New York State Fiscal Analysis Model for Early Childhood Services:

A look at the New York State’s Early Childhood Fiscal Model - Early Childhood System Brief

Prepared for the NYS Early Childhood Advisory Council Finance Work Group by

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New York is home to about 1.4 million children age birth through five. These children are supported through a comprehensive early childhood system, incorporating child care, health care, and a range of other programs. This brief examines the current scope of the system, using the latest data on program participation and funding across the state from the New York State Fiscal Analysis Model for Early Childhood Services.

**About the Model**

The Early Childhood Advisory Council (ECAC) Finance Work Group has developed a fiscal model that provides policymakers with an analytical tool to better understand the state’s early childhood system. The tool helps accomplish several of the ECAC’s goals, including gauging the impact of changes in access, quality, and funding levels for early childhood programs; providing the information necessary to maximize existing resources to support the goals of a coordinated and comprehensive early childhood service system; and helping identify new financing strategies to increase access and quality in the ECAC’s four focus areas — Healthy Children, Strong Families, Early Learning, and Coordinated and Responsive Systems. This fiscal model helps users understand the costs of programs and services that together comprise a comprehensive early childhood system of supports for children birth to five and their families. Identified in the model are funding and participation rates for programs and services that support early learning, healthy families, family supports and coordinated and responsive systems, including 85 publically-funded programs that serve pregnant mothers, families and children ages birth through five.

**About the Data**

Data for the model came from relevant agencies as they pertain to the 85 programs and services that were identified by members of the ECAC Finance Work Group. The model includes the most current data available at the time the model was built (2013). The majority of the data in the model is from 2010 or 2011, although some programs are from earlier years and some data is more current. When possible, funding data was disaggregated by source (federal, state, or other), and current enrollment is disaggregated into age and income brackets. In most cases, actual expenditures were used in the model. However, when programs were not able to provide unit costs, an estimate was developed by dividing the total funding by the enrollment in the most recent year that both values were available. In addition, the model includes data collected from the 2009 Census as it relates to New York State population and family income.

**What’s in the Model**

The model is divided into five domains:

- **Early Learning:** This domain spans child care programs — including Head Start, campus-based programs, and the state child care subsidy program — in addition to other resources including preschool special education, professional development, and many other programs.
- **Home Visiting:** This domain includes home visiting programs such as Healthy Families New York, Parents as Teachers, and Nurse Family Partnership, among others.
- **Healthy Children:** This domain includes programs designed to promote health, encompassing nutrition information and assistance and mental health consultation.
- **Strong Families:** This domain supports the framework that pulls together relevant health, family engagement, education and human services that improve outcomes, efficiency and the ability to reach more at-risk families.
- **Infrastructure and Governance:** This domain supports the ability to coordinate the right mix of services across agencies to maximize effectiveness and efficiency. Focusing on both data systems and financing models,

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1 Source: U.S. Census Bureau, 2010 Census figures. The 1.4 million figure is calculated by multiplying the reported number of children birth through 4 (1,155,822) by 1.2 to estimate the number of children birth through five.
these elements create a consistent infrastructure that will inform and support the early childhood system, identifying trends, tracking outcomes, and helping to plan more accurately for the future.

**Information provided by the Model**

The model identifies current funding and population served as it relates to the four ECAC focus areas. The model provides enough information to:

- Identify costs related to policy changes;
- Develop fiscal analysis of existing and proposed programs, services, and policies;
- Maximize existing resources; and
- Recognize funding and budgeting strategies.

The model can be used to estimate the funding to support the expansion and modifications of programs and services provided to the children and families of New York, and determine the need to change, expand, eliminate and/or create new programs to better serve an ever changing population in the state.

- **Participation in Early Childhood Programs**

New York is home to about 1.4 million children age birth through five, of whom almost 1 in 6 live in families below the poverty line - a total of about 245,000 children. Nearly 240,000 children are born in the state each year. It is impossible to gauge the number of young children who are enrolled in at least one public program, but enrollment in individual programs gives a snapshot of usage and unmet need throughout the system.

In the model four programs serve more than 100,000 children or families:

<table>
<thead>
<tr>
<th>Program</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunger Prevention and Nutrition Assistance Program</td>
<td>545,728</td>
</tr>
<tr>
<td>WIC – Women, Infants and Children Program</td>
<td>391,830</td>
</tr>
<tr>
<td>Child and Adult Care Food Program (CACFP)</td>
<td>328,058</td>
</tr>
<tr>
<td>New Born Screening</td>
<td>245,000</td>
</tr>
</tbody>
</table>

- **Funding for the Early Childhood System**

Based on the information collected by State agencies, the total federal and state funding for New York’s early childhood system is just under $4.4 billion, as documented in the model. The bulk of expenditures are spent on programs in the Early Learning domain, totaling approximately $3 billion, or 75 percent of total funding. Programs in

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2 The 245,000 figure is calculated by multiplying the estimated number of children birth through 5 (1,386,986) by the percentage of families with related children under 5 living in poverty (17.7%), according to 2007-2011 American Community Survey 5-year estimates.


4 All program data cited in this brief is taken from the Estimation Model. Individual program windows in the Estimation Model contain details on the source of the data.
the Healthy Children domain total $954 million; Strong Families domain funding is $85 million; and funding for Home Visiting domain programs equals $51 million. Finally, infrastructure and governance domain programs total $134 million, or about 3% of the total.5

Six programs in the model receive funding of $300,000 or more.6

<table>
<thead>
<tr>
<th>Program</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Intervention Program</td>
<td>$623,000,000</td>
</tr>
<tr>
<td>WIC – Women, Infants and Children Program</td>
<td>$610,262,171</td>
</tr>
<tr>
<td>New York State Child Care Subsidy Program</td>
<td>$424,056,178</td>
</tr>
<tr>
<td>Preschool Special Education – Full Day</td>
<td>$386,133,544</td>
</tr>
<tr>
<td>Universal Pre-Kindergarten</td>
<td>$385,034,734</td>
</tr>
<tr>
<td>Head Start – Only</td>
<td>$358,277,941</td>
</tr>
</tbody>
</table>

➢ Early Childhood Funding In Context

Total state expenditures for New York in 2011 totaled $84 billion,7 with $21 billion allocated for education – about 25 percent of all state expenditures. The $4 billion of expenditure on the early childhood programs in this tool represents approximately 19 percent of all education spending in New York State, and 4.7 percent of total state expenditure.

Per-child investments for the entire system for young children can be compared to other types of investments, such as kindergarten to age 12 per pupil funding, which in New York totals $18,6188. In other words, New York invests nearly 7 times as much for every child age 6 to 18 to attend public school as it spends on all public investments for children five and under9.

➢ Generating a model

The Estimation Model can be used to model the impact of a policy change or to answer a specific question, such as the cost to add children to a particular program. Below are a number of examples of how the model can be used:

- If the state wanted to know the cost to screen 10,000 more newborns per month this can easily be calculated through the model by going to the “Newborn screening” program and increasing the enrollment by 10,000.

5 The model provides details of the programs included in each domain, as well as individual and total funding data.

6 The model provides details of individual program funding and total program funding.


9 The estimated funding per child for children birth through five equals the total system funding (about $4 billion) divided by the number of children under 6 (about 1.386 million), or around $2,886 per child. The per-pupil cost in the K-12 system of $18,618 is about 6.5 times this number.
A more detailed example would be using the model to calculate the additional cost of increasing the number of children enrolled in 3- and 4-star rated Head Start programs. Currently, the model shows 7 percent of enrollees are in a 1-star program and 26 percent in a 4 star program. Using the model, a user can change the quality distribution for children in the Head Start program and the tool will show the change in cost, using the true cost of quality numbers (rather than the per child funding allocation). In this example, modeled in the table below, moving all 7 percent of 1-star programs into the 4-star category would require an additional $5 million of funding.

<table>
<thead>
<tr>
<th>Head Start – Only</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
</tr>
<tr>
<td>Original</td>
</tr>
<tr>
<td><strong>Scenario:</strong></td>
</tr>
<tr>
<td>Increased</td>
</tr>
<tr>
<td>Program Quality</td>
</tr>
</tbody>
</table>

As the model categorizes programs by domains, age and income eligibility it is possible to filter the view of the programs by any of these categories. For example, to see only programs that do not directly serve children, the “non-direct service” box can be checked under the “Age” and “Income eligibility” filter. The resulting list of programs now only displays programs that do not directly serve children, and the totals in the table at the top of the page now only show data related to these programs. The total funding for all non-direct services in the model is $219 million, which is approximately 5 percent of the total cost of programs in the state.

**Conclusion**

The ECAC developed this fiscal model to be a useful tool for policy makers to support the current efforts across the state to develop a comprehensive system of supports and services for children birth to five and their families. The model draws upon information from several state agencies that administer and provide early childhood education, prenatal and maternal health programs, and family support services such as home visiting and parenting education.