Preliminary Report:

An Estimate of Infrastructure Needs in Head Start

NATIONAL HEAD START ASSOCIATION

The National Head Start Association would like to express its sincere thanks to the following people for contributing their time and expertise to this project:

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Executive Summary

One of the most pressing needs in Head Start today is an investment in infrastructure. Programs across the country are looking to expand duration in order to meet the needs of low-income working families, but they need additional classrooms to do so.

Currently, more than 4,000 classrooms are being used to run double sessions, serving one group of children in the morning and another in the afternoon. If programs are to serve all children in a full-day model, more closely aligning with the standard work week and the public school calendar, they'll need an additional classroom for every one currently running double sessions.

The National Head Start Association worked with top experts in architecture and construction consulting in order to come to an accurate, justifiable estimate of the infrastructure investment required to serve Head Start's current population in safe, high quality learning environments.

Based on input from experts and first-hand knowledge from practitioners, NHSA estimates that **Head Start needs a $3.6 billion infrastructure investment** to meet classroom needs nationwide for the approximately one million children it serves annually. This funding would allow programs across the country to build critically needed early childhood facilities and would create jobs and stimulate local economies for years to come. Head Start programs exist in every congressional district in the country, and this funding would be a boost nationwide to workers, business-owners, and children and families alike.

Analysis of Cost for Regional Programs

Double session classrooms are those in which one teacher serves two different groups of students, one in the morning and one in the afternoon, in one classroom. In order to successfully achieve the requirement for extended duration, programs will need an additional classroom for every double session class run.

This infrastructure analysis assumes that programs will need to build entirely new early childhood centers or additions onto their current centers, if space allows. Based on the expert experience of RDG Planning & Design, which has significant experience constructing new Educare centers, the infrastructure team designed a model, high-quality facility based on Head Start requirements. This model center includes all necessary space in an early childhood center, including classrooms, food prep spaces, restrooms, closets, office spaces, lactation rooms, mechanical/electrical space, and more. A detailed description of this model facility can be found in Appendix A.

The model facility gives an estimate of 790 gross square feet per classroom alone, or 2,000 net square footage per classroom including all additional required spaces and efficiency mark-up. The assumptions used in the creation of the model facility were validated by Head Start practitioners with recent experience constructing new facilities to ensure accuracy.

Running Cost Estimates

Once space needs were confirmed, construction costs were estimated using RDG Planning & Design and Clark Construction's expert experience. An average construction cost of the space alone was determined to be $280/square foot based on previous projects and confirmed by the practitioners. On top of site and building construction costs are costs such as hiring an architect, project management and administration, and contingency. Standard industry expectations for these additional costs, as well as location modifiers by zip code, were used and can be found in Appendix B.

Classroom Start-Up Supplies

The final piece of the new construction projects is to outfit each new classroom with the necessary start-up supplies, from tables and chairs to cubbies, storage shelves, and books. Complete classroom set-ups, confirmed across multiple educational retailers, are approximately $20,000 all included.

Land Allowance

In order to comply with all the regulations regarding indoor and outdoor square footage per child, programs will need to purchase additional land on which to build the new facilities. Based on a conservative estimate of average land cost, the land allowance was calculated using $1.25/square foot of land, or $54,450/acre. While land is significantly more expensive in metropolitan areas and significantly less expensive in rural farm areas, this is used as an average expected cost for purchasing new land.

Based on previous facility construction, the land allowance also assumes 0.2 acres of land needed per classroom, or that a new center with five classrooms and all associated spaces will need one acre of land.

The total estimate for costs in the regional programs is $3,324,861,305.

Analysis of Cost for Migrant/Seasonal and American Indian/Alaska Native Head Start

Facilities for MSHS and AIAN programs can vary greatly depending on the location and population served, making the analysis conducted above less relevant for these programs. Additionally, these programs do not run double session classrooms the same way that regional programs do. Therefore, cost estimates for meeting infrastructure needs for MSHS and AIAN are instead determined by historical precedence for designating a certain amount of funding be set aside for these grantees.

When extended duration funds were made available, 4.5% of the funds were set aside for MSHS programs and another 3.5% of the funds were set aside for AIAN programs. The same set-aside is included here.

The total estimate for the MSHS and AIAN set-asides is $162,629,086 and $126,489,289, respectively.

Conclusion

In order to better meet the needs of working parents, Head Start programs nationally need to build 4,378 classrooms in order to eliminate double sessions and instead provide full-day, full-year services. The total estimated cost of this infrastructure investment is $3,613,979,679. This investment will stimulate local economies, enhance infrastructure nationwide, and directly serve children and families who need it most.

This estimate accounts for the immediate need in classroom space due to programs previously running double session classrooms. Additional infrastructure needs stem from: (1) double sessions sharing a classroom but not a teacher, for which we do not have an accurate estimate; (2) Head Start classrooms previously located in public school buildings being asked to leave as universal preschool programs expand and need the classrooms; and (3) existing centers requiring standard maintenance and renovations.

Appendix A: Model Head Start Facility

This model facility is being built to align with Head Start standards. The model facility is a center with ten preschool classrooms and additional necessary spaces, from food prep to restrooms to office spaces, as these can be shared efficiently amongst many classrooms.

Description of Space	Number in Center	Area (SF)	Total Area (SF)
Classrooms *(20 children/room * 35 square feet/child)*	10	700	7,000
Food Prep	1	350	350
Children's Restrooms	5	110	550
Office Spaces			
Site Director	1	120	120
Family Support Supervisor	1	120	120
Family Support Specialist	5	75	375
Master Teachers birth - 5 years	2	120	240
Administrative Assistant	1	75	75
Nurse/Isolation	1	200	200
Community Resource/Library	1	200	200
Work Room/Teacher Resource	1	250	250
Staff Kitchen/Lounge	1	250	250
Consultation	2	130	260
Gathering Space	1	350	350
Gross Motor/Multipurpose Room	1	1,500	1,500
Gross Motor/Multipurpose Storage	1	100	100
Kitchen	1	630	630
Pantry	1	125	125
Lactation	1	65	65
Laundry/Supplies	1	90	90
Custodial Room	2	60	120
Custodial Storage	1	100	100
Vestibule	1	150	150
Adult Single Person Restrooms	4	80	320
Telecom	1	60	60
Child Seat/Stroller Storage	1	50	50
Storage (Distributed)	2	100	200
Playground Storage	3	50	150
Assignable Square Feet (ASF)			**14,000**
Efficiency Mark Up *(mechanical, electric, etc.)*			**70%**
Total Gross Square Feet (GSF)			20,000
Gross Square Foot/Classroom			2,000

Appendix B: Running Cost Estimate

Construction Costs		
Classrooms Needed		4,378
GSF per Classroom	x	2,000
Building Construction Cost ($/GSF)	x	280
Construction Cost		$2,451,680,000
Construction Cost *(adjusted by location modifiers)*	*(see appendix C)*	**$2,455,353,600**

Project Costs (eg. architect fees)		
Construction Cost		$2,455,353,600
Ratio of Project/Construction Costs (0.85/0.15)	*	0.15/0.85
Project Costs		**$433,297,694**

Land Allowance		
Classrooms Needed		4,378
Acres/Classroom	x	0.20
Cost per acre ($54,450/acre)	x	$54,450
Land Cost		**$47,676,420**

Additional Costs		
Construction + Project + Land Costs		$2,936,327,714
Project Management and Administration *(5% of construction, project, and land costs)*	x	1.05
Contingency *(5% of all costs)*	x	1.05
Project Cost Total		3,237,301,305
Classroom Start-Up Supplies ($20,000/classroom)	+	87,560,000
Total Cost for Regional Programs		**$3,324,861,305**

TOTAL INFRASTRUCTURE ESTIMATE		**$3,613,979,679**
Regional Programs	92.0%	$3,324,861,305
Migrant and Seasonal Programs	4.5%	$162,629,086
American Indian/Alaska Native Programs	3.5%	$126,489,289

Appendix C: Analysis of Cost for Regional Programs

State	Double Sessions	Addt'l GSF	Construction $/GSF	Location Modifier	Construction Cost	Project Costs	Site Acres	Land Allowance	Construction + Project + Land Costs	Start-Up Supplies	Total Project Cost
		(Double Sessions/ 2) * 2,000 GSF/ class	$280/GSF * (Location Modifier)		(Addt'l GSF) * (Construction $/GSF)	(Construction Cost) * 0.15/0.85	(Addt'l Class) * 0.2 acres/ class	(Site Acres) * $54,450/acre	Construction + Project + Land Costs	(Addt'l Class) * $20,000/ classroom	((Construction + Project + Land Costs) * 1.05 * 1.05) + Start-Up Supplies
AS	66	66,000	285.60	1.02	18,849,600	3,326,400	6.60	359,370	22,535,370	660,000	**25,505,245.43**
AZ	214	214,000	728.00	2.60	52,068,800	9,188,612	21.40	1,165,230	62,422,642	2,140,000	**70,960,962.55**
CA	1664	1,664,000	10508.40	37.53	527,128,000	93,022,588	166.40	9,060,480	629,211,068	16,640,000	**710,345,202.73**
CO	248	248,000	4012.40	14.33	62,339,200	11,001,035	24.80	1,350,360	74,690,595	2,480,000	**84,826,381.31**
CT	12	12,000	893.20	3.19	3,584,000	632,471	1.20	65,340	4,281,811	120,000	**4,840,696.17**
DE	20	20,000	291.20	1.04	5,824,000	1,027,765	2.00	108,900	6,960,665	200,000	**7,874,132.84**
HI	4	4,000	658.00	2.35	1,316,000	232,235	0.40	21,780	1,570,015	40,000	**1,770,941.86**
IA	98	98,000	1747.20	6.24	24,869,600	4,388,753	9.80	533,610	29,791,963	980,000	**33,825,639.14**
IL	938	938,000	10690.40	38.18	299,157,600	52,792,518	93.80	5,107,410	357,057,528	9,380,000	**403,035,924.23**
IN	360	360,000	5367.60	19.17	93,688,000	16,533,176	36.00	1,960,200	112,181,376	3,600,000	**127,279,967.56**
KS	438	438,000	6084.40	21.73	114,973,600	20,289,459	43.80	2,384,910	137,647,969	4,380,000	**156,136,885.63**
KY	308	308,000	3004.40	10.73	77,470,400	13,671,247	30.80	1,677,060	92,818,707	3,080,000	**105,412,624.53**
MA	4	4,000	296.80	1.06	1,187,200	209,506	0.40	21,780	1,418,486	40,000	**1,603,880.69**
MD	94	94,000	1808.80	6.46	24,444,000	4,313,647	9.40	511,830	29,269,477	940,000	**33,209,598.46**
ME	34	34,000	1500.80	5.36	8,523,200	1,504,094	3.40	185,130	10,212,424	340,000	**11,599,197.59**
MI	756	756,000	7095.20	25.34	200,452,000	35,373,882	75.60	4,116,420	239,942,302	7,560,000	**272,096,388.34**
MN	120	120,000	3620.40	12.93	34,048,000	6,008,471	12.00	653,400	40,709,871	1,200,000	**46,082,632.32**
MO	126	126,000	1934.80	6.91	35,212,800	6,214,024	12.60	686,070	42,112,894	1,260,000	**47,689,465.12**
MP	28	28,000	316.40	1.13	8,859,200	1,563,388	2.80	152,460	10,575,048	280,000	**11,938,990.68**
NC	8	8,000	476.00	1.70	1,904,000	336,000	0.80	43,560	2,283,560	80,000	**2,597,624.90**
ND	58	58,000	1520.40	5.43	14,705,600	2,595,106	5.80	315,810	17,616,516	580,000	**20,002,208.76**
NE	112	112,000	2741.20	9.79	27,837,600	4,912,518	11.20	609,840	33,359,958	1,120,000	**37,899,353.31**
NH	10	10,000	268.80	0.96	2,688,000	474,353	1.00	54,450	3,216,803	100,000	**3,646,525.24**
NJ	184	184,000	1624.00	5.80	65,996,000	11,646,353	18.40	1,001,880	78,644,233	1,840,000	**88,545,266.82**
NM	80	80,000	1464.40	5.23	19,437,600	3,430,165	8.00	435,600	23,303,365	800,000	**26,491,959.59**

NV	36	36,000	520.80	1.86	9,452,800	1,668,141	3.60	196,020	11,316,961	360,000	**12,836,949.70**
NY	310	310,000	8635.20	30.84	94,808,000	16,730,824	31.00	1,687,950	113,226,774	3,100,000	**127,932,517.82**
OH	1014	1,014,000	10889.20	38.89	262,007,200	46,236,565	101.40	5,521,230	313,764,995	10,140,000	**356,065,906.66**
OK	10	10,000	705.60	2.52	2,352,000	415,059	1.00	54,450	2,821,509	100,000	**3,210,713.48**
OR	66	66,000	1117.20	3.99	18,468,800	3,259,200	6.60	359,370	22,087,370	660,000	**25,011,325.43**
PA	208	208,000	4678.80	16.71	57,512,000	10,149,176	20.80	1,132,560	68,793,736	2,080,000	**77,925,094.46**
PR	24	24,000	218.40	0.78	5,241,600	924,988	2.40	130,680	6,297,268	240,000	**7,182,738.23**
SD	100	100,000	1176.00	4.20	23,548,000	4,155,529	10.00	544,500	28,248,029	1,000,000	**32,143,452.43**
TX	402	402,000	2814.00	10.05	92,999,200	16,411,624	40.20	2,188,890	111,599,714	4,020,000	**127,058,684.17**
UT	92	92,000	733.60	2.62	22,327,200	3,940,094	9.20	500,940	26,768,234	920,000	**30,431,978.11**
VA	30	30,000	744.80	2.66	7,358,400	1,298,541	3.00	163,350	8,820,291	300,000	**10,024,371.02**
WA	74	74,000	1654.80	5.91	20,087,200	3,544,800	7.40	402,930	24,034,930	740,000	**27,238,510.33**
WI	398	398,000	6078.80	21.71	110,611,200	19,519,624	39.80	2,167,110	132,297,934	3,980,000	**149,838,471.72**
WV	2	2,000	260.40	0.93	520,800	91,906	0.20	10,890	623,596	20,000	**707,514.46**
WY	6	6,000	249.20	0.89	1,495,200	263,859	0.60	32,670	1,791,729	60,000	**2,035,381.03**

TOTALS

8,756	8,756,000			$2,455,353,600	$433,297,694	876	$47,676,420	$2,936,327,714	$87,560,000	$3,324,861,305

Appendix D: Map of Double Sessions Nationwide