

Economic Impact Study 2007  
Allegheny County  
Department of Human Services

Katz Consulting Team

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# Department of Human Services



A Decade of Progress  
1997 - 2007

- *What do they do?*
- Provide and administer human services to most vulnerable Allegheny County residents
- *Who they help?*
- Children, Young Adults, Elderly, and Disabled
- *How do they do it?*
- Receive nearly \$1 billion in funding from over 200 Federal, State, and Local sources, which is distributed to over 400 service providers
- *Examples of Services Provided:*
- Prevention, Crisis Management, Early Intervention, After-Care Services, Job Training and Placement, Hunger Services, and Energy Assistance

# Executive Summary

- DHS provides considerable multiplying effects to the funding given to them from Federal, State and local sources
- For every \$1 in funding, they give back approximately \$1.75 to the local Allegheny County community
- Directly through jobs and income
- Indirectly through related businesses in the community
- Induced through household purchases
- Health Services provide an “extra” multiplying effect
- Funding should continue and a focus on specifically high benefit areas in the county targeted

# DHS Team Members

- Randy Brockington - Deputy Director
- Lisa Caldwell – Information Systems
- Dan Evancho – Budget Manager
- Kathy Heinz – Contract Process
- Latoya Warren – Data Analysis, Research
- Leslie Lewis-Pollard – Administrative Asst
- Rich Karas – Assistant Deputy Director
  
- *Faculty Advisor* – Ravi Madhavan

# Objective

- What does the Department of Human Services (DHS) bring to Allegheny County in terms of Economic Impact through nearly \$1 billion in local contracts for fiscal year 2007?

# How did we get here?

## *Projects Activity:*

- Database creation
- Interviews and contact with service providers
- Survey creation and execution
- Data Analysis
- Economic Analysis – IMPLAN
- Insights/Recommendations to DHS

# Criteria of Interest

- Total number of Jobs created
- Workforce Demographics: Minority, Gender, and Education specifics
- Types of business – WBE, MBE, and DBE
- Tax Generation
- Overall Multiplier

# What is Economic Impact?

- How much effect on the local economy can a change in economic activity cause?
- A change can be small (a new company) to large (new city planning)
- I-O model most accurate for regional impact
- Total impact = gross sales (output) + income + employment + value added
- Ripple effect example



What does that REALLY mean?  
(Imagine for a minute if DHS didn't exist)



# Direct Effects – Initial Economic Impact

- Loss of jobs would HURT
- Loss of salary/wages
- Loss of benefits
- Loss of revenue



# Indirect Effects – Industry-to-Industry

- Loss of business would HURT
- Suppliers
  - Office
  - Food
  - Laundry
  - Medical
  - Transportation



# Induced Effects – Household Consumption

- Loss of employee spending would HURT
- Local retail and service purchases
  - Grocery store
  - Pharmacy
  - Housing



# Health Care Related Economic Impact Multipliers

	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>
<b>Employment Multiplier</b>	Health care jobs	Health care supplier jobs	Local retail and service jobs related to health care employee spending
<b>Income Multiplier</b>	Health care employee income	Health care supplier employee income	Local retail and service income related to health care employee spending
<b>Sales or Output Multiplier</b>	Health care revenue	Health care supplier revenue	Local retail and service revenue related to health care employee spending

The Economic Impact of the Local Health Care System on the McCracken County Economy, Prepared by KY Rural Health Works, January 2003.

# So What?



# Funding

- DHS received \$984,000,000 in funding in 2007 and gave this money to over 400 agencies, but what was the economic effect to Allegheny County?

# The Multiplier effect is:

- 1.75
- Service agencies receive \$786,013,391
- Result:
  - Estimated total economic impact to region of \$1,375,523,434!





# IMPLAN

- Industry standard software package to estimate economic impact
- Based on Input-Output model (Nobel Prize in Economics) for regional area
- Used by universities, government agencies, private companies
- Generates multiplier effects and allows for creation of impact analysis

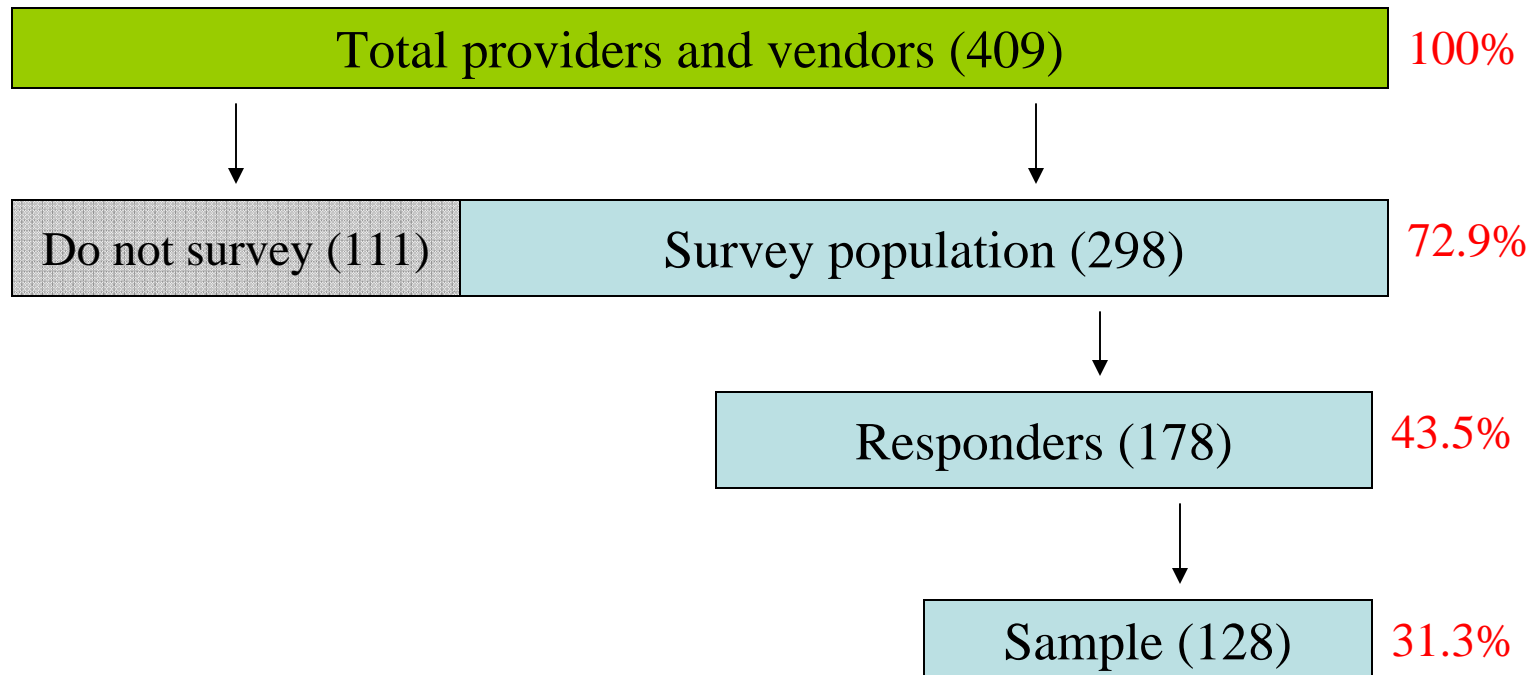
# DHS Multipliers by Agency

<b>Agency Type</b>	<b>Output Multiplier</b>	<b>Employment Multiplier</b>	<b>Income Multiplier</b>
Social Services	1.75	1.36	1.5
(range)	(1.75-1.76)	(1.3 - 1.41)	(1.46-1.56)
Health Services	1.9	1.86	2.76
(range)	(1.83-1.94)	(1.42-2.27)	(2.29-3.83)
Housing	1.68	1.39	1.63
(range)		(1.39-1.4)	(1.62-1.63)

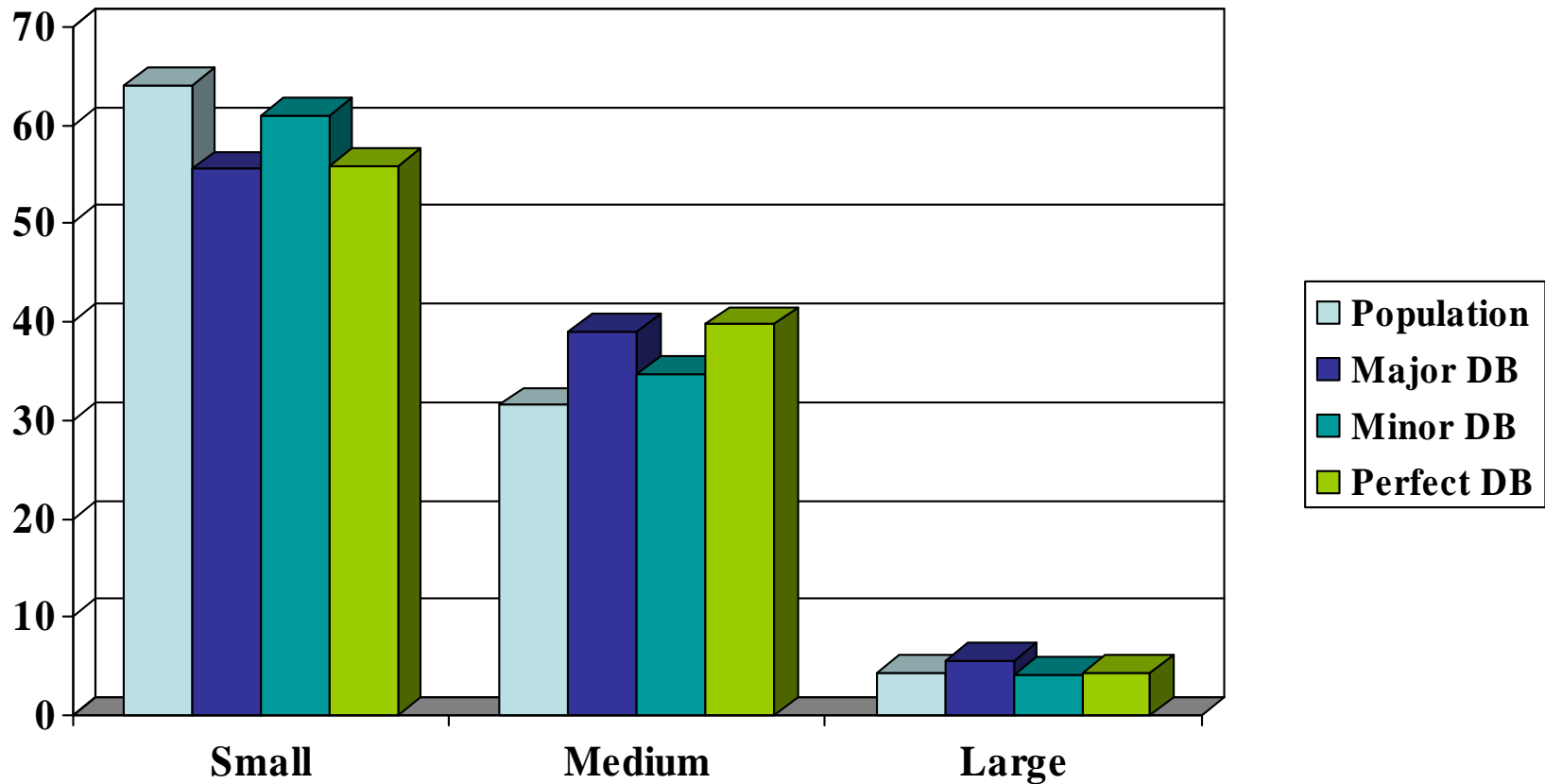
# Limitations

- Preliminary work to get a working number for multiplier
- Response rate is 59.7 %, which consists of only 31.3% of total DHS funded providers/vendors
- Survey duration is only 4 weeks
- Limited data collecting ability from questionnaire

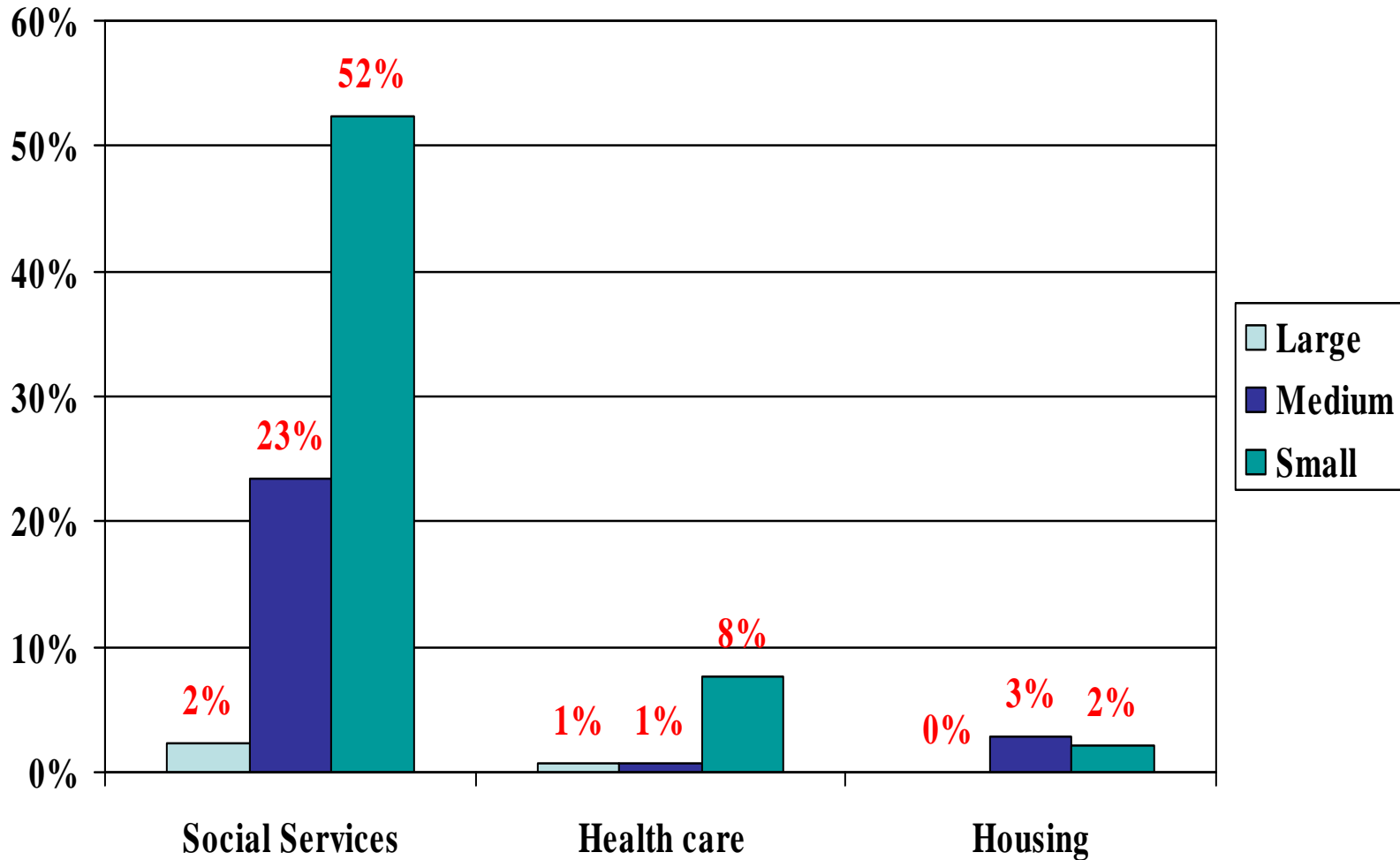
# Sample Population



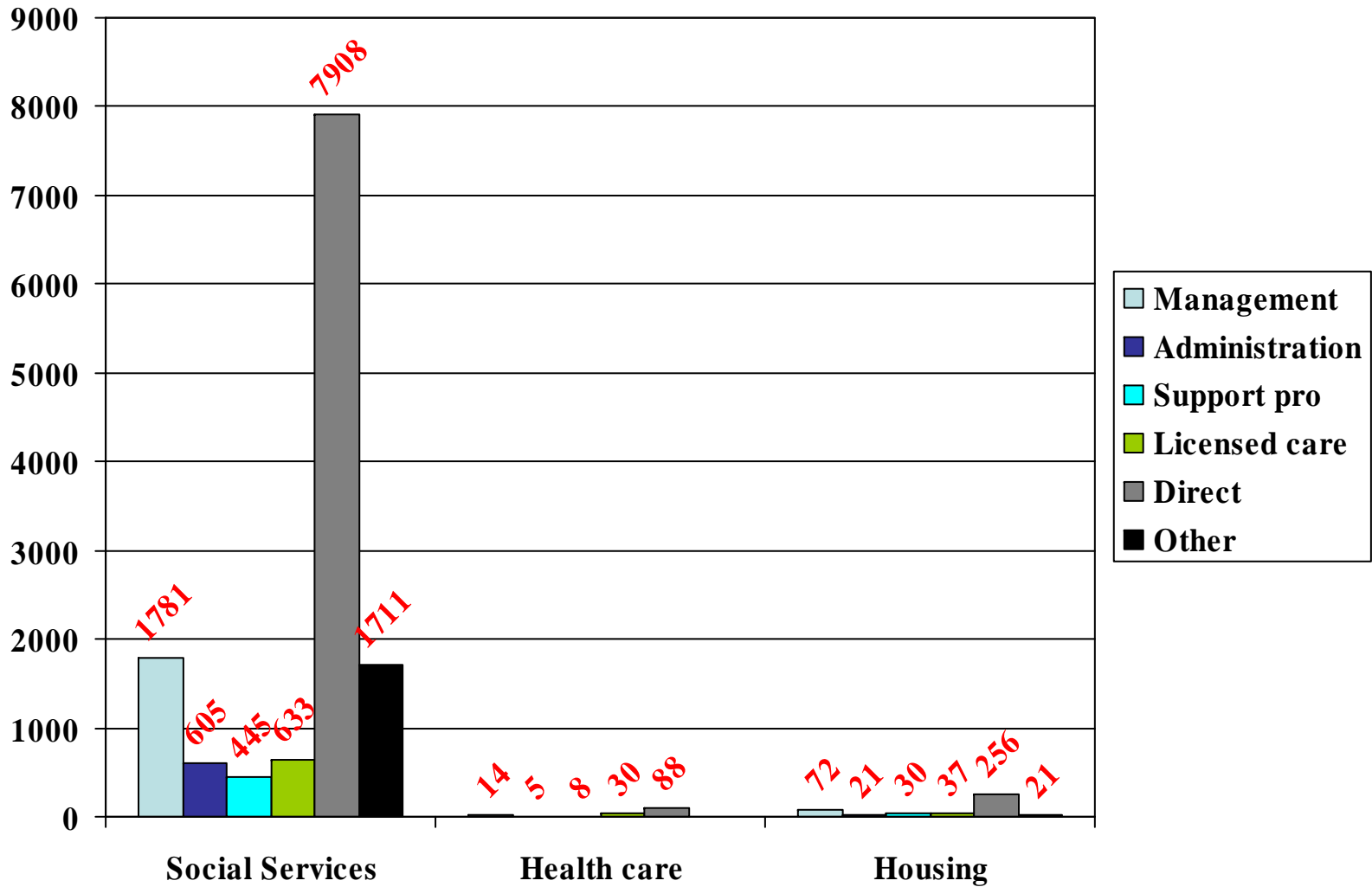
# Response Bias – by Funding size



# Funding by Agencies



# Jobs Created



# Assumptions in Analysis

- For service providers that chose “Other” – we reviewed company services on website and tried to make a best fit into the current categories. Some were outside of this range and we chose the best fit group of education.
- Due to multiple databases (perfect, minor, and major) we are showing a range of multipliers, including an average of the range.
- Extrapolation was done to the best data to show the true overall effects on the entire DHS spending profile (due to many non-responders and inaccurate data).



# Tax Effect

*Funding contributes through induced effects to the following major taxes:*

- Federal, State and Local income taxes
- Social Security – Employer and employee contributions
- Housing Taxes – real estate and school
- Sales Tax

# Insights/Recommendations

- Very large percentage of Women employees in service providers – marketing tool?
- Percentage of minority workers is much higher than the county average – marketing tool?
- Social Services support lion share of activity
- DHS database versus provider view has many differences
- DHS has underlying effect on so many organizations in community, most aid receivers may not even know DHS is involved
- The majority of funds are distributed to a very small percentage of providers – conduct quarterly provider reviews to focus activity and develop strategies for future

# Insights/Recommendations

- Salaries for social services and housing are generally higher than the IMPLAN supplied salary data for county
- Vast majority of jobs created are direct care workers (which is good ratio to management/admin)
- Is effort to work with small agencies worth the administrative effort (agencies vs. dollars provided) – can there be any partnerships of small agencies?
- Almost all agencies are non-profit
- Very few service providers subcontract
- Less than 25% are faith based organizations
- Very few WBE, MBE, DBE certified agencies

# Recommendations

## *Strengthen Analysis:*

- Database accuracy
- Repeat annually to trend growth
- Include second-order impacts, such as users attendance and productivity increases due to using DHS agencies
- See Lessons Learned

## *Business Implications:*

- Link value to correlation with residents served
- Focus on health service sector to multiply value to region
- Marketing message to community
- Does Agency Size have impact on correlation to multiplier?
- Job creation in region

# Lessons Learned

*What went well?*

- Defined Problem
- Teamwork between DHS and Katz

*What could have gone better?*

- Survey monkey technical issues
- Time – not enough (database, survey, analysis)

# Lessons Learned

*What would you do again?*

- Update Meetings
- Faculty Advisor greatly helped with guidance
- One central contact at DHS and Katz

*What would you do differently?*

- Survey monkey technique – trial
- More direct contact with providers – phone and in person

# Questions



Thank you for your support

Katz Consulting Team



# Appendix A

## Assumptions on databases:

- *Perfect* – All data is correct including DHS Funding, salary info, job creation, and agency type
- *Minor* – Same as above but including those who have salary information missing
- *Major* – Same as minor but including those who have issues adding up division of labor to total DHS employees
- Removed Community Care Behavioral Health from health service analysis – major outlier w/ >\$200,000,000 funding
- *Note:* All assumptions or changes are highlighted in the specific database (if any)

# Appendix B1

## Survey Questions ([www.surveymonkey.com](http://www.surveymonkey.com))

1. What is the name of your organization?
2. What type of Agency is your organization? (Social Services, Housing, Health Care, Vendor, or Other)
3. Are you a non-profit organization?
4. Are you a faith-based organization?
5. Is your organization a federal, state or county certified WBE, MBE, or DBE?
6. What is your total funding and income from all sources for your last fiscal year?
7. What percentage of your total income does DHS contribute?

# Appendix B2

8. Do you subcontract? (if so, what percent?)
9. What is the total number of employees at your organization that work within Allegheny County?
10. How many employees are hired through DHS funds?
11. How many Full time equivalent employees are hired through DHS Funds (Management, Administrative, Support Professionals, Licensed care work, Direct Care worker, and Other)
12. How many Part time equivalent employees are hired through DHS Funds (Management, Administrative, Support Professionals, Licensed care work, Direct Care worker, and Other)
13. What is the average annual income for your employees (including wages & salaries plus benefits)? (all categories)
14. What is approximate percentage of your DHS funded employees are – female, minority, or college educated?

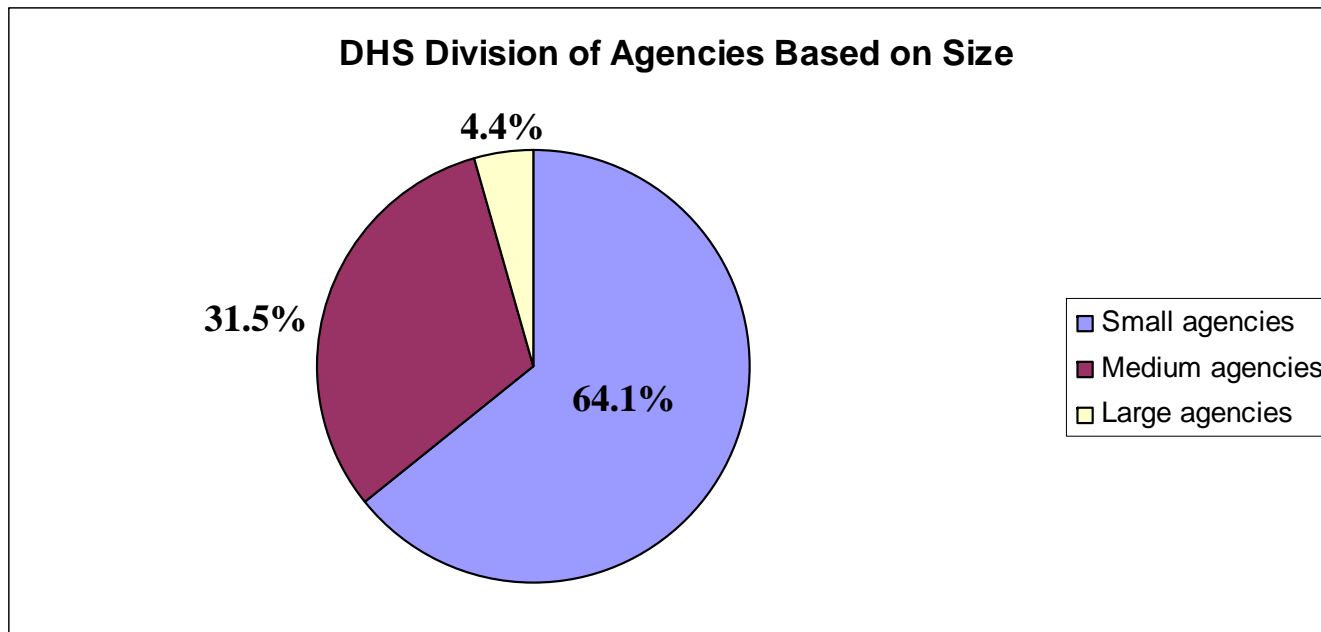
# Appendix C

## Scope:

- Complete by 12/5/07 – answer from information to date
- Effect on Allegheny County residents only, not outlining counties
- Minimum of 25% Survey response

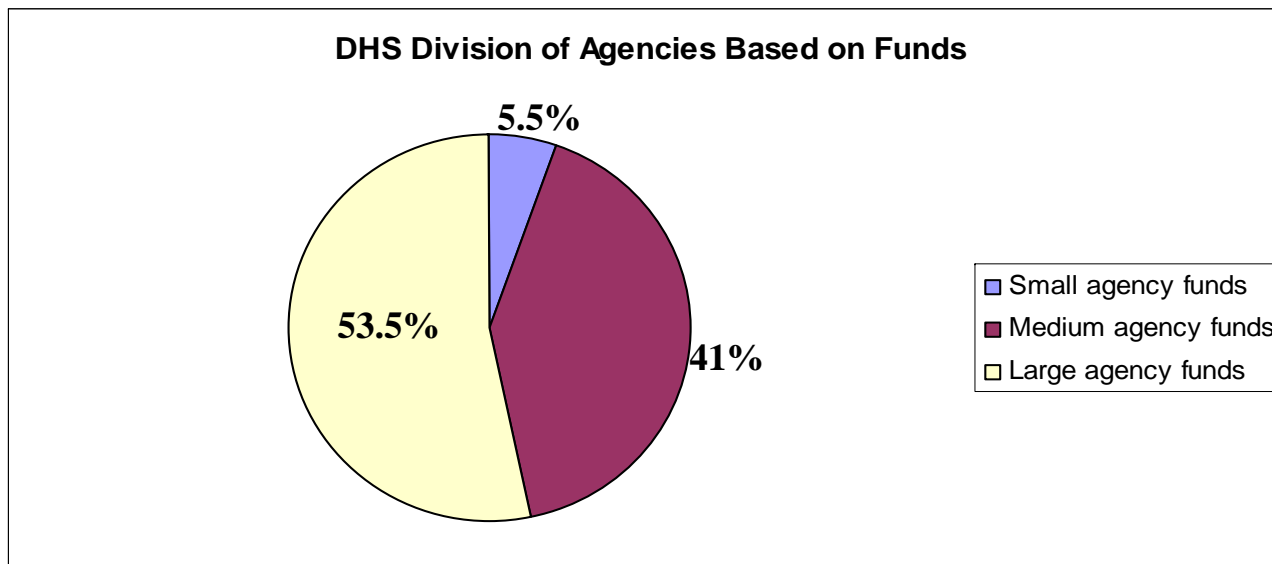
# Appendix D1

## Agency Breakdown by Size



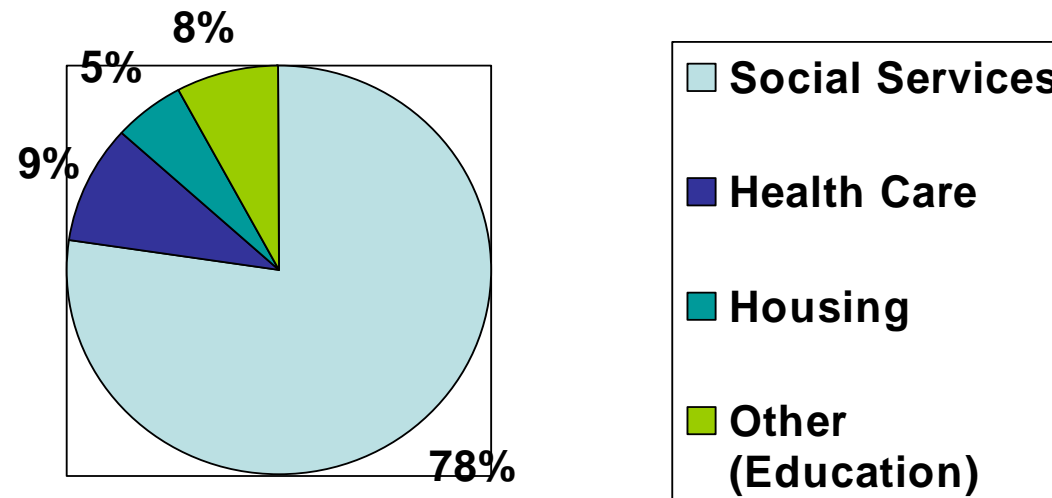
## Appendix D2

# Agency Breakdown by Funds



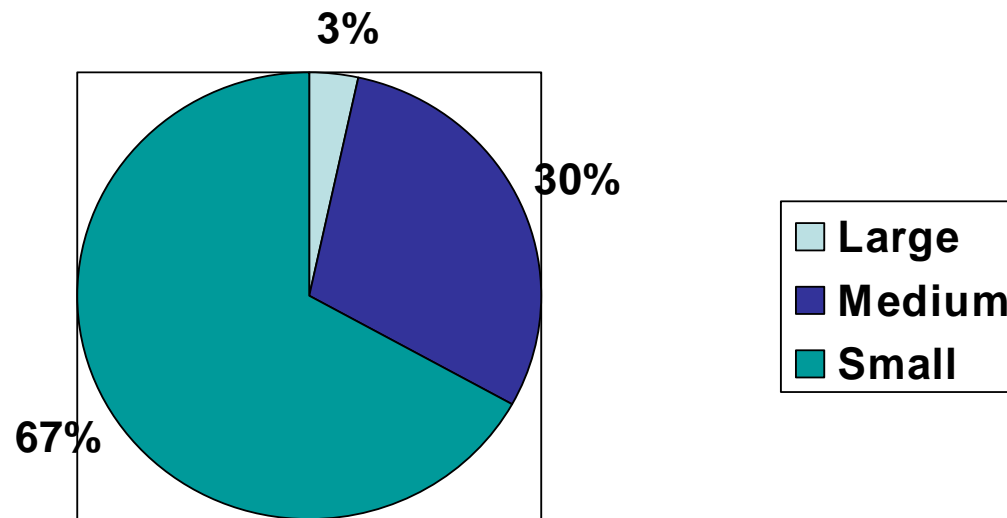
# Appendix D3

## Types of Agencies



# Appendix D4

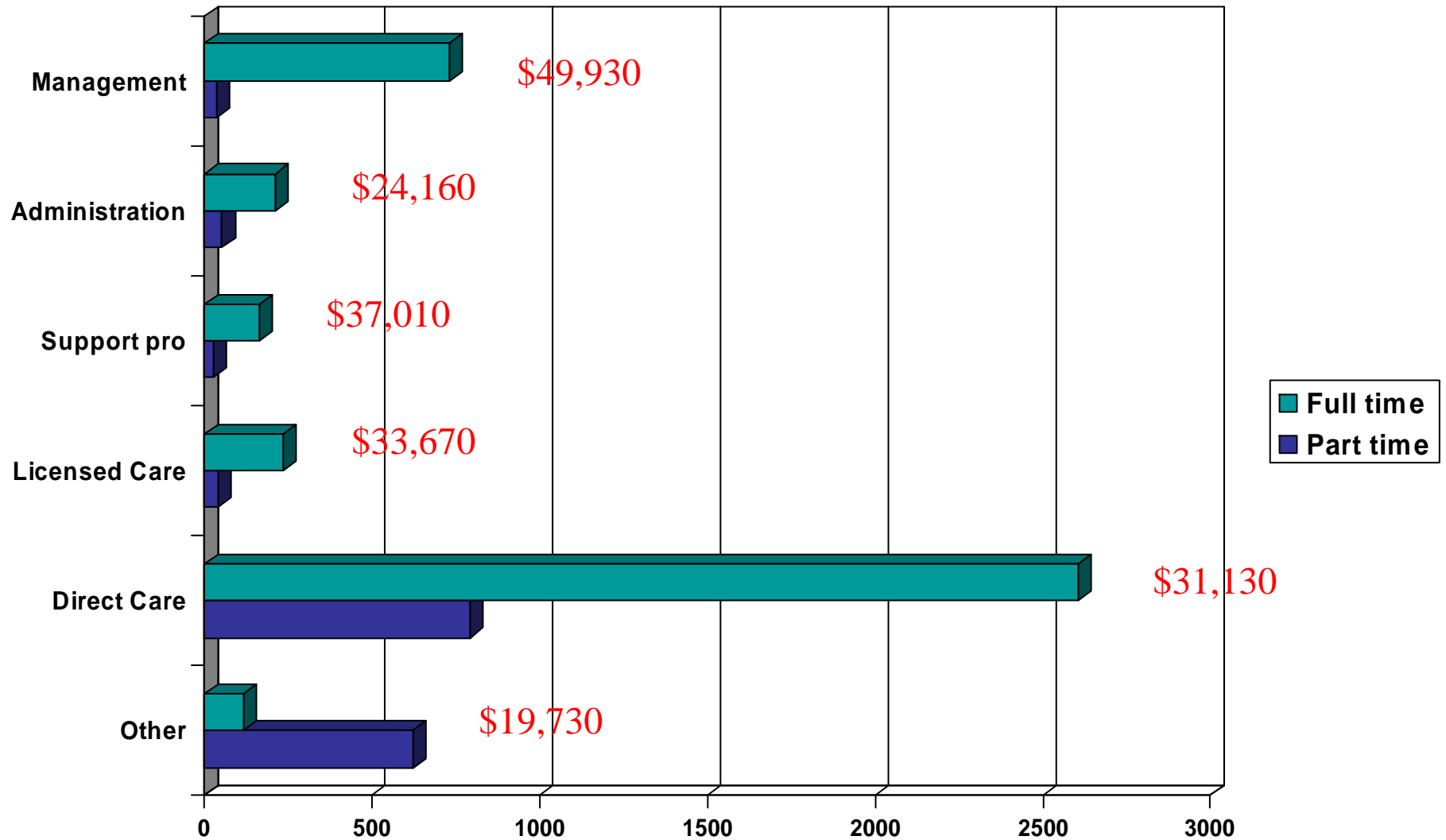
## Social Services





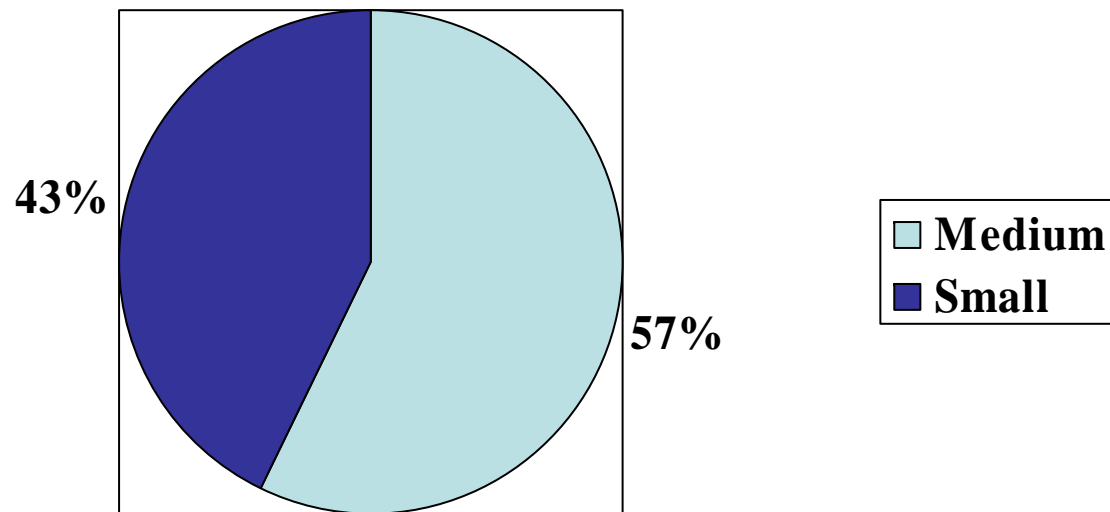
# Appendix D5

## Social Services Sector Employees



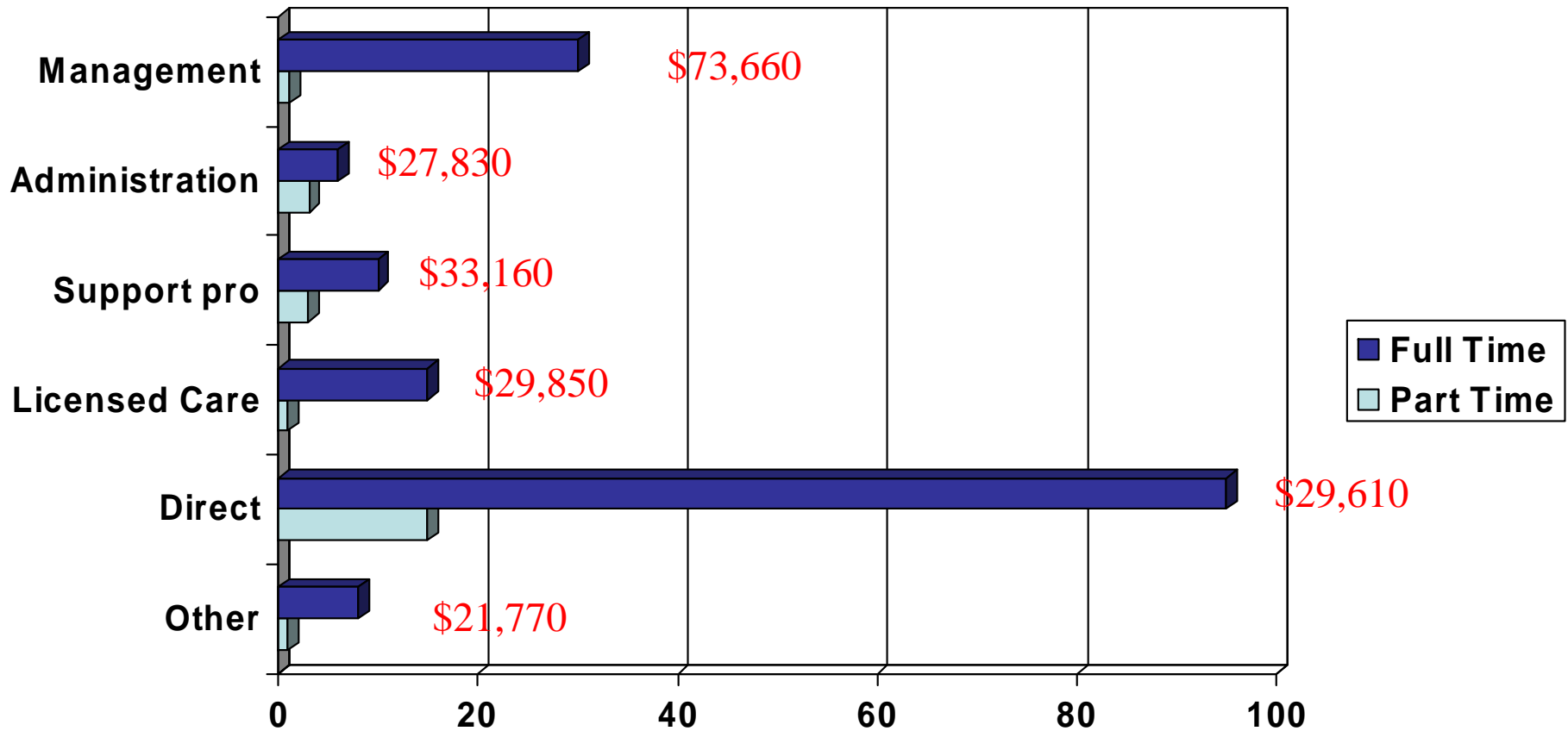
# Appendix D6

## Housing Agencies



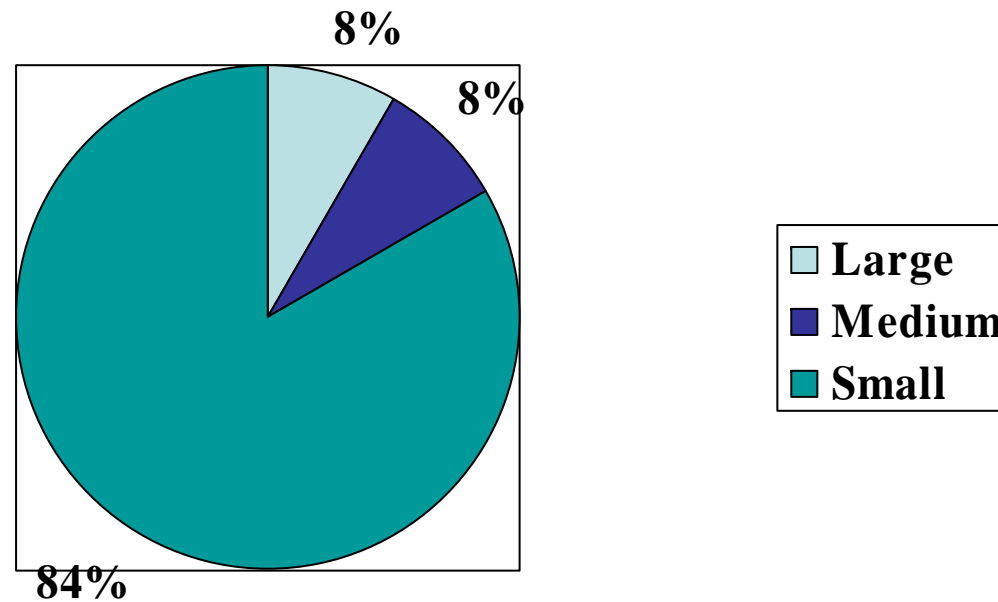
# Appendix D7

## Housing Sector Employees



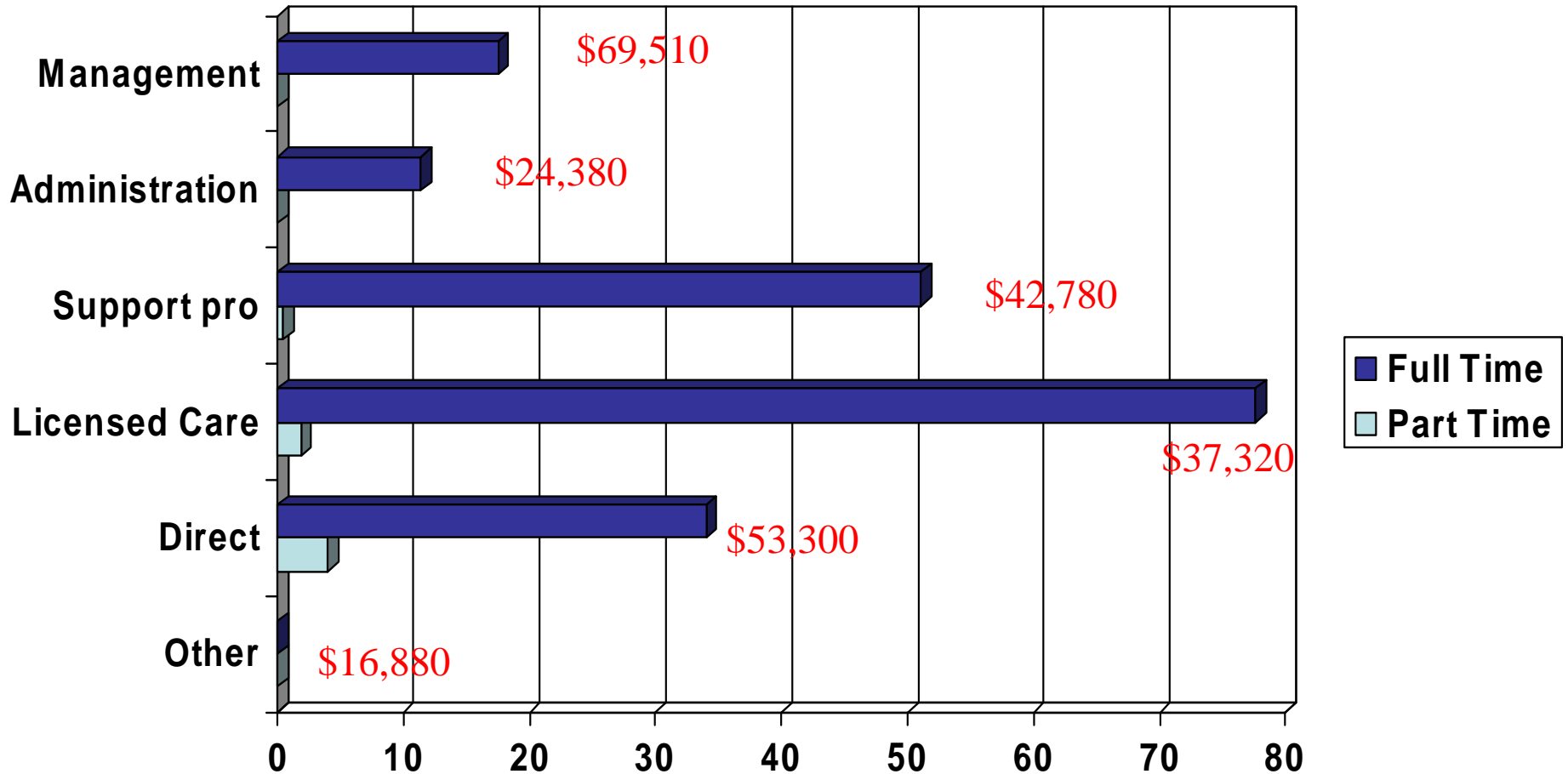
# Appendix D8

## Health Care Agencies

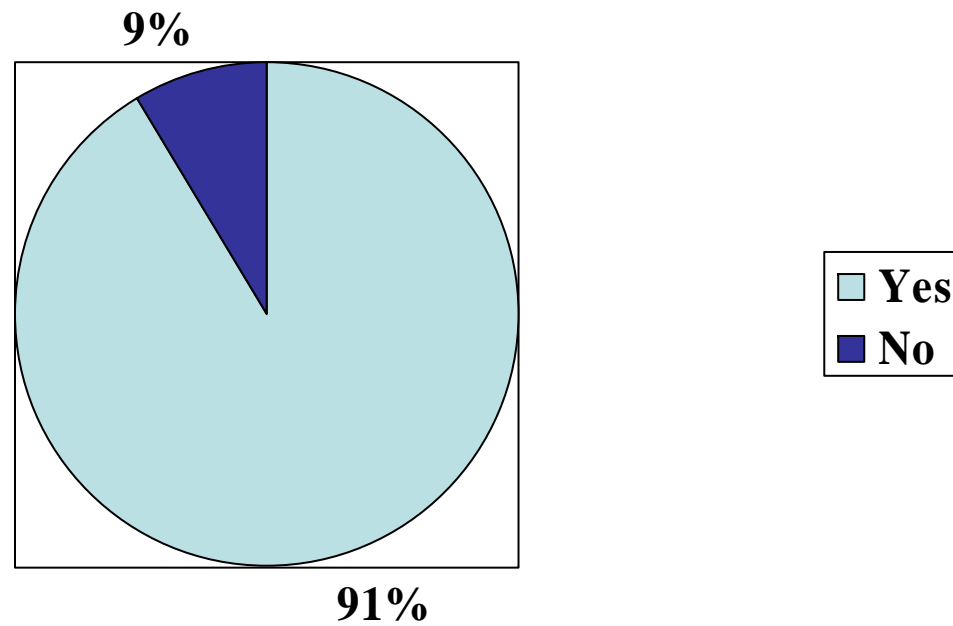


# Appendix D9

## Health Care Sector Employees

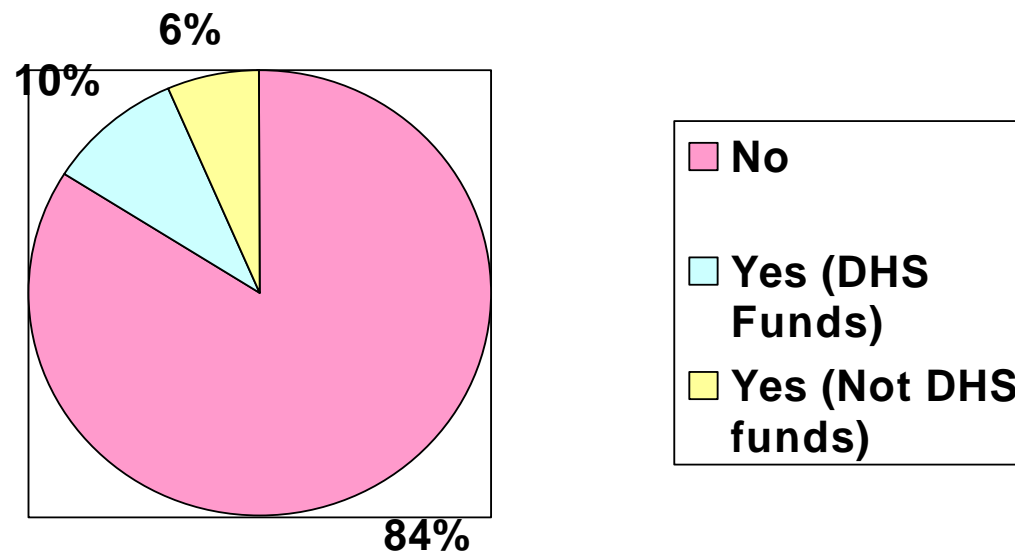


# Appendix D10 Non Profit



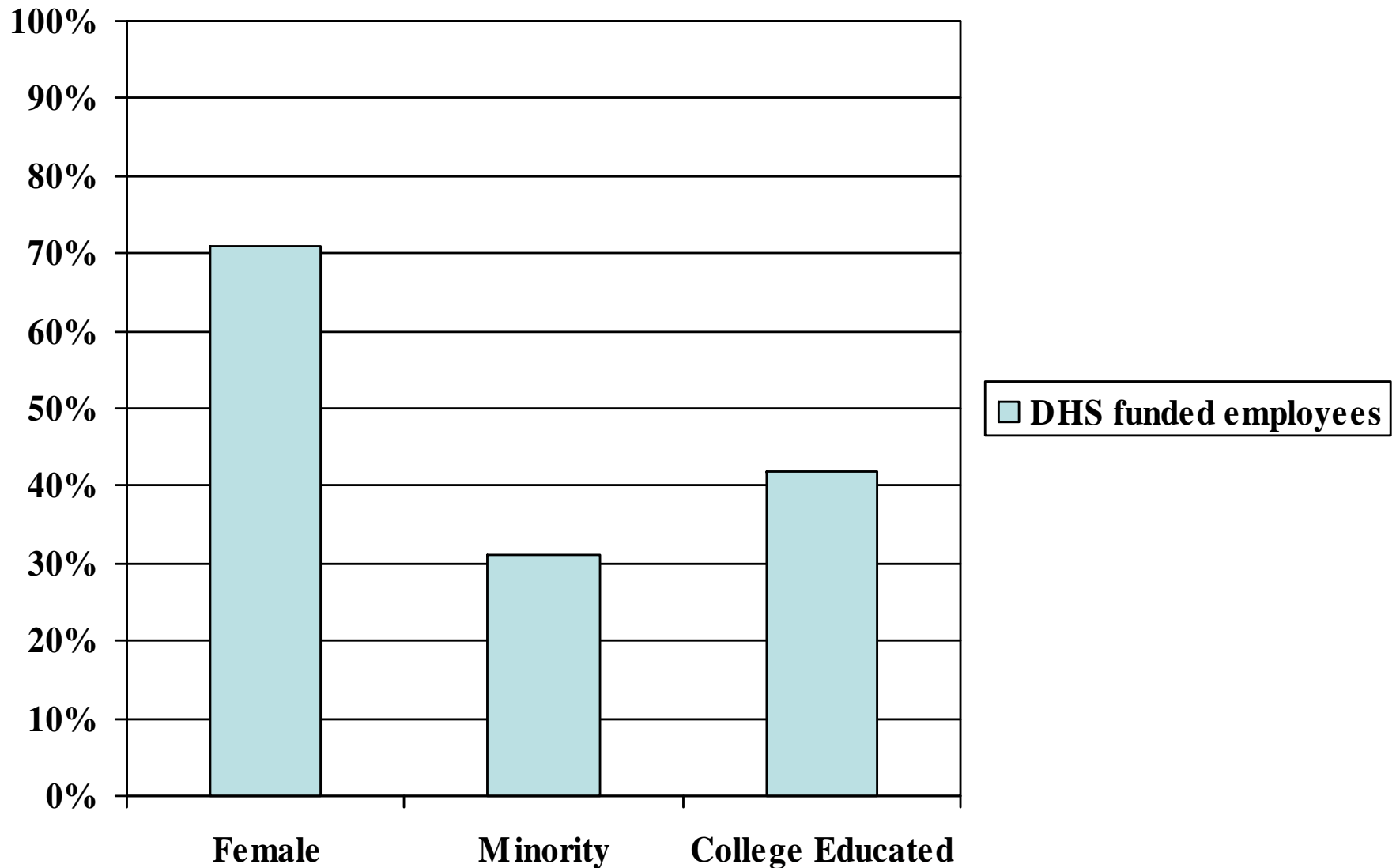
# Appendix D11

## Sub-contract



# Appendix D12

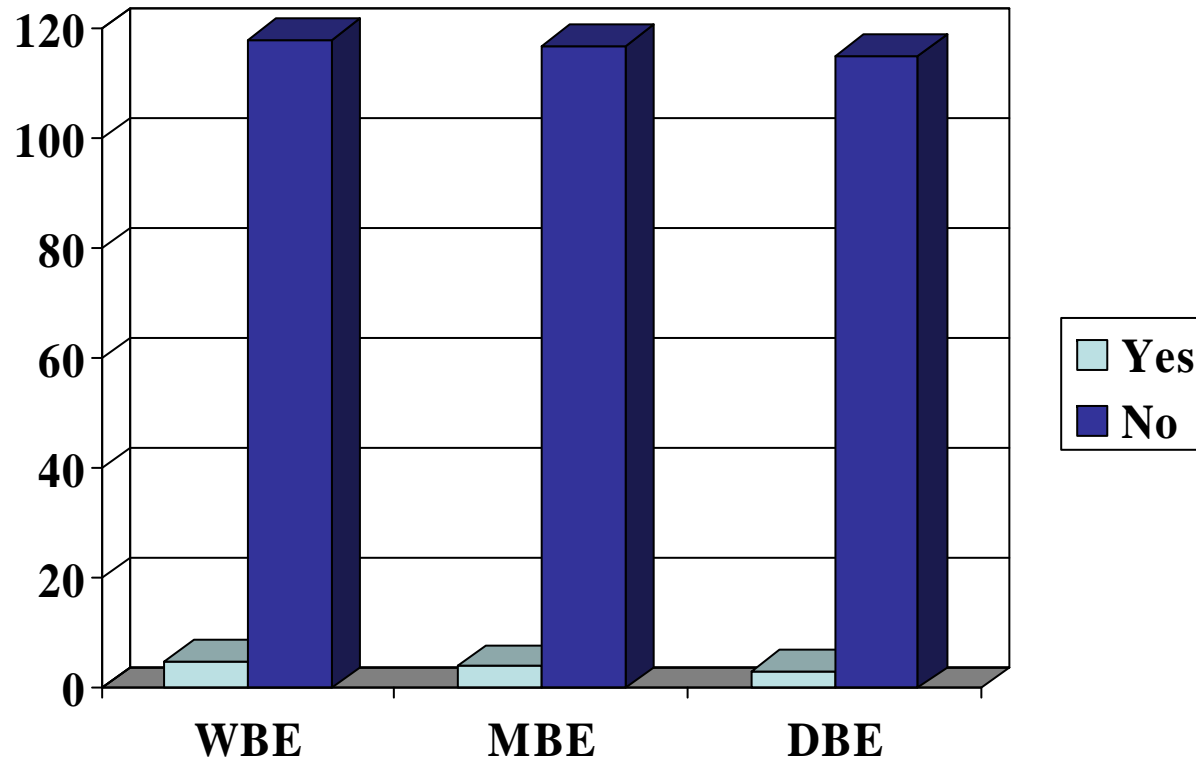
## Female, Minority, College Educated





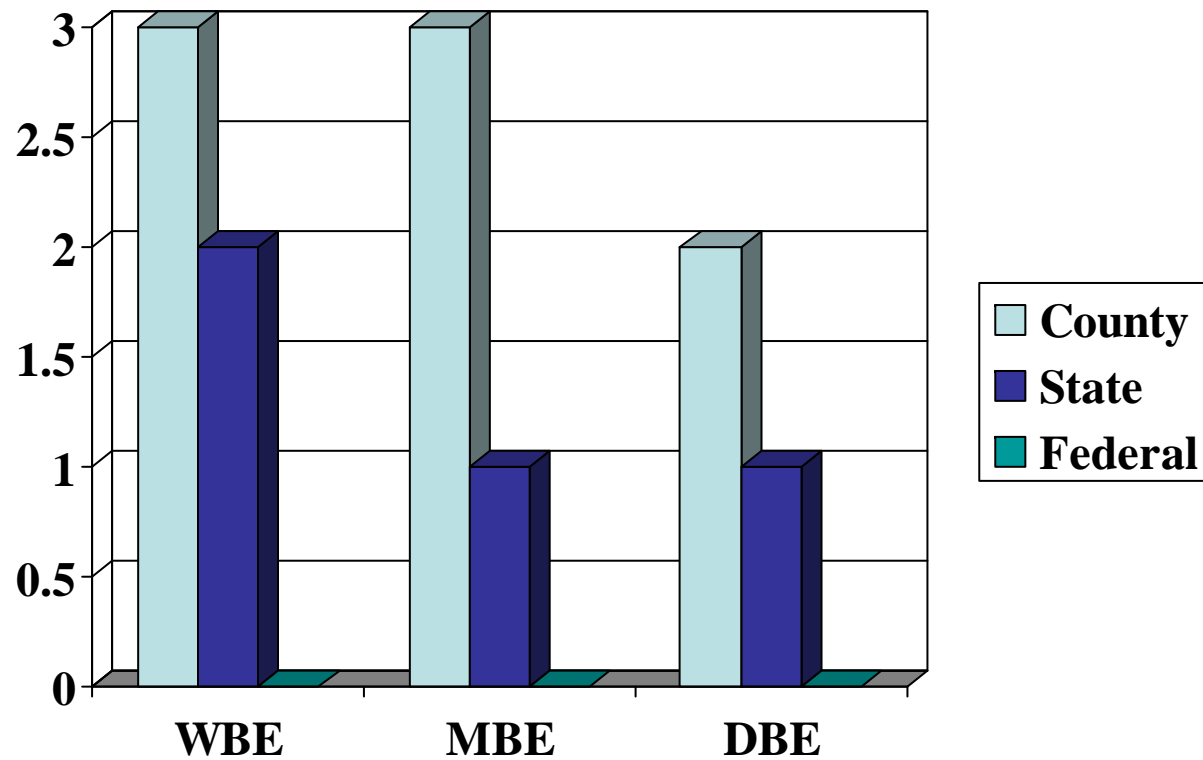
# Appendix D13

## WBE, MBE, DBE Certified?



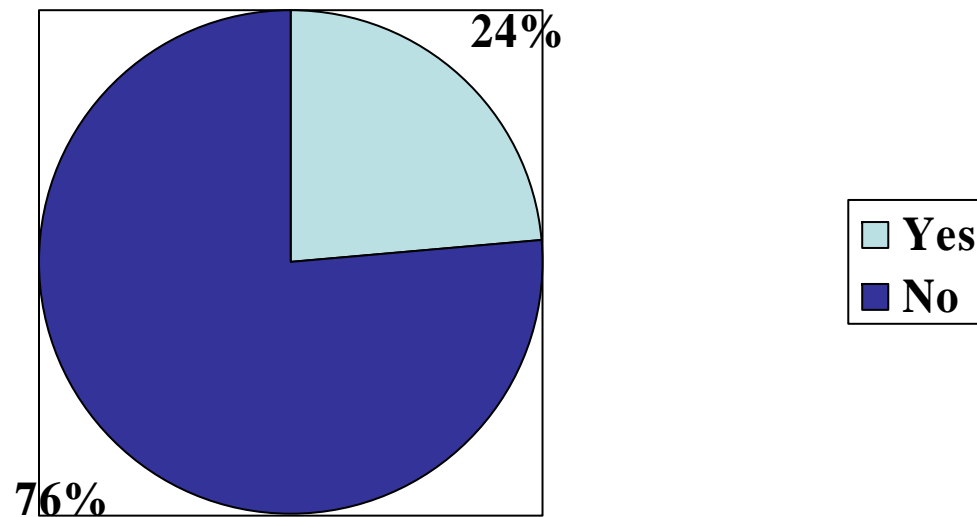
# Appendix D14

## WBE, MBE, DBE Certification



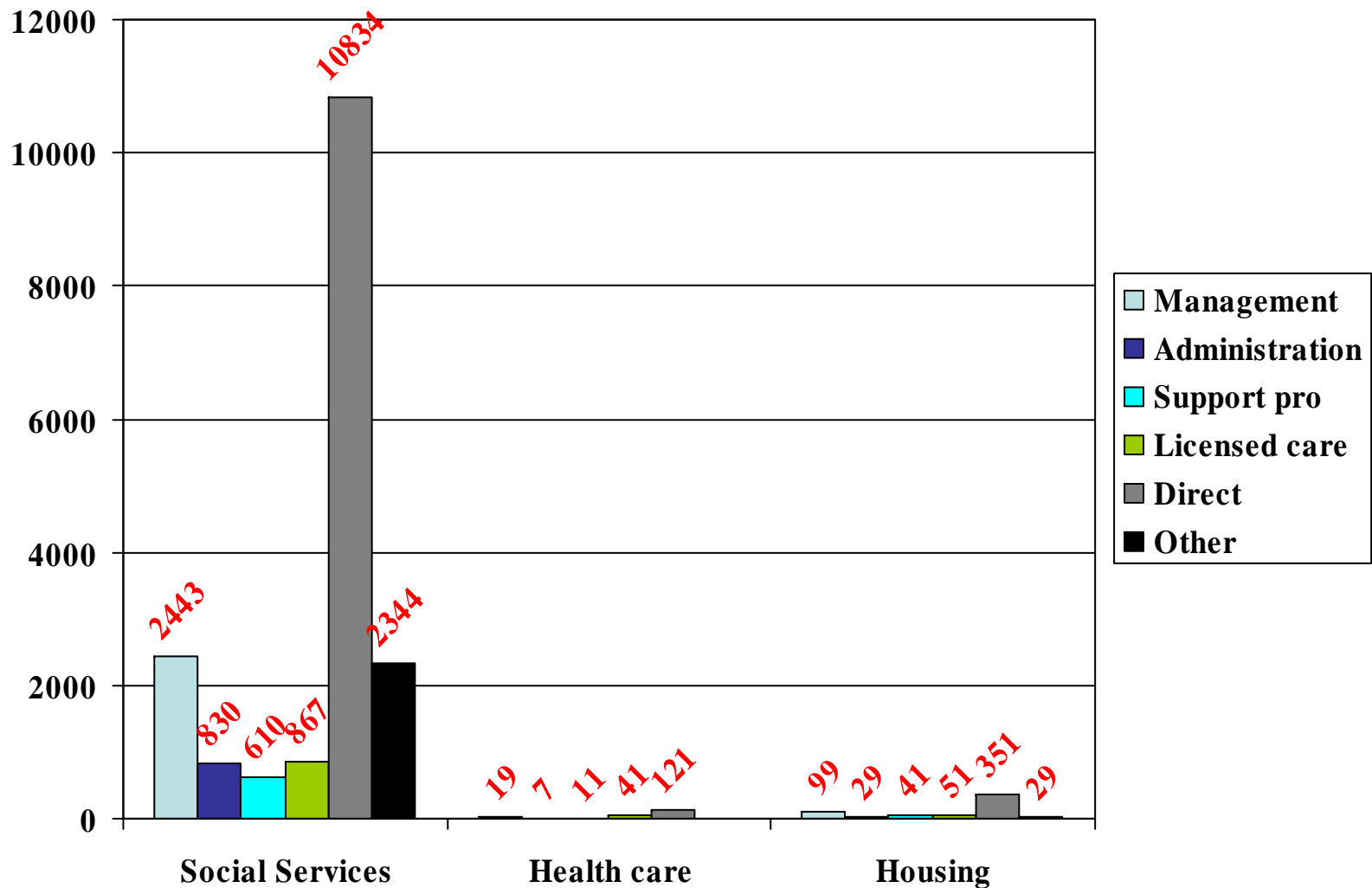
# Appendix D15

## Faith based



# Appendix D16 Jobs Created (extrapolated to all DHS providers & vendors)

\*Assume non-surveyed providers and vendors hire the same ratio of employees as those surveyed



# Appendix E - Taxes (\$)

	Social services	Health services	Housing
Federal: Personal Income Tax	15,534,210	163,507	562,727
Federal: Social Insurance Tax	13,487,624	136,254	478,762
State/Local: Sales Tax	4,135,936	55,569	338,271
State/Local: Personal Property Tax	101,954	1073	3694
State/Local: Personal Income Tax	4,691,096	49,377	169,936
State/Local: Social Insurance Tax	297,530	3006	10,561

# Appendix F - Allegheny County Standard Industry Multipliers

Industry	Output Multiplier	Employment Multiplier	Income Multiplier
Social Services	1.74	1.24	1.41
Health Services	1.73	1.38	1.43
Housing	1.77	1.52	2.27

# Appendix G - Multiplier Comparison Chart

Article Title	Prepared by	Date	Population	Output Multiplier	Employment Multiplier	Income Multiplier	Source
<i>Local Health Care System, Livingston County</i>	KY Rural Health Works	Feb 2003	2000 – 9804*	1.27	1.26	1.20	Implan
<i>Social Services, Cleveland County</i>	National Center for Rural Health Works	Feb 2006	2004 – 222,074	3.19	1.99	2.86	Implan
<i>Local Health Care System, McCracken County</i>	KY Rural Health Works	Jan 2003	2000 – 65,514*	1.46	1.53	1.30	Implan
<i>Healthcare Industry, Seattle</i>	Huckell /Weinman Associates	Sept 2004	2000 – 3,043,878	1.62	1.55	1.37	Implan

\*<http://recenter.tamu.edu/>

# Appendix H - Link to Database

- Perfect Database
- Minor Database
- Major Database