b>\$88,802,380</b>	<b>100%</b>	<b>\$12,368</b>	<b>\$6,184</b>

- If any homeless client that had a diagnostic condition identified as Serious Mental Illness or Co-occurring Condition (also referred to a Dual Diagnosis) by Seven Counties, Central State Hospital, Phoenix Health Center or University Hospital were grouped in the category Serious Mental Illness of Co-occurring Condition. If they were identified as having a alcohol or drug condition by any of these agencies, the homeless client was grouped with the substance abuse category. If a non-serious mental health condition and no substance condition was identified for a homeless client, he or she was included in the mental health group. And all other homeless clients were grouped under “other homeless.”

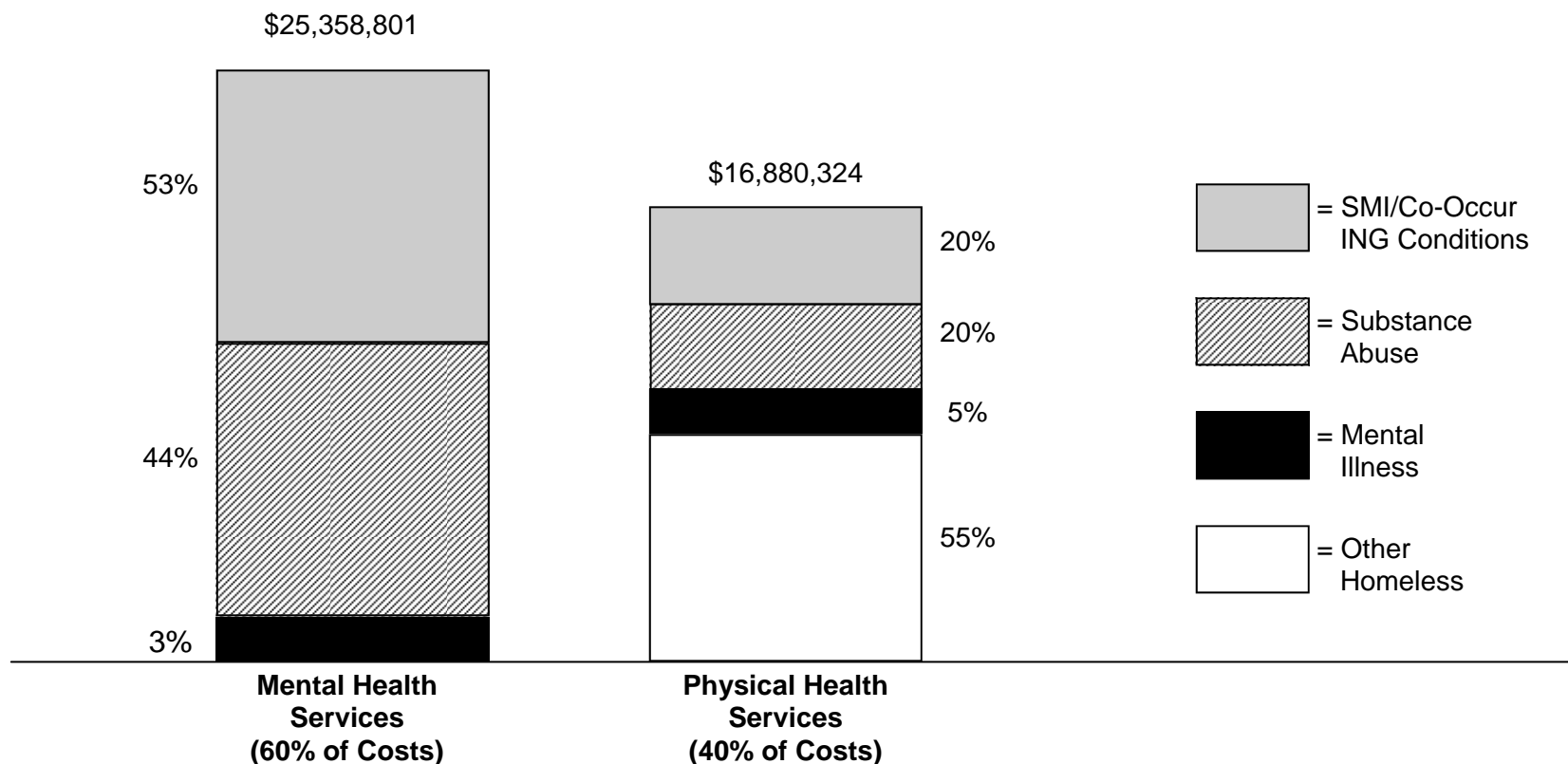
**COMPARISON OF ANNUAL MULTI-SYSTEM PER CLIENT COST FOR HIGH COST (\$50,000+) SMI/CC CLIENTS USING EMERGENCY AND TRANSITIONAL SHELTER AND PERMANENT HOUSING CLIENT COSTS**



- Of the 626 SMI/CC clients who received emergency shelter, 107 were “high-cost” clients whose multi-service system cost exceeded \$50,000 per year (average per client cost of \$53,596). Of the 792 SMI/CC clients who received transitional shelter, 167 were “high-cost” clients with an average multi-service system per client cost of \$54,945 per year.
- In comparison, the 34 SMI/CC clients who lived in permanent housing had an average multi-service system per client cost of only \$27,450 per year.
- Providing permanent housing for the high-cost SMI/CC clients in emergency and transitional shelter could have saved \$7.4 million per year (for emergency shelter: [\$53,596 - \$27,450] x 107 = \$2,797,622; for transitional shelter: [\$54,945 - \$27,450] x 167 = \$4,591,665; grand total: \$2,797,622 + \$4,591,665 = \$7,389,287).
- **The permanent housing approach puts resources into community based services and can lead to better case management, and reduced multi-system service costs.**

**2004 AND 2005 HOSPITAL SERVICE COSTS BY TYPE OF SERVICE AND HIGH RISK GROUPS**

- 60% of hospital service costs was for mental health services and 82% of this was for inpatient care
- 97% of hospital mental health services costs was related to homeless clients with SMI/Co-Occurring Conditions and Substance Abuse
- 40% of hospital service costs was for physical health services: 28% for emergency care, 28% for outpatient care and 44% for inpatient care
- 55% of hospital physical health service costs was related to “other homeless” clients and 52% of their costs was for inpatient care



**SERVICE OPTIONS FOR MEETING NEEDS OF SERIOUSLY MENTALLY ILL OR CLIENTS WITH CO-OCCURRING CONDITIONS: EXPAND PERMANENT HOUSING FOR HIGH COSTS SMI/CC HOMELESS CLIENTS.** Two models have demonstrated their cost effectiveness with these clients.

- **INTENSIVE CASE MANAGEMENT BY AN INTERDISCIPLINARY TEAM COMBINED WITH LONG TERM SUPPORTIVE HOUSING**
  - Strong research evidence supports the Assertive Community Team (ACT) model
  - Controlled research studies showed that homeless clients participating in ACT had reduced psychiatric hospitalization and psychiatric symptoms, better housing stabilization, greater client satisfaction, and greater likelihood of obtaining independent housing. (Caldwell and Bender 2007; Lehman, Dixon, Kernan, Deforge, and Postrado, 1997; Rosenheck and Demimes, 2001)
  - Assertive Community Team models are expensive and must be targeted to homeless clients with histories of heavy multi-service use (Culhane, Parker, Poppe, Grass & Sykes, 2007; Clark and Rich, 2003). The average annual costs for Permanent Housing in Louisville for SMI/CC clients was \$23,227 for community based services and \$4,223 for institutional services for a combined cost of \$27,450 per year.
  
- **AN ALTERNATIVE MODEL IS “HOUSING FIRST”**
  - This model does not make permanent housing conditional on accepting mental health/substance abuse treatment and it does not require defined periods of being “clean and sober” as a precondition for accessing housing. It allows more consumer autonomy to freely choose services that are offered. Housing arrangements tend to be small apartments dispersed over a geographical area rather than congregate housing arrangements.
  - Advantage of this approach: it allows some monitoring of clients behavior and ability to provide or get support services when needed to avoid more costly institutional care, such as hospitalization or incarceration.
  - There is some recent evidence supporting the cost effectiveness of this approach. (Tsemberis, 2007; American Psychiatric Association, 2005; Gulcur, Stefancie, Shinn, Tsemberis, and Fischer, 2003).

**SERVICE OPTIONS FOR MEETING NEEDS OF SERIOUS MENTALLY ILL OR CLIENTS WITH CO-OCCURRING CONDITIONS:  
EXPAND ADVAOCACY SERVICES TO GET MORE OF THESE CLIENTS ON MAINSTREAM ENTITLEMENT PROGRAMS FOR  
INCOME SUPPORT AND FINANCIAL MANAGEMENT SUPPORT THEY WILL NEED**

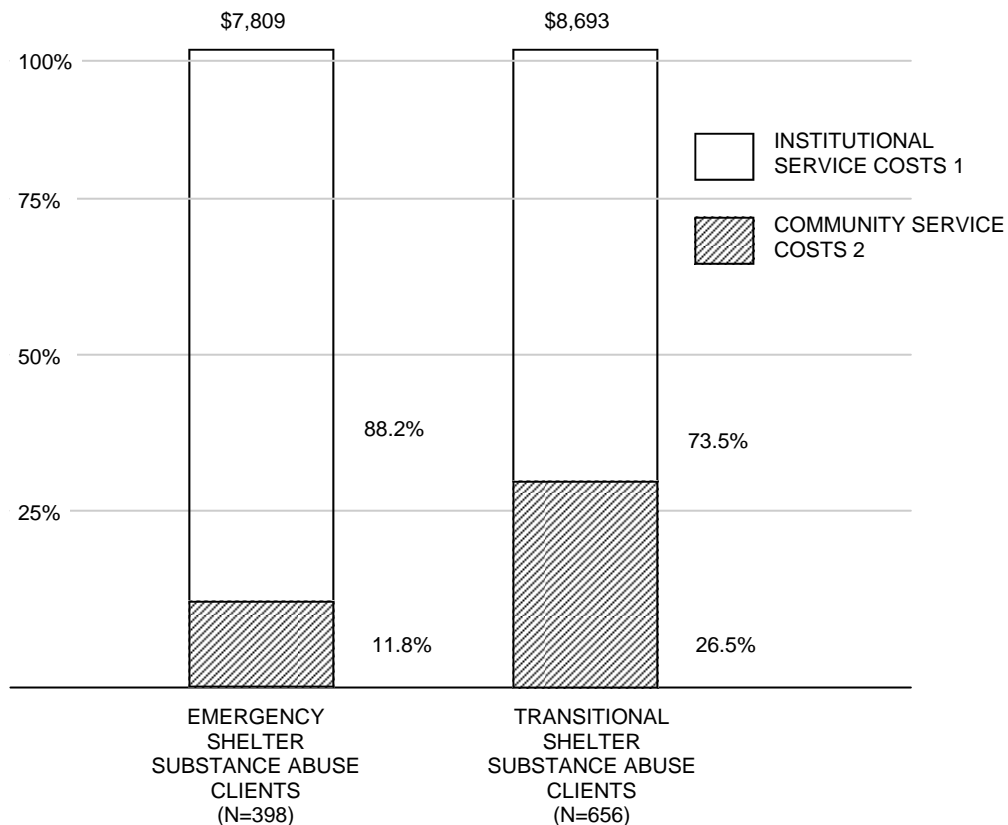
- An analysis of Seven Counties Services showed that 459 or 43% of the 1056 clients served by Seven Counties Services with Serious Mental Illness and/or Co-occurring Conditions were NOT on SSDI or SSI or had Medicare or Medicaid coverage.
- Most of these clients are likely to be eligible for SSI or SSDI, which also makes them eligible for Medicare or Medicaid.
- Medicare or Medicaid would help cover much of the Indigent Care Costs, which were assumed by University Hospital (\$4,816,861) and Seven Counties Services (\$396,604); for a total of \$5,213,465 for homeless clients with SMI/Co-occurring Conditions.
- If most of these clients were on SSI they could get about \$637 per month and \$90 per month from food stamps for an annual amount of \$8,724 ( $637 + 90 = 727 \times 12 = \$8,724$ ) SSDI provides a little more income support.
- If the 459 clients received this annual income, it would total to \$4,004,316.

**THEREFORE IT IS RECOMMENDED THAT EFFORTS BE MADE TO:  
EXPAND THE SOAR UNIT AT THE PHOENIX HEALTH CENTER IN ORDER TO INCREASE SSDI AND SSI ELIGIBILITY  
ENROLLMENT**

Most Serious Mentally Ill or Clients with Co-occurring Conditions should be eligible for SSDI or SSI, but 43% were not enrolled during 2004 or 2005.

**EXPAND NUMBER OF “PAYEE” SUPERVISORS TO HELP SMI and/or CLIENTS WITH CO-OCCURRING CONDITIONS  
MANAGE THEIR MONEY.** Many of these clients are likely to need someone to help them manage their money, and there are only two payee groups in the Louisville area now. More would be needed if SSDI and SSI enrollment expands.

**ANNUAL MULTI-SYSTEM PER CLIENT COST FOR SUBSTANCE ABUSE HOMELESS CLIENTS USING EMERGENCY OR TRANSITIONAL SHELTER**

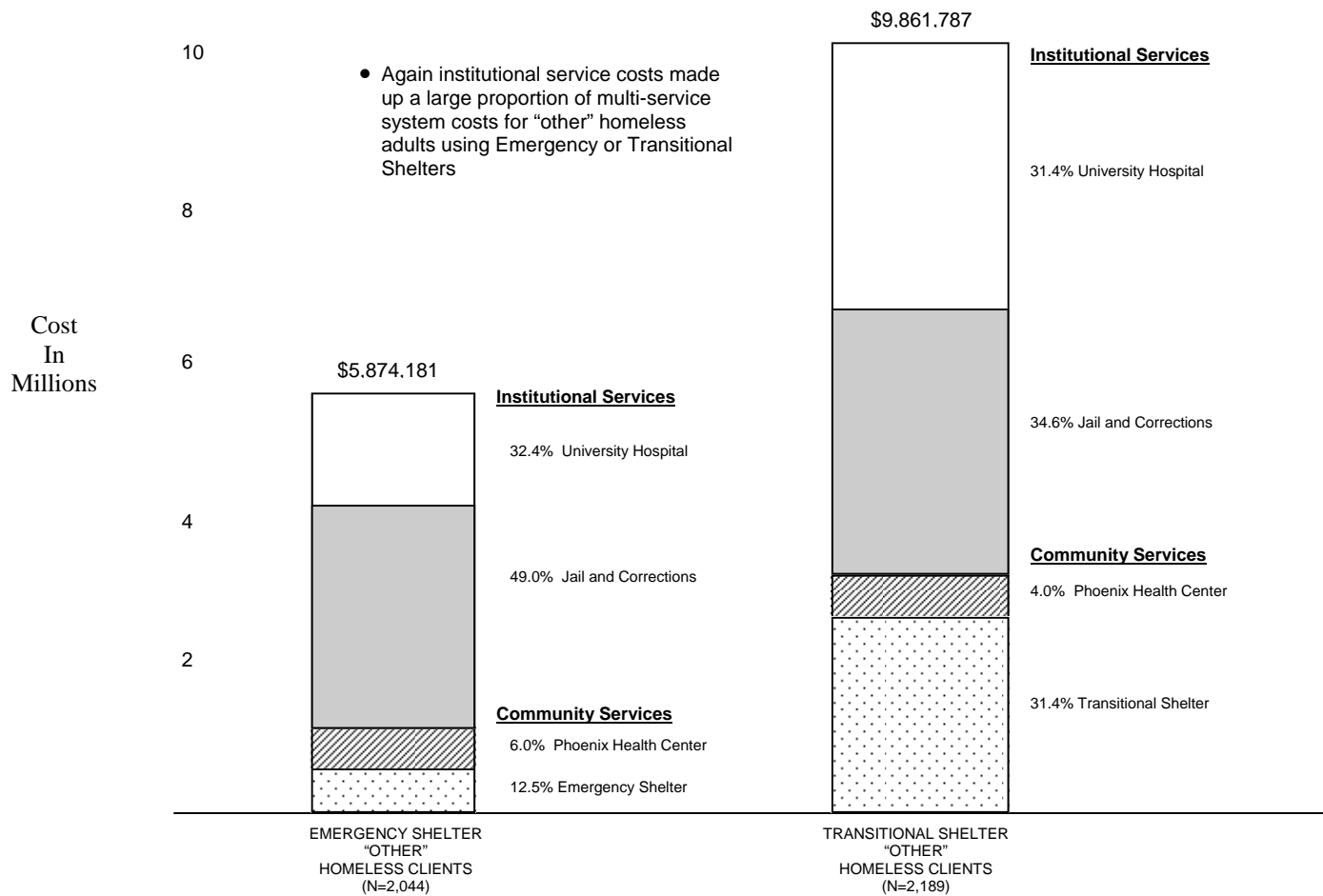


- Almost 80 percent of multi-system cost for substance abuse clients using Emergency or Transitional Shelters was for institutional services. Metro jail and corrections made up 16.2% of this costs and University Hospital made up 62.3%

Institutional Costs: University Hospital, jail and corrections

Community Costs: Homeless Shelters, Healing Place, Seven Counties Services and Phoenix Health Center

**2004 AND 2005 MULTI-SYSTEM SERVICE COSTS FOR “OTHER” HOMELESS SINGLE ADULTS USING EMERGENCY OR TRANSITIONAL SHELTER**



## OPTIONS TO DEVELOP COMMUNITY BASED SERVICES AS ALTERNATIVES TO JAIL OR PRISON INCARCERATION

Much money was spent on incarceration for homeless clients, especially those with a substance abuse condition (\$2,896,919) and the “other homeless” (\$6,192,283). Since most of these individuals were in Metro Jail rather than state prisons, a large proportion of them were likely to be Class C or D felons or type 1 or 2 misdemeanors – less serious charges. Options should be considered to substitute community based treatment and case management services rather than incarceration for these adult homeless individuals. Therefore, it is recommended:

- **PLACE SOCIAL WORKERS IN DEPARTMENT OF PUBLIC ADVOCACY’S JEFFERSON COUNTY OFFICE TO ASSIST ATTORNEYS TO DEVELOP ALTERNATIVE SENTENCING PLANS.**
  - A recent social work pilot project in three Department of Public Advocacy’s regions found that social workers helped defendants to reduce sentences, avoid prison and jail time, obtain services for mental health, substance abuse, job training and housing. The one year savings in jail and prison time was \$1,371,894. After costs for alternative community services and social workers were deducted, there was a net annual savings of \$290,508 or \$96,836 per social worker. For every dollar invested in social worker salary there was a savings of \$2.46 dollars. (Barber & Stone, 2008)
- **EXPAND MORE SOCIAL WORKERS TO METRO JAIL STAFF TO DEVELOP DIVERSION AND EARLY RELEASE ARRANGEMENTS WITH LOCAL HOMELESS AND OTHER SERVICE AGENCIES AND MONITOR CLIENTS AFTER LEAVING METRO JAIL.**
- **ESTABLISH “HOUSING FIRST” SHELTERS AND PERMANENT HOUSING FOR HOMELESS CLIENTS WHO AVOID FORMAL SERVICE ARRANGEMENTS; SUCH HOMELESS SERVICE ARRANGEMENTS HAVE BEEN FOUND TO BE EFFECTIVE, ESPECIALLY FOR HOMELESS CLIENTS WITH SUBSTANCE ABUSE AND CO-OCCURRING CONDITIONS.** (American Psychiatric Association, 2005).

**USE AND COST  
OF HOMELESS SERVICES**

**CLIENTS' USE AND COST OF HOMELESS SERVICES DURING 2004**

TYPE OF SHELTER	CLIENTS		HOMELESS DAYS		AVERAGE ANNUAL DAYS PER CLIENT	COSTS	
	#	%	#	%		\$	%
EMERGENCY SHELTER	2,113	46%	50,307	28%	23.8	\$633,538	13%
TRANSITIONAL SHELTER	2,357	52%	109,245	62%	46.3	\$3,571,013	72%
PERMANENT HOUSING	76	2%	17,733	10%	233.3	\$761,039	15%
<b>TOTAL</b>	<b>4,546</b>	<b>100%</b>	<b>177,285</b>	<b>100%</b>	<b>39.0</b>	<b>\$4,965,590</b>	<b>100%</b>

- Emergency shelters served 46% of clients, but account for only 28% of homeless days with an average annual use of 23.8 days per client.
- Transitional shelter served 52% of homeless clients and accounted for 62% of homeless days; clients in transitional shelters stayed about twice as long on average (46.3 days) as clients in emergency shelters.
- Note the average annual use per client in both emergency shelter (23.8 days) and transitional shelter (46.3 days); as will be described later, a large majority of high risk and very costly multi-system users came from these groups.

**COST PATTERN FOR 2004 HOMELESS CLIENTS**

Costs of homeless services were calculated by using average costs per client day and average number of client days and number of clients served.

TYPE OF SHELTER	AVERAGE COST PER CLIENT DAY	AVERAGE ANNUAL DAYS PER CLIENT	AVERAGE COST PER CLIENT PER YEAR
EMERGENCY SHELTER	\$13.19	23.8	\$313.92
TRANSITIONAL SHELTER	\$32.69	46.3	\$1,513.55
PERMANENT HOUSING	\$42.92	233.3	\$10,013.24

- In 2004, the cost per day for transitional shelter was almost two and a half times the cost of emergency shelter, and clients stayed twice as long in transitional shelters.
- The daily cost for permanent housing in 2004 was about 130% of the daily cost for transitional shelter. However, the major contribution to annualized cost of permanent housing was the length of stay, which averaged 233 days per year. This is not surprising since permanent housing is designed to provide stable housing and ongoing intensive case management to relatively few high cost clients. As will be discussed later, if this is not done, very high multi-service system costs—especially for hospital care and incarceration—can be a consequence.

**CLIENTS' USE OF HOMELESS SERVICES IN 2004 AND 2005**

TYPE OF HOMELESS SHELTER	2004 CLIENTS		2005 CLIENTS		TOTAL CLIENTS (UNDUPLICATED)		USED SHELTERS BOTH YEARS	
	#	%	#	%	#	%	#	%
EMERGENCY SHELTER	2,113	46%	1,664	39%	3,250	45%	527	33%
TRANSITIONAL SHELTER	2,357	52%	2,494	59%	3,841	54%	1,010	64%
PERMANENT HOUSING	76	2%	65	2%	89	1%	52	3%
<b>TOTAL CLIENTS</b>	<b>4,546</b>	<b>100%</b>	<b>4,223</b>	<b>100%</b>	<b>7,180</b>	<b>100%</b>	<b>1,589</b>	<b>100%</b>

- During 2004 and 2005, 7,180 people used residential homeless services covered in this study. (For a description of agencies and residential programs by type of homeless shelter, see Attachment A.)

Use by type of homeless shelter during 2004 and 2005:

- 3,250 or 45% used emergency services
- 3,841 or 54% used transitional services
- 89 or 1% used permanent housing
- 1,589 or 22% of the 7,180 homeless clients used shelters both years

The number using homeless residential services in both years:

- Emergency shelter – 527 or 16% of all 3,250 clients used emergency shelter
- Transitional shelter – 1,010 or 26% of all 3,841 clients used transitional shelter
- Permanent housing – 52 or 58% of all 89 clients in permanent housing

**CLIENTS' USE OF HOMELESS  
RESIDENTIAL SHELTER SERVICES DURING 2004 AND 2005**

TYPE OF SHELTER	2004		2005		BOTH YEARS (UNDUPLICATED)	
	# CLIENTS	TOTAL DAYS	# CLIENTS	TOTAL DAYS	# CLIENTS	TOTAL DAYS
EMERGENCY SHELTER	2,113	50,307	1,664	45,110	3,250	95,416
TRANSITIONAL SHELTER	2,357	109,245	2,494	138,410	3,841	247,655
PERMANENT HOUSING	76	17,733	65	17,452	89	35,185
<b>TOTAL RESIDENTIAL HOMELESS</b>	<b>4,546</b>	<b>177,285</b>	<b>4,223</b>	<b>200,972</b>	<b>7,180</b>	<b>378,256</b>

- While the number of homeless clients decreased by 323 clients between 2004 and 2005, the total number of residential days increased by 23,687 or 13%. Thus, the average number of residential days per client increased from 39.0 days in 2004 to 47.6 days in 2005.
- Fewer clients were served in 2005, but clients tended to stay longer because of increased use of transitional services.

**COST OF HOMELESS SERVICES IN 2004 AND 2005**

TYPE OF HOMELESS SHELTERS	2004 COSTS		2005 COSTS		TOTAL COSTS	
	\$	%	\$	%	\$	%
EMERGENCY SHELTER	663,538	13.3%	618,671	11.7%	1,282,209	12.5%
TRANSITIONAL SHELTER	3,571,013	71.5%	4,025,155	76.0%	7,596,168	73.8%
PERMANENT HOUSING	761,039	15.2%	654,784	12.4%	1,415,823	13.8%
<b>TOTAL COSTS</b>	<b>4,995,590</b>	<b>100.0%</b>	<b>5,298,610</b>	<b>100.0%</b>	<b>10,294,200</b>	<b>100.0%</b>

- The total cost of homeless, residential service over two years was \$10,294,200
- Costs increased \$303,020 or 6.1% between 2004 and 2005
- Costs decreased for emergency shelter and permanent housing and increased for transitional housing

**MULTI-SERVICE SYSTEM  
USE AND COSTS**

## 2004 ANNUAL HOMELESS COSTS FOR MULTI-SERVICE SYSTEMS BY TYPE OF HOMELESS SERVICE

TYPE OF SYSTEM	EMERGENCY SHELTER		TRANSITIONAL SHELTER		PERMANENT HOUSING		TOTAL	
	# CLIENTS	\$	# CLIENTS	\$	# CLIENTS	\$	# CLIENTS	\$
HOMELESS SERVICES	2,113	663,538	2,357	3,571,013	76	761,039	4,546	4,995,590
METRO JAIL	434	764,311	522	932,349	5	11,969	961	1,708,629
CORRECTIONS	69	769,760	139	1,551,488	3	26,996	211	2,348,244
SEVEN COUNTIES SERVICES	370	733,031	480	1,768,363	32	342,976	882	2,844,370
HEALING PLACE	216	79,165	379	142,426	5	1,491	600	223,082
CENTRAL STATE HOSPITAL	77	1,740,102	72	1,595,958	1	19,656	150	3,355,716
PHOENIX HEALTH CENTER	841	703,890	1,086	904,450	22	38,775	1,949	1,647,115
UNIVERSITY HOSPITAL	589	7,222,744	689	6,842,960	35	284,481	1,311	14,350,185
ALL SERVICE COSTS		\$12,676,541		\$17,309,007		\$1,487,383		\$31,472,931
% OF ALL SYSTEMS COSTS		40.3%		55.0%		4.7%		100%

- Clients who used emergency shelter and transitional shelter consumed 95.3% of annual, multi-system costs
- Similar patterns were found for the 2005 annual multi-service systems costs
- Of the 4,546 clients who used homeless residential services in 2004:
  - 961 or 21.1% used metro jails
  - 211 or 4.6% used corrections
  - 882 or 19.4% used Seven Counties Services
  - 600 or 13.2% used Healing Place
  - 150 or 3.3% used Central State Hospital
  - 1,949 or 42.9% used Phoenix Health Center
  - 1,311 or 28.8% used University Hospital



## 2004 AND 2005 COSTS FOR MULTI-SERVICE SYSTEM USE BY TYPE OF SERVICE SYSTEM

TYPE OF SERVICE SYSTEM	2004 COSTS		2005 COSTS		OTHER SYSTEMS COSTS FOR NON-HOMELESS YEAR**		TOTAL SYSTEM COSTS	
	\$	%	\$	%	\$	%	\$	%
HOMELESS SHELTERS	4,995,590	15.9%	5,298,610	14.9%	0	0%	10,294,200	11.6%
METRO JAIL	1,708,629	5.4%	2,235,795	6.3%	2,109,077	9.7%	6,053,501	6.8%
CORRECTIONS	2,348,244	7.5%	1,796,832	5.0%	3,874,368	17.9%	8,019,444	9.0%
SEVEN COUNTIES SERVICES	2,844,370	9.0%	3,039,678	8.5%	1,637,627	7.6%	7,521,675	8.5%
HEALING PLACE	223,082	0.7%	217,615	0.6%	84,632	0.4%	525,329	0.6%
CENTRAL STATE HOSPITAL	3,355,716	10.7%	4,399,800	12.3%	2,823,054	13.0%	10,578,570	11.9%
PHOENIX HEALTH CENTER	1,647,115	5.2%	1,507,870	4.2%	415,550	1.9%	3,570,535	4.0%
UNIVERSITY HOSPITAL	14,350,185	45.6%	17,175,595	48.1%	10,713,346	49.5%	42,239,126	47.6%
TOTAL SYSTEMS COSTS	31,472,931	100%	35,671,795	100%	21,657,654	100%	88,802,380	100%

**\*Other Systems Costs For Non-Homeless Year** – Represents costs for other service systems for the year a homeless person was not homeless. For cases using homeless residential services in 2004 but not in 2005, this category represents other system cost for 2005; for cases using homeless residential services in 2005 but not in 2004, this represents the cost of other services for 2004.

- Homeless residential services accounted for 11.6% of two year multi-service systems costs
- Costs related to mental health and substance abuse (Seven Counties Services, Healing Place and Central State Hospital) accounted for 21% of two year multi-service systems costs
- Incarceration (metro jail and corrections) accounted for 15.8% of two year multi-service systems costs, and
- University Hospital inpatient, outpatient and emergency room use accounted for 47.6% of two-year multi-service systems costs

## 2004 AND 2005 COSTS FOR MULTI-SERVICE SYSTEMS BY TYPE OF HOMELESS SERVICE

TYPE OF HOMELESS SERVICE	2004		2005		OTHER SYSTEMS COSTS FOR NON-HOMELESS YEAR**		TOTAL SYSTEMS COSTS	
	<u>ANNUAL COSTS</u>		<u>ANNUAL COSTS</u>				<u>COSTS</u>	
	\$	%	\$	%	\$	%	\$	%
EMERGENCY SHELTER	12,676,541	40.3%	10,667,357	29.9%	9,226,199	42.6%	32,570,097	36.7%
TRANSITIONAL SHELTER	17,309,007	55.0%	23,710,498	66.5%	12,369,524	57.1%	53,389,029	60.1%
PERMANENT HOUSING	1,487,383	4.7%	1,293,940	3.6%	61,931	0.3%	2,843,254	3.2%
TOTAL COSTS	31,472,931	100%	35,671,795	100%	21,657,654	100%	88,802,380	100%

- The 2004 and 2005 annual costs above show homeless residential service and other system costs for all residential, homeless persons in each year: \$31,472,931 in 2004 and \$35,671,795 in 2005.
- The 2,957 homeless clients who were only homeless in 2004 had “other systems” costs during 2005 even though they did not use homeless residential services in that year. Similarly, the 2,634 homeless clients who were only homeless in 2005 had “other systems” costs during 2004. These “other systems costs” for years homeless clients were not active in homeless residential services are shown above in the “other systems costs for non-homeless year” column.
- Almost one quarter of multi-systems costs (\$21,657,654) were accrued in the year before or after homeless clients used homeless residential services. This is twice the amount that was spent to provide homeless residential services in 2004-05 (\$10,294,200 for all emergency shelter, transitional shelter and permanent housing).
- 37% of multi-system cost was accrued by homeless clients who used emergency shelter and 60% was accrued by homeless clients who used transitional services; 97% of multi-system costs came from homeless clients using one of these two types of homeless services.

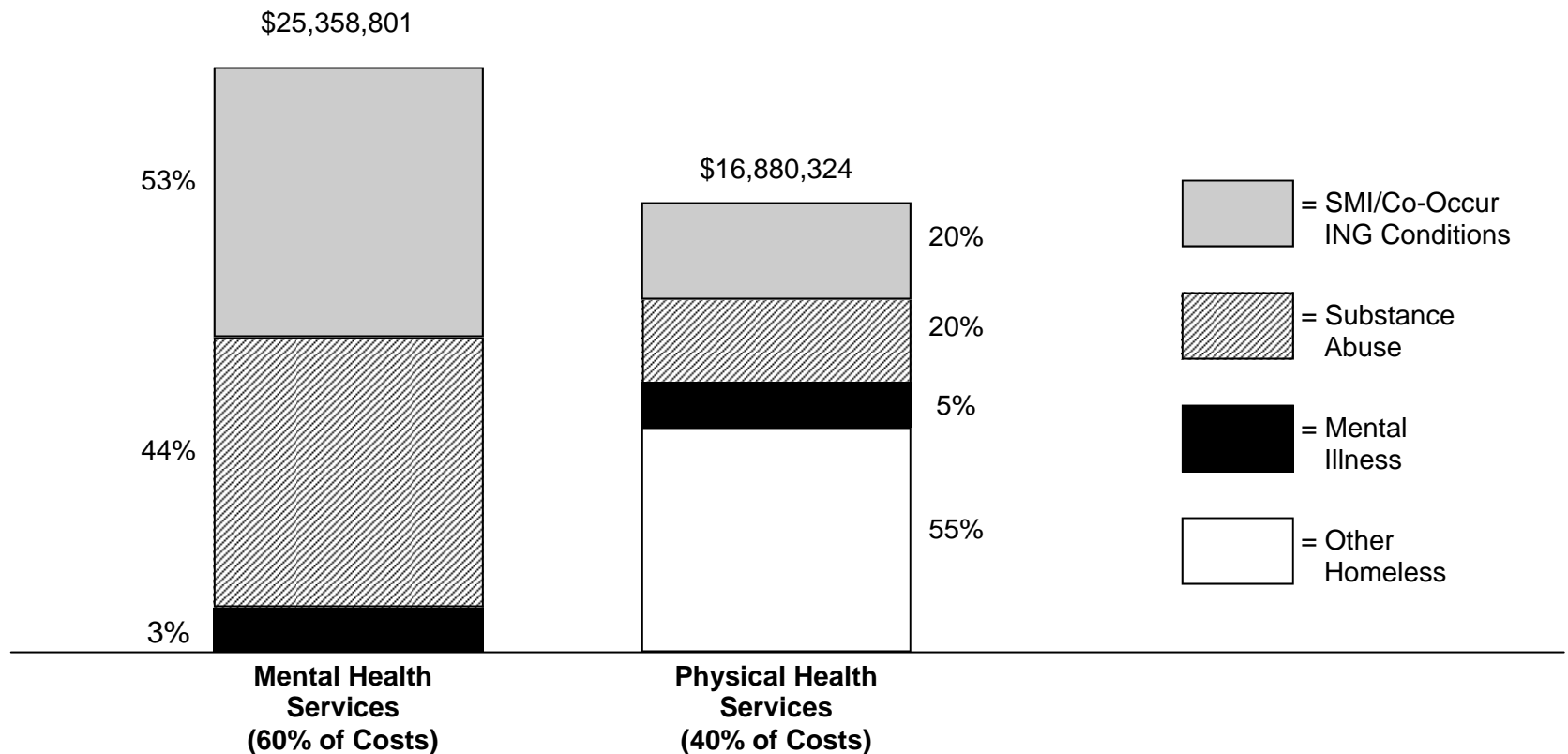
## TWO YEAR PER CLIENT COSTS FOR DIFFERENT SERVICE SYSTEMS

TYPE OF SYSTEM	HOMELESS CLIENTS USING SYSTEM		TWO YEAR SYSTEM COSTS	COST PER CLIENT
	#	%		
HOMELESS SHELTERS/PERMANENT HOUSING	7,180	100%	\$10,294,200	\$1,434
METRO JAIL	2,006	28%	\$6,053,501	\$3,018
CORRECTIONS	459	6%	\$8,019,444	\$17,472
SEVEN COUNTIES SERVICES	1,685	23%	\$7,521,675	\$4,464
HEALING PLACE	1,109	15%	\$525,329	\$474
CENTRAL STATE HOSPITAL	331	5%	\$10,578,570	\$31,863
PHOENIX HEALTH CENTER	3,324	46%	\$3,570,535	\$1,074
UNIVERSITY HOSPITAL	2,542	35%	\$42,239,126	\$16,616
ALL 2004-2005 HOMELESS CLIENTS	7,180	100%	\$88,802,380	\$12,368

- The two year cost of providing shelter/housing for residential, homeless clients was \$10,294,200 and the average per client cost was \$1,434.
- Over the two year period, the average cost for the relatively few residential, homeless clients who used correctional services was \$17,472 per client; the average cost for University Hospital services was \$16,616 per client and for Central State services it was \$31,863 per client. Each use of high cost institutional services made a substantial contribution to multi-system costs.
- Providing permanent housing would be less costly and more effective for many homeless clients who use high cost institutional care. This can be demonstrated by focusing on certain high risk client groups, which is done in the next section.

**2004 AND 2005 HOSPITAL SERVICE COSTS BY TYPE OF SERVICE AND HIGH RISK GROUPS**

- 60% of hospital service costs was for mental health services and 82% of this was for inpatient care
- 97% of hospital mental health services costs was related to homeless clients with SMI/Co-Occurring Conditions and Substance Abuse
- 40% of hospital service costs was for physical health services: 28% for emergency care, 28% for outpatient care and 44% for inpatient care
- 55% of hospital physical health service costs was related to “other homeless” clients and 52% of their costs was for inpatient care



**ANALYSIS OF HIGH RISK  
HOMELESS CLIENT GROUPS**

**IMPORTANT PRINCIPLES FROM HOMELESS SERVICE DELIVERY LITERATURE**

- Identify high risk cases that are contributing to high costs, which are usually related to frequent use of costly institutional care.
- Identify specific criteria related to high costs. Recent review of homeless cost studies and literature\* tend to report the following criteria:
  - Serious mental illness
  - Co-occurring conditions (also known as dual diagnosis)
  - Multiple years of homeless service use
- This cost study classified homeless clients into the following groups:
  1. **Serious mental illness/co-occurring conditions** – all homeless clients treated by Seven Counties Services, Central State Hospital, Phoenix Health Center and University Hospital services identified with these conditions.
  2. **Substance abuse** – all homeless clients treated by Seven Counties Services, Phoenix Health Center and University Hospital for alcohol or drug abuse, and all homeless clients treated by the Healing Place for detoxification (there were other homeless clients served by these institutions but they did not use residential, homeless shelters during 2004 and 2005).
  3. **Mental illness** – all homeless clients who were treated by Seven Counties Services, Central State Hospital, Phoenix Health Center, and University Hospital for mental health condition not classified as “Serious Mental Illness” or “Co-occurring Condition” or who had admission to Central State Hospital and were not in Group 1 above (3 cases).
  4. **All other homeless cases** – the reader is cautioned that some of these cases could have been mentally ill or had a substance abuse condition, but they were not served by institutions participating in this study so their conditions could not be identified from available data sources.

\*Culhane, Parker, Poppe, Gross & Sykes, 2007; Clark & Rich, 2003.

## CHARACTERISTICS OF HIGH RISK GROUPS AND THEIR TWO YEAR COST OF SERVICES FOR 2004 AND 2005

CHARACTERISTICS	<u>SMI/CO-OCCURRING CONDITIONS</u> (N=1,452)			<u>SUBSTANCE ABUSE</u> (N=1,059)			<u>MENTAL HEALTH</u> (N=396)			<u>OTHER HOMELESS</u> (N=4,273)			<u>ALL HOMELESS</u> (N=7,180)		
	% CLIENTS	\$	% of \$	% CLIENTS	\$	% of \$	% CLIENTS	\$	% of \$	% CLIENTS	\$	% of \$	% CLIENTS	\$	% of \$
<b><u>GENDER</u></b>															
Male	65%	33,822,847	67%	84%	15,048,744	85%	49%	2,464,257	54%	82%	13,371,186	83%	77%	64,707,133	73%
Female	35%	16,660,001	33%	16%	2,602,888	15%	51%	2,119,834	46%	18%	2,712,523	17%	23%	24,095,247	27%
<b><u>AGE*</u></b>															
<21	1%	47,412	<1%	0%	0	0%	2%	37,543	1%	1%	11,203	<1%	1%	96,158	<1%
21-30	12%	6,287,705	13%	10%	1,257,454	7%	24%	863,742	19%	11%	1,793,165	11%	12%	10,202,066	11%
31-40	26%	12,291,665	24%	22%	3,233,294	18%	23%	852,889	19%	17%	2,575,215	16%	20%	18,953,063	21%
41-50	37%	17,682,848	35%	41%	6,567,510	37%	29%	1,441,673	31%	31%	5,995,466	37%	34%	31,687,496	36%
51-60	20%	11,457,040	23%	23%	5,886,871	33%	17%	993,013	22%	19%	4,864,688	30%	20%	23,201,613	26%
61+	4%	2,677,301	5%	4%	706,504	4%	5%	384,314	8%	5%	727,066	5%	4%	4,495,185	5%
<b><u>VETERAN STATUS</u></b>															
Veteran	14%	6,016,382	12%	23%	3,319,789	19%	13%	816,874	18%	15%	3,493,583	22%	16%	13,646,628	15%
Non-Veteran	86%	44,466,566	88%	77%	14,331,843	81%	87%	3,767,218	82%	85%	12,590,125	78%	84%	75,155,752	85%
<b>TOTAL</b>		50,482,948	100%		17,651,632	100%		4,584,092	100%		16,083,708	100%		88,802,380	100%

\* Age data are missing for 682 individuals

- Females tend to be overrepresented among homeless clients with SMI/co-occurring conditions and less severe mental health conditions
- The age group 41-50 had the highest proportion of homeless clients in all high risk groups as well as in the overall homeless population.
- Veterans tend to be overrepresented among homeless clients with substance abuse conditions

**2004 AND 2005 COSTS FOR MULTI-SERVICE SYSTEM USE BY HIGH RISK HOMELESS GROUPS**

HIGH RISK HOMELESS GROUPS	2004 COSTS (N=4,546)		2005 COSTS (N=4,223)		OTHER SYSTEMS COSTS FOR NON-HOMELESS YEAR		TOTAL SYSTEMS COSTS (N=7,180)	
	\$	%	\$	%	\$	%	\$	%
SMI/CO-OCCURRING CON. (N=1,452 20.2%)	\$16,230,155	51.6%	\$20,098,662	56.3%	\$14,154,131	65.4%	\$50,482,948	56.8%
SUBSTANCE ABUSE (N=1,059 14.7%)	\$6,179,584	19.6%	\$6,706,716	18.8%	\$4,765,332	22.0%	\$17,651,632	19.9%
MENTAL ILLNESS (N=396 5.5%)	\$1,722,492	5.5%	\$1,801,432	5.1%	\$1,060,168	4.9%	\$4,584,092	5.2%
OTHER HOMELESS (N=4,273 59.5%)	\$7,340,700	23.3%	\$7,064,984	19.8%	\$1,678,024	7.7%	\$16,083,708	18.1%
ALL 2004-05 CLIENTS (N=7,180 100%)	\$31,472,931	100%	\$35,671,795	100%	\$21,657,654	100%	\$88,802,380	100%

- Residential, homeless cases with serious mental illness/co-occurring conditions made up about 20% of all clients who used homeless services (1,452 out of 7,180 clients) during 2004 and 2005, but they consumed 57% of total multi-service system costs (\$50,482,948) over the two year period.

**TWO YEAR (2004 AND 2005) MULTI-SERVICE SYSTEM COSTS BY HIGH RISK GROUPS AND  
TYPE HOMELESS, RESIDENTIAL SHELTERS**

TYPE OF HOMELESS SHELTERS	SMI/CO-OCCURRING COND. (N=1,452)				SUBSTANCE ABUSE (N=1,059)				MENTAL HEALTH (N=396)				OTHER HOMELESS (N=4,273)				ALL HOMELESS (N=7,180)			
	Clients		\$		Clients		\$		Clients		\$		Clients		\$		Clients		\$	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
EMERGENCY SHELTER	626	43%	19,099,899	38%	398	38%	6,215,972	35%	182	46%	1,580,045	34%	2,044	48%	5,674,181	35%	3,250	45%	32,570,097	37%
TRANSITIONAL SHELTER	792	55%	29,516,449	58%	656	62%	11,404,867	65%	204	51%	2,605,932	57%	2,189	51%	9,861,787	61%	3,841	54%	53,389,030	60%
PERMANENT SHELTER	34	2%	1,866,600	4%	5	<1%	30,798	<1%	10	3%	398,115	9%	40	1%	547,741	4%	89	1%	2,843,254	3%
TOTAL	1452	100%	50,482,948	100%	1059	100%	17,651,632	100%	396	100%	4,584,092	100%	4273	100%	16,083,708	100%	7180	100%	88,802,380	100%

- More than 90% of multi-system service costs for all high risk homeless, residential clients was related to homeless clients who used emergency or transitional shelters, and as will be shown in some of the remaining pages, most of these costs were for high cost, institutional care.

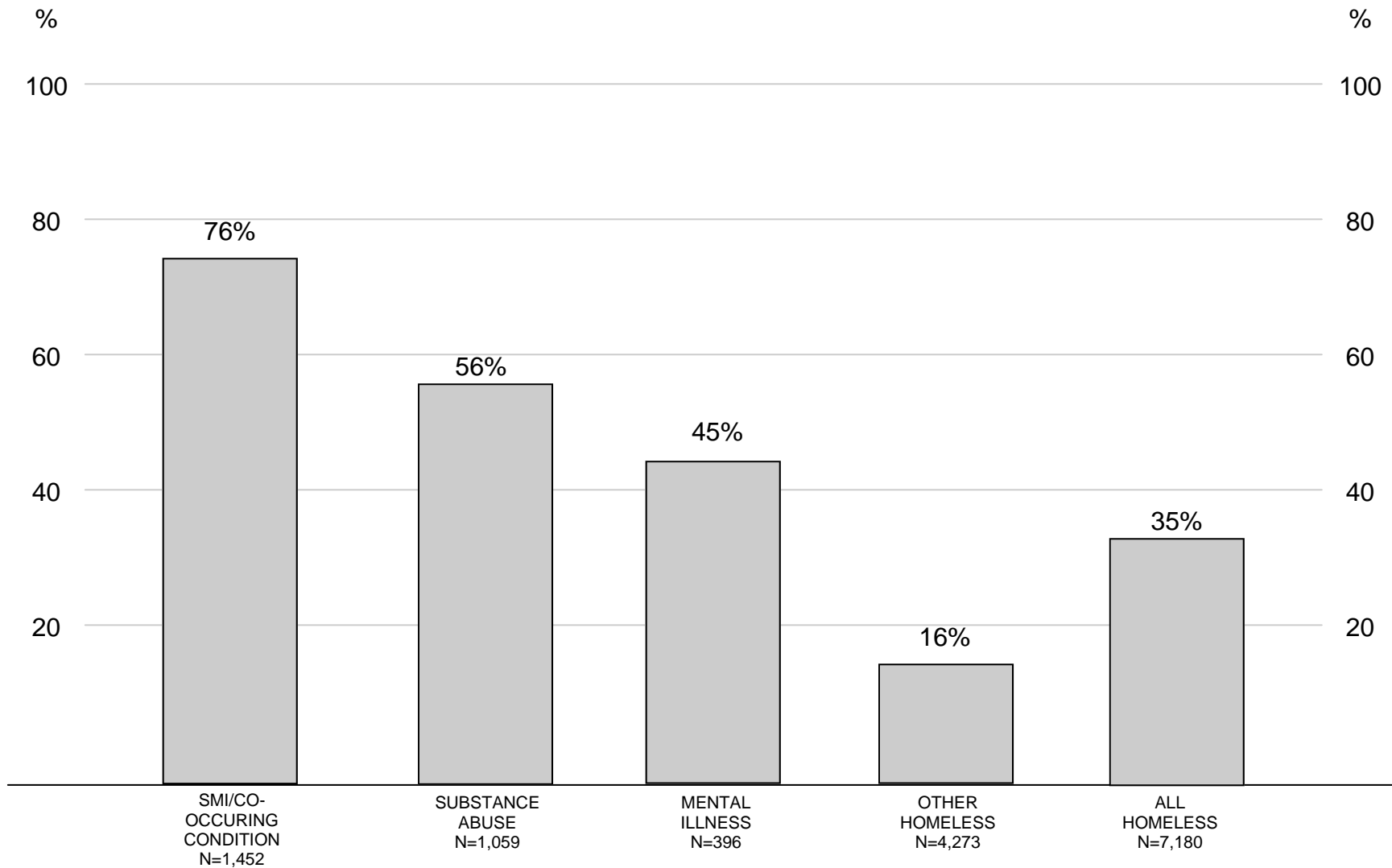
**TWO YEAR (2004 AND 2005) RESIDENTIAL HOMELESS COSTS FOR MULTI SERVICE SYSTEM USE  
BY TYPE OF SERVICE SYSTEM**

TYPE OF SERVICE	SMI/CO-OCCURRING COND. (N=1,452)			SUBSTANCE ABUSE (N=1,059)			MENTAL HEALTH (N=396)			OTHER HOMELESS (N=4,273)			ALL HOMELESS (N=7,180)		
	# CLIENTS	\$	%	# CLIENTS	\$	%	# CLIENTS	\$	%	# CLIENTS	\$	%	# CLIENTS	\$	%
HOMELESS SERVICES	1,452	\$3,939,922	7.8%	1,059	\$1,793,955	10.2%	396	\$636,408	13.9%	4,273	\$3,923,916	24.4%	7,180	\$10,294,200	11.6%
METRO JAIL	668	\$2,176,833	4.3%	<b>463</b>	<b>\$1,259,472</b>	<b>7.1%</b>	<b>97</b>	<b>\$317,912</b>	<b>6.9%</b>	<b>778</b>	<b>\$2,299,283</b>	<b>14.3%</b>	2,006	\$6,053,501	6.8%
CORRECTIONS	121	\$1,847,288	3.7%	<b>97</b>	<b>\$1,636,964</b>	<b>9.3%</b>	<b>36</b>	<b>\$642,192</b>	<b>14.0%</b>	<b>205</b>	<b>\$3,893,000</b>	<b>24.2%</b>	459	\$8,019,444	9.0%
SEVEN COUNTIES SERVICES	1,232	\$6,149,259	12.2%	218	\$1,069,081	6.1%	235	\$303,334	6.6%	0	0	0	1,685	\$7,521,675	8.5%
HEALING PLACE	477	\$247,222	0.5%	632	\$278,107	1.6%	0	0	0	0	0	0	1,109	\$525,329	0.6%
CENTRAL STATE HOSPITAL	<b>303</b>	<b>\$10,248,582</b>	<b>20.3%</b>	0	\$0	0%	28	\$329,988	7.2%	0	\$0	0	331	\$10,578,570	11.9%
PHOENIX HEALTH CENTER	1,011	\$1,752,440	3.5%	685	\$613,110	3.5%	289	\$401,865	8.8%	1,339	\$803,120	5.0%	3,324	\$3,570,535	4.0%
UNIVERSITY HOSPITAL	<b>1,098</b>	<b>\$24,121,401</b>	<b>47.8%</b>	<b>590</b>	<b>\$11,000,943</b>	<b>62.3%</b>	<b>179</b>	<b>\$1,952,392</b>	<b>42.6%</b>	<b>675</b>	<b>\$5,164,389</b>	<b>32.1%</b>	2,542	\$42,239,125	47.6%
TOTAL COSTS		\$50,482,948	100%		\$17,651,632	100%		\$4,584,092	100%		\$16,083,708	100%		\$88,802,380	100%
PERCENT OF COSTS		<b>56.8%</b>			19.9%			5.2%			18.1%				

- Charges incurred at University Hospital were the primary driver of multi-system cost; these charges represented nearly half of the total multi-system cost for all homeless clients over the two year period. For the various risk groups, the proportion of total multi-system costs attributable to University Hospital ranged from 32% for the “other homeless” group to 62% for the substance abuse group.
- Central State Hospital was a large contributor to multi-system costs for SMI/DD clients.
- Incarceration was a major contributor for homeless substance abuse, less seriously mentally ill, and “other” homeless clients.
- Incarceration represented about 16% of total multi-system costs for substance abuse clients, and 39% of multi-system costs for the “other homeless” group.

**PROPORTION OF 2004 & 2005 HOMELESS HIGH RISK GROUP CLIENTS USING UNIVERSITY HOSPITAL**

- A high proportion of homeless clients with SMI/co-occurring conditions or a substance abuse condition used University Hospital services.
- About two thirds of their cost for physical health services was for emergency room or outpatient services, and
- A little more than 80% of services costs for mental health services was for inpatient care.



**2004 & 2005 UNIVERSITY HOSPITAL COSTS FOR SINGLE, RESIDENTIAL HOMELESS CLIENTS  
BY TYPE OF SERVICE AND HIGH RISK GROUPS\***

	<u>SMI/CO-OCCURRING CONDITIONS</u>		<u>SUBSTANCE ABUSE</u>		<u>MENTAL HEALTH</u>		<u>OTHER HOMELESS</u>		<u>ALL HOMELESS</u>	
	\$	% of \$	\$	% of \$	\$	% of \$	\$	% of \$	\$	% of \$
<b><u>PHYSICAL HEALTH</u></b>										
Emergency Room	1,097,928	33%	1,178,137	34%	311,493	36%	2,065,548	22%	4,653,107	28%
Inpatient	1,116,834	34%	1,217,564	36%	245,361	29%	4,868,762	52%	7,448,521	44%
Outpatient	1,070,798	33%	1,036,471	30%	295,270	35%	2,376,157	26%	4,778,696	28%
<b><u>MENTAL HEALTH</u></b>										
Emergency Room	1,304,128	10%	1,400,305	13%	107,278	14%	0	0%	2,811,710	11%
Inpatient	11,248,870	84%	9,017,425	80%	518,625	70%	0	0%	20,784,920	82%
Outpatient	861,658	6%	784,396	7%	116,117	16%	0	0%	1,762,171	7%
<b><u>PHYSICAL/MENTAL HEALTH</u></b>										
Emergency Room	2,402,056	14%	2,578,442	18%	418,771	26%	2,065,548	22%	7,464,817	18%
Inpatient	12,365,704	74%	10,234,989	70%	763,986	48%	4,868,762	52%	28,233,441	67%
Outpatient	1,932,456	12%	1,820,867	12%	411,387	26%	2,376,157	26%	6,540,867	15%
<b>TOTAL</b>	<b>16,700,217</b>	<b>100%</b>	<b>14,634,296</b>	<b>100%</b>	<b>1,594,144</b>	<b>100%</b>	<b>9,310,467</b>	<b>100%</b>	<b>42,239,125</b>	<b>100%</b>

\*On page 33 costs are grouped by high risk group, however on this page costs are grouped by type of service, which shifts cost allocations among high risk homeless client groups.

**2004 AND 2005 HIGH RISK HOMELESS CLIENTS IDENTIFIED  
AS CHRONIC HOMELESS OR MULTI-SYSTEM HIGH COST (\$50,000+) HOMELESS**

HIGH RISK HOMELESS GROUPS	TOTAL CLIENTS		CHRONIC HOMELESS*		% OF HIGH RISK GROUP CHRONIC HOMELESS	HIGH COST (50K+)**		% OF HIGH RISK GROUP HIGH COST HOMELESS
	# OF CLIENTS	% OF CLIENTS	# OF CLIENTS	% OF CLIENTS		# OF CLIENTS	% OF CLIENTS	
SMI/CO-OCCURRING CONDITIONS	1,452	20.2%	649	44.0%	44.7%	274	70.6%	18.9%
SUBSTANCE ABUSE	1,059	14.7%	306	20.7%	28.9%	75	19.3%	7.1%
LESS SERIOUS MENTAL ILLNESS	396	5.5%	136	9.2%	34.3%	12	3.1%	3.0%
OTHER HOMELESS	4,273	59.5%	385	26.1%	9.0%	27	6.9%	<1%
ALL HOMELESS	7,180	100%	1,476	100%	20.6%	388	100%	5%

\*Chronic homeless cases were identified by Phoenix Health Center. CAUTION: This is probably a conservative count of the chronic homeless, because the Phoenix Health Center served only 3,324 or 46.3% of the homeless included in UofL's 7,180 homeless study.

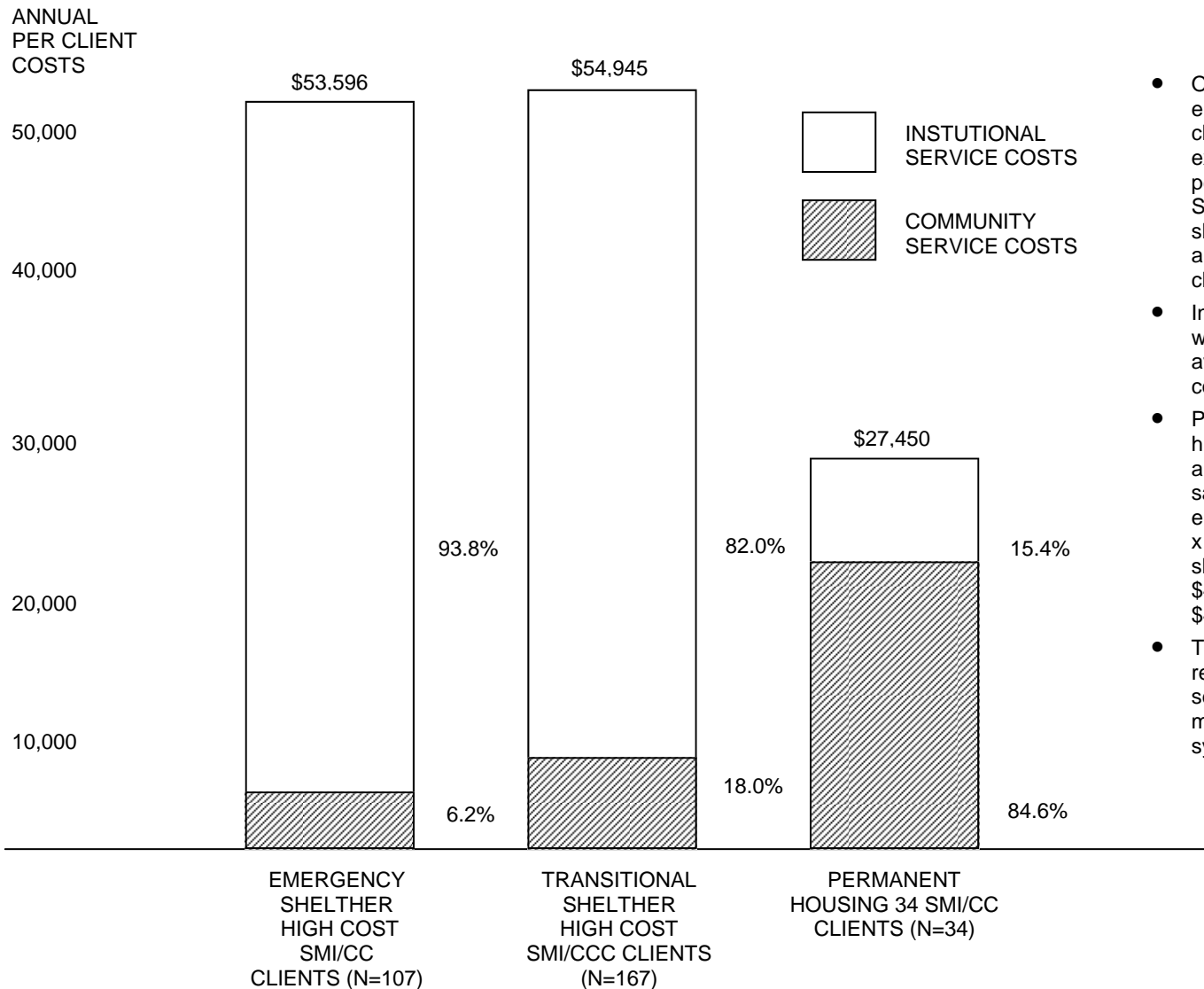
\*\*Clients who used Emergency or Transitional Shelters and costs \$50,000 or more in multi-system costs in 2004 and 2005.

- 20.6% or 1,476 of homeless clients were identified as Chronic Homeless (using the federal definition of three consecutive years of homeless service use) by the Phoenix Health Center.
- Only 5% of homeless clients cost \$50,000 or more in multi-system costs. 90% of high cost homeless clients came from the first two high risk groups, and a large proportion of cases came from the SMI/CC high risk group.

**NEXT STEP IN ANALYSIS: Focus on high cost institutional care to identify high cost cases that could be served more effectively by alternative community based services.**

- **Target Group 1: Seriously mentally illness/co-occurring condition homeless cases that used emergency or transitional services. This group consumed 57% (\$50,482,948) of all 2004 and 2005 multi-system service costs. The 626 SMI/CC clients in emergency shelters and 792 in transitional shelters consumed 96% of these costs.**
- **Target Group 2: Substance abuse homeless cases mostly used jail, prison and University Hospital Services. The substance abuse group consumed 20% (\$17,651,632) of all 2004 and 2005 multi-system service costs. The 398 substance abuse clients in emergency shelter and 656 in transitional shelters consumed 99% of these costs.**
- **Target Group 3: “Other Homeless” cases mostly used jail, prison and University Hospital Services. This group consumed 18% (\$16,083,708) of all 2004 and 2005 multi-system service costs. Again, the 2,044 homeless clients in emergency shelters and 2,189 in transitional shelters consumed 97% of these costs.**

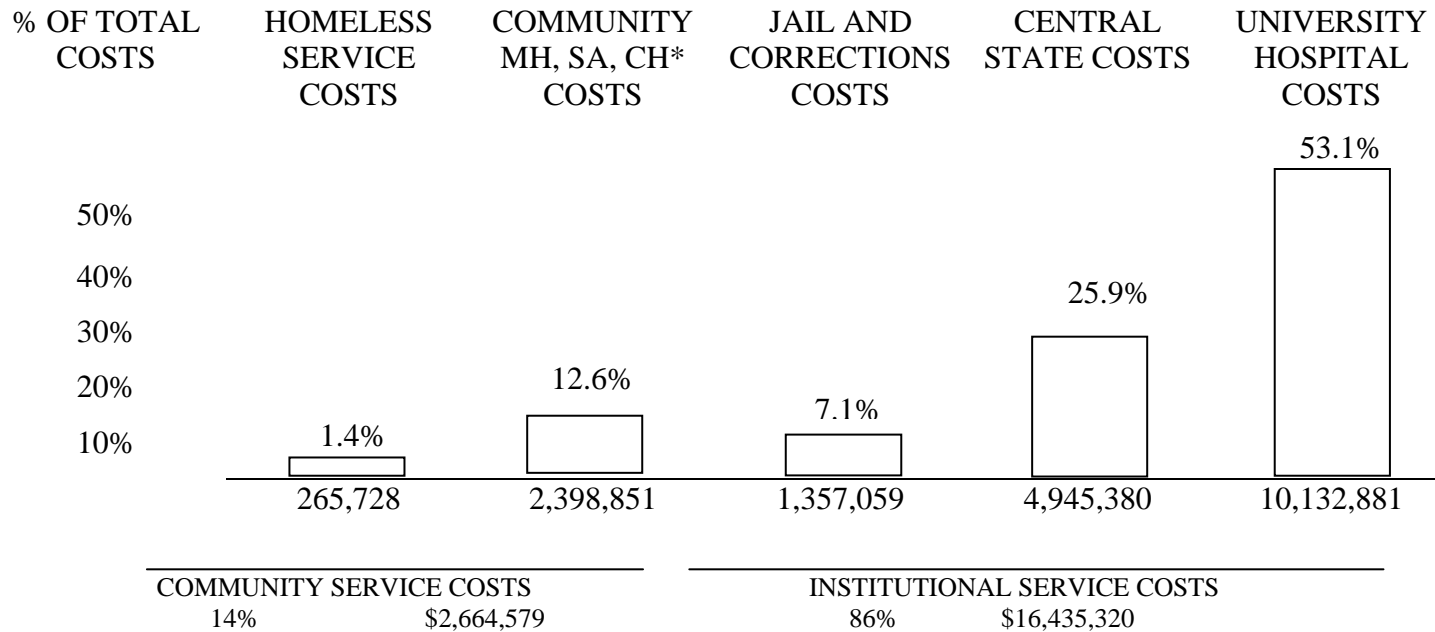
**COMPARISON OF ANNUAL MULTI-SYSTEM PER CLIENT COST FOR HIGH COST (\$50,000+) SMI/CC CLIENTS USING EMERGENCY AND TRANSITIONAL SHELTER AND PERMANENT HOUSING CLIENT COSTS**



- Of the 626 SMI/CC clients who received emergency shelter, 107 were “high-cost” clients whose multi-service system cost exceeded \$50,000 per year (average per client cost of \$53,596). Of the 792 SMI/CC clients who received transitional shelter, 167 were “high-cost” clients with an average multi-service system per client cost of \$54,945 per year.
- In comparison, the 34 SMI/CC clients who lived in permanent housing had an average multi-service system per client cost of only \$27,450 per year.
- Providing permanent housing for the high-cost SMI/CC clients in emergency and transitional shelter could have saved \$7.4 million per year (for emergency shelter:  $[\$53,596 - \$27,450] \times 107 = \$2,797,622$ ; for transitional shelter:  $[\$54,945 - \$27,450] \times 167 = \$4,591,665$ ; grand total:  $\$2,797,622 + \$4,591,665 = \$7,389,287$ ).
- The permanent housing approach puts resources into community based services and can lead to better case management. And reduced multi-system service costs.

**EMERGENCY SHELTER**

**2004-2005 SMI/CC HOMELESS USING EMERGENCY SHELTER  
(626 – HOMELESS; COSTS = \$19,099,899)**



**2004-2005 HIGH COST (50,000+) HOMELESS CASES USING EMERGENCY SHELTER  
107 CASES (17% OF 626) COSTING \$50,000+ PER YEAR – TOTAL COSTS: \$11,469,519 (60% OF \$19,099,899)**

**AVERAGE TWO YEAR COST PER CLIENT – \$107,192**

\$694	\$6,005	\$2,990	\$36,957	\$60,546
COMMUNITY SERVICE COSTS \$6,699 (6.2% of total)		INSTITUTIONAL SERVICE COSTS \$100,493 (93.8% of total)		

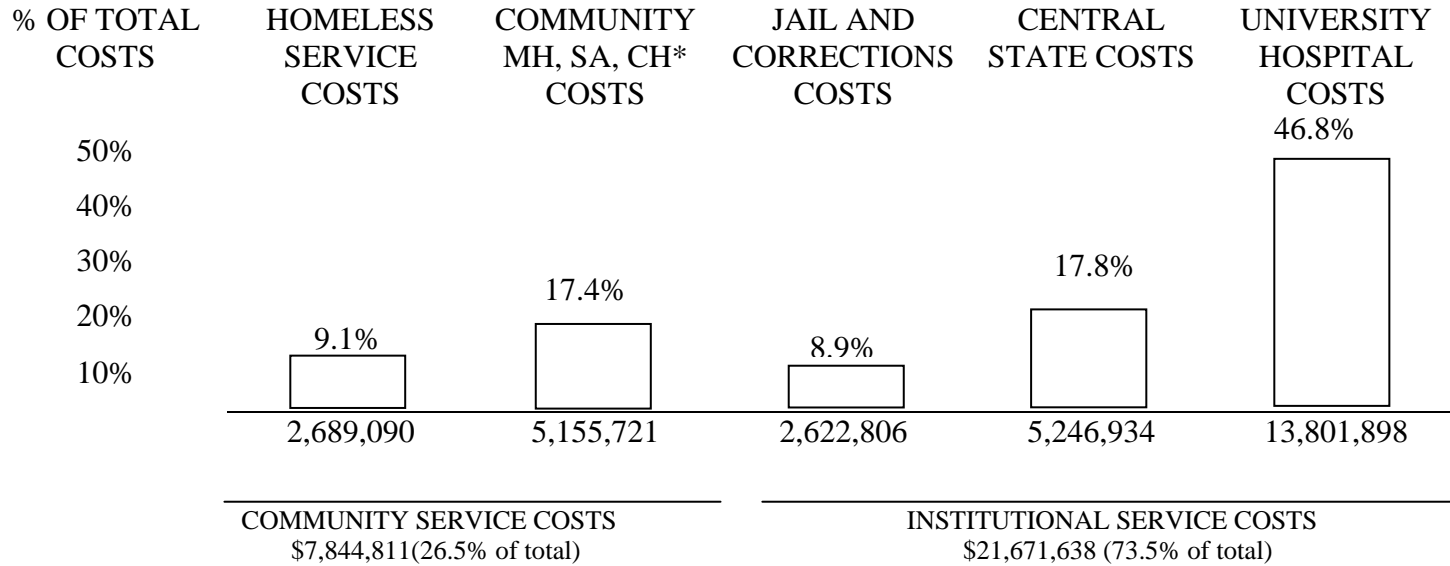
**AVERAGE ONE YEAR COST PER CLIENT – \$53,596**

\$347	\$3,003	\$1,495	\$18,479	\$30,273
COMMUNITY SERVICE COSTS <b>6.2%</b> \$3,350		INSTITUTIONAL SERVICE COSTS <b>93.8%</b> \$50,247		

\* Seven Counties Services (MH & SA), The Healing Place (SA), and Phoenix Health Center (CH, MH & SA)

**TRANSITIONAL SHELTER**

**2004-2005 SMI/CC HOMELESS USING TRANSITIONAL SHELTER  
(792 – HOMELESS; COSTS = \$29,516,449)**



**2004-2005 HIGH COST (50,000+) SMI/CC HOMELESS CASES USING TRANSITIONAL SHELTER  
167 CASES (21% OF 792) COSTING \$50,000+ PER YEAR – TOTAL COSTS: \$18,351,606 (62% OF \$29,516,449)**

**AVERAGE TWO YEAR COST PER CLIENT – \$109,890**

\$7,018	\$12,751	\$5,114	\$25,260	\$59,746
COMMUNITY SERVICE COSTS \$19,769 (18.0% of total)		INSTITUTIONAL SERVICE COSTS \$90,121 (82.0% of total)		

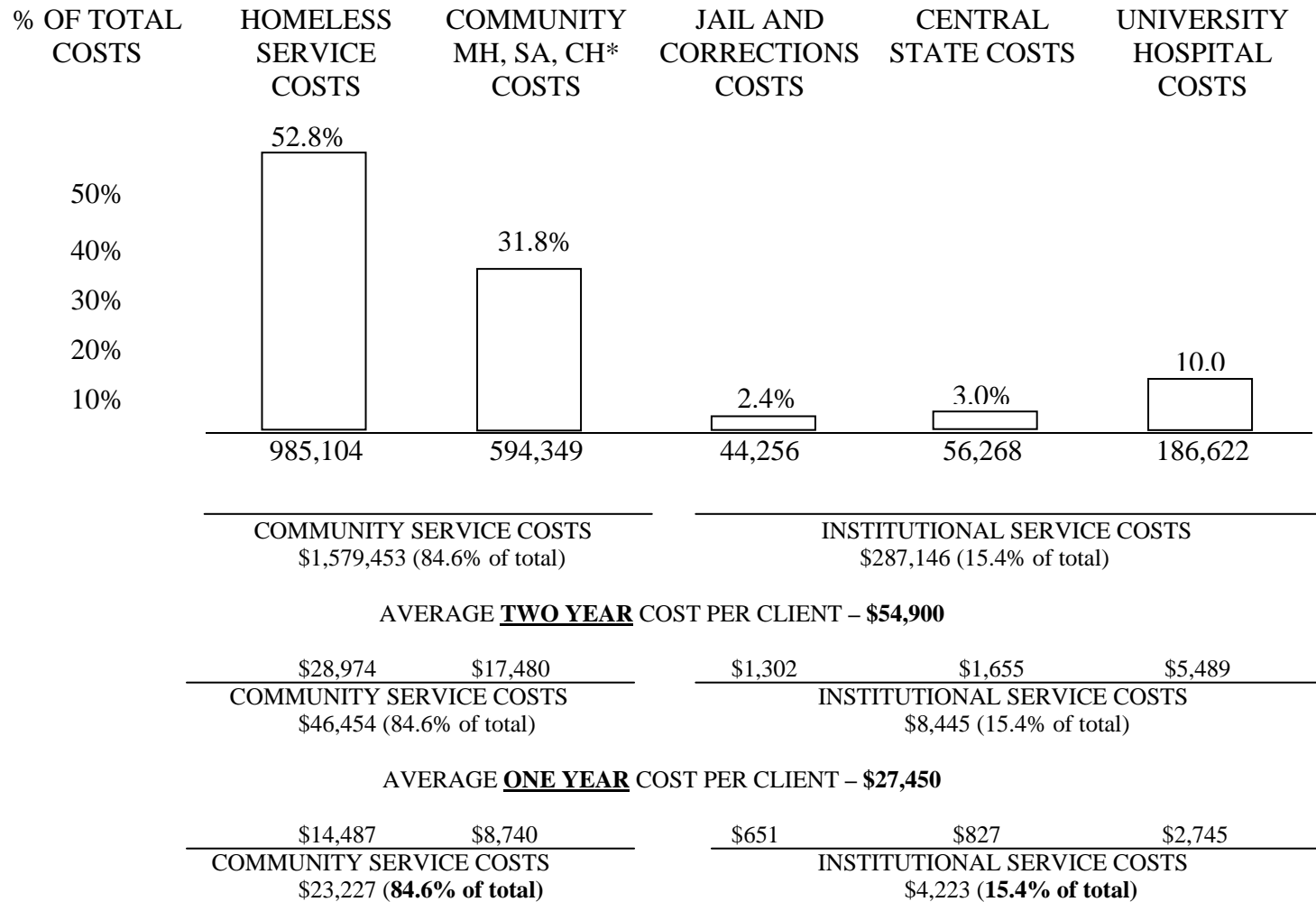
**AVERAGE ONE YEAR COST PER CLIENT – \$54,945**

\$3,509	\$6,376	\$2,557	\$12,630	\$29,873
COMMUNITY SERVICE COSTS \$9,885 (18.0% of total)		INSTITUTIONAL SERVICE COSTS \$45,060 (82.0% of total)		

\* Seven Counties Services (MH & SA), The Healing Place (SA), and Phoenix Health Center (CH, MH & SA)

**PERMANENT HOUSING**

**2004-2005 SMI/CC HOMELESS USING PERMANENT HOUSING  
(34 – HOMELESS; COSTS = \$1,866,600)**



\* Seven Counties Services (MH & SA), The Healing Place (SA), and Phoenix Health Center (CH, MH, SA)

**GROUP 1: SERIOUSLY MENTALLY ILL/CO-OCCURRING CONDITION HOMELESS WHO USED EMERGENCY AND TRANSITIONAL SHELTERS – USE AND COSTS OF CENTRAL STATE HOSPITAL, OTHER MENTAL HEALTH SERVICES AND TOTAL MULTI-SERVICE SYSTEM USE**

# Of Admits To Central State Hospital	Clients		Days In Hospital		Central State Costs 2004 & 2005	
	#	%	#	%	\$	%
3 Admits	69	23%	9,489	54	<b>5,456,178</b>	<b>54%</b>
2 Admits	66	22%	4,394	24%	2,535,582	24%
1 Admit	168	55%	3,744	21%	2,257,822	22%
All Admits	303	100%	17,629	100%	10,249,582	100%

- 303 homeless clients with SMI and/or Co-occurring conditions used Central State Hospital at a cost of \$10,249,582 or 20% of the multi-service system cost of 50,482,949 for this group.
- The Central State Hospital costs for 69 clients who had 3 or more admissions was \$5,456,178, which accounted for 54% of all Central State Hospital Costs.

**SERVICE OPTIONS FOR MEETING NEEDS OF SERIOUSLY MENTALLY ILL OR CLIENTS WITH CO-OCCURRING CONDITIONS: EXPAND PERMANENT HOUSING FOR HIGH COSTS SMI/CC HOMELESS CLIENTS.** Two models have demonstrated their cost effectiveness with these clients.

- INTENSIVE CASE MANAGEMENT BY AN INTERDISCIPLINARY TEAM COMBINED WITH LONG TERM SUPPORTIVE HOUSING
  - Strong research evidence supports the Assertive Community Team (ACT) model
  - Controlled research studies showed that homeless clients participating in ACT had reduced psychiatric hospitalization and psychiatric symptoms, better housing stabilization, greater client satisfaction, and greater likelihood of obtaining independent housing. (Caldwell and Bender 2007; Lehman, Dixon, Kernan, Deforge, and Postrado, 1997; Rosenheck and Demimes, 2001)
  - Assertive Community Team models are expensive and must be targeted to homeless clients with histories of heavy multi-service use (Culhane, Parker, Poppe, Grass & Sykes, 2007; Clark and Rich, 2003). The average annual costs for Permanent Housing in Louisville for SMI/CC clients was \$23,227 for community based services and \$4,223 for institutional services for a combined cost of \$27,450 per year.
  
- AN ALTERNATIVE MODEL IS “HOUSING FIRST”
  - This model does not make permanent housing conditional on accepting mental health/substance abuse treatment and it does not require defined periods of being “clean and sober” as a precondition for accessing housing. It allows more consumer autonomy to freely choose services that are offered. Housing arrangements tend to be small apartments dispersed over a geographical area rather than congregate housing arrangements.
  - Advantage of this approach: it allows some monitoring of clients behavior and ability to provide or get support services when needed to avoid more costly institutional care, such as hospitalization or incarceration.
  - There is some recent evidence supporting the cost effectiveness of this approach. (Tsemberis, 2007; American Psychiatric Association, 2005; Gulcur, Stefancie, Shinn, Tsemberis, and Fischer, 2003).

**SERVICE OPTIONS FOR MEETING NEEDS OF SERIOUS MENTALLY ILL OR CLIENTS WITH CO-OCCURRING CONDITIONS: EXPAND ADVOCACY SERVICES TO GET MORE OF THESE CLIENTS ON MAINSTREAM ENTITLEMENT PROGRAMS FOR INCOME SUPPORT AND FINANCIAL MANAGEMENT SUPPORT THEY WILL NEED**

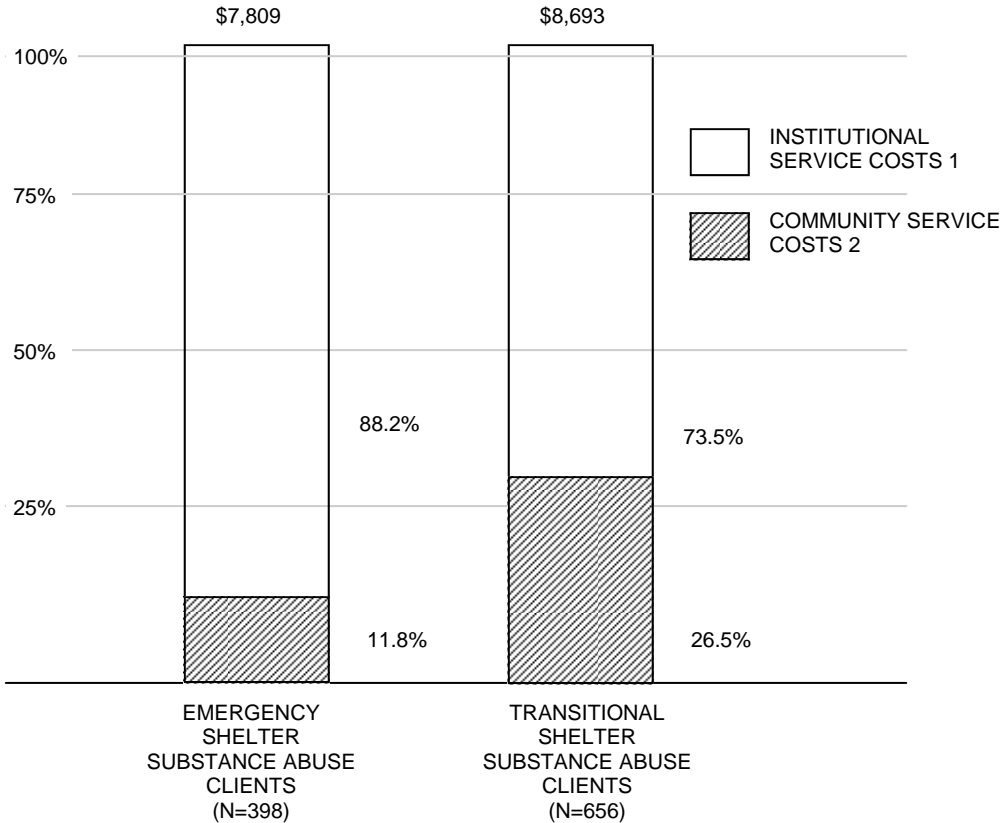
- An analysis of Seven Counties Services showed that 459 or 43% of the 1056 clients served by Seven Counties Services with Serious Mental Illness and/or Co-occurring Conditions were NOT on SSDI or SSI or had Medicare or Medicaid coverage.
- Most of these clients are likely to be eligible for SSI or SSDI, which also makes them eligible for Medicare or Medicaid.
- Medicare or Medicaid would help cover much of the Indigent Care Costs, which were assumed by University Hospital (\$4,816,861) and Seven Counties Services (\$396,604); for a total of \$5,213,465 for homeless clients with SMI/Co-occurring Conditions.
- If most of these clients were on SSI they could get about \$637 per month and \$90 per month from food stamps for an annual amount of \$8,724 ( $637 + 90 = 727 \times 12 = \$8,724$ ) SSDI provides a little more income support.
- If the 459 clients received this annual income, it would total to \$4,004,316.

**THEREFORE IT IS RECOMMENDED THAT EFFORTS BE MADE TO:  
EXPAND THE SOAR UNIT AT THE PHOENIX HEALTH CENTER IN ORDER TO INCREASE SSDI AND SSI ELIGIBILITY  
ENROLLMENT**

Most Serious Mentally Ill or Clients with Co-occurring Conditions should be eligible for SSDI or SSI, but 43% were not enrolled during 2004 or 2005.

**EXPAND NUMBER OF “PAYEE” SUPERVISORS TO HELP SMI and/or CLIENTS WITH CO-OCCURRING CONDITIONS MANAGE THEIR MONEY.** Many of these clients are likely to need someone to help them manage their money, and there are only two payee groups in the Louisville area now. More would be needed if SSDI and SSI enrollment expands.

**ANNUAL MULTI-SYSTEM PER CLIENT COST FOR SUBSTANCE ABUSE HOMELESS CLIENTS USING EMERGENCY OR TRANSITIONAL SHELTER**



- Almost 80 percent of multi-system cost for substance abuse clients using Emergency or Transitional Shelters was for institutional services. Metro jail and corrections made up 16.2% of this costs and University Hospital made up 62.3%

Institutional Costs: University Hospital, jail and corrections

Community Costs: Homeless Shelters, Healing Place, Seven Counties Services and Phoenix Health Center

**USE OF METRO JAIL BY SUBSTANCE ABUSE  
HOMELESS CLIENTS DURING 2004 & 2005**

# of Days	Inmates		# of Admits		Total Days		Total Jail Costs		Total Multi-Systems Costs	
	#	%	#	Average # Per Person	#	%	\$	%	\$	%
181+	<b>40</b>	<b>9%</b>	215	5	<b>11,265</b>	<b>47%</b>	<b>586,231</b>	<b>47%</b>	1,265,406	14%
61-180	<b>79</b>	<b>17%</b>	316	4	<b>9,007</b>	<b>37%</b>	<b>468,724</b>	<b>37%</b>	2,349,362	25%
31-60	35	8%	150	4	1,527	6%	79,465	6%	646,460	7%
6-30	133	29%	366	3	2,018	8%	105,017	8%	2,241,300	24%
1-5	176	38%	272	2	385	2%	20,035	2%	2,820,104	30%
All Cases	463	100%	1,319	3	24,202	100%	1,259,472	100%	9,322,632	100%

- During 2004 and 2005, 463 residential, homeless clients, known to have a substance abuse condition, used Metro jail; this was 44% of all residential homeless known to have a substance abuse condition.
- The two year jail cost represents 7.1% of the multi-service system costs for residential, homeless clients with a known substance abuse condition.
- Homeless persons who used jails had a high turn over during the two year period. The 463 individuals used 24,202 days of jail time, which was an average of 52.3 days in a two year period ( $24,202/463 = 52.3$ ), however they averaged 2.8 admissions, which means they stayed on average about 19 days ( $52.3/2.8 = 18.7$ ).

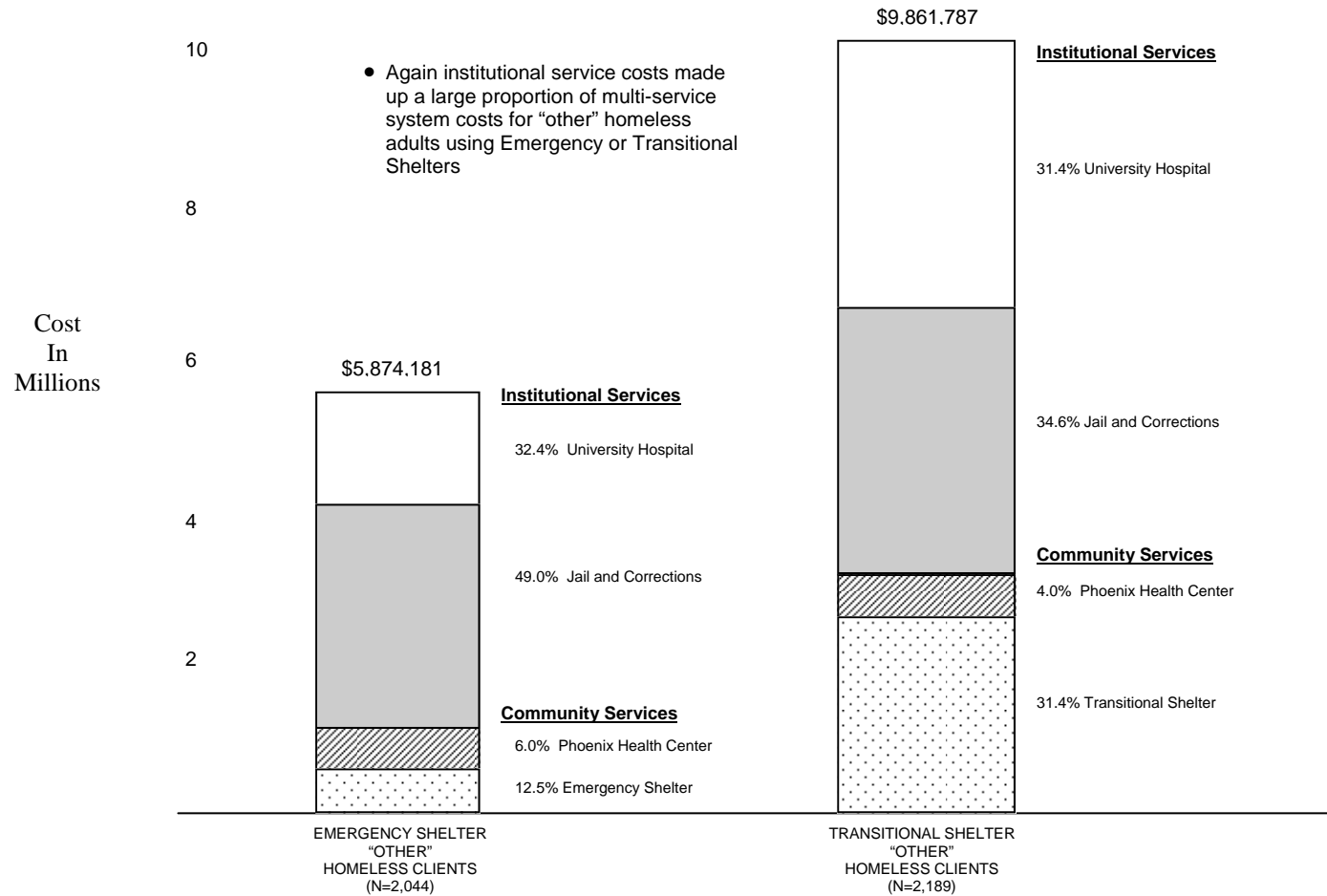
- Relatively few clients (26%) accounted for 84% of jail days. Concentrating on longer stay, homeless jail cases for early release would reduce jail use much more effectively than giving equal time to all cases. Creating discharge plans that prevent a return to homelessness and help former inmates to access supportive services could prevent recidivism and reduce the total number of days of incarceration.

## USE OF CORRECTIONS BY SUBSTANCE ABUSE HOMELESS CLIENTS DURING 2004 AND 2005

Days in Prison	Inmates		Total Days		Average Stay	Total Cost of Corrections		Total Multi-Systems Costs	
	#	%	#	%	Average # Days Per Person	\$	%	\$	%
366+	30	31%	14,097	59%	470	958,596	59%	1,549,951	43%
181-365	20	21%	5,426	23%	271	368,968	23%	696,061	19%
61-180	<b>32</b>	<b>33%</b>	3,918	16%	122	<b>266,424</b>	<b>16%</b>	980,695	27%
1-60	<b>15</b>	<b>15%</b>	632	3%	42	<b>42,976</b>	<b>3%</b>	407,826	11%
All Cases	97	100%	24,073	100%	248	1,636,964	100%	3,634,533	100%

- During 2004 and 2005 97 out of 1,059 homeless substance abusers (or 9.2%) spent time in prison. The average stay for these inmates was much longer than the average metro jail term.
- 31% (30) of these inmates stayed more than one year at a cost of \$958,596.
- 48% (47) of these inmates had relatively short stays ( $\leq 181$  days) for corrections inmates; since these inmates had a substance abuse condition, there is potential that some of them could have been diverted from prison time and saved 4,550 prison days or \$309,400 in prison costs.

**2004 AND 2005 MULTI-SYSTEM SERVICE COSTS FOR “OTHER” HOMELESS SINGLE ADULTS USING EMERGENCY OR TRANSITIONAL SHELTER**



**USE OF METRO JAIL BY “OTHER HOMELESS”  
CLIENTS DURING 2004 & 2005**

# of Days	Inmates		# of Admits		Total Days		Total Jail Costs		Total Multi-Systems Costs	
	#	%	#	Average # Per Person	#	%	\$	%	\$	%
181+	<b>90</b>	<b>12%</b>	321	4	<b>25,975</b>	<b>59%</b>	<b>1,351,739</b>	<b>59%</b>	2,018,513	29%
61-180	<b>110</b>	<b>14%</b>	356	3	<b>12,289</b>	<b>28%</b>	<b>639,520</b>	<b>28%</b>	1,675,650	24%
31-60	57	7%	137	2	2,368	5%	123,231	5%	851,479	12%
6-30	199	26%	432	2	2,943	7%	153,154	7%	1,139,263	16%
1-5	322	41%	433	1	608	1%	31,640	1%	1,281,789	18%
All Cases	778	100%	1,679	2	44,183	100%	2,299,283	100%	6,966,693	100%

- The “Other Homeless” group had a pattern of jail use and cost that was very similar to the pattern for homeless clients who had a known substance abuse condition.
- Combined Use and Costs - About 26% or 200 homeless clients stayed in jail 61 days or more in 2004 and 2005, and they accounted for 87% of jail days (38,264) and costs (\$1,991,259). Again concentrating on longer stay, homeless jail cases for early release could reduce jail use much more effectively than giving equal time to all cases.

USE OF CORRECTIONS BY “OTHER HOMELESS” CLIENTS DURING 2004 AND 2005

Days in Prison	Inmates		Total Days		Average Stay	Total Cost of Corrections		Total Multi-Systems Costs	
	#	%	#	%	Average # Days Per Person	\$	%	\$	%
366+	64	31%	33,419	58%	522	2,272,492	58%	2,544,252	49%
272-365	33	16%	10,678	19%	324	726,104	19%	943,627	18%
181-271	28	14%	6,105	11%	218	415,140	11%	641,479	12%
61-180	52	25%	6,123	11%	118	416,364	11%	798,865	15%
1-60	28	14%	925	2%	33	62,900	2%	276,513	5%
All Cases	205	100%	57,250	100%	279	3,893,000	100%	5,204,736	100%

- 205 (or 5% of 4,273) of the “other homeless” group served time in prison for a total corrections cost of \$3,893,000.
- The total corrections costs (\$3,893,000) was 24% of total multi-system costs for all “other homeless” clients.
- Diverting these cases from prison time or obtaining early release for the group that spent more than one year in prison could save substantial corrections costs.

## OPTIONS TO DEVELOP COMMUNITY BASED SERVICES AS ALTERNATIVES TO JAIL OR PRISON INCARCERATION

As the last several charts show much money was being spent on incarceration for homeless clients, especially those with a substance abuse condition (\$2,896,919) and the “other homeless” (\$6,192,283). Since most of these individuals were in Metro Jail rather than state prisons, a large proportion of them were likely to be Class C or D felons or type 1 or 2 misdemeanors – less serious charges. Options should be considered to substitute community based treatment and case management services rather than incarceration for these adult homeless individuals. Therefore, it is recommended:

- **PLACE SOCIAL WORKERS IN DEPARTMENT OF PUBLIC ADVOCACY’S JEFFERSON COUNTY OFFICE TO ASSIST ATTORNEYS TO DEVELOP ALTERNATIVE SENTENCING PLANS.**
  - A recent social work pilot project in three Department of Public Advocacy’s regions found that social workers helped defendants to reduce sentences, avoid prison and jail time, obtain services for mental health, substance abuse, job training and housing. The one year savings in jail and prison time was \$1,371,894. After costs for alternative community services and social workers were deducted, there was a net annual savings of \$290,508 or \$96,836 per social worker. For every dollar invested in social worker salary there was a savings of \$2.46 dollars. (Barber & Stone, 2008)
- **EXPAND MORE SOCIAL WORKERS TO METRO JAIL STAFF TO DEVELOP DIVERSION AND EARLY RELEASE ARRANGEMENTS WITH LOCAL HOMELESS AND OTHER SERVICE AGENCIES AND MONITOR CLIENTS AFTER LEAVING METRO JAIL.**
- **ESTABLISH “HOUSING FIRST” SHELTERS AND PERMANENT HOUSING FOR HOMELESS CLIENTS WHO AVOID FORMAL SERVICE ARRANGEMENTS; SUCH HOMELESS SERVICE ARRANGEMENTS HAVE BEEN FOUND TO BE EFFECTIVE, ESPECIALLY FOR HOMELESS CLIENTS WITH SUBSTANCE ABUSE AND CO-OCCURRING CONDITIONS.** (American Psychiatric Association, 2005).

## APPENDIX A

### IDENTIFYING INDIVIDUAL, RESIDENTIAL HOMELESS CLIENTS AND COSTS AND LINKAGES WITH OTHER SERVICE SYSTEMS

Identifying Residential Homeless Clients: Agencies shown in Appendix B were contacted to provide the names, social security numbers, client demographic data and number of days each client used the program during 2004 and 2005. All transitional shelters and permanent housing agencies provided data in electronic format as did some emergency shelters. However, for a few emergency shelters research staff had to record this information from paper documents and transfer it to electronic form. After data was collected, it was verified with agencies during 2006.

Linking Data With Other Service Systems: All homeless cases were merged onto a single, master electronic data file with a social security number as the main identifier. The research team then assigned a random identification number to each homeless person. The research team identified the following agencies for sharing data: Louisville Metro Jails; Kentucky Department of Corrections; Seven Counties Services (including JADAC); Healing Place; Central State Hospital, and UofL's University Hospital. After getting approval for the proposed electronic, data merging process from the University of Louisville's Institutional Review Board, each agency was contacted to participate in the study. Each institution required approval from its own IRB and HIPAA review group for the administrative data study, which is reported in this document and a qualitative study, which is reported in another document.

Once each institution provided IRB, HIPAA and administrative approval the following procedure was followed. The research team met with a programmer from the agency to identify data items available and needed for the study. The Homeless study programmer gave the homeless, electronic data file to the agency programmer who then electronically identified any homeless person who used their services during 2004 and 2005 and merged their service use information to the homeless data file. The programmer deleted the social security number and day and month of birth from the new merged data file so it only contained the randomly assigned identification number. Homeless cases were matched to the institutional client file only using the social security numbers. Each institution followed the same procedure and UofL's research team then merged all the institution files with the randomly assigned identification number.

Identifying Cost Information: To collect homeless service cost the Project Director obtained annual financial reports for each homeless service agency, which were on file at The Coalition for the Homeless office. In most all annual audited reports, direct homeless service program costs were identified, and indirect administrative costs for the whole agency were identified separately. The agency-wide administrative costs were distributed to homeless service programs in proportion to their contribution to total direct service costs. For example, if an agency had one program costing \$150,000 or 33% of their total direct service costs of \$450,000, then 33% of the administrative cost was assigned to the one residential, homeless program. In a few large agencies, food costs were reported separately. Residential homeless clients were not the only clients using the food service. It was impossible to determine how much of the food costs should be charged to residential homeless clients. Therefore, these costs were not included in some agency cost estimates (usually for larger emergency shelters).

Costs for other service systems were obtained in two ways. The first was to attach an agency determined per diem cost to every day a homeless client used the service. This method was used for estimating individual client costs for metro jails, corrections, the Healing Place and Central State Hospital. Seven Counties Services, Phoenix Health Center and University Hospital reported specific service costs for each client encounter and research staff aggregated costs for each homeless client to determine an overall cost for each individual at each agency.

## APPENDIX B

### **AGENCIES AND PROGRAMS PROVIDING INFORMATION FOR HOMELESS RESIDENTIAL, SINGLE WOMEN (W) AND MEN (M) EMERGENCY SHELTER**

Salvation Army (W) (M)  
Saint Vincent DePaul (M)  
Wayside Christian Mission (W) (M)

### **TRANSITIONAL SHELTER**

Choices: Norma's House (W)  
Interlink: Genesis House I (M)  
          : Genesis House II (M)  
House of Ruth: Transitional Housing (W) (M)  
          : Glade House (M)  
          : Harmony House (M)  
Saint Vincent DePaul: St. June (W)  
          : Ozarram (M)  
Volunteers of America: Maird Booth House (W)  
          : Shelby Men (M)  
Well Spring: Journey (W)  
          : Audrey (W) (M)  
Wayside Christian Mission: Transitional Shelter (W) (M)

### **PERMANENT HOUSING**

Saint Vincent DePaul: Tranquil House (W) (M)  
          : Roberts (W)  
          : Simon Hall (M)  
Well Spring: Murry (W)  
          : Baxter (M)  
          : Cresent (M)  
Wayside Christian Mission: Permanent Housing (M)

## APPENDIX C: REFERENCES

- American Psychiatric Association. (2005). 2005 APA gold award: Providing housing first and recovery services for homeless adults with severe mental illness. Psychiatric Services, 56, 1303-1305.
- Barber, G. & Stone, R. (2008). Social work pilot project report. Louisville, KY: Kent School of Social Work, University of Louisville.
- Caton, C.M., Dominquez, B., Schanzer, B., Hasin, D.S., Shrout, D. E., Felix, D., et. al. (2005). Risk factors for long-term homelessness: Findings from a longitudinal study of first-time homeless single adults. American Journal of Public Health, 95, 1753-1759.
- Clark, C., & Rich, A. (2003). Outcomes of homeless adults with mental illness in a housing program and in case management only. Psychiatric Services, 54, 78-83.
- Caldwell, C.M., & Bender, W.S. (2007). The effectiveness of assertive community treatment for homeless population with severe mental illness: A meta-analysis. American Journal of Psychiatry, 164, 393-399.
- Culhane, D.P., Metraux, S. & Hadley, T. (2002). Public service reductions associated with placement of homeless persons with severe mental illness in supportive housing. Housing Policy Debate, 13, 107-163.
- Culhane, D., Parker, W., Poppe, B., Gross, K. & Sykes, E. (2007). Accountability, cost-effectiveness, and program performance: Progress since 1998. The 2007 National Symposium on Homeless Research. (see <http://aspe.hhs.gov/hsp/homelessness/symposium07/culhane/>)
- Gulcur, L., Stefancie, A., Shinn, M., Tsemberis, S., Fischer, S.N. (2003). Housing, hospitalization, and cost outcomes for homeless individuals with psychiatric disabilities participating in continuum of care and housing first programs. Journal of Community & Applied Social Psychology, 13, 171-186.
- Lehman, A.F., Dixon, L.B., Kernan, E., DeForge, B.R. & Postrado, L.T. (1997). A randomized trial of assertive community treatment for homeless persons with severe mental illness. Archives of General Psychiatry, 54, 1038-1043.
- Martinez, T.E. & Burt, M.R. (2006). Impact of permanent supportive housing on the use of acute care health services by homeless adults. Psychiatric Services, 57, 992-999.
- Meisler, N., Blankertz, L., Santos, A.B., & McKay, C. (1997). Impact of assertive community treatment on homeless persons with co-occurring severe psychiatric and substance use disorders. Community Mental Health Journal, 33, 113-122.

## APPENDIX C: REFERENCES (cont.)

- Mondello, M., Gass, A.B., McLaughlin, T. & Share, N. (2007). Cost of homelessness: Cost analysis of permanent supportive housing. Augusta, Maine: Maine Department of Health and Human Services.
- Morse, G.A., Calsyn, R.J., Klinkenberg, W.D., Trusty, M.L., Gerber, F., Smith, R., Tempelhoff, B., & Amad, L. (1997). An experimental comparison of three types of case management for homeless mentally ill persons. Psychiatric Services, 48, 497-503.
- Rosenheck, R.A., & Dennis, D. (2001). Time-limited assertive community treatment for homeless persons with severe mental illness. Archives of General Psychiatry, 58, 1073-1080.
- Rosenheck, R.A., Kaspro, W., Frisman, L., & Lin-Mares, W. (2003). Cost-effectiveness of supported housing for homeless persons with mental illness. Archives of General Psychiatry, 60, 940-951.
- Tsemberis, S. (2007). Housing first: Ending homelessness and supporting recovery. NY,NY: Pathways To Housing, Inc. (see <http://www.pathwaystohousing.org>)