The human services support system of Allegheny County, Pennsylvania, incorporates a complex and concentrated network of services for its economically disadvantaged citizens. In 2004, the Allegheny County Department of Human Services (DHS) served 231,400 people by administering 2,190 contracted services through a network of 384 direct service providers, most being autonomous, nonprofit organizations.\(^1\) Local government relies heavily on nonprofit organizations to address the physical, mental, and emotional health of individual residents, which in turn improves the quality of life for families and communities. Allegheny County residents consequently enjoy a human service delivery system with great geographical access to a variety of service providers. A network of 384 direct service providers delivering services across five DHS program offices provides choice to individuals. This ample supply of service delivery options enables consumers to select direct service providers in close geographic proximity to their residence, as well as an opportunity to select a provider based upon its particular service delivery approach. That said, this abundance of supply options, while likely attractive to the consumer, entails a cost to government or the funder in its costs to administer contracts with each autonomous, direct service provider.

The Forbes Funds commissioned The Hill Group, Inc., to conduct a study of the human service delivery system in Allegheny County to determine if there were opportunities to enhance the system’s capacity. Specifically, this study investigates whether there is an opportunity to maintain choice in service delivery, a benefit of the Allegheny County human services system, while creating operating efficiencies and enhancing mission effectiveness.

This study addresses the following questions:

- What is the supply and demand continuum of human services in Allegheny County?
- Is there evidence of equilibrium or disequilibria between human services provided and demand for human services?
- Are there high or low concentrations of service providers geographically clustered around clients or any natural market sheds of human services activities?
- Can geographical concentrations of providers and clients be leveraged for efficiency through various forms of collaboration without compromising choice or delivery of services?
- Would the geographic clustering of human service organizations lead to any cost savings to the public (government or funders) or to nonprofit organizations?

This study offers a framework to enable local governments, like DHS, to continue to offer ample choice for consumers while providing opportunities to reduce its administrative costs. It also offers an approach to direct service providers to reduce their administrative costs through collaboration, directed by the services offered and the providers’ geographical proximity to each other and their consumers.

**Context**

- DHS, through five human services program offices, administers a $757.4 million human services budget. This budget is derived from 80 different funding sources, each with separate laws, funding regulations, and reporting requirements.
- The current federal budget is projecting a five percent decrease in human services funding over the next five years. This is driving a subsequent 14 percent reduction at the state level and will place increased pressure on the private and foundation sectors to mitigate these funding gaps.
- Human service organizations are facing some of the most difficult challenges in recent memory. The reduction in government funding, coupled with recent and significant regional job losses, has placed severe pressure on the capacity of nonprofits. The nonprofit sector is continually being asked to accomplish more and more with fewer resources.
- The ability to provide ample choice of direct service providers to consumers of human services is desirable for many obvious reasons, including the ability to stimulate competition and innovation in service delivery. Contracting of services allows the marketplace to reward those providers that deliver. On the other hand, Allegheny County’s complex system of contracting carries a burden of high transaction costs in eligibility assessment, program oversight, and compliance reporting.
- Past studies investigating the capacity of nonprofits to provide human services have focused largely on fiscal and organizational capacity, documenting the often incoherent, fragmented nonprofit sector (e.g., Kearns, 2004; Johnson, 2005). Strategic restructuring of nonprofit agencies has been advanced since the late 1990s (LaPiana, 1998).
- The research defining industry clusters serves as the springboard for developing service clusters. According to Michael E. Porter (2000), clusters are geographic concentrations of interconnected service providers in a particular field that compete but also cooperate. Other researchers similarly champion “clusters” as a tool to engage organizations in strategy development and problem solving (Waits, 2000). This report argues that the application of the cluster concept provides the same useful alternative for nonprofits to create synergies, increase productivity, and support economic advantages.

**Methodology**

The Hill Group used multiple research methods to produce this study. The supply and demand continuum of human services delivery in Allegheny County was studied by using geographic information systems and client and provider databases. Primary data was extracted from a DHS client and provider database.

The researchers also used the National Nonprofit Research Database (FY 2001) and the GuideStar National Nonprofit Database (1998–2003) to examine financial characteristics of nonprofit human services organizations in Allegheny County. This financial data is derived from Internal Revenue Service filings by the nonprofit organizations.

Also, structured interviews were conducted with representatives from the DHS and numerous nonprofit direct service providers. Dr. John Pierce and Lisa Caldwell of DHS were invaluable for their collaboration and contribution to this study.

**Findings**

DHS provided services to 231,400 individuals in 2004 through five departments or program offices:

- Area Agency on Aging (AAA);
- Office of Behavioral Health (OBH);
- Office of Children, Youth and Families (CYF);
- Office of Community Services (OCS); and
- Office of Mental Retardation/Developmental Disabilities (MR/DD)

OBH provided 36 percent of the services (Figure 1). These program offices administered 2,190 contracted services with most delivered through 384 direct service providers, primarily autonomous, nonprofit organizations. At any given time, 70 percent of case-managed individuals are getting help from more than one program office. The most frequent combination of services is mental health and substance abuse. Typical clients for all services are more likely to be female, over the age of 55, and unemployed.

Even though most individuals receiving services require service from more than one program office, local governments, like DHS, are seriously inhibited in providing comprehensive services or a continuum of services. Public funding over the years has been isolated into diagnosis-specific “silos,” each with its own set of regulations and eligibility criteria. Funding requirements and regulations make it extremely difficult to provide integrated service to individuals and discourage collaboration between funders and direct service providers.

These funding requirements and eligibility criteria provide a serious challenge not only to local governments or funders of human services, but to direct service providers as well. The administrative costs to administer and fund multiple services

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1 This data, provided by Lisa Caldwell of the DHS, reflects single client contact only. It does not include the clients who access multiple DHS services.
to an individual are obviously significant, particularly due to eligibility assessment and compliance reporting. The administrative costs to direct service providers are high as well due to the same issues.

Location and service density were examined to determine matches between distressed areas, human service provider locations, and services provided (Figure 2). The correlation between human service provider locations and clients in distressed neighborhoods was apparent. Equally telling was the marked evidence of service overlaps. These study findings suggest high concentrations of human service providers and clients in geographic proximity.

Human services in Allegheny County are densely clustered with mission-similar, direct service providers offering services in close geographic proximity to each other and to clients. “Meals” was chosen as a sample service in this study because financial data was accessible; more than 70 percent of meals are provided through the AAA. Meals provided through the AAA demonstrate horizontal service clustering of direct service providers (Figure 3).
These mission-similar, direct service providers have an opportunity to collaborate or share non-mission critical or back-office functions like compliance, accounting, information technology, and human resources, hence horizontal integration.

There are 20 direct service providers offering meal services in the county. Approximately 70 percent of the direct service providers are located in close geographic proximity to each other in one of three service clusters. It appears that clients may have an oversupply of service delivery (or ample choice). If there is an oversupply in some areas, these nonprofit organizations may not be optimizing their capacity to provide services, especially if they are all expending resources on compliance and other non-mission critical support activities.

The economic characteristics of this network are as follows:

**Horizontal Integration Cluster Characteristics**

- 14 of the 20 agencies are in service clusters (70% of agencies fall into a cluster).
- 70 percent of the contracts administered by DHS fall into one of the three clusters (23 out of the original 33 contracts).
- The total budget of these 20 agencies is $8.0 million for meals.
- 70 percent of the agencies represent a total budget of $5.6 million (or an average budget of $400,000 for each agency).
- If 18 percent, a conservative estimate, (Urban Institute, 2004, cites 20%) of the $5.6 million budget associated with clustered agencies is allocated to DHS administrative costs associated with eligibility assessment, oversight, and compliance reporting, then $1.01 million is allocated to DHS administrative costs with all agencies in these three clusters.
- It is estimated that DHS spends approximately $43,900 per direct service provider on contract administration.

**DHS Potential Cost Savings**

If the 14 direct service providers, distributed within three service clusters, collaborate or share services with each other in administrative support areas like program compliance, accounting, information technology administration, and human resources, there could be considerable cost savings to DHS and to the collaborating direct service providers.
DHS could save $400,000, or five percent, of the total program budget for this service by reducing the number of contracts administered from 23 to 12. The logic of this scenario is as follows:

- \[ (33 \text{ original agency contracts} - 23 \text{ contracts within 3 clusters}) + (3 \text{ new contracts organized through three service cluster collaborations}) = 13 \text{ total contracts} \]

- The 10 original, non-clustered contracts cost approximately $43,900 each to administer.

- If the three new contracts for each of the three service clusters increase by 30 percent due to complexity, then the average administrative cost to DHS of the three service cluster contracts is $57,000.

- Estimated administration cost to DHS after service clustering would be \[ (43,900 \times 10) + (57,000 \times 3) = 610,000 \]

- DHS savings would be $1,010,000 - $610,000 = $400,000

**Agency Potential Cost Savings**

Each direct service provider collaborating within a horizontal service cluster could save approximately $840,000, or 15 percent, of their total budget. The logic of this scenario is as follows:

- In general, 20 percent of a human service agency's budget is allocated to non-program-related activities (Urban Institute, 2004)

- Eleven percent of an agency's total budget is allocated to compliance activities (Lara-Cinisomo, 2005)

- Conservatively, at least three percent of an agency's budget can be allocated to accounting and information technology administration and at least four percent can be allocated to human resources activities.

- If 70 percent of the compliance activities could be reduced through collaboration, then 7.4 percent of an agency's budget can be reduced.

- If we take an eight percent budget reduction for compliance activities and seven percent for accounting, information technology, and human resources, there is an opportunity to save 15 percent from an agency's budget through collaboration.

- Estimated savings to collaborating agencies savings would be \[ (5.6 \text{ million} \times 0.15) = 840,000 \].

**Figure 4. Overlay of Multiple Mission-Dissimilar Direct Service Providers in Distressed Neighborhoods**

*Each cluster circle represents approximately a three-mile radius.*
**Figure 5. Service Integration Model**

**Collaboration with Mission-Similar Organizations**

**Meal Services**
- Similar Support Functions
- Compliance
- Accounting
- Human Resources
- Information Technology

**Youth Job Training**

**Collaboration with Client-Similar Organizations**

**Similar Clients** (in close geographic proximity)
- Mental Retardation
- Aging
- Transportation
- Nutrition/Meals
- Home Maker Services/Chores
- Children & Youth Services
- Community Services
- Behavioral Health
- Goods & Services
- Home Modifications

**Horizontal Integration**

**Vertical Integration**
In this example, the system savings would be $1.2 million or 15 percent of the overall $8.0 million budget. This excess supply, or high number of agencies and contracts with DHS to provide similar services, provides excess administrative cost to DHS. This geographic clustering of supply and demand creates an opportunity to look to the delivery system to improve system capacity. If one were to project this scenario across the entire DHS budget of $757.4 million, a 15 percent savings across the human services system could mitigate federal and state budget reductions and maintain the current level of service providers and choice to the client.

The next example illustrates a current network of multiple, direct service providers offering mission-dissimilar services, located around like clients within geographic clusters (Figure 4). In this scenario, direct service providers are clustered in close geographic proximity, almost vertically stacked around their clients. In this example, mission-dissimilar service providers have the opportunity to collaborate or share non-mission critical or back-office functions like compliance, accounting, information technology, and human resources, hence vertical integration.

In this example, we examine two service providers, each with multiple locations (2,142 locations, combined) and each with six distinct services. The combined budget for these two sample providers is $33.6 million. Approximately 60 percent of the locations fall into discrete geographic clusters. If we apply the logic from horizontal integration, cost savings at the agency level are 15 percent of total agency budget. In this example, these two sample agencies might save in excess of $5 million through collaboration via service clustering.

**Recommendations**

The reality of current economic conditions should prompt human service funders to consider adopting the Service Integration Model (Figure 5) that provides a mechanism for nonprofit agencies to take steps to collaborate and share non-mission critical services and functions. This will reduce high administrative transaction costs of funders, primarily the government, in administering service contracts, and it provides an opportunity for nonprofits to reduce their administrative and operating costs significantly.

The Service Integration Model suggests that collaboration between nonprofits might be facilitated by their proximity. It is easier to share, communicate, and collaborate with one’s neighbor than with an organization separated by distance. The model provides a progression of collaboration. The easiest way to improve system and organizational efficiency, while not impacting mission delivery, is through the collaboration or sharing of non-mission critical or back-office functions.

In horizontal integration, mission-similar organizations in geographic proximity collaborate or share non-mission critical functions like compliance, accounting, information technology, and human resources. The final progression in the model is for organizations in close geographic proximity to organize around their clients (a customer-focused approach). In this progression, organizations that share similar clients, although they may have dissimilar missions, can collaborate on non-mission critical functions.

As natural or logical opportunities for clustering services emerge, future efforts should consider the dynamics of clustering. Maskell (2005) proposes a framework to examine clusters. Maskell’s unified approach connects the work of Marshall’s “Industrial district” (i.e., externalities), Porter’s competitive cluster growth framework, and territorial perspective (i.e., the GREMI approach) (Maskell, 2005, 2004). Maskell builds upon the single dimension of financial efficiency by proposing the economic and social benefits, diseconomies of cluster saturation, intra-cluster synergies, and the life cycle of clusters. The implication is that DHS and funders embrace clustering as an on-going process rather than as a re-structuring event.