SEPARATE AND UNEQUAL

An Analysis of Disparities in New York City Senior Center Funding

January 16, 2017
A. Executive Summary

This report describes the methodology, findings and recommendations of a study conducted by Union Settlement into disparities in the funding provided by the New York City Department for the Aging (DFTA) to nonprofit organizations that operate senior centers.

Union Settlement, which is the oldest and largest social service provider in East Harlem, offers a broad range of education, wellness and community-building programs to local residents, including early childhood education, youth afterschool and summer programs, college preparation, job readiness, adult education, mental health counseling, small business development and senior programs. Established in 1895, Union Settlement assists over 10,000 individuals every year from more than a dozen locations in East Harlem, and also serves as a strong advocate for low-income residents throughout New York City and the country.

Union Settlement has been providing services to seniors in East Harlem for over a century. Last year, over 1,500 seniors accessed programming through Union Settlement’s four senior centers, a Naturally Occurring Retirement Community (NORC) program, Meals-on-Wheels services, transportation program and other services.

DFTA provides the funding for Union Settlement’s four senior centers, and for over 250 other centers throughout New York City. These centers are a vital resource for aging New Yorkers, providing nutritious meals, physical activities, health screenings, educational programming, case assistance, transportation and a wide variety of other vital services. Many seniors who attend DFTA-funded senior centers live alone, and the senior center becomes their “home away from home,” providing opportunities of socialization and personal interactions that help address the isolation and depression issues that so many seniors face.

DFTA-funded senior centers operate pursuant to “cost reimbursement” contracts, under which DFTA reimburses nonprofit senior center operators for the costs incurred in running the centers, up to a maximum dollar amount set forth in the contract budget. Each senior center contract also specifies the services that DFTA expects to be provided at the center – e.g., the number of seniors to be served, meals to be provided, health promotion activities to be offered, etc.

Union Settlement decided to undertake this study after reviewing the funding disparities in its four DFTA contracts, which provide widely varying dollar amounts that appear unconnected to the amount of services required to be provided under the contract.

Union Settlement obtained the Fiscal Year 2015 budget summaries for over 230 DFTA-funded senior centers, which DFTA had released pursuant to the Freedom of Information Law, and then conducted a statistical analysis of those budgeted dollar amounts and service level requirements. The purpose of this analysis was to determine whether an equitable amount of funding is provided to senior centers based on the number of seniors to be served and the types of services to be provided.
The analysis demonstrated that the funding levels were not equitable, with essentially no identifiable basis for many of the disparities that were discovered. The result is a system of senior centers that are “separate and unequal,” with some centers receiving vastly more funding per senior than other centers. This system is patently unfair to the seniors who attend those underfunded centers, and accordingly receive lower levels of services and programming than seniors who attend better-funded centers.

Union Settlement brought its findings to the attention of DFTA, which to its great credit immediately acknowledged that these disparities existed. Indeed, DFTA noted that these disparities have existed for many years due to a variety of factors, most notably because over the years DFTA has acquired jurisdiction over senior centers previously overseen by other City agencies (such as HRA and NYCHA), as well as centers previously funded by the New York City Council. The different categories of centers were taken over by DFTA at different times and had very different funding mechanisms, and as a general rule the substantial disparities in funding were simply carried forward from year to year, and from mayoral administration to mayoral administration.

Fortunately, DFTA expressed a strong desire to: (1) quantify the exact extent of the disparities; and (2) develop a plan for addressing the most egregious inequities. DFTA provided Union Settlement with Fiscal Year 2016 data for 231 DFTA-funded senior centers, which Union Settlement reviewed.

Not surprisingly, Union Settlement’s review again showed substantial inequities in the funding of the senior centers. For example:

- **Overall funding:** The contract for a senior center in Midwood, Brooklyn provided for just $5.32 in funding per senior served per day, while the contract for another center in Jamaica, Queens was provided *more than nine times more* − $50.31 per senior per day.

- **Meal costs:** A senior center in Lower Manhattan received just $3.54 per meal to feed seniors there, while a different senior center in Borough Park, Brooklyn received *over five times more* − $18.36 per meal.

- **Health promotion activities:** DFTA contractually requires senior centers to provide a specified number of "units" of Health Promotion (HPR) activities – i.e., health management, physical health/exercise and nutrition education activities – and provides a specific dollar amount to cover the costs of offering those activities. A senior center in Williamsburg, Brooklyn was contracted to receive $0.11 per HPR unit, while the contract for a senior center in the Morris Heights area of the Bronx called for *465 times more* funding – $51.16 per unit.
• **Assistance/Information/Benefits (AIB) activities:** DFTA also expects senior centers to provide different types of assistance to seniors, including case assistance, information, and help signing up for benefits. Once again, each senior center contract specifies the exact number of Assistance/Information/Benefits (AIB) “units” to be offered to seniors, and the dollar amounts being provided to cover the costs of offering those activities. The contract for a senior center in Manhattan provided for $5.57 per AIB unit, while the contract for another senior center in the Wakefield area of the Bronx called for 317 times more funding – $1,767.71 per unit.

In an effort to understand these vast funding disparities in more detail, Union Settlement then conducted a series of linear regression analyses to determine if the disparities could be explained by logically relevant variables. For example:

- **Is the variation in total funding explained by the number of seniors who attend a senior center?**

- **Does the number of meals served explain the variations in food budgets?**

- **Do the differences disappear when you separate centers that cook their own meals from those that purchase cooked meals from a vendor?**

- **Do the number of health promotion activities required under the contracts explain the variations in health promotion funding?**

- **Could the variation in funding be explained by other factors, such as differing costs for rent or food?**

If the amount of funding each center received were solely determined by the number of seniors served or the number of units of service offered – for example, if DFTA provided the exact same amount of funding per meal at every senior center – then the above regression analyses would have produced correlations of 100%. Even recognizing that some variation is inevitable – for example, there should be “economies of scale” that would allow larger senior centers to provide services for fewer dollars per senior – the correlations still could reasonably be expected to be 85% or higher.

However, the regression analyses that were conducted\(^1\) showed that the service variables explained a surprisingly small portion of the variations in funding offered for those services. In particular:

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\(^1\) Union Settlement would like to express its appreciation to DFTA for its assistance in providing the data necessary for the completion of this report, as well as to Laura Giavarini, Union Settlement’s Development Associate, who conducted the regression analyses.
1. **Attendees**: The number of seniors expected to attend a center explained only 25% of the variation in the amount of funding provided to the center, even after excluding occupancy costs such as rent and utilities (which generally are fixed and not within the control of DFTA or the senior center operator).

2. **Meal costs**: The number of meals to be offered at a senior center explained only 49% of the variation in the amount of contract funding designated to cover the cost of those meals, even after controlling for occupancy costs.

3. **Health Promotion units**: The number of contracted Health Promotion units to be provided explained less than 1% of the dollar amount in the budgets to provide those activities, even after occupancy costs were excluded.

4. **Assistance/Information/Benefits units**: The number of contracted Assistance/Information/Benefits units to be provided explained only 46% of the dollar amount in the budgets to provide those activities, and explained less than 52% of the budget variance after excluding occupancy costs.

**Conclusions and Recommendation:**

If the senior center funding process were equitable, there would be a direct correlation between the quantity of services provided, and the funding received to provide those services (subject to some variation for fixed costs such as rent and utilities).

The fact that the regression analysis correlations were so low – all but two under 60%, and several under 5% – shows that the methodology used for providing funding to senior centers – assuming there is a methodology – is inequitable, with no apparent logical basis for many of the disparities uncovered by our review.

As a result, Union Settlement recommends the following corrective actions:

- First, the Mayor should immediately authorize supplemental spending so that DFTA can increase the contract budgets for the underfunded senior centers (i.e., those in the bottom half based on funding per senior per day), to eliminate the most egregious inequities that currently exist. This will require less than $15 million in funding citywide.

- Second, DFTA should convene a Fair Senior Funding Working Group of senior center providers, private funders and academic experts that can work with DFTA to determine how much it costs to provide a high quality senior center program, including the actual costs of providing the services that DFTA is requiring under the contracts. This working group should report the results of its review no later than March 1, 2017.
• Finally, DFTA should abolish its current “separate and unequal” system of allocating funding to senior centers, which leaves some seniors languishing in woefully underfunded centers. In its place, DFTA should adopt a new formula based on the recommendations of the Fair Funding Working Group, to go into effect in FY2018. In particular, that system should be based on the core principle that each senior center should receive the same amount per senior to be served, with: (1) a separate payment for fixed costs (such as rent, utilities, etc.) to ensure that providers located in “high rent” districts are not disadvantaged; and (2) an agreed-upon adjustment to account for economies of scale.

This is the only way to ensure that seniors are treated equitably, regardless of where they live or which senior center happens to be closest to their home. DFTA concurs with the finding that there is variability in funding, and that this needs to be addressed. Through addressing this issue, the senior center system overall will be better able to meet the service needs of seniors. Notably, external evaluations conducted on behalf of DFTA have demonstrated that senior center services provide major benefits to senior participants’ health and well-being.²

² For example, the Fordham University Impact Analysis found that “senior center participants reported improved physical and mental health, increased participation in health programs, frequent exercising, positive behavior change in monitoring weight and keeping physically active.” Senior Center Evaluation Final Report (June 28, 2016).
B. Background

1. DFTA

The New York City Department for the Aging (DFTA) was established to address the needs of elderly residents in New York City. DFTA accomplishes this goal through the development and provision of accessible services for older persons, and also by serving as an advocate on legislative and policy issues. DFTA’s mission is to “work for the empowerment, independence, dignity and quality-of-life of New York City’s diverse older adults and for the support of their families through advocacy, education, and the coordination and delivery of services.”

For many years, DFTA has collaborated with community-based nonprofit organizations for the provision of programs and services. In particular, DFTA receives federal, state and city funds to provide essential services for seniors, and then contracts with nonprofits that provide needed senior programs locally throughout the five boroughs. These contracted services include activities and congregate meals at senior centers, home-delivered meals, case management services, home care, transportation and legal services.

2. Senior center contracts

DFTA – which from 1968 to 1975 was known as the Mayor’s Office for the Aging – first started contracting with nonprofits to operate senior centers in the 1970s. At that time, most senior centers in New York City were operated by either the New York City Human Resources Administration (HRA) or the New York City Housing Authority (NYCHA). The HRA centers were transferred to DFTA in the early 1990s, and more recently DFTA has assumed oversight of many of the NYCHA centers as well.

DFTA currently contracts with more than 100 nonprofit organizations to operate over 250 senior centers, where seniors can obtain both nutritious meals and a wide variety of cultural, creative, recreational and fitness activities. Each of the contracts is essentially identical, except for: (1) the number of seniors to be served at the center; (2) the type and quantity of services expected to be provided to those seniors during the year; and (3) the dollar amount provided by DFTA to cover the costs of those services.

Seniors can receive a wide variety of services at a senior center, including congregate meals, arts and culture, health management, physical health and exercise, case assistance, information/referrals, technology education, transportation, etc. In each senior center contract,

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DFTA specifies the minimum number of "units" of those services that the nonprofit contractor must provide.

The contracts also specify the exact amount of funding that is offered to provide those services. It does so by grouping related services into specific "cost center" categories. For example, the "Congregate Meals" category includes the number of congregate breakfasts and lunches offered at the senior center. The "Health Promotion" category combines the number of units of three separate services: (1) health management; (2) physical health/exercise; and (3) nutrition education.

In addition to specifying the service units to be provided and the budgeted dollar amounts for the various cost centers, each senior center contract also sets forth how much should be spent on a variety of "line item" expenditure categories, such as personnel costs, food costs, printing and supplies, rent, utilities, etc.

3. Contract Funding Methodologies

Numerous New York City government agencies contract with nonprofits to provide services to the public, and in most cases the amount of funding paid to the nonprofit is determined by either the quantity of services provided or the number of individuals served.

For example, the NYC Department of Youth and Community Development (DYCD) contracts with nonprofits throughout New York City to provide elementary and middle school afterschool programs, and pays those nonprofits a set amount per student. This methodology creates a "level playing field," because all afterschool programs receive an identical level of funding based on the number of children served, and therefore the services provided to those children are similar citywide.

DFTA itself uses this methodology when contracting with nonprofits to deliver meals to homebound residents in the City. In particular, DFTA provides those contractors with a set amount per meal, which means that no matter where the homebound resident lives, the same amount of funding is being provided to cover the cost of cooking and delivering that meal.

In some cases, of course, a flat per-participant cost reimbursement would not provide for a level playing field. For example, the NYC Administration for Children’s Services (ACS) contracts with nonprofits to operate early childhood education centers for children ages two to five years old. The costs of renting space for these centers can vary widely. For example, rents in privately owned spaces are much higher than rents in buildings owned by the City or NYCHA, and rents in Manhattan generally are much higher than rents in other boroughs. As a result, ACS reimburses contractors for the costs of providing the services, up to a budgeted cap.

DFTA’s senior center funding has the appearance of being based on a per-service methodology because, as noted above, each contract budget contains a chart indicating the specific amount of money provided for each cost center (Congregate Meals, Health Promotions,
etc.), as well as the specific number of units of services that the senior center operator is expected to provide to the seniors.

However, as discussed further below, DFTA does not fund senior centers based on the number of seniors to be served, the number of services to be provided, or any other logically apparent methodology.

C. **Reason for Investigation**

As noted above, Union Settlement operates four senior centers in East Harlem pursuant to contracts with DFTA – the Corsi Senior Center, Jefferson Senior Center, Gaylord White Senior Center and Washington Lexington Senior Center. All of these centers are located in NYCHA developments, and primarily serve public housing tenants, as well as other low-income residents of East Harlem.

If the senior center funding process were equitable, then centers providing the same number of activities to the same number of seniors would receive the same amount of funding to provide those services (subject to some variation for fixed costs such as rent and utilities). For many years, however, this has not been the case.

For example, Union Settlement's Jefferson Senior Center and Gaylord White Senior Center were both expected to serve 75 seniors per day in FY2016, and with one minor exception, were expected to provide the same number of services to those seniors – 16,500 congregate meals per year, 1,000 units of case assistance, 1,013 units of transportation, 144 units of nutrition education, etc.\(^5\)

Given these nearly-identical requirements, one would expect the two centers to receive similar amounts of funding from DFTA, but they do not – Union Settlement was contracted to receive up to $413,841 in FY2016 to operate the Jefferson Senior Center, but just under half that amount – $206,610 – to operate the Gaylord White Senior Center.\(^6\) Senior centers are open 250 days per year, and since both senior centers are expected to serve 75 seniors per day, Union Settlement's contracts provided $22.07 per senior per day at the Jefferson Senior Center, and less than half that amount – just $11.02 per day – at the Gaylord White Senior Center.

Similar disparities exist with respect to cost center funding among Union Settlement’s four senior centers. For example, at the Corsi Senior Center, Union Settlement’s contract provided for $8.95 per Health Promotions unit provided (which includes health management,

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\(^5\) The only exception is that the Gaylord White Senior Center contract requires 2,500 units of physical health/exercise per year, while the Jefferson Senior Center contract requires 3,000 units.

\(^6\) These are actually the maximum amounts allowable. Like the vast majority of City contracts, senior centers are funded on a “cost reimbursement” basis. The contract budget sets forth the maximum amount allowable, and DFTA reimburses costs up to that amount, based upon the submission of proof of actual expenditures. If less money is spent operating the center, DFTA reimburses less. If more money is spent, then the operator must identify other funding – usually charitable donations – to cover those other costs.
physical health/exercise, and nutrition education activities), but just $1.97 per Health Promotions unit at the Washington-Lexington Senior Center.

These apparent inequities caused Union Settlement to obtain the FY2015 senior center contract budgets for 251 DFTA-funded senior centers, to see if these issues were unique to Union Settlement’s senior centers, or whether the disparities existed throughout New York City.

The disparities were endemic.

Union Settlement then brought its findings to DFTA, which readily acknowledged that it was aware of the disparities, and also indicated that the disparities have existed for decades. As noted above, at various time in the past DFTA acquired jurisdiction over senior centers previously overseen by HRA and NYCHA, as well as centers previously funded by the New York City Council. These groups of centers had very different funding mechanisms, and there often was not a rational funding process even within each group. As a general rule, the substantial disparities in funding were simply carried forward from year to year, and from mayoral administration to mayoral administration.

DFTA expressed a longstanding desire to address these inequities, and agreed to work with Union Settlement to determine the exact extent of the disparities. In particular, DFTA’s Planning Division provided Union Settlement with Fiscal Year 2016 data for all DFTA-funded senior centers, which Union Settlement reviewed and analyzed.

D. Methodology

1. Data Set

Every DFTA senior center contract specifies the number of seniors expected to be served, the services required to be provided to those seniors, and the specific dollar amounts provided to provide those services. That information is contained in a budget summary page that is made a part of each contract.

A typical budget summary – for Union Settlement’s Gaylord White Senior Center – is set forth as Exhibit A. At the top, the summary indicates the fiscal year (FY2015), the name of the senior center, the expected number of seniors expected to be served per day (75), the contract number, contract period, and budget period.

The table on the right side of the summary shows the number of units of various services that Union Settlement is expected to provide to the Gaylord White seniors every year – e.g., 104 units of arts activities, 16,500 congregate lunches (CNLH), 1,040 health management units (HMLG), etc.

The table at the bottom left of the summary shows the dollar amounts allocated to each of the cost centers. For example, “CML” stands for “Congregate Meals,” and consists solely of the
congregate lunch (CNLH) units from the right side table.\textsuperscript{7} In FY2015, the Gaylord White Senior Center contract allocated $112,070 to CML, to cover the cost of providing 16,500 congregate lunches to the seniors. “HPR” stands for “Health Promotions,” which is a combination of three types of services from the right side table – health management (HLMG), physical education (PHEX) and senior center nutrition education (SCNE). In FY2015, the contract allocated $19,833 to the HPR cost center, to cover the costs of providing 1,040 HLMG units and 2,500 PHEX units and 144 SCNE units.

Finally the table on the left side of the budget summary specifies how the overall contract funding amount can be spent. For example, $96,246 could be spent on personnel costs, $8,680 on consultants, $13,529 on vehicles, etc.

Although the budget summaries may appear to be unduly prescriptive with respect to how funds can be spent, DFTA – like most City agencies – is very flexible with respect to the line item allotments, as well as with respect to the cost center allocations. All parties know that it is virtually impossible to predict how much is going to be spent on each line item category more than a year in advance. As a result, towards the end of each year, senior center operators can ask DFTA to modify the initial contract budgets, so that funding can be moved from one line item to another, and therefore allow for the reimbursement of all legitimate costs. DFTA routinely approves those budget modifications.

DFTA and the senior center operators generally have strong working relationships, and issues relating to individual line item allocations are easily resolved. As a result, this report does not address that aspect of the budgeting process, and instead focuses on the overall level of funding provided to each senior center, and whether those dollar amounts are equitable based on the services required to be provided under each contract.

As noted above, DFTA provided information relating to the required services and allocated funding for 231 DFTA senior centers for Fiscal Year 2016 (July 1, 2015 to June 30, 2016).

2. Data Set Exclusions

In order to ensure an “apples to apples” comparison, the data set excludes certain categories of senior centers. In particular:

a. Innovative Senior Centers

The vast majority of senior centers are called “Neighborhood Senior Centers,” which is the typical senior center that has existed in New York City for decades. In 2011, however, DFTA issued a request for proposals for organizations interested in operating “Innovative Senior Centers,” which were designed to offer a “new model” for senior centers providing flexible and

\textsuperscript{7} A list of acronyms is attached as Exhibit B.
expanded hours, as well as enhanced programming such as robust wellness programs, access to health care services, and enhanced arts and cultural programs. DFTA initially awarded eight Innovative Senior Center contracts in 2012, and there are now 16 such centers throughout New York City.\(^8\)

Because the Innovative Senior Centers are expected to provide expanded hours and/or enhanced programming, and therefore receive significantly more funding than Neighborhood Senior Centers, we excluded the Innovative Senior Centers from the data set.

b. City-Council Funded Senior Centers

The vast majority of senior centers receive funding through contracts awarded by DFTA as a result of the normal City contracting process. During the Bloomberg Administration, however, many senior center operators lost their DFTA contracts (in part because DFTA was seeking to close smaller senior centers). The City Council then decided to restore funding for some of those centers, which are generally referred to as “Council-funded” centers.

Unfortunately, the total amount of funding available from the City Council for those centers generally was less than they had been receiving previously, and as a result, many Council-funded centers have much smaller budgets than their DFTA-funded peers. For example, Union Settlement operates a senior center in NYCHA’s Washington Houses that is a “Council-funded” center, but that center received only $70,000 in FY2016, compared to over $200,000 received by the Gaylord White Senior Center, and the more than $350,000 received by the Corsi Senior Center and Jefferson Senior Center.

Because the method of funding the Council-funded centers is different, they were excluded from the data set.\(^9\)

3. Funding Disparities

Even with the exclusions noted above, data still showed widespread disparities in funding. In particular, as noted above:

- **Overall funding**: The contract for a senior center in Midwood, Brooklyn provided for just $7.24 in funding per senior served per day, while the contract

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\(^9\) In addition to the senior centers whose funding is entirely designated by the City Council, some senior centers receive small amounts of supplemental funding from the Council and/or the Borough Presidents. According to DFTA, these amounts are only about 1.2% of the total amount of City funding provided to senior centers and does not have a material impact on the analyses below.
for another center in Jamaica, Queens was provided *almost seven times more* – $50.31 per senior per day.

- **Meal costs:** A senior center in Lower Manhattan received just $3.54 per meal to feed seniors there, while a different senior center in Borough Park, Brooklyn received *over five times more* – $18.36 per meal.

- **Health promotion activities:** DFTA contractually requires senior centers to provide a specified number of “units” of Health Promotion (HPR) activities – i.e., health management, physical health/exercise and nutrition education activities – and provides a specific dollar amount to cover the costs of offering those activities. A senior center in Williamsburg, Brooklyn was contracted to receive $0.11 per HPR unit, while the contract for a senior center in the Morris Heights area of the Bronx called for *over 450 times more* funding – $50.92 per unit.

- **Assistance/Information/Benefits (AIB) activities:** DFTA also expects senior centers to provide different types of assistance to seniors, including case assistance, information, and help signing up for benefits. Once again, each senior center contract specifies the exact number of Assistance/Information/ Benefits (AIB) “units” to be offered to seniors, and the dollar amounts being provided to cover the costs of offering those activities. The contract for a senior center in Manhattan provided for $5.57 per AIB unit, while the contract for another senior center in Manhattan called for *over 14 times more* funding – $81.65 per unit.

E. **Regression Analyses**

As a result of these clear disparities, Union Settlement conducted a series of linear regression analyses,¹⁰ in an effort to determine what factors might be influencing DFTA’s funding decisions. Set forth below are the questions the regression analyses were utilized to answer:

**Question 1:** To what extent is the total amount of funding provided to a senior center determined by the number of seniors attending the center?

¹⁰ The goal of a linear regression analysis is to determine the extent to which a dependent variable (in this case, funding dollars) is influenced by an independent variable (in this case, the number of attendees, meals, or service units). Although many of our regressions did find some degree of a relationship between the two variables being analyzed, and most relationships were found to be statistically significant, they could not show with certainty how much of an impact the independent variable had on the dependent variable (funding dollars), because of the potential influence of other possible variables. (This is generally referred to as “omitted variable bias”). We currently are unaware of any additional variables that would need to be included in the model to account for the unexplained variation, which appears to be caused by arbitrariness or randomness in the determination of funding.
As noted above, senior centers are intended to provide a broad variety of nutrition, recreation, socialization, education and other services to seniors. If the funding system were equitable, then every operator would receive the same amount of funding per senior, and those funds could be used to offer equitable levels of services to the seniors.

Of the 231 Neighborhood Senior Centers in the data set, the budgets for 209 included both the number of expected attendees and the total dollar amount budgeted. However, simply dividing the contract budgets by the number of seniors to be served is not sufficient, because senior centers have both variable costs (e.g., food costs and staff salaries), and fixed costs (e.g., rent and utilities). Moreover, for some fixed costs, DFTA has only limited control over the amount being spent. For example, some DFTA senior centers are located in New York City Housing Authority (NYCHA) buildings, where the nonprofit provider pays little or no rent, while other centers are located in private building where the rents are much higher.

As a first step, Union Settlement therefore excluded senior center occupancy costs (rent and utilities) from the calculations, and then conducted a regression analysis to determine the extent to which the amount of funding correlated with the number of seniors served.\textsuperscript{11}

\textit{This regression analysis showed that the number of attendees explained only 25\% of the variation in the budget.}

This is a remarkable result, because there is a strong governmental and public policy interest in ensuring equitable treatment of seniors throughout New York City. The easiest way to do that would be to provide senior center operators with similar amounts of funding per senior served – which, as noted above, is how many other City agencies make funding decisions.

Even accounting for variations in per-capita funding due to such as economies of scale, it would be reasonable to expect a correlation of 85\% or higher between total funding and the number of seniors served.

The disparities in funding per senior potentially could be explained by the fact that different types of services (meals, health promotion, etc.) have different levels of costs associated with them. For example, if one senior center offered more higher-cost services (e.g., meals), while another center offered more lower-cost services (e.g., nutrition education), it might be appropriate for DFTA to provide a higher level of funding to the first center, even if the number of seniors served was the same.

As a result, Union Settlement then analyzed the designated amount of funding that DFTA provided to senior centers for specific types of activities, in order to determine the extent to which they were correlated.

\textsuperscript{11} For the purposes of this regression analysis, the senior centers located in NYCHA buildings that incur rent or other occupancy charges were grouped with the other senior centers with such costs.
**Question 2:** To what extent is the total amount of funding provided for food costs determined by the number of meals expected to be served at the center?

a. **Meal funding per meal served**

The most straightforward comparison relates to funding provided for meals. Again, if the system were designed equitably, then each senior center operator would receive the same amount of money per meal served. Union Settlement therefore conducted a regression analysis to determine the correlation between total meal funding and total meals served at the 231 Neighborhood Senior Centers in the data set.

*This regression analysis showed that the number of meals to be served explained only 49% of the variation in the budget.*

b. **Impact of occupancy costs**

As noted above, some senior centers have occupancy costs, and others do not, so we then sought to analyze the meal costs after controlling for occupancy costs. Unfortunately, while each DFTA senior center budget includes both the number of meals expected to be served, and the amount of funding provided for meal costs, the budgets do not indicate the proportion of meal funding that is attributable to the operator’s rent and utilities costs.

As a result, we then separated the 231 senior centers into two groups – those with occupancy costs (217 centers) and those without (14 centers) – and conducted two regression analyses to see if controlling for occupancy costs would help explain why the significant variations in meal funding per meal served.\(^{12}\)

*For the 217 senior centers with occupancy costs, once those costs were excluded, the number of meals explained only 49% of the variation in meal funding.*

*For the 14 senior centers without occupancy costs, once those costs were excluded, the number of meals explained 28% of the variation in meal funding.*

c. **Impact of meal preparation method**

The manner in which senior centers provide meals was another potential reason for the low correlation between meal funding and meals served. In particular, there are two different ways in which a center might provide meals to seniors:

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\(^{12}\) Because the DFTA budgets do not show the proportion of meal funding attributable to occupancy costs, we assumed that those costs are spread evenly across the various cost centers. In particular, we calculated the percentage of the *overall* budget that was attributable to rent, and reduced the meal funding by that percentage.
1. Some senior centers purchase raw food, which they cook at the center and serve to the seniors. These centers incur costs for the food and for the kitchen staff.

2. Other senior centers have meals “catered” – i.e., they purchase pre-cooked meals from a vendor, who delivers the meals to the center. Those centers obviously incur the costs of the subcontracts with the caterers, rather than having raw food costs.

Union Settlement therefore separated the senior centers into two groups – those with only raw food costs, and those with only catered food costs, and ran two additional regression analyses to determine if this would help explain the funding disparities. A total of 151 centers had only raw food costs, and 58 centers had only catered food costs. The regression analyses produced the following results:

*For the 151 senior centers that cook their own meals, the number of meals served explained only 60% of the variation in the funding that DFTA provided to cover the meal costs.*

*For the 58 senior centers that purchase pre-cooked catered meals from a vendor, the number of meals served explained only 53% of the variation in the funding that DFTA provided to cover the meal costs.*

Thus, the method of meal preparation failed to sufficiently explain the disparities in meal funding.

d. **Combined impact of occupancy costs and meal preparation method**

Union Settlement then sought to control for both occupancy costs and meal preparation method. In particular, we divided the senior centers into four groups – raw food with occupancy costs (162 centers), raw food without occupancy costs (11 centers), catered food with occupancy costs (77 centers) and catered food without occupancy costs (3 centers) – and conducted regression analyses for each. Those analyses showed:

*For the 140 senior centers that cook their own meals and have occupancy costs, the number of meals served explained 60% of the variation in meal funding.*

*For the 11 senior centers that cook their own meals and have no occupancy costs, the number of meals served explained 9% of the variation in meal funding.*

*For the 55 senior centers that purchase pre-cooked catered meals and have occupancy costs, the number of meals served explained only 53% of the variation in meal funding.*

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13 A total of 22 centers had both raw food and catered food costs, and so were excluded from the analysis.
For the 3 senior centers that purchase pre-cooked catered meals and have no occupancy costs, the number of meals served explained 99% of the variation in meal funding.

Thus, only the regression analysis for this last category produced evidence of a high explanation of variance (99%) between the number of meals served and the variation the amount of funding that DFTA provided to serve those meals – but this correlation related to only 3 senior centers, and the explained variance for the other 206 centers were much dramatically lower.

**Question 3:** To what extent is the total amount of funding provided for Health Promotion activities determined by the number of units of such activities provided at the center?

a. **HPR funding per HPR unit of service**

Union Settlement then sought to determine whether the same overall disconnect between funding and services also existed for other types of services provided at senior centers. Some of the most common of those services is Health Promotion (HPR) activities, which consist of three different types of activities – (1) health management; (2) physical health/exercise; and (3) nutrition education.

Union Settlement first conducted a regression analysis to determine the extent to which the amount of funding provided by DFTA for Health Promotion activities correlated with the number of units of Health Promotion services that the contract required be provided.

*This regression analysis showed that the number of units of Health Promotion activities attendees explained only 0.7% of the variation in the budget.*

b. **Impact of occupancy costs**

Each DFTA senior center budget includes both the number of Health Promotion units expected to be provided, and the amount of funding in the contract to cover the cost of those activities. Once again, however, the budgets do not indicate the proportion of the Health Promotion funding that is attributable to the operator’s rent and utilities costs.

We therefore again separated the senior centers into two groups – those with occupancy costs (217 centers) and those without (14 centers) – to see if that helped to explain some why the correlation between Health Promotion units and funding was so low.

*For the 14 senior centers without occupancy costs, the number of Health Promotion units to be provided explained only 12% of the variation in funding to offer those activities.*

*For the 217 senior centers with occupancy costs, once those costs were controlled for, the number of required Health Promotion units explained only 0.5% of the budget variance.*
Question 4: To what extent is the total amount of funding provided for Assistance/Information/Benefits (AIB) activities determined by the number of units of such activities provided at the center?

a. AIB funding per AIB unit of service

Union Settlement then conducted the same analyses for Assistance/Information Benefits (AIB) activities, which consist of two different types of activities – senior center case assistance and senior center information. In particular, Union Settlement first conducted a regression analysis to determine the extent to which the amount of funding provided by DFTA for AIB activities correlated with the number of AIB units of service that the contract required be provided.

This regression analysis showed that the number of units of AIB activities attendees explained only 46% of the variation in the budget.

b. Impact of occupancy costs

Each DFTA senior center budget includes both the number of AIB units expected to be provided, and the amount of funding in the contract to cover the cost of those activities. Once again, however, the budgets do not indicate the proportion of the AIB funding that is attributable to the operator’s rent and utilities costs.

We therefore separated the 231 senior centers with AIB funding into two groups – those with occupancy costs (217 centers) and those without (14 centers) – to see if that helped to explain some why the correlation between AIB units and funding was so low.

For the 14 senior centers without occupancy costs, the number of AIB units to be provided explained 23% of the variation in funding to offer those activities.

For the 217 senior centers with occupancy costs, once those costs were controlled for, the number of required AIB units explained 51% of the budget variance.

Thus, even after occupancy costs were excluded, the number of AIB units still explained only about half of the variation in funding.

F. DFTA Feedback and Additional Analyses

All of the above results were provided to DFTA, which recommended that in addition to running separate regression analyses for each independent variable, further insights might be obtained by including all such variables in the model simultaneously.

DFTA therefore ran such multiple regression analyses, in order to test the hypothesis that the total DFTA funding might be closely related to the total units of service being provided. Before doing so, DFTA excluded occupancy costs, whether funded by DFTA or by the City
Council. In addition, because senior centers vary greatly in size, DFTA conducted its analyses separately for three subgroups of senior centers: (a) 115 “small” senior centers, with an average of 99 or fewer attendees per day; (b) 94 “medium” senior centers, with between 100 and 199 attendees; and (c) 13 “large” senior centers, with 200 or more attendees per day.\footnote{14}

The multiple regression analyses explained only 37\% of the variance in service units for the “small” senior centers, and only 19\% of the variance for the “medium” senior centers. For the “large” senior centers, there were only 13 centers in that category, which was too small a sample size and so the results did not meet the assumptions for multiple regressions.

**G. Conclusion and Recommendations**

Based on the above regression analyses, it is clear that there is a remarkably low correlation between the amount of funding provided to senior center operators and the services and activities to be offered. Even after controlling for occupancy costs, there was little correlation between dollars provided and seniors served, meal funding and meals offered, or activity funding and units of activity to be provided.

In particular, of the 16 regression analyses that were conducted, in 10 cases the amount of service to be provided explained less than 50\% of the variation in funding – including four cases which explained less than 15\% of the funding disparity. Of the remaining six regressions, five explained between 50\% and 60\% of the variation in funding, and in only one case – which related to just three senior centers – did the amount of service explain over 60\% of the funding disparity. These findings were bolstered by the multiple regression analyses that DFTA conducted, which showed that additional DFTA funding explained only 37\% of the variance in total service units for small senior centers, and just 19\% of the variance for medium senior centers.

*These analyses demonstrate that the methodology used by DFTA for providing funding to senior centers – assuming there is a methodology – is inequitable, with no apparent logical factors explaining the vast majority of the funding disparities.*\footnote{15}

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\footnote{14} DFTA determined these categories by reviewing a histogram which showed a distinct clustering of senior centers in those three ranges. DFTA is not unduly concerned that the largest centers comprised a group too small to conduct a meaningful multiple regression, because DFTA-funded centers include only a small number of very large sites, DFTA felt it best to isolate them, and the histogram supported that. Though that group is small, DFTA was able to determine that there are economies of scale that larger sites achieve and that the same pattern of underfunding pertains to these sites.

\footnote{15} As noted above, the goal of the regression analyses was to determine the extent to which the level of funding was influenced the number of attendees, meals, or service units. Although many of our regressions found some degree of a statistically significant relationship between the two variables being analyzed, they could not show the degree of the relationship with certainty, because of the potential influence of other possible variables. We currently are unaware of any additional variables that would need to be included in the model to account for the unexplained variation, which appear to be caused by arbitrariness or randomness in the determination of funding.
As a result, Union Settlement recommends the following corrective actions:

- First, the Mayor should immediately authorize supplemental spending so that DFTA can increase the contract budgets for the underfunded senior centers (i.e., those in the bottom half based on funding per senior per day), to eliminate the most egregious inequities that currently exist. This will require less than $15 million in funding citywide.

- Second, DFTA should convene a Fair Senior Funding Working Group of senior center providers, private funders and academic experts that can work with DFTA to determine how much it costs to provide a high quality senior center program, including the actual costs of providing the services that DFTA is requiring under the contracts. This Working Group should report the results of its review no later than March 1, 2017.

- Finally, DFTA should abolish its current “separate and unequal” system of allocating funding to senior centers, which leaves some seniors languishing in woefully underfunded centers. In its place, DFTA should adopt a new formula based on the recommendations of the Fair Funding Working Group, to go into effect in FY2018. In particular, that system should be based on the core principle that each senior center should receive the same amount per senior to be served, with: (1) a separate payment for fixed costs (such as rent, utilities, etc.) to ensure that providers located in “high rent” districts are not disadvantaged; and (2) an agreed-upon adjustment to account for economies of scale.

This is the only way to ensure that seniors are treated equitably, regardless of where they live or which senior center happens to be closest to their home. DFTA concurs with the finding that there is variability in funding, and that this needs to be addressed. Through addressing this issue, the senior center system overall will be better able to meet the service needs of seniors. Notably, external evaluations conducted on behalf of DFTA have demonstrated that senior center services provide major benefits to senior participants’ health and well-being.\(^16\)

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\(^{16}\) For example, the Fordham University Impact Analysis found that “senior center participants reported improved physical and mental health, increased participation in health programs, frequent exercising, positive behavior change in monitoring weight and keeping physically active.” Senior Center Evaluation Final Report (June 28, 2016).
## EXHIBIT A

**NEW YORK CITY DEPARTMENT FOR THE AGING**  
**DATE OF REPORT:** 9/17/2014

**BUDGET SUMMARY**

<table>
<thead>
<tr>
<th>PROGRAM: 351 GAYLORD WHITE NEIGHBORHOOD SENIOR CENTER</th>
<th>CONTRACT NO: 2013141023</th>
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<tbody>
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<td>ALL SITES</td>
<td>CONTRACT PERIOD: 12/01/2012 TO 06/30/2016</td>
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<tr>
<td>Unduplicated # attendees/Day: 75</td>
<td>BUDGET PERIOD: 07/01/2014 TO 06/30/2016</td>
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### LINE ITEMS

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<tr>
<th>Line Items</th>
<th>Budgeted Dollars</th>
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<td>Other Occupancy</td>
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<td>Communications</td>
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<td>Raw Food/Disposables</td>
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<td>Other Expenses</td>
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<td>Total GFI Direct Costs</td>
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Less: Income: $12,000

**INDIRECT COSTS**

Total Reimbursement: $201,916

**COST CENTER BUDGETED AMOUNT SUMMARY**

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<tr>
<th>Cost Center</th>
<th>AIB</th>
<th>CML</th>
<th>HFR</th>
<th>IHC</th>
<th>SCE</th>
<th>TRP</th>
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**SERVICE SUMMARY**

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<th>Units</th>
<th>Unit Rate</th>
<th>Contributions</th>
<th>AVG. BUDGETED CONTRIBUTION</th>
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<tr>
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<td>HLMG</td>
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Total Project Cost: $213,916
EXHIBIT B

Senior Center Budget Acronyms

**Service Codes**

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<tr>
<th>Code</th>
<th>Description</th>
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<td>ARTS</td>
<td>Arts &amp; Culture</td>
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<td>CNLH</td>
<td>Congregate Lunch</td>
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<td>HLMG</td>
<td>Health Management</td>
</tr>
<tr>
<td>ISHP</td>
<td>In-Home Support/Shopping</td>
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<tr>
<td>ITEL</td>
<td>In-Home Support/Telephone Reassurance</td>
</tr>
<tr>
<td>PHEX</td>
<td>Physical Health/Exercise</td>
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<td>SCCA</td>
<td>Senior Center Case Assistance</td>
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<td>SCED</td>
<td>Senior Center Education</td>
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<tr>
<td>SCIN</td>
<td>Senior Center Information/Referrals</td>
</tr>
<tr>
<td>SCNE</td>
<td>Senior Center Nutrition Education</td>
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<tr>
<td>TECH</td>
<td>Technology Education</td>
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<tr>
<td>TRAN</td>
<td>Transportation</td>
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**Cost Center Codes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AIB</td>
<td>Assistance, Information &amp; Benefits</td>
</tr>
<tr>
<td>CML</td>
<td>Congregate Meals</td>
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<td>HPR</td>
<td>Health Promotions</td>
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<td>In-Home Care</td>
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<td>SCE</td>
<td>Senior Center Education</td>
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<td>TRP</td>
<td>Transportation</td>
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