

*This Update incorporates the revised estimates for the number of 4-year olds in Florida based upon the November 2004 School Readiness Estimating Conference and a revised estimate of participation rates based on a statewide poll of parents released November 2004.*

# Estimating the Cost of Voluntary Universal Prekindergarten in Florida — Calculations An Update

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This document provides the model assumptions and calculations used to develop *The Universal Prekindergarten Cost Model for Florida — An Update* (Publication #2004-S002a). An additional companion piece is *The Cost of Voluntary Universal Prekindergarten — Working Papers An Update* (Publication #2004-S004a), which provides further detail used by the committee to develop these calculations and estimates. All can be found at [www.policygroup.org](http://www.policygroup.org).

## **Fundamental Model Assumptions**

1. Universal prekindergarten would be a voluntary program that gives parents the choice of placing their children in a variety of settings or not placing their children in the program.
2. Lead teachers would minimally have a bachelor's degree in early childhood education or a related field by 2012, and there would be one bachelor's-level teacher in every UPK classroom. By 2008, lead teachers would minimally have an associate's degree. No lead teacher will have less than a CDA credential as the program begins in 2005.
3. All assistant teachers would minimally have a CDA credential.
4. Program staff-to-child ratios would be 1:10 with a maximum group size of 20. The majority of classrooms would have one lead teacher, one assistant teacher, and twenty children.
5. Developmentally appropriate materials would be available to children.
6. Program length of day would be 6 hours with an option for a 3-hour day by parent choice.
7. Adequate funds would be available to preschool providers to maintain facilities to ensure proper health and safety.
8. Adequate funds would be available for wages, benefits, and professional development to ensure the availability of qualified teachers for preschool classrooms.
9. Adequate funding would exist to ensure proper monitoring of programs.
10. Adequate funds would be available to provide preschool programs with technical assistance for curriculum development and teacher-child interactions.
11. Adequate funds would be available to conduct both school readiness assessments and third-party evaluations to monitor quality through a number of measurement scales.

## **Calculations**

### **Estimating Program Need and Participation**

#### **Target Population Size**

Estimated number of 4-year-olds in Florida in 2005 (based on data from the Office of Economic and Demographic Research of the Florida Legislature)

209,492

#### **Estimated Participation Rate**

Three possible participation rates were used in the cost calculations: 55%, 67%, and 70%. Fifty-five percent is a percentage proposed by Legislative staff and is a participation rate similar to that experienced early in Georgia's Universal Prekindergarten Program. The 67% participation rate was chosen based on a statewide survey of parents of 2- and 3-year-olds that found that two-thirds planned to enroll their child in UPK. Georgia currently reports that 70% of their 4-year-olds are in UPK or Head Start and several organizations recommend planning for a 70% participation rate.

55% participation rate	121,469
67% participation rate	147,972
70% participation rate	154,597

#### **Estimated Number of Children Needing Full-day and Part-day Options**

Three options include: All full-time, all part-time, and 2/3 full-time and 1/3 part-time

#### **Ratios and Group Size**

Estimates were also developed projecting a 1:10 teacher-to-child ratio and a maximum class size of 20. It is recommended that Florida develop a minimum class size of 17 or 18 (as in Georgia) in order to maximize the cost efficiency of the program.

#### **Costs Not Included in the Calculations**

Cost calculations do not include comprehensive services or services beyond the 180 days a year, 3 or 6 hours per day. Many families will need access to assistance for comprehensive services and extended day/extended year care and education.

In addition, UPK services in family child care settings were not considered in these calculations. Approximately 4% of children receiving child care subsidies are currently served in family child care settings. Parents choosing family child care are more likely to do so for their infants and toddlers than their preschool-age children; thus, less than 4% of children enrolling in UPK are expected to be served in family child care settings. Given the small percentage and the complications of estimating the costs for family child care, these costs were not considered in this model.

## **Direct Program Costs (Provider Payments)**

### **Personnel Costs**

Lead Teacher Salaries and Benefits for Year 1 (7,399 lead teachers needed at 67% participation rate)

Education	Beginning Salary	Benefits (25% of salary)	% estimate of total lead teachers
Bachelor Degree	\$32,000*	\$8,000	20%
Associate Degree	\$19,000	\$4,750	20%
CDA Credential	\$17,000	\$4,250	60%

\* Although the kindergarten teacher starting salary range is \$27,000 to \$34,000, some teachers with experience will likely enter the system, thus the higher end of the range has been selected for estimation purposes. All salaries are based on a 190-day year (i.e., 180 days of instruction and 10 days of in-service/planning), adjusted by the number of hours of employment (i.e., full-time or half-time)

Assistant Teacher Salaries and Benefits for Year 1 (7,399 assistant teachers needed at 67% participation rate)

Education	Beginning Salary	Benefits (25% of salary)	% estimate of total lead teachers
CDA Credential	\$15,500	\$3,875	100%

### **Personnel Costs Associated with Length of Day Options**

#### Option 1 – Full-day

All Lead Teachers with Bachelor Degrees

40,000 (Salary and Benefits) x 7,399 Lead Teachers = \$295,960,000

19,375 (Salary and Benefits) x 7,399 Assistant Teachers = \$143,355,625

TOTAL \$439,315,625 or \$2,969 per child

Teachers with Mix of Credentials

40,000 (Salary and Benefits) x (.20 x 7,399; BA degree) = \$59,192,000

23,750 (Salary and Benefits) x (.20 x 7,399; AA degree) = \$35,145,250

21,250 (Salary and Benefits) x (.60 x 7,399; CDA lead teacher) = \$94,337,250

19,375 (Salary and Benefits) x 7,399 Assistant Teachers = \$143,355,625

TOTAL \$332,030,125 or \$2,244 per child

#### Option 2 – Part-day (3 hours of instruction + 1 hour for teacher preparation and planning)

All Lead Teachers with Bachelor Degrees

20,000 (Salary and Benefits) x 7,399 Lead Teachers = \$147,980,000

9,688 (Salary and Benefits) x 7,399 Assistant Teachers = \$71,681,512

TOTAL \$219,661,512 or \$1,484 per child

Teachers with Mix of Credentials

20,000 (Salary and Benefits) x (.20 x 7,399; BA degree) = \$29,596,000

11,875 (Salary and Benefits) x (.20 x 7,399; AA degree) = \$17,572,625

10,625 (Salary and Benefits) x (.60 x 7,399; CDA lead teacher) = \$47,168,625

9,688 (Salary and Benefits) x 7,399 Assistant Teachers = \$71,681,512

TOTAL \$166,018,762 or 1,122 per child

### Option 3 – 2/3 of children full-day and 1/3 of children part-day

#### All Lead Teachers with Bachelor Degree

40,000 (Salary and Benefits) x (.67 x 7,399; BA degree) = \$198,293,200

20,000 (Salary and Benefits) x (.33 x 7,399; BA degree) = \$48,833,400

19,375 (Salary and Benefits) x (.67 x 7,399; Assistant Teacher) = \$96,048,269

9,688 (Salary and Benefits) x (.33 x 7,399; Assistant Teacher) = \$23,654,899

TOTAL \$366,829,767 or \$2,479 per child

#### Teachers with Mix of Credentials

40,000 (Salary and Benefits) x [.20 x (.67 x 7,399); BA degree, full-day] = \$32,552,000

23,750 (Salary and Benefits) x [.20 x (.67 x 7,399); AA degree, full-day] = \$23,545,750

21,250 (Salary and Benefits) x [.60 x (.67 x 7,399); CDA Lead Teacher, full-day] = \$63,201,750

19,375 (Salary and Benefits) x (.67 x 7,399; Assistant Teacher, full-day) = \$96,041,875

20,000 (Salary and Benefits) x 373 [.20 x (.33 x 7,399); BA degree, part-day] = \$9,768,000

11,875 (Salary and Benefits) x 373 [.20 x (.33 x 7,399); AA degree, part-day] = \$5,799,750

10,625 (Salary and Benefits) x [.60 x (.33 x 7,399); CDA Lead Teacher; part-day] = \$15,567,750

9,688 (Salary and Benefits) x (.33 x 7,399; Assistant Teacher, part-day) = \$23,658,096

TOTAL \$277,238,971 or 1,874 per child

### **Operating Costs**

These costs include rent, utilities, maintenance/repair, food, kitchen supplies, education supplies, education equipment, in-service training, office supplies, audit, insurance, telephone, postage, advertising, fees/permits, record-keeping, and other administrative expenses (see Working Papers for detailed breakdown of costs). Costs were determined based on an average UPK program size of two classrooms.

Estimate	\$318,139,800 or \$2,150 per child, full-day
	\$291,356,868 or \$1,969 per child, mix-day
	\$236,755,200 or \$1,600 per child, part-day

### **Outcome and Accountability Costs**

#### **Consultation and Technical Assistance**

Recommendations from the PG committee include a consultant to work with every 20 to 30 UPK classrooms. Consultant responsibilities would include:

- Administration of the Early Childhood Environmental Rating Scale twice a year
- Classroom training, technical assistance, and mentoring
- Curriculum and classroom environment support
- Family support and resource coordination as needed

Using an average of these numbers, 296 consultants would be needed to assist the total of 7,399 UPK classrooms with each consultant assigned 25 classrooms (committee members did not anticipate any cost savings based on full-day or part-day for consultation). The committee also recommended budgeting \$80,000 for consultant salaries (requiring a Master level degree), benefits, and office costs (supervision support, clerical support, and supplies). Thus the per-child costs for technical assistance and consultation would be:

$(7,399/25) \times 80,000 = \$23,676,800$  or \$160 per child

## **Professional Development**

Two scenarios are proposed:

1. All teachers will have bachelor degrees;
2. Teachers will have the current market mix of credentials – 20% with Bachelor degrees, 20% with Associate degrees, and 60% with CDAs – and those without Bachelor degrees will move toward obtaining BAs.

Under both scenarios, lead and assistant teachers would require in-service training support, and funding would be required to support replacement of teachers leaving the program. Although full scholarships to assist teachers in obtaining baccalaureate degrees are not recommended, professional development funding should be sufficient to ensure ample and appropriate staffing. Accepting the recommendation of the Center for the Study of Social Policy, \$800 is designated per teacher for professional development. Professional development, in their definition, includes scholarships, loan forgiveness programs, release time, and course credit. The calculation would be:

14,798 (total number of teachers needed) x \$800 = \$11,838,400 or \$80 per child.

## **Program Evaluation**

The IWPR recommends two types of evaluation and assessment: 1) program evaluation (of the process and outcomes of the preschool program) and 2) measurement of children's readiness for kindergarten.

PG committee members concurred with the estimate proposed by IWPR of 5% of total project implementation for third-party program evaluation.

Estimate: Sub-total of Direct Program Costs + Consultation and Technical Assistance + Professional Development + Monitoring x .05 = Total Program Evaluation. Note that the calculation does not include the costs for State and Local Administration nor the non-recurring start up costs.

Full-day, BA teachers	\$39,990,024 or \$270 per child
Full-day, Mix of Credentials	\$34,625,749 or \$234 per child
Variable-day, BA teachers	\$35,026,584 or \$237 per child
Variable-day, Mix of Credentials	\$30,547,044 or \$206 per child
Part-day, BA teachers	\$24,938,088 or \$169 per child
Part-day, Mix of Credentials	\$22,255,950 or \$150 per child

## **Governance and Administration**

### **State and Local Administration**

Funding sufficient to cover both state and local level administration of the program is needed. As some administrative costs are addressed under “consultation” and “monitoring”, an additional 3% is projected.

Estimate: Sub-total of Direct Program Costs + Consultation and Technical Assistance + Professional Development + Monitoring x .03 = Total State and Local Administration.

Note that the calculation does not include the costs for Program Evaluation nor the non-recurring start up costs.

Full-day, BA teachers	\$23,994,014 or \$162 per child
Full-day, Mix of Credentials	\$20,775,449 or \$140 per child
Mix-day, BA teachers	\$21,015,950 or \$142 per child
Mix-day, Mix of Credentials	\$18,328,227 or \$124 per child
Part-day, BA teachers	\$14,962,853 or \$101 per child
Part-day, Mix of Credentials	\$13,353,570 or \$90 per child

### **Monitoring**

Recommendations from the PG Committee include one monitor for every 60 to 70 classrooms.

Monitoring responsibilities would include:

- Annual administration of any monitoring tools
- Record review
- Health and safety review
- Follow-up regarding any citations
- Coordination of information with consultants

Using the average, 114 monitors would be needed to each serve 65 classrooms (committee members did not anticipate any cost savings based on full-day or part-day for monitoring). Using the average of the Program Specialist II salary range and adding benefits and office costs, \$60,000 is the projected salary for monitors. The calculation is:

$$(7,399/65) \times 60,000 = \$6,829,846 \text{ or } \$46 \text{ per child}$$

### **Facilities**

Georgia elected to allot \$8,000 per classroom for start-up costs, and the PG committee recommends the same allotment in Florida. As in Georgia, stipulation of required classroom purchases should be delineated.

$$7,399 \text{ classrooms} \times 8,000 = \$59,192,000 \text{ or } \$400 \text{ per child.}$$

## Credits

This document was developed by Alisa S. Ghazvini for The Policy Group for Florida's Families and Children with guidance and input from the Executive Director (i.e., Barbara Foster), The UPK Cost/Quality Workgroup and external advisors (i.e., Ed Feaver-Chair, Jesse Leinfelder, Jim Mills, Karen Deringer, Mary Bryant, Peter Gorski, Phyllis Kalifeh, Roy Miller, Tana Ebbole, Ted Granger, and Warren Eldridge) and the Executive Committee of The Policy Group (i.e., Bob Friedman, Doug Sessions, Ed Feaver, Jeannette McGill Corbett, and Jim Mills-Chair).

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You may also contact the Executive Director as follows: *Barbara F. Foster, Ph.D., 1310 Cross Creek Circle, Suite A, Tallahassee, FL 32301, Telephone: 850-921-9111, Fax: 850-487-0045, Email: [policygroup@aol.com](mailto:policygroup@aol.com), <http://www.policygroup.org>*

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The Policy Group for Florida's Families and Children  
Attention: Barbara Foster, Executive Director  
1310 Cross Creek Circle, Suite A  
Tallahassee, FL 32301