

# Plans to Achieve Efficiencies of Scale and Ensure the Appropriate Education of Students with Visual and Hearing Impairments

Report to the House Appropriations Subcommittee on Health and Human Services; the Senate Appropriations Committee on Health and Human Services; the Joint Legislative Commission on Governmental Operations, and the Fiscal Research Division of the North Carolina General Assembly

Submitted by  
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## EXECUTIVE SUMMARY

Over the last two decades, a variety of studies have been conducted regarding how the state of North Carolina should proceed in providing educational services to children with sensory disabilities. Considering factors related to high operational costs and declining enrollments, most of these studies have focused on the operation of the state residential schools. Essentially, recommendations stemming from these studies identified ways the state could reduce operational costs while at the same time improving educational outcomes for children served in these facilities.

As far back as 1986, the Governor appointed a task force to examine issues related to the NC Schools for the Deaf. Among the recommendations of the task force was to consolidate high school programs of the two other schools for the deaf with the Central North Carolina School for the Deaf by 1991 and the closure of the Western North School for the Deaf by 2000. While the recommendations of this earlier task force were not implemented, it did identify an issue related to the cost effectiveness of providing residential services that has been discussed during many legislative sessions for the past 22 years.

In 1992 the cost effectiveness of operating four residential schools was considered as part of the Government Performance Audit. Based on that audit and subsequent audits by the Office of the State Auditor in 2000, the General Assembly closed the Central North Carolina School for the Deaf in 2001. In addition, a study commissioned by DHHS and conducted by Price Waterhouse Coopers in 1999 made recommendations to the Department that resulted in both programmatic and cost efficiencies in the operation of the residential schools.

In recent years, the Fiscal Research Division (2006) conducted a justification review of the residential schools serving deaf and blind students. Based on its findings, the FRD recommended that the General Assembly "transfer management of the residential schools to the Department of Public Instruction and require that DPI" determine continuing operational capacity of the schools. Transferring management of the residential schools had also been presented as an option in the Price Waterhouse Coopers study conducted in 1999. In response to the Fiscal Research Division's recommendation, the General Assembly in Session Law 2007-323 directed DHHS and DPI to conduct an evaluation of educational services to students with hearing and visual impairments in North Carolina.

The School of Government of the University of North Carolina at Chapel Hill was contracted by the two agencies to conduct the evaluation as directed by Session Law 2007-323. The SOG evaluation was completed and presented to the General Assembly in May of 2008 and followed with a subsequent joint report by DHHS and DPI in May of 2009.

In the 2009 report, the two agencies recommended the establishment of an LEA-hosted and LEA-administered consortium model for regional service delivery through which a fuller continuum of placement options could be considered and provided for hearing and visual impaired students in regions of North Carolina where an appropriate continuum of services are not readily available. Consequently, regional services delivery models involving several small rural school systems are under development in the north central and far western sections of the state.

In 2009 the General Assembly drafted several appropriations bills, all but one of which made substantial cuts and/or structural changes to the two NC Schools for the Deaf and the Governor Morehead School for the Blind. In the chaptered bill, Session Law 2009-451, the Department of Health and Human Services, in consultation with the Department of Public Instruction, was directed to “develop and recommend a plan to achieve efficiencies of scale and ensure appropriate education of students with visual and hearing impairments.”

Staff from the Office of Education Services in the Department of Health and Human Services collected data on students with vision and hearing impairments in North Carolina and compared that data to the same populations in other states, including emerging trends in service delivery models. They consulted with staff from the Department of Public Instruction and Local Education Agencies (LEAs) to determine available services for this population of students and the capacity of LEAs to serve them. Staff from the Office of Education Services used internal stakeholder groups to develop the model proposed in this report. Then the model was shared with external stakeholder groups and modified based on their feedback. This ensures that the recommendations made in this report are responsive to the needs of students with vision and hearing impairments, their families, and the professionals who serve them.

In this report, the term consolidated refers to a school which will serve deaf, hard of hearing, blind, visually impaired, and deaf-blind students on the same campus but not the same classrooms. Also, all of the options outlined for consideration are models based on the current needs of residential students in NC and would require retraining for teachers and support staff to increase their knowledge and understanding of students with sensory disabilities and multiple needs and the most effective ways to help those students achieve success. A partnership between public and private colleges and universities, the Department of Public Instruction, and the Department of Health and Human Resources would provide ample opportunities and expertise to prepare the professional and support staff.

### Summary of Findings

- Enrollment at the Governor Morehead School has decreased by 26% from 2001 to 2010. During the same period, the average cost per pupil increased from \$92,739 to \$112,314.
- 46 of the 54 students enrolled at the Governor Morehead School as of February 28, 2010 have a disability in addition to being identified as visually impaired. Thirty-five percent have a mental health diagnosis. Thirty-six students are on Medicaid and the same number qualify for free and/or reduced lunch.
- Enrollment at the Western NC School for the Deaf in Morganton decreased by 35% from 2001 to 2010. The per pupil expenditure rose from \$57,148 in 2001 to \$91,094 in 2009.
- 65 of the 93 students enrolled at the Western NC School for the Deaf as of February 28, 2010 have a disability in addition to being identified as hearing impaired. Fifty-one percent have a mental health diagnosis. Fifty students are on Medicaid and 85 qualify for free and/or reduced lunch.
- Enrollment at the Eastern NC School for the Deaf in Wilson decreased by 33% from 2001 to 2010. The per pupil expenditure rose from \$56,596 to \$82,053 from 2001 to 2009.

- 95 of the 97 students enrolled at the Eastern NC School for the Deaf as of February 28, 2010 have a disability in addition to being identified as hearing impaired. Fifty-nine percent have a mental health diagnosis. Eighty students are on Medicaid and 89 qualify for free and/or reduced lunch.
- From 1999-2009, 390 students at the three residential schools have graduated and/or aged out of eligibility for exceptional children's services (age 21) the schools.
- From 1999-2009, the three state residential schools awarded
  - 177 certificates;
  - 135 academic pathway diplomas, and
  - 78 Occupational Course of Study pathway diplomas.
- 55% of the students who exited the residential schools at graduation time from 1999-2009 did not earn academically based diplomas.
- Only 45% of students who exited at graduation would have been qualified to enter two or four year institutions of higher learning based on their diploma pathway.
- The number of children and families being served by the Early Intervention Program for Children who are Deaf and Hard of Hearing has increased by 54% since 2004.
- More families are choosing spoken language communication options for their children. Since 2004, no less than 60% of families in Early Intervention are choosing spoken language. In December, 2009, 73% of families are choosing this option as compared with 17% choosing Total Communication and 2% choosing ASL.
- DPI, The Office of School Readiness, and DHHS recently surveyed professionals serving three to five year olds who are deaf and hard of hearing in public schools. The greatest need expressed by these professionals was for more training in language development and early literacy.
- The Resource Support Program has provided services in 71 LEAs since July, 2009 to help teachers, speech language pathologists, and audiologists build their capacity to serve the deaf and hard of hearing students in their home LEAs.
- The Resource Support Program and Governor Morehead School Outreach Program both rest in DHHS because the objectivity and neutral status of staff is critical when assisting LEAs. School professionals are receiving colleague to colleague professional suggestions instead of mandates from the state education agency.
- Governor Morehead School Outreach for blind and visually impaired students provided direct services to 413 children in LEAs in 2008-2009. During the same period, they worked with professionals in 89 LEAs.
- Governor Morehead Preschool has increased its enrollment 62% from 2001 to 2009. Caseloads in 2009 for staff averaged one teacher to 22 children.

- Transportation records from the three residential schools indicate that 79% of all students live within a two hour or less drive of the residential school that they currently attend. The majority of students are transported by buses to the schools.
- According to the 2009 Statistical Profile from the NC Public Schools, there were 2,153 primarily identified hearing impaired students ages 3-21 in the public schools.
- According to the 2009 Statistical Profile from the NC Public Schools, there were 682 primarily identified visually impaired students ages 3-21 in the public schools.
- According to the 2009 Statistical Profile from the NC Public Schools, there were 31 primarily identified deaf-blind students ages 3-21 in the public schools.
- The average statewide per pupil expenditure is \$8,522 according to the 2008-2009 Facts and Figures publication from DPI and the State Board of Education. The smallest LEA, Tyrrell, spends \$16,273 per pupil (558 students). During the same time, the average per pupil expenditure in the residential schools was \$87,451.
- There are 38 LEAs with no Exceptional Children licensed or paid teachers of the hearing impaired or visually impaired. Of these 38 LEAs, all have students primarily identified in these disability categories. The residential schools serve students from 16 of these 38 LEAs. That means that in the other half of those LEAs without licensed staff, the HI and VI identified students are receiving services through some other means.

## Recommendations

1. Based on the findings and needs assessments, it is imperative that the state operate a different level and intensity of residential services for students who are deaf, hard of hearing, blind, visually impaired, and deaf-blind. There are basically four options to be considered which would address the changing face of residential students in the 21<sup>st</sup> century: a consolidated residential school with two consolidated day programs; a consolidated residential school; three consolidated schools with enhanced services, and two consolidated residential schools. In order to effect change in the continuum of services and make the changes to the service delivery options without leaving students underserved, the earliest any of these models could be implemented would be January, 2011.
2. The residential schools will continue to participate in the existing state accountability program, the ABCs, as an alternative school (the current practice). The Department of Public Instruction in collaboration with the Department of Health and Human Services will work to identify additional measures and targets specific to these schools in order to provide a more comprehensive picture of their performance levels.
3. Each of the local school systems in North Carolina referring students to a state operated program, in conjunction with appropriate staff working in these programs, should work more closely to ensure that students' placement is revisited at the yearly IEP meeting. This ensures that student transitions into and out of state operated schools and programs as needed will meet the unique educational needs of each individual student.

4. Outreach and/or capacity building efforts to serve students with vision and hearing impairments should be increased significantly to support all other deaf, hard of hearing, deaf-blind, blind, and visually impaired students attending schools in their local education agency (LEA). Outreach efforts to build capacity in LEAs to serve these populations are provided by identified staff in DHHS. It is anticipated that some of the savings realized by the restructuring of residential services will be leveraged to support expanded efforts to foster the development of capacity in LEAs through professional development, mentoring and coaching, demonstration teaching, and some direct services.
5. The Resource Support Program, which provides services to professionals and families of children who are deaf and hard of hearing, will be increased to provide teachers to LEAs to ensure that deaf and hard of hearing children ages 3-5 receive the highest quality language and communication skill development thus increasing the opportunity for these children to develop language at a pace more aligned to that of their hearing peers.
6. A distance technology program, currently under development, will be offered as a component within the proposed residential organizational structure. The program will be managed in collaboration with the North Carolina Virtual Public School. As an option, the program can be employed across the state to reduce isolation for vision and hearing impaired students and the professionals who serve them and to enhance programming for children with sensory disabilities who would not have attended residential programming in any case. This would ensure that students who use American Sign Language as their primary communication modality would receive instruction from a teacher dually licensed in a specific content area as well as in the education of exceptional children. It may also serve to provide direct instruction for students who have never received instruction directly from their teacher but always through an interpreter.
7. Based on the current governing arrangement for the state residential schools, transition to the new model of service delivery and the operation of the residential, day, and outreach programs for vision and hearing impaired students will continue to occur organizationally within the Department of Health and Human Services. Quarterly reports will be made to the State Board of Education and the State Superintendent of Public Instruction.
8. Collaborative programs will continue to be established between smaller, economically challenged LEAs which will enable them to pool their resources to serve students with visual and hearing impairments more efficiently, providing more options for services, better access to hard to recruit employees, and student groups large enough to provide positive peer interactions. The Department of Health and Human Services would be able to provide resources to these collaboratives as an equal partner with DPI and the LEAs.
9. A differentiated salary schedule needs to be created for teachers in the Department of Health and Human Services. This would allow residential and outreach programs as well as the schools in the Division of State Operated Healthcare Facilities to compete more competitively with the LEAs when recruiting and retaining highly qualified teachers. Without access to local funds, DHHS cannot offer teachers the incentives that LEAs may offer. This could be accomplished not only through an alternative salary funding formula, but also by altering applicable policies and procedures through the Office of State Personnel that regulates how teachers in the employ of the state are paid.
10. If one or more of the existing residential schools are discontinued in the future, consideration needs to be given to how the property no longer in use could best serve the state. The location of the facility in Raleigh make it a prime location for additional office space to carry out the functions of state government. In Wilson and Burke counties, proximity to the community colleges would allow for collaborative use of property between the community college system and DHHS to house other state agencies. Other uses may include: offer classes for adults with sensory disabilities to

increase their marketability in the 21<sup>st</sup> century workplace; house itinerant staff and their equipment; and provide additional classroom space for professional development for public school staff. Collaborative classrooms could also be set up in these spaces as well as use for localized instructional materials resource centers which would be managed by DPI and DHHS. It should also be noted that having residential space near community colleges would enable the Division of Services for the Blind and the Division of Services for the Deaf and Hard of Hearing to create rehabilitative residential programs for adult clients. These facilities could also be used for the purpose of establishing public/private partnerships to create jobs in the communities where they are located. A recent comment made by a reader in the Morganton News Herald suggested using the Morganton campus to expand the UNC system thereby creating an addition to the UNC school.

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## ASSUMPTIONS

It cannot be ignored that changes to the current parts of the educational continuum for vision and hearing impaired students is difficult. North Carolina has kept three residential schools for these low incidence populations even as most states are closing schools and creating other opportunities for students to receive services. Many of the changes proposed in this report will cause great consternation for families, children, staff, citizens, and interests groups; change always comes at a cost. However, the question this report seeks to answer is whether the new opportunities and discomfort caused by the changes now will outweigh a dismantling of the current system with no real vision for change as fiscal realities continue to erode school budgets leaving them shells of their former selves unable to serve any truly useful function. By making these changes now, the state can avoid change driven only by fiscal considerations.

**Because of these realities, some basic assumptions have been made in the preparation of this report.**

**First, all children have the right to a Free, Appropriate Public Education (FAPE) which enables them to be a participating member of our society upon graduation.** Studies show that the difference between earning a high school diploma or not is the single largest determinant for lifelong income. In fact, education beyond high school determines how much a citizen participates in society. For example, research from the Southern Education Foundation shows that of adults with a high school education or less, only 50.4% registered to vote whereas those with at least a bachelor's degree registered at a rate of 84.4%. The same study showed that only 22.1% of those with a high school education or less do volunteer work in their community while 76.6% of adults with at least a bachelor's degree volunteer in their community. Clearly, the more education individuals have, the more likely they are to participate fully in society.

**Another assumption which underlies this report is the importance of early intervening services for children with hearing or visual impairments.** Consistently, children who begin receiving services within the first six months made far greater strides than their counterparts who came to intervention at a later age. For children with a hearing or vision loss, any delay in access to interventions delays their development and keeps them behind their typically developing peers for years to come. In fact, students who are behind at age six rarely, if ever, achieve at the same pace set by their typically developing peers. Funds spent to provide services to children before they turn eight are returned exponentially and those same children's need for access to specialized services declines sharply. The quality of early intervening services for children with both vision and hearing losses in North Carolina are far superior to those other states; the network for service provision, provided at no cost to families, ensures unparalleled access to services and professionals thus creating pathways to independence, self-advocacy, and academic success at rates comparable to non-disabled children.

**A third assumption is that everyone involved in education for children with vision and hearing impairments wants them to have access to the best educational and intervention opportunities that North Carolina can provide.** These students need high quality services in order to decrease their achievement gap and to be citizens who participate effectively in all areas of society. Dedicated professionals at the Department of Health and Human Services, the Department of Public Instruction, and Local Education Agencies across the state have been working together, and continue to do so, to bridge the gaps for these children and their families.

**A fourth assumption is that the number of deaf, hard of hearing, blind, visually impaired, and deaf-blind students who will need residential school educational placements will continue to decline.** The majority of these children will be served in local school systems. Data analysis over the past ten years reveals that although the number of students with hearing and visual impairments has continued to increase, the numbers actually enrolling in the state residential schools has continued to decline. If this trend continues as expected, by the 2017-18 school year, of the 2566 hearing and 854 vision impaired students in the state, only 157 will be served in residential facilities.

**A variety of factors are contributing to the decreasing populations in residential schools in NC and across the country.**

**1. Legal mandates (IDEA and state laws):** Since the reauthorization of IDEA in 2004, Individualized Education Program (IEP) teams have taken a more significant role in determining placement for students with disabilities. While special factors are considered, especially for students who are identified as deaf and hard of hearing, placement in a residential school is no longer seen as the only option for students for socialization in their chosen communication modality. With a stronger emphasis on Least Restrictive Environment (LRE), IEP teams are encouraged to look at all the options for services in the continuum and seek to involve students with low incidence disabilities in classroom settings with their non-disabled peers.

**2. Improvement in Medical Technology:** With more premature babies able to survive earlier, retinopathy of prematurity is no longer the primary cause of vision loss. However, there has been a significant increase in cortical vision impairment; the retina and optic nerve are intact, but the ability of the brain to process the signal received from the nerve is impaired. Many of the drugs which enable premature babies to survive also impact their sensory input, especially vision and hearing. Advances in cochlear implant and other hearing aid technologies allow for earlier and more effective amplification for deaf and hard of hearing children.

**3. Early Hearing Screening:** Through mandatory newborn hearing screening, more babies' hearing losses are detected earlier. In 1998, children averaged 25 months in age before their loss was diagnosed. In 2002, the average age was less than one month. In 2007, 94.4% of all babies born in the United States were screened for a hearing loss as a newborn. In North Carolina, 98.24% of babies were screened. About 131,101 babies were screened for a loss; 243 were identified with a hearing loss. Of those 243, 186 requested services for their loss. These earlier diagnoses enable families to access services earlier thus eliminating the previously lengthy delay between diagnosis and intervention and increasing the variety of choices that these children and their families will have when choosing a communication modality.

**4. Expanded Early Intervention Services:** Earlier identification of vision and hearing losses has created an awareness of and need for expanded early intervention services. In collaboration with other services such occupational, physical, and speech/language therapies, children and families are taught how to do therapy at home that supplements services from early interventionists. As much as possible, children and families receive services in their natural environment. Early intervention for deaf and hard of hearing children focuses on language and communication skill development. Blind and visually impaired children receive training in compensatory skills such as functional skill development, pre-Braille, pre-Orientation and Mobility, adaptive play, use of low vision devices, and parent education.

**5. Improvement in the Capacity of LEAs to Serve Children with Sensory Disabilities:** As families and IEP teams make choices for children, LEAs have had to increase their services for all children, including those for children with low incidence sensory disabilities. As more children are mainstreamed and/or provided with fewer self-contained classes, LEAs have hired the professionals to serve the students and/or contracted with private providers. While this is not feasible for all LEAs, DPI and DHHS are working with LEAs to help establish collaborative programs where LEAs with small numbers of low incidence population students can share their resources to provide more options in the continuum of services at a more reasonable cost enabling students to receive appropriate services locally rather than only having that access at a residential school.

**A fifth assumption is that the per pupil cost to operate residential schools will continue to be greater than the cost to serve a similar population of children in a regular day programs.** This implies that an optimal number of pupils must be served in a school to provide to the most programmatic, cost, and organizational effectiveness. It is important to note, however, that an LEA with less than five students with sensory disabilities would show spending patterns similar to that of the residential schools because of the exponentially high cost of appropriate related services staff and assistive technologies. The costs are also increased if these students have multiple disabilities thereby increasing their need for access to even more exceptional children's services. Similar to school memberships, sound school planning principles dictate that the number of students to be served in a school system is the primary determinant of the number of schools to operate. This consideration is no less important in a statewide school operation than it would be in a traditional LEA. At the time of the drafting of this report, the number of students served in the three state operated residential schools of North Carolina was less than 250, and that number continues to decline. The literature is convincing that the most economically as well as programmatically effective schools serve a defined number of pupils. Among traditional public schools, the greatest cost efficiencies are realized within the following ranges: elementary schools 450-700 students; middle schools 600-800 students, and high schools 800-1200 students. While there is no general agreement on the optimal size of specialized schools, the greatest opportunities for efficiencies of scale are offered when schools are operated within defined ranges. Also, organizational configuration impacts the cost effectiveness of school operations. The larger the number of schools operated, the more complex the administrative structure in order to provide centralized coordination. Again, this is as true in statewide school operations as in traditional LEAs. Approximately twenty-five percent of states operating residential schools for sensory impaired students have addressed this issue by operating schools that serve deaf and blind populations on the same campus. It should be clarified that this does not mean serving students with these different disabilities in the same classrooms, nor would they necessarily live in the same residential facility.

**A sixth assumption is that there is no evidence to support that the transfer of these savings from the consolidation of residential programs to the LEAs could be maintained in support of students with vision and hearing impairments with integrity.** The local autonomy granted to LEAs allows those systems to use positions and funding with the maximum flexibility. These outreach programs (for visually and hearing impaired) function best in DHHS for the following reasons.

- The staff is able to maintain professional objectivity and neutral positions when observing students and professionals in LEAs.
- Staff is able to provide research-based, professional recommendations to LEAs which they may or may not choose to follow; these may be seen as a mandate if delivered by DPI staff.

- Staff may attend IEP meetings and provide information from a position of professional neutrality.
- Staff is invited to LEAs which seems to create more collegial relationships with professionals.
- Staff can provide direct student evaluation (free of charge to the LEA) and provide one-on-one coaching and assistance for professionals who work with the students who are evaluated. This provides a continuity of services which ensures consistent follow-through on recommendations for students.

## NEEDS ANALYSIS

Prior to a discussion of possible models of service, it is critical to consider extant data regarding the sensory impaired students served in the residential schools now. The other data that must be considered is what research shows regarding the trends across the lifespan related to sensory impaired populations. The chart below shows information from the residential schools in North Carolina regarding students' needs as of February, 2010.

	ENCSD	GMS	WNCSD
Total number of students served	97	54	93
Number of students with disabilities in addition to their primary sensory disability	95	46	65
Number of students with a mental health diagnosis	57	19	47
Number of students who qualify to receive free and/or reduced lunch	89	36	85
Number of students on Medicaid	80	31	50
Number of students who are uninsured	4	1	11

Based on this data, it is clear that the students who attend the residential schools in the 21<sup>st</sup> century have a variety of needs which impact their ability to learn at the same rate as their non-disabled peers. In addition, a large percentage of the students served on all three campuses display characteristics consistently identified by all educators as factors which make students more at risk of failure than not. Students from low socioeconomic backgrounds and/or those who have less than desirable access to healthcare professionals achieve at lower rates than other students. These are two factors that need to be addressed as educators seek to close the achievement gap for the children in the residential schools.

In addition, access to comprehensive mental health treatment and medications is critical for these students. However, that access is severely limited, especially in rural areas, since mental health professionals who can communicate with deaf and hard of hearing students directly, that is not through an interpreter, are few and far between. These students need ongoing therapy and increased access to any medications which could aid in their treatment.

Finally, research provides a plethora of data regarding the progression of needs for persons who are deaf, hard of hearing, blind, visually impaired, and deaf-blind. The following is a compilation of state and national data that support a continued strong focus on early interventions; the need for comprehensive career and technical education with a focus on transition services, and the importance of preparing these students to be productive citizens in the 21<sup>st</sup> century.

## **HEARING LOSS BACKGROUND**

### **Statistics on Hearing Loss and Early Intervention**

- Hearing loss is the more frequently occurring birth defect. In North Carolina, two of every 1,000 babies born have a hearing loss.
- Early diagnosis is the key. In 1998, children averaged 25 months in age before their loss was diagnosed. In 2002, the average age was less than one month.
- In 2007, 94.4% of all babies born in the United States were screened for a hearing loss as a newborn. 98.24% of babies in North Carolina were screened. 131, 101 were screened for a loss; 243 were identified with a hearing loss. Of those 243, 186 requested services for their loss.
- Children identified with a hearing loss before they reach six months of age progress faster than children identified after six months.
- There is "substantial payback" from early intervention and/or aggressive medical intervention for children identified with a hearing loss.
- Early intervention can significantly improve language development and possibly other development outcomes.
- Enrollment in an early intervention program is one of the best predictors of positive developmental and educational outcomes for children who are deaf.

### **Cochlear Implant Technology**

- Cochlear Implants are proven to be cost effective for children who are candidates. 40% of deaf children under age three receive a cochlear implant today. This is up from 25% in 2004. The cochlear implant has become the "standard of care" for hearing loss.
- Cost benefit analyses show that the savings for K-12 education for a deaf child with a cochlear implant ranges from \$30,000 to \$200,000.
- Studies show that "profoundly deaf children who had more than two years of experience with a cochlear implant were able to move out of special education into a mainstream setting at twice the rate of their age-matched peers without an implant."
- These students also were in fewer self-contained special education classes and received fewer exceptional children's services.

## **Hearing Loss in Special School and Regular Educational Settings**

- Based on five students, the average child with a unilateral loss in the third grade is 24 months behind his/her hearing peers in math, language, and social skills.
- In the 1997-98 Gallaudet Research Institute Annual Survey of Deaf and Hard of Hearing Children and Youth, it was estimated that 84% to 90% of deaf and hard of hearing students are taught outside of mainstream classrooms.
- American Sign Language is prevalent mostly in special schools. 74.3% of those schools use ASL while it is only used in 22.2% of regular education settings.
- Spoken language methods are used most predominantly in regular education classrooms (79.7%). Only 8.9% of special schools use spoken language methods.
- Special schools for deaf and hard of hearing also have a higher percentage of children with multiple disabilities (47.7%) as compared with regular education settings (29.3%).
- The Texas Youth Commission reports that children who do not develop normal language at the expected age are at a high risk for a variety of problems---academic, social, and emotional---that have not been previously linked to delays in language development.

### **Societal Impact of Hearing Loss**

- 44% of deaf individuals with a severe to profound loss do not graduate from high school; only 5% of these individuals graduate from college
- 42% of deaf adults ages 18-44 are underemployed; this is reflected in the average household income for deaf adults with a severe to profound loss. As of 1990 (the most recent figure), the average family income was \$25,000.
- Cost analyses vary as to what the cost is to society for a severe to profoundly deaf individual. In a study done in 1970, expected lifetime earnings for prelingually deaf was an average of \$275,000 less than that of a hearing person.
- The estimates on the societal loss vary from \$1.73 million for a child who has a prelingual loss (this does not include the cost of a cochlear implant) to a 1998 study that showed in a study of 15,400 persons born with a hearing loss a lifetime societal cost of \$4.6 billion.
- As compared with other disabilities, the cost is "so large that it warrants discussion." The societal costs for someone with a severe/profound hearing loss is three times that of someone who sustains injuries due to a near drowning incident or a firearm accident and two times that of someone who sustains a stroke, rheumatoid arthritis, and epilepsy.

### **VISION LOSS BACKGROUND**

#### **Statistics on Vision Loss and Children Birth to Five**

- Vision is the sense that provides the most information to the brain. Only vision can perceive shape, size, color, distance, and spatial location all in one glance.
- Vision impairment occurs in .01% of babies born annually.
- Early diagnosis is critical; in 1999, the average age of diagnosis was 14.5 months. Now it is about 5 months.
- Congenital vision impairments---those which exist at birth---will have lifelong affects on children; therefore, the diagnosis and intervention is critical to children's growth and development.
- Nationally, 65% of children with an identified vision loss also have other disabilities.
- Substantial payback for early intervening services comes in the areas of motor, cognitive, and sensory skill development.

- In the birth to five population served by the Governor Morehead Preschool Program, about 65% of children being served with vision loss also have another disability. About 5% of those children are identified with additional disabilities at a later date.

### **Vision Loss in Special School and Regular Educational Settings**

- According to the American Printing House for the Blind Annual Report for 2007, 57,696 children in the US ages 0-21 are legally blind.
- Of those 57,696, 56,266 use Braille as their primary reading medium.
- 9% of the legally blind students in the US attend residential schools. In NC, only 2% of primarily identified blind and visually impaired students attend the Governor Morehead School for the Blind.
- Per the December 1, 2008, Exceptional Children's Headcount, there were 2,251 students whose primary identification on their IEP was vision loss. Of those 573 were ages three to five.
- In 2008-2009 the Outreach Program operated by Governor Morehead School served 413 students ages 5-21 and provided services in 89 LEAs through over 3,900 personal contacts (visits, observations, phone calls, etc.).

### **Societal Impact of Vision Loss**

- According to data from the National Center for Health Statistics in 2008, 25.2 million Americans had a vision loss.
- Of those, about 5 million did not earn a high school diploma. About 6.3 million graduated with a high school diploma or earned a GED. Approximately, 6.5 million had more than a high school education, and 4
- Of those, about 5 million did not earn a high school diploma. About 6.3 million graduated with a high school diploma or earned a GED. Approximately, 6.5 million had more than a high school education, and 4.8 million held at least a bachelor's degree.

## FINDINGS AND DISCUSSION

### Summary of Findings

- Enrollment at the Governor Morehead School has decreased by 26% from 2001 to 2010. During the same period, the average cost per pupil increased from \$92,739 to \$112, 314.
- 46 of the 54 students enrolled at the Governor Morehead School as of February 28, 2010 have a disability in addition to being identified as visually impaired. Thirty-five percent have a mental health diagnosis. Thirty-six students are on Medicaid and the same number qualify for free and/or reduced lunch.
- Enrollment at the Western NC School for the Deaf in Morganton decreased by 35% from 2001 to 2010. The per pupil expenditure rose from \$57,148 in 2001 to \$91,094 in 2009.
- 65 of the 93 students enrolled at the Western NC School for the Deaf as of February 28, 2010 have a disability in addition to being identified as hearing impaired. Fifty-one percent have a mental health diagnosis. Fifty students are on Medicaid and 85 qualify for free and/or reduced lunch.
- Enrollment at the Eastern NC School for the Deaf in Wilson decreased by 33% from 2001 to 2010. The per pupil expenditure rose from \$56,596 to \$82,053 from 2001 to 2009.
- 95 of the 97 students enrolled at the Eastern NC School for the Deaf as of February 28, 2010 have a disability in addition to being identified as hearing impaired. Fifty-nine percent have a mental health diagnosis. Eighty students are on Medicaid and 89 qualify for free and/or reduced lunch.
- From 1999-2009, 390 students have graduated and/or aged out of eligibility for exceptional children's services (age 21) the three residential schools.
- From 1999-2009, the three state residential schools awarded
  - 177 certificates;
  - 135 academic pathway diplomas, and
  - 78 Occupational Course of Study pathway diplomas.
- 55% of the students who exited the residential schools at graduation time from 1999-2009 did not earn academically based diplomas.
- Only 45% of students who exited at graduation would have been qualified to enter two or four year institutions of higher learning based on their diploma pathway.
- The number of children and families being served by the Early Intervention Program for Children who are Deaf and Hard of Hearing has increased by 54% since 2004.
- More families are choosing spoken language communication options for their children. Since 2004, no less than 60% of families in Early Intervention are choosing spoken language. In December, 2009, 73% of families are choosing this option as compared with 17% choosing Total Communication and 2% choosing ASL.



- DPI, The Office of School Readiness, and DHHS recently surveyed professionals serving three to five year olds who are deaf and hard of hearing in public schools. The greatest need expressed by these professionals was for more training in language development and early literacy.
- The Resource Support Program has provided services in 71 LEAs since July, 2009 to help teachers, speech language pathologists, and audiologists build their capacity to serve the deaf and hard of hearing students in their home LEAs.
- The Resource Support Program and Governor Morehead School Outreach Program rests in DHHS because the objectivity and neutral status of staff is critical when assisting LEAs. School professionals are receiving colleague to colleague professional suggestions instead of mandates from the state education agency.
- Governor Morehead School Outreach for blind and visually impaired students provided direct services to 413 children in LEAs in 2008-2009. During the same period, they worked with professionals in 89 LEAs.
- Governor Morehead Preschool has increased its enrollment 62% from 2001 to 2009. Caseloads in 2009 for staff averaged one teacher to 22 children.
- Transportation records from the three residential schools indicate that 79% of all students live within a two hour or less drive of the residential school that they currently attend. The majority of students are transported by buses to the schools.
- According to the 2009 Statistical Profile from the NC Public Schools, there were 2,153 primarily identified hearing impaired students ages 3-21 in the public schools.
- According to the 2009 Statistical Profile from the NC Public Schools, there were 682 primarily identified visually impaired students ages 3-21 in the public schools.
- According to the 2009 Statistical Profile from the NC Public Schools, there were 31 primarily identified deaf-blind students ages 3-21 in the public schools.
- The average statewide per pupil expenditure is \$8,522 according to the 2008-2009 Facts and Figures publication from DPI and the State Board of Education. The smallest LEA, Tyrrell, spends \$16,273 per pupil (558 students). During the same time, the average per pupil expenditure in the residential schools was \$87,451.
- There are 38 LEAs with no Exceptional Children licensed or paid teachers of the hearing impaired or visually impaired. Of these 38 LEAs, all have students primarily identified in these disability categories. The residential schools serve students from 16 of these 38 LEAs. That means that in the other half of those LEAs without licensed staff, the HI and VI identified students are receiving services through some other means.

## Discussion

Students with sensory disabilities in North Carolina are afforded educational opportunities by most of the 115 local public school systems in the state and through the three specialized state operated residential schools. Over ninety percent of those with sensory disabilities (hearing and vision impaired students) are educated in local schools and the remainder is served in specialized residential facilities.

The specialized residential schools serving children with sensory disabilities are managed by the North Carolina Department of Health and Human Services. Admission to the schools is by referral only with students who are admitted referred by their Individualized Education Program (IEP) Team in the local school systems. Governor Morehead School for the Blind in Raleigh serves students with vision impairments. Two schools, the North Carolina School for the Deaf in Morganton and the Eastern North Carolina School for the Deaf in Wilson, serve deaf and hard of hearing children. This section of the report discusses findings related to the operation of these schools as well as other programs serving deaf, hard of hearing, deaf-blind, and blind students in the state.

## Costs of Operating the Residential Schools

The average annual cost per student at each of the three residential schools consistently increased over the last decade. For the Governor Morehead School, the cost per student increased from \$92,739 in 2001-2002 to \$112,314 in 2008-2009. During the same period of time, at the Western North Carolina School for the Deaf, the cost per student increased from \$57,148 in 2001-2002 to \$91,094 in 2008-2009. This trend also holds true for the Eastern North Carolina School for the Deaf with an average per pupil cost of \$56,596 in 2001-2002 and \$82,053 in 2008-2009. However, this represents a cost reduction for ENCSD from the previous year, 2007-2008, when the average per pupil cost was \$98,605.

For the 2008-2009 fiscal year, the average annual expenditure per student receiving residential as well as academic services as compared to those receiving only academic services showed variance among the three schools. For the Governor Morehead School, the per pupil cost for residential as well as academic services was \$114,748 verses a per pupil cost of \$80,129 for those participating solely in the academic program. At the Western North Carolina School for the Deaf, the cost per pupil for residential as well as academic services was \$93,125 as compared to a per pupil cost of \$66,256 for those participating only in the academic program. Similar findings are evident for the Eastern North Carolina School for the Deaf, where the cost per pupil for residential as well as academic services was \$83,370 verses a per pupil cost of \$60,322 for those enrolled in the academic program. Additional data for academic/instruction, residential/dormitory, utilities, child nutrition, student health centers and administrative costs for each school and covering the years 2007-2008, 2008-2009 and through December 2009 for the current fiscal year can be found in the appendices.

## Membership Trends

An analysis of student membership data for the past two decades reveals that the number of students with hearing and vision impairments served in North Carolina public schools has displayed a steady increase, while the numbers actually enrolling in state residential schools has continued to decline. In 1990-91, 578 students were in enrolled in North Carolina deaf schools. This number declined to 287 students in 2000-2001 and was at 188 as of December, 2009. Similar membership trends have been observed at the Governor Morehead School with a high of 83 pupils in 2006-2007 and 54 as of December, 2009.

Assuming that membership trends continue as expected, by the 2017-18 school year, of the 2,566 hearing and 854 vision impaired students projected to be attending public schools in North Carolina, approximately

157 are projected to be served in state residential schools. While membership projections for state operated residential schools are not as reliable as they are for locally operated school districts, they are informed by reliable statistical methods and necessary for long range planning. Nevertheless, declining membership in residential schools operated in North Carolina as well as throughout the United States is evident and can be explained by factors such as

- legal mandates (IDEA and state laws);
- improvements in medical technology;
- mandates surrounding newborn hearing screening;
- expanded Early Intervention services for hearing and vision impaired children, and
- the improvement in the capacity of LEAs to serve children with sensory disabilities.

### **Transportation at the Three Residential Schools**

Of the 238 students currently served in the three schools under the supervision of the DHHS Office of Education Services, 167 are served in both the residential and day programs, while 71 are only served in the day program. As displayed in Appendix E, 189 or 79 percent of the children attending the schools live two hours or less from where they are enrolled. Forty-nine students live more than two hours from the school where they are enrolled. Many of the children who live more than two hours from the school attend the Governor Morehead School. Four students are currently traveling four hours or more one-way each week.

Because the Governor Morehead School is the only residential facility serving a statewide population, most of the children in the three-hour or above category attend this school. In addition, three students attending NCSD travel at least four hours to get to the school. However, this represents an outlier because these children live in Richmond County which is at the far eastern edge of the NCSD catchment area.

The primary mode of transportation to all three schools is by bus. As reflected in Appendix E, 200 children attending both the residential and days programs are transported by a combination of school-operated and charter buses. Six residential and 32 day students are transported by parents.

The number of children currently traveling more than 2.5 hours to get to school is reflected in chart Appendix E. The number of miles of travel is also presented. It is important to note that this represents one-way mileage from the home of each student to the school of assignment.

### **Early Intervention for Children who are Deaf and Hard of Hearing (EI)**

The program, operated by the DHHS Office of Education Services, provides early language and communication skill development intervention for children ages birth to age three who are deaf and hard of hearing. Managed by a statewide director and two lead teachers, the program employs itinerant teachers who provide interventions for children and their families in their natural environments (home, daycare, preschool, etc.). Teachers, speech language pathologists, audiologists, diagnosticians, and social workers travel throughout the state, mostly from home offices, to provide intervention services. They also interact with other professionals, such as occupational and physical therapists, to coordinate communication and language skill development with the other services children and their families receive.

In 2002, as long as numbers have been compiled at OES for the entire program, 258 children were served by the program. These numbers were not kept to reflect a year to date or cumulative total for the year. In June, 2004, when the first year-to-date number was collected, the program served 429 children and families. The number increased to 660 in June, 2009. Based on those figures, it is reasonable to expect

that the program will gain an average of 50 children and families per year. This increase not only means that more teachers will be needed in early intervention to ensure high quality services are provided to children and their families, but it also means that more preschool teachers will have to be trained to continue the communication and language skill development at a pace commensurate of what the child received from birth to age three in order to enable these children to “catch up” with their typically developing, hearing peers.

In the past ten years, the number of families who are choosing a spoken language communication option for their children has continued to increase. While the numbers vary slightly, the percentage of families choosing a spoken language option over the past seven years has always been 60% or greater in any given month of service. Currently, 73% of families are choosing a spoken language option while only 2% are choosing American Sign Language. This is the data from December, 2009. The data on communication modality choice is only tabulated by the month, not over the entire year, because children are constantly coming into the program and aging out into preschool programs.

All of these statistics show the increased need for professionals in the public schools to move beyond the traditional training that most received when they became certified in deaf education. They must now be competent in the use of spoken language and how to develop language and build on the foundation these children received in the early intervention programs.

### **Services for Three to Five Year Olds who are Deaf and Hard of Hearing**

In 1999, a letter was sent from the Exceptional Children's Division of the NC Department of Public Instruction to all of the Exceptional Children's Directors in the public schools as well as the Superintendent of the DHHS LEA. That letter disbanded the preschools operated by the Schools for the Deaf and gave LEAs the responsibility for educating deaf and hard of hearing children from ages three to five. While those preschools were perceived as feeder programs for the Schools for the Deaf, the reality is that many of those children and their families were already choosing spoken language options. However, it became apparent that LEAs did not have the staff to continue the communication and language skill development that those children had had during their time in the preschools. As Early Intervention continued its work and transitioned children from their program to the LEAs, often children were placed inappropriately in cross-categorical classrooms or developmentally delayed classrooms with little or no exposure to teachers of the deaf. Of course, the larger LEAs were more able to make this transition successfully than the smaller ones.

Currently, many LEAs do not have the expertise on staff to deliver high quality language and communication skill development to these children. In response to a request by the NC Council for the Deaf, staff from the Department of Public Instruction, the Office of School Readiness, and the Office of Education Services developed and conducted a survey of Preschool Deaf and Hard of Hearing Services in the fall of 2009. While a formal disaggregation of the data is forthcoming, the preliminary data supports the need for an increased effort to continue children's language and communication skill development, regardless of communication modality, from highly trained and experienced teachers of the deaf and hard of hearing. The sample was small; there were 253 respondents from all but 10 counties in the state, 57% of whom currently provided services to deaf and hard of hearing children. The majority of those respondents were either speech language pathologists (20%), other (17%), itinerant teachers of the deaf/hard of hearing (16%), or Exceptional Children's Preschool Directors (11%). Of those respondents, 55% had less than five years of experience working with preschool children who were deaf and hard of hearing. The need for extensive capacity building among the professionals who serve these children at such a critical time in their language and communication skill development was evidenced by a substantial list of training needs from

such a small sample. Of the 18 possible choices for professional development, only two choices (understanding the stages of grief and cued speech) received less than a 21% positive response rate.

In order to provide a highly skilled cadre of preschool teachers for deaf and hard of hearing children in LEAs across NC, DHHS proposes to allot positions from the consolidation of the Schools for the Deaf to the Resource Support Program. These positions would be allocated to preschool programs in LEAs where there is no teacher of the deaf or a teacher with less than five years of experience. These teachers would be trained, evaluated, and paid by RSP. LEAs would request teachers for preschool classrooms for deaf and hard of hearing students and would receive a teacher for a year as long as they provided a teacher from their own LEA to be the co-teacher for the classroom. The teacher from the LEA would attend the free trainings on language development provided by the consortium between OES, DPI, BEGINNINGS, Project EAR at ECU, and the CASTLE Program at UNC and be mentored by the RSP teacher assigned to the classroom as they co-taught the class. This would enable the LEA to build capacity and allow deaf and hard of hearing preschool students the opportunity to continue their communication and language skill development at a rate that is appropriate for them; it also eliminates the "down time" or gap created when those children do not have the consistent exposure to a teacher skilled in language development during that critical time in a child's development and acquisition of language and vocabulary. Based on the research about language development, these students would make gains that could move them toward the language levels of their typically developing peers by the time that they reach kindergarten.

This would require funding for the positions from the consolidation of the residential schools to continue; however, savings would be realized over time in the cost to educate these students and their decreased need for special education services as they grow and develop.

### **Resource Support Services for Children who are Deaf and Hard of Hearing (RSP)**

Formed in 2002, the Resource Support Program began as an effort to build capacity in LEAs to serve deaf and hard of hearing preschool children. Through free workshops, individual consultation and mentoring, student evaluation and observation, consultation with parents, and assistance for Speech Language Pathologists and Audiologists, the Resource Support Program has been assisting parents and professionals in LEAs across the state. Services are requested in writing by the Exceptional Children's Director of the LEA after receiving a request from a teacher, speech language pathologist, audiologist or parent. Currently, this program employs a speech language lead worker as the coordinator, four teachers of the deaf, and a part-time audiologist. Since July 2009, they have provided services in 71 LEAs; more requests come in weekly. Teachers are assigned based on proximity of location to save travel costs and expertise in the area of need expressed by the LEA request. Staff has a wide variety of experiences: public school, early intervention, preschool, private schools, university cochlear implant programs, residential schools for the deaf, and private practice. Staff also supports spoken language and manual communication modes.

RSP staff collaborates with the consultant for deaf and hard of hearing education at the Department of Public Instruction as well as Project EAR, BEGINNINGS, and the Western NC School for the Deaf to ensure that duplication of services is not occurring. Currently, as numbers from each of those programs indicate, there is more need than resources across the state. It should be noted that many school systems also use private providers to deliver services to students in their LEA at a high cost to the LEA. Providing services free of charge to LEAs ensures that students have more opportunity to access appropriate services.

Enabling RSP to grow and work with LEAs to provide services to three to five year olds who are deaf and hard of hearing will create fewer deficits in language as these students enter kindergarten. There is already an established relationship with the LEAs and a strong sense of what services different LEAs need. This team has an established reputation across the state, and though there is not a waiting list, it is having trouble meeting the needs of all LEAs who need services due to the low number of staff. This program is extremely cost efficient; however, more staff and the budget to establish them and support them is needed as demand is outpacing staff caseloads.

### **Governor Morehead Preschool (GMP)**

The Governor Morehead Preschool provides a host of services to blind and visually impaired children ages birth to five, their families, and the professionals who serve them throughout the state. One of the four fastest growing programs in OES, GMP has served no less than 500 children per year since October, 2001. In fact, the expectation is that they will again exceed the enrollment of the previous year by almost 100 children again in the 2009-2010 year. The enrollment as of December 31, 2009, was 726 compared to 811 for the 2008-2009 year.

It should be noted that this program serves three to five year olds while early intervention for children who are deaf and hard of hearing from OES must stop at age three. As a consequence, the enrollment at the Governor Morehead School has continued to decline presumably because children and their families gain so many skills early in life that they are much more independent and more aware of the services available in their local communities as the students age. Typically, only students with multiple impairments, of which vision is a third or fourth consideration, need residential education on a full-time basis. More often than not, the skills learned prior to age five provide a firm foundation for the adaptation and coping skills that these children will utilize for the rest of their lives.

Itinerant teachers of the visually impaired, social workers, orientation and mobility specialists, and other specialized staff provide adaptive skill development for children in their homes, preschools, and daycares across the state. Housed largely in home offices, leases for office space are being discontinued to save funds, these staff provide functional skill development, pre-Braille, pre-Orientation and Mobility, adaptive play, use of low vision devices, and parent education to children and families on their caseloads. In spite of increasing numbers, this program lost two positions in the 2009-2010 budget. This caused caseloads to continue to grow; these staff cannot continue to provide high quality services to children and their families with caseloads that only allow visits once per week or once every two weeks. Distance, particularly in rural areas, creates an obstacle because the further a teacher has to drive to reach a child, the less time she/he has to serve children. By restoring the two positions lost and providing five more positions, caseloads and service areas could be adjusted to reduce driving time and increase the service delivery times. Funding would also be needed for state cars and technology to support these teachers in their home offices. This is still a more fiscally responsible option than leasing spaces across the state. OES continues to work with other state facilities to find spaces for these teachers to store larger equipment needed in the field such as light boxes and Braille embossers.

### **Governor Morehead School Outreach Services for Children who are Blind and Visually Impaired (GMO)**

Currently, the Governor Morehead Outreach program provides itinerant and on campus services to blind and visually impaired children, their parents, and the professionals who serve them across the state. Since May, 2002, the number of students directly served has grown from 293 to 413 in 2008-2009. This number was slightly down from previous years as Outreach has been experiencing some changes in leadership

models as the Outreach Director and GMS Principal have become a combined position and some veteran staff have left the program. In 2008-2009, 89 LEAs received services and more than 3,900 personal contacts were made for either consultations on previously seen students, teachers with questions or concerns, parents with needs for assistance, or consultations and training for professionals.

GMS Outreach has been analyzing trends in services needed by LEAs for students who are blind and visually impaired as well as its service delivery options for the past several years to determine how it can best serve these students and the professionals who serve them. By providing more direct student services, mentoring and capacity building for teachers of the visually impaired and regular classroom teachers, orientation and mobility and adaptive physical education, and other assessments, the program can meet more needs of students and the professionals who serve them. This will allow more students to stay in their home LEA and learn more about the services available in their communities. It will also ease students' transitions after high school graduation as their transition caseloads with the Division of Services for the Blind will already rest with a home counselor in their area. An emphasis on assistive technology and use of virtual classrooms will provide students access to their blind and visually impaired peers as well as prepare them for employment in the twenty-first century. This is a model that is being used by most of the schools for the blind across the country as student residential populations dwindle.

As the number of students on the GMS campus has declined, staff from the K-12 program has been reassigned to the Outreach program. Training is in development now to ensure that those are retooled, mentored, and coached as they begin serving students outside of the traditional classroom.

#### **Governor Morehead School for the Blind (GMS)**

As of December, 2009, GMS is serving 54 students in Kindergarten through twelfth grade. Of these, 18 are day students and 35 are residential. The high school program currently serves 30 students. Of those, only 11 are students who are projected to earn a diploma rather than a certificate. Currently, national data shows that about 65% of students who are blind or visually impaired have additional disabilities. Frequently, their vision loss is not their primary disability.

While GMS is required to participate in the ABCs of Public Education to measure accountability, this is not an accurate or appropriate measure of students' progress. Many of these students are so far behind academically or in their acquisition of Braille as a reading medium that they are unable to read the questions on the test. Therefore, the test really does not measure what those students have learned. In spite of the fact that GMS is classified an alternative school for the purposes of calculating whether or not it has met growth in the ABCs, GMS did not meet its growth goals in 2008-2009.

Currently, GMS has an NC Information Highway room on campus that is provided through a partnership with North Carolina Central University. This guarantees staff and students access to other schools in the DHHS LEA as well as the opportunity to collaborate with other students and staff across the state. In addition, GMS remains the center of expertise for all assistive technology related to vision loss for students in the state.

The leadership at GMS has been proactive in creating a new plan for service delivery for the comprehensive program: K-12 and Outreach. This plan will provide a wider array of services for blind and visually impaired students and the professionals who serve them across the state by providing more services through an Outreach model. This is a trend across the country as fewer students attend residential schools for the blind.

### **NC Schools for the Deaf (NCSDs)**

Both NC Schools for the Deaf, Eastern in Wilson and Western in Morganton, continue to experience declining enrollment. As of December, 2009, ENCSD had 97 students; there were 91 at WNCSD. Compared to the same month in 2008, ENCSD had 103 students and WNCSD had 95.

While both schools met expected growth in the ABCs of Public Education in 2008-2009, most students participate in the Extend 2 assessment which tests students off grade level. In addition, both schools are classified as alternative schools for the ABCs calculation of whether or not they meet or exceed expected growth. This formula incorporates targets chosen by the school rather than just test scores. Another factor that renders the test scores less than statistically valid and/or reliable is the small number of students being tested. A student who achieves a Level III on any given test can make overall scores for the school highly inflated. Individual scores, which are not valid or reliable in interpreting the test scores, can skew the composite results for the school, showing growth where little of the growth measured by those tests actually occurred. Individual scale scores are somewhat more valid to show growth for students from year to year. However, the fact remains that students who have the language levels of preschoolers cannot read the tests or learn the NC Standard Course of Study at grade level. The language levels of students at the schools are so far behind their typically developing peers that they are largely unable to read the tests on their own. They are allowed the "read aloud" option for some tests as are other students but that means that the test is provided to them in ASL which does not provide a one-to-one correspondence between the words in the test questions.

Toward this end, both schools are involved in projects aimed at increasing the language levels of students in the K-5 program. WNCSD in Morganton is in the final year of the federally funded NC SIP II reading grant which is using the Wilson Reading Program along with Visual Phonics to increase students' language levels. However, results currently show that students are not yet reading above a first grade level for comprehension. Therefore, WNCSD is expanding this work to its entire staff to focus all staff as teachers of reading. This involves an extensive teacher development program as well as national and state research to develop more accurate and valid language assessments for profoundly deaf students who use ASL as their primary communication modality. ENCSD in Wilson has begun working with two teachers from the Resource Support Program to supplement its current language development program with instruction for teachers in typical language development, language assessments on each K-5 student, focused language instruction for the kindergarten class, and teaching targeted to the language gaps identified for each student. No results are currently available for this program which just started in October, 2009. ENCSD has also invested in new FM systems to provide better amplification for students who benefit from this. Both schools are also working with the three cochlear implant hospitals across the state to provide mapping services and teacher education about implants on the school campus.

Technology is also playing a major part in the educational opportunities for students at the Schools for the Deaf as well as in the public schools. At ENCSD, all K-12 classrooms are equipped with Smart Boards and at least two computers. ENCSD has embarked on a 1:1 laptop initiative, similar to those used across the state, aimed at increasing students' level of engagement in instruction and immersion in 21<sup>st</sup> century technology. Residential life training has increased to provide students with adults trained in technology in the afternoons and evenings. The NC Information Highway room is in the process of being recertified by the Department of Public Instruction. Not only will this increase access to professional development for staff but it will enable the Schools for the Deaf and Governor Morehead School to collaborate on instructional projects among themselves and with other schools across the state. At WNCSD, three new computer labs



are available in the high school in addition to at least two computers in each classroom. WNCSD also has access to the NC Information Highway classroom at Western Piedmont Community College.

### **Local Education Agencies (LEAs)**

Local Education Agencies (LEAs) continue to improve the variety and quality of services to students with sensory impairments. The reauthorization of IDEA in 2004 gave parents more input in the IEP process, and more families understand how to be effective advocates for their children. As more students with disabilities have been mainstreamed due to the emphasis in the reauthorization on Least Restrictive Environment (LRE), regular classroom teachers have built their skills in planning, instructing, and assessing exceptional children. More LEAs are providing resource teachers in the regular classroom and co-teaching models to ensure that the small number of students with low incidence disabilities receive high quality instruction.

However, not all LEAs are able to provide licensed teachers of the deaf and hard of hearing or teachers of the visually impaired. This is especially difficult in the more rural areas of the state where the tax base cannot support salaries of licensed teachers or full time related services personnel for hearing and visual impaired students. Not only is salary an issue but recruitment and retention of these personnel to rural areas has been a constant challenge (See Appendix I).

### **Recommendations**

1. Based on the findings and needs assessments, it is imperative that the state operate a different level and intensity of residential services for students who are deaf, hard of hearing, blind, visually impaired, and deaf-blind. There are basically four options to be considered which would address the changing face of residential students in the 21<sup>st</sup> century: a consolidated residential school with two consolidated day programs; a consolidated residential school; three consolidated schools with enhanced services, and two consolidated residential schools. In order to effect change in the continuum of services and make the changes to the service delivery options without leaving students underserved, the earliest any of these models could be implemented would be January, 2011.
2. The residential schools will continue to participate in the existing state accountability program, the ABCs, as an alternative school (the current practice). The Department of Public Instruction in collaboration with the Department of Health and Human Services will work to identify additional measures and targets specific to these schools in order to provide a more comprehensive picture of their performance levels.
3. Each of the local school systems in North Carolina referring students to a state operated program, in conjunction with appropriate staff working in these programs, should work more closely to ensure that students' placement is revisited at the yearly IEP meeting. This ensures that student transitions into and out of state operated schools and programs as needed will meet the unique educational needs of each individual student.
4. Outreach and/or capacity building efforts to serve students with vision and hearing impairments should be increased significantly to support all other deaf, hard of hearing, deaf-blind, blind, and visually impaired students attending schools in their local education agency (LEA). Outreach efforts to build capacity in LEAs to serve these populations are provided by identified staff in DHHS. It is anticipated that some of the savings realized by the restructuring of residential services will be leveraged to support expanded efforts to foster the development of capacity in LEAs through

professional development, mentoring and coaching, demonstration teaching, and some direct services.

5. The Resource Support Program, which provides services to professionals and families of children who are deaf and hard of hearing, will be increased to provide teachers to LEAs to ensure that deaf and hard of hearing children ages 3-5 receive the highest quality language and communication skill development thus increasing the opportunity for these children to develop language at a pace more aligned to that of their hearing peers.
6. A distance technology program, currently under development, will be offered as a component within the proposed residential organizational structure. The program will be managed in collaboration with the North Carolina Virtual Public School. As an option, the program can be employed across the state to reduce isolation for vision and hearing impaired students and the professionals who serve them and to enhance programming for children with sensory disabilities who would not have attended residential programming in any case. This would ensure that students who use American Sign Language as their primary communication modality would receive instruction from a teacher dually licensed in a specific content area as well as in the education of exceptional children. It may also serve to provide direct instruction for students who have never received instruction directly from their teacher but always through an interpreter.
7. Based on the current governing arrangement for the state residential schools, transition to the new model of service delivery and the operation of the residential, day, and outreach programs for vision and hearing impaired students will continue to occur organizationally within the Department of Health and Human Services. Quarterly reports will be made to the State Board of Education and the State Superintendent of Public Instruction.
8. Collaborative programs will continue to be established between smaller, economically challenged LEAs which will enable them to pool their resources to serve students with visual and hearing impairments more efficiently, providing more options for services, better access to hard to recruit employees, and student groups large enough to provide positive peer interactions. The Department of Health and Human Services would be able to provide resources to these collaboratives as an equal partner with DPI and the LEAs.
9. A differentiated salary schedule needs to be created for teachers in the Department of Health and Human Services. This would allow residential and outreach programs as well as the schools in the Division of State Operated Healthcare Facilities to compete more competitively with the LEAs when recruiting and retaining highly qualified teachers. Without access to local funds, DHHS cannot offer teachers the incentives that LEAs may offer. This could be accomplished not only through an alternative salary funding formula, but also by altering applicable policies and procedures through the Office of State Personnel that regulates how teachers in the employ of the state are paid.
10. If one or more of the existing residential schools are discontinued in the future, consideration needs to be given to how the property no longer in use could best serve the state. The location of the facility in Raleigh make it a prime location for additional office space to carry out the functions of state government. In Wilson and Burke counties, proximity to the community colleges would allow for collaborative use of property between the community college system and DHHS to house other state agencies. Other uses may include: offer classes for adults with sensory disabilities to

increase their marketability in the 21<sup>st</sup> century workplace; house itinerant staff and their equipment; and provide additional classroom space for professional development for public school staff. Collaborative classrooms could also be set up in these spaces as well as use for localized instructional materials resource centers which would be managed by DPI and DHHS. It should also be noted that having residential space near community colleges would enable the Division of Services for the Blind and the Division of Services for the Deaf and Hard of Hearing to create rehabilitative residential programs for adult clients. These facilities could also be used for the purpose of establishing public/private partnerships to create jobs in the communities where they are located. A recent comment made by a reader in the Morganton News Herald suggested using the Morganton campus to expand the UNC system thereby creating an addition to the UNC school.

DRAFT

## REDESIGNED MODEL OF SERVICES

Over the last two decades, a variety of studies have been conducted regarding how the state of North Carolina should proceed in providing educational services to children with sensory disabilities. Considering factors related to high operational costs and declining enrollments, most of these studies have focused on the operation of the state residential schools. Essentially, recommendations stemming from these studies identified ways the state could reduce operational costs while at the same time improving educational outcomes for children served in these facilities.

In 2009 the General Assembly drafted several appropriations bills, all but one of which made substantial cuts and/or structural changes to the two NC Schools for the Deaf and the Governor Morehead School for the Blind. In the chaptered bill, Session Law 2009-451, the Department of Health and Human Services, in consultation with the Department of Public Instruction, was directed to “develop and recommend a plan to achieve efficiencies of scale and ensure appropriate education of students with visual and hearing impairments.”

Since spring, 2009, the leadership of OES (the central office and residential school leadership) has been working on alternative models that involve programmatic consolidation which will improve efficiencies in the delivery of educational services for hearing and visually impaired students across NC. This effort began as an exercise among the central office leadership for the Secretary and has evolved into a work group of central office and school and program leadership. In addition, the team at Governor Morehead School has been working on a completely new model for service delivery options for blind and visually impaired students across the state. The one consensus among all OES leadership (the central office and residential school leadership as taken by a vote) is that the current model of three residential schools is neither efficient nor fiscally responsible; it also does not provide enough opportunities for students with low incidence disabilities in a state with such disparate resources. In order to meet the needs of each child as an individual, it is critical that the continuum of services be expanded thus creating more options to meet those unique needs. Because of the advances in the fields of technology and medicine, children born in NC today will redefine what it means to be deaf, hard of hearing, blind, visually impaired, and deaf-blind; therefore, it is critical that we redefine the service delivery options for these children, their families, and the professionals who serve them. Providing new and more varied options will enable today's children to be active participants in society as they reach adulthood in the next 20 years. Four service delivery options are presented for consideration.

### **Option 1: One Consolidated Residential School and Two Day Programs**

This model provides for one residential school, centrally located, and able to accommodate 150 deaf, hard of hearing, blind, visually impaired, and deaf-blind students. These students would certainly attend classes separately and most likely live separately in the residential dormitories. The model would also include day programs at each of the other two schools with a capacity to serve about 50 deaf, hard of hearing, deaf blind, blind, and visually impaired students. Again, students would attend classes separately. The two day programs would be programs which could be phased out over time based on demand. Overall, this model emphasizes multiple options with fluidity and flexibility so that students would not spend their entire school career at a residential school.

This model would also include an emphasis on three features: a diagnostic and treatment clinic at the consolidated residential school which would serve the entire state; an increased emphasis in all three programs on career and technical education, and an additional language development component for

students who are deaf and hard of hearing on all three campuses. The diagnostic and treatment clinic would be available to all students with sensory impairments across the state so that they could have access to a concentrated cadre of professions who could accurately assess and prescribe therapies which would increase their access to the general curriculum either in the DHHS system or in any other LEA. This clinic component would include five occupational therapists, five physical therapists, two mental health professionals, a developmental psychologist, four speech language pathologists, two audiologists, and one school psychologist. Supplemented by educational assessments completed by teachers in the comprehensive school and/or in the VI or HI Outreach programs, this clinic would provide comprehensive services in one centralized location to ensure that students, their families, and the professionals who serve them have a variety of clinical and educational data available to them when IEP teams convene to make decisions regarding best educational programming for students.

This change reflects a revolving door model where students are enrolled in the DHHS school programs for shorter periods of time to receive intense services which is more in line with the way other DHHS schools currently serve students. The model would provide one consolidated residential school with multiple day and residential options and two schools with day programming which would focus on the Expanded Core Curriculum for students who are blind or visually impaired and the development of communication skills and language for students who are deaf or hard of hearing against the backdrop of the NC Standard Course of Study. Upper grades middle school and high school students in the Future Ready Diploma Pathway would be mainstreamed into schools in Burke, Wilson, and Wake counties so that they could access the general curriculum with their non-disabled peers and learn how to advocate for themselves in the mainstream setting. In the day programs, they would have access to professionals from their day school to enhance their mainstreamed experience. In the comprehensive residential school, these students would have access to the additional life skills training available in the residential program. Students would also have access to the NC Virtual Public School to enhance their academic course selections.

Students at all three locations would have access to a full array of related service professionals such as a speech language pathologist, audiologist, orientation and mobility instructors, Braillists, teachers specializing in Nemeth Code, social workers, counselors, nurses, and any other related service professionals specified on their IEP. Teachers of the deaf-blind and intervenors would also be available to accommodate the needs of students who are deaf-blind. Elementary and middle school students would focus on assistive technology; their disability-specific skills with some content instruction to help them transition smoothly in and out of their public school, and social skill development. High school students would have increased access to career and technical education courses, job readiness training, life management skills, and more advanced assistive technologies. This would prepare them more for the world of work in the 21<sup>st</sup> century to ensure their ability to participate fully in society. This enhanced focus would be available in the comprehensive residential school as well as in the two day programs. Staffing for this focus would include five career and technical educators, two job coaches, and one community employment specialist on each campus. The schools would also aggressively pursue relationships with the local community colleges to increase students' access to upper level career and technical education courses and certificate programs. This may even include the community college teaching some of its courses on the school campuses and utilizing some of the unique equipment and classrooms on the school campuses.

An additional enhancement on all three campuses would be a concentrated language and communication skill development program. Staffed by five teachers and two teacher assistants, this program would provide two basic services: intense language development for younger children who need to catch up to their peers

and an opportunity for older students with little or no language to have intense language development. These language lessons would be taught against the backdrop of the NC Standard Course of Study, enabling students to learn the vocabulary of the content area while enhancing their overall language skills. These students will receive this instruction both in their regular classrooms and through one-on-one pull-out services. These teachers would collaborate closely with the Speech Language Pathologist on campus as well as depend on the diagnostic work done in the clinical setting to develop individual language programming for every student.

The DHHS school system would continue to exist, headed by a superintendent, to ensure that appropriate educational functions would still be carried out for the one residential school, the two day programs, and the other educational programs in DHHS. The current OES central office staff would be modified with some positions eliminated to employ a Director of Instructional Services, a Business/Finance Officer and three other business staff, a Human Resources Manager and two other HR staff, a Licensure and Support Services Coordinator, the Director of the Early Intervention Program for Children who are Deaf or Hard of Hearing, and the Director of the Governor Morehead Preschool Program. The Resource Support and the Visually Impaired Outreach Programs would report to the Director of Instructional Services who would also manage curriculum and any accountability needs as well as the collaboration with the LEAs. The superintendent would gain the direct line responsibility for the educational programs currently in the Division of Mental Health, including all business and HR functions, and maintain its dotted line relationship with the educators in the developmental disabilities centers. The existing conceptual model for education programming in DHHS is in Appendix G and the recommended new schematic for educational programming for the Department is in Appendix H.

The one residential school would be managed by a school director, principal, and student services coordinator with an ombudsman and an exceptional children's director. The school would employ about 146 personnel including teachers, educational development assistants, residential life staff, related services staff, child nutrition workers, and some housekeeping staff. The two day programs would be staffed similarly with about 100 staff divided between the two sites.

The number of staff in the VI and HI outreach programs would be increased to about 20 staff per program to ensure that services are available across the state to deaf, hard of hearing, deaf-blind, blind, and visually impaired students and the professionals who serve them. By increasing outreach efforts, more LEAs can begin to build capacity in their systems to serve their students locally allowing more children to use assistive technology, access local consortia programs set up by LEAs, spend more time with their families, and rely more on locally provided resources to create a smooth transition from high school to independent life in their home community.

Overall, these staff changes would represent a 35% percent (based on the changes we are proposing to have day programs as well as 3-5 year old teachers in RSP) decrease from the current staffing levels of OES. This does not include the calculation of the positions that would be added as a result of the transfer of the educational programming from the Division of Mental Health.

## **Analysis of Option One: One Consolidated Residential School and Two Day Programs**

### **Potential Benefits**

- This model represents a substantial cost savings for DHHS in the long run.

- Fewer staff employed overall in OES
  - Maintenance of one campus with limited maintenance costs for the two day programs
- More concise programming can be provided for children who are deaf, hard of hearing, deaf blind, blind, and visually impaired since residential services will be concentrated in one location.
- The two day programs would provide partnerships opportunities with LEAs to create a critical mass of students to ensure opportunities for social growth and development in addition to interactions with non-disabled peers.
- The model is sustainable over time since it would not require the closure of more programs in the future.
- With all residential programming at one school, better budget management and oversight will occur.
- More students will be served in their LEA through the efforts of the Resource Support and Visually Impaired Outreach Programs.
- Fewer students and staff on a single campus will lead to fewer incidents, accidents, and workman's compensation claims.
- Staff can obtain more specialized training since their roles will be better defined.
- Moving to one state residential school represents a national trend and is aligned with the models in adjoining states (see Appendix E).
- Agencies on the NCSO campus in Morganton or the GMS campus would not have to move and could potentially expand.
- A greater emphasis on technology and preparation for life as a productive citizen in the global economy can be provided.
- Overall, the model retains more flexibility so that programming can match trends in population, medical advances, education of these populations, and the needs of children.

### Concerns

- The two schools to convert to day programs will need to be identified.
- Implementation of the new model represents a complete structural shift, not incremental change. However, we cannot afford to waste students' time or state resources. The Department of Health and Human Services through the Office of Education Services is committed to changing the way services are delivered in the state to improve the efficiency, effectiveness, quality, and variety to students who are deaf, hard of hearing, deaf-blind, blind, and visually impaired.
- Collaboration between DPI and DHHS will need to strengthen to make this process work smoothly. In addition, DPI will have to work closely with the LEAs to ensure that they support the new model, particularly through the development of programming for these students.
- It will take at least a year to assist LEAs in creating services to ensure a smooth transition for students. This will also mean that central office staff as well as school staff will spend the majority of their time focused on the planning for the new model, transitioning children and staff, and working with staff to keep them focused on educating children in the current model.
- Cost savings of the total budgets of two schools would not be immediately realized. There will be a need for some transitional costs such as those listed below.
  - RIF packages for employees who would not be employed in the new model
  - VI and HI outreach programs would need to have an increase in staff
  - Possible legal costs
  - Relocation of some agencies; moving costs for OES
- Travel distances for some residential students may actually increase; however, based on a review of students and their home LEAs, a low number of students and families would be impacted.

- Some students, again very few, would possibly go to school further away from their family and community than they do now.
- By shifting to a one residential school model, the employment opportunities for deaf, hard of hearing, and visually impaired staff may be impacted. However, there would still be opportunities for employment in the day programs.
- Advocacy and constituent groups for these disability areas will disagree with the shift in service provision. Working with these groups to help involve them in the new model and to see its advantages will take a significant amount of time from DHHS and central office staff.
- Because of the fluidity of the model and reduced student numbers, a single NC residential school may not qualify to participate in athletic events hosted by deaf or blind entities.

### Implications of Option One

- For Students
  - More students will be able to be served in the new model since it is fluid and operates more like a revolving door.
  - Students will learn skills that can be applied regardless of where they live or where they go to school.
  - Students will have better outcomes and be more prepared for effective participation in the global economy.
  - Transitions to new schools and settings are always difficult for students, especially those with disabilities.
  - Contact with families and communities will be even more difficult due to distance for the few students who may have to travel further.
- For Families
  - Families will encounter less confusion when DHHS has a single portal for all services.
  - Families will benefit from a stronger focus on parent education which is a strong component of the new model.
  - Some families will have difficulty interacting with school staff face to face because of the distance. This is not entirely new; however, this should impact fewer families than the current situation.
- For Staff
  - Opportunities for jobs for deaf, hard of hearing, and visually impaired staff are likely to increase in the public schools, especially in the counties currently surrounding the two Schools for the Deaf. This is due largely to the fact that an average of 22% percent of the students at NCSD live in Burke County and 9% of the students at ENCSD live in Wilson County. About 22% of students at GMS live in Wake County.
  - Some staff at all three schools will face a Reduction in Force (RIF). This may present the greatest problem for staff in Wilson County as those in Burke and Wake Counties are near other state facilities and programs where employment may be more readily available.
  - Staff in the new model will receive training to update their skills and build their capacity to focus on disability specific needs. Other staff will receive training on working with LEAs and the collaboratives that LEAs are expected to form to better serve deaf, hard of hearing, deaf blind, blind, and visually impaired students.
- For LEAs
  - Creating programming to transition students successfully back to the LEA will be a challenge. However, the work of the Resource Support Program and the Visually Impaired



Outreach Program will make this easier as the staff in those programs will grow and continue their work building capacity to serve these student populations in the future.

- The work of the Free Appropriate Public Education (FAPE) Task Force has already laid the ground work for collaboratives among LEAs to ensure that there are more options in the continuum of services for children than what currently exists.
- LEAs will have the opportunity to employ some of the teachers who will be displaced from the two NC Schools for the Deaf and Governor Morehead School to work with the children who will be returning to the LEAs. This may be the first time ever that they will actually have a pool of applicants for positions as teachers of the deaf, hard of hearing, deaf blind, blind, and visually impaired.
- Accepting the responsibility for transportation for students when they are attending the new model school will be a major change for LEAs. Collaboration between DPI and the LEAs and OES will ensure that the funding that OES currently uses for transportation can be used to help LEAs fund attendance of students at the new model school.

### **Option Two: One Consolidated Residential School**

This model would provide one centrally located comprehensive residential school for students who are deaf, hard of hearing, blind, visually impaired, and deaf-blind. It would contain the diagnostic and treatment clinic for the entire state as well as a K-12 residential school. The residential school would maintain the same attributes described in the consolidated residential school in the first model option, including the enhanced focus on career and technical education, language development, and mainstreaming for upper grade middle school and high school students in the Future Ready Diploma Pathway. The capacity would still be for 150 students with the DHHS Superintendent as the head of the school, a principal, and a student services coordinator with an ombudsman and an exceptional children's director. The school would employ about 146 personnel including teachers, educational development assistants, residential life staff, related services staff, child nutrition workers, and some housekeeping staff.

The DHHS school system would continue to exist, headed by an educational executive, to ensure that appropriate educational functions would still be carried out for the one residential school and the other educational programs in DHHS. The current OES central office staff would be modified with some positions eliminated to employ a Director of Instructional Services, a Business/Finance Officer and three other business staff, a Human Resources Manager and two other HR staff, a Licensure and Support Services Coordinator, the Director of the Early Intervention Program for Children who are Deaf or Hard of Hearing, and the Director of the Governor Morehead Preschool Program. The Resource Support and the Visually Impaired Outreach Programs would report to the Director of Instructional Services who would also manage curriculum and any accountability needs as well as the collaboration with the LEAs. The superintendent would gain the direct line responsibility for the educational programs currently in the Division of Mental Health, including all business and HR functions, and maintain its dotted line relationship with the educators in the developmental disabilities centers. The existing conceptual model for education programming in DHHS is in Appendix G and the recommended new schematic for educational programming for the Department is in Appendix I.

### **Analysis of Option Two: One Consolidated Residential School**

#### **Potential Benefits**

- This model represents a substantial cost savings for DHHS in the long run.

- Fewer staff employed overall in OES
  - Maintenance of one campus
- More concise programming can be provided for children who are deaf, hard of hearing, deaf blind, blind, and visually impaired since residential services will be concentrated in one location.
- The model is sustainable over time since it would not require the closure of more programs in the future.
- With all residential programming at one school, better budget management and oversight will occur.
- The opportunity for private and civic organizations to provide donations, etc. to one location will exist thus maximizing their donations.
- A single portal for all DHHS educational services is created.
- More students will be served in their LEA through the efforts of the Resource Support and Visually Impaired Outreach Programs.
- Fewer students and staff on a single campus will lead to fewer incidents, accidents, and workman's compensation claims.
- Staff can obtain more specialized training since their roles will be better defined.
- Moving to one state residential school represents a national trend and is aligned with the models in adjoining states (see Appendix E).
- Agencies on the NCSO campus in Morganton or the GMS campus would not have to move and could potentially expand.
- A greater emphasis on technology and preparation for life as a productive citizen in the global economy can be provided.
- Overall, the model retains more flexibility so that programming can match trends in population, medical advances, education of these populations, and the needs of children.

### Concerns

- The two residential schools to be discontinued will need to be identified.
- Implementation of the new model represents a complete structural shift, not incremental change. However, we cannot afford to waste students' time or state resources. The Department of Health and Human Services through the Office of Education Services is committed to changing the way services are delivered in the state to improve the efficiency, effectiveness, quality, and variety to students who are deaf, hard of hearing, deaf-blind, blind, and visually impaired.
- Collaboration between DPI and DHHS will need to strengthen to make this process work smoothly. In addition, DPI will have to work closely with the LEAs to ensure that they support the new model, particularly through the development of programming for these students.
- It will take at least a year to assist LEAs in creating services to ensure a smooth transition for students. This will also mean that central office staff as well as school staff will spend the majority of their time focused on the planning for the new model, transitioning children and staff, and working with staff to keep them focused on educating children in the current model.
- Cost savings of the total budgets of two schools would not be immediately realized. There will be a need for some transitional costs such as those listed below.
  - RIF packages for employees who would not be employed in the new model
  - VI and HI outreach programs would need to have an increase in staff
  - Possible legal costs
  - Relocation of some agencies; moving costs for OES
- Student travel distances for some residential students may actually increase; however, based on a review of students and their home LEAs, a low number of students and families would be impacted.

- Some students, again very few, would possibly go to school further away from their family and community than they do now.
- By shifting to a one residential school model, the employment opportunities for deaf, hard of hearing, and visually impaired staff may be impacted.
- Advocacy and constituent groups for these disability areas will disagree with the shift in service provision. Working with these groups to help involve them in the new model and to see its advantages will take a significant amount of time from DHHS and central office staff.
- Because of the fluidity of the model and reduced student numbers, a single NC residential school may not qualify to participate in athletic events hosted by deaf or blind entities.

### Implications of Option Two

- For Students
  - More students will be able to be served in the new model since it is fluid and operates more like a revolving door.
  - Students will learn skills that can be applied regardless of where they live or where they go to school.
  - Students will have better outcomes and be more prepared for effective participation in the global economy.
  - Transitions to new schools and settings are always difficult for students, especially those with disabilities.
  - Contact with families and communities will be even more difficult due to distance for the few students who may have to travel further.
- For Families
  - Families will encounter less confusion when DHHS has a single portal for all services.
  - Families will benefit from a stronger focus on parent education which is a strong component of the new model.
  - Some families will have difficulty interacting with school staff face to face because of the distance. This is not entirely new; however, this should impact fewer families than the current situation.
- For Staff
  - Opportunities for jobs for deaf, hard of hearing, and visually impaired staff are likely to increase in the public schools, especially in the counties currently surrounding the two Schools for the Deaf. This is due largely to the fact that an average of 22% percent of the students at NCSD live in Burke County and 9% of the students at ENCSD live in Wilson County. About 22% of students at GMS live in Wake County.
  - Some staff at all three schools will face a Reduction in Force (RIF). This may present the greatest problem for staff in Wilson County as those in Burke and Wake Counties are near other state facilities and programs where employment may be more readily available.
  - Staff in the new model will receive training to update their skills and build their capacity to focus on disability specific needs. Other staff will receive training on working with LEAs and the collaboratives that LEAs are expected to form to better serve deaf, hard of hearing, deaf blind, blind, and visually impaired students.
- For LEAs
  - Creating programming to transition students successfully back to the LEA will be a challenge. However, the work of the Resource Support Program and the Visually Impaired

- Outreach Program will make this easier as the staff in those programs will grow and continue their work building capacity to serve these student populations in the future.
- The work of the Free Appropriate Public Education (FAPE) Task Force has already laid the ground work for collaboratives among LEAs to ensure that there are more options in the continuum of services for children than what currently exists.
  - LEAs will have the opportunity to employ some of the teachers who will be displaced from the two NC Schools for the Deaf and Governor Morehead School to work with the children who will be returning to the LEAs. This may be the first time ever that they will actually have a pool of applicants for positions as teachers of the deaf, hard of hearing, deaf blind, blind, and visually impaired.
  - Accepting the responsibility for transportation for students when they are attending the new model school will be a major change for LEAs. Collaboration between DPI and the LEAs and OES will ensure that the funding that OES currently uses for transportation can be used to help LEAs fund attendance of students at the new model school.

### **Option Three: Enhanced Services**

This model builds on the three existing residential schools and adds new focus areas that, based on the research about the education and career pursuits of persons with sensory disabilities, would provide the children in the residential schools with more supports and more options for successful lives in the 21<sup>st</sup> century. All three schools would remain open offering day and residential education. Each school would gain the diagnostic and treatment clinic described in Option 1 allowing those services to be accessed more easily from all areas of the state. With capacity at each school at 120, schools would experience some reduced staffing in some areas and increased staffing in others. For example, each school would need to increase its professional staff to add an occupational therapist, a physical therapist, two mental health professionals, a developmental psychologist, three speech language pathologists, and one audiologist. Schools would also add five more career and technical education teachers, two job coaches, and one community employment specialist. To ensure adequate access to language and communication skill development for students who are severely delayed, the schools for the deaf would add five teachers and two teacher assistants. Each school would also have two teachers of the deaf-blind and two deaf-blind intervenors.

Students in the seventh and eighth grades as well as high school students in the Future Ready Diploma Pathway would be mainstreamed in the local public schools and/or educated using the NC Virtual Public School to access higher level academics with their non-disabled peers. This may reduce the need for some of the academic high school staff.

The schools would also increase their emphasis on career and technical education through the addition of five teachers in that field as well as two more job coaches who would need to work more with students after school hours as they are working in the community. The schools would also gain one community employment specialist to help develop job opportunities in the community; this person would also interface with Vocational Rehabilitation and the Division of Services for the Blind to communicate with counselors in those agencies as students transition to the caseloads of those divisions.

Finally, the two schools for the deaf would refocus their efforts on students' language development. By adding five additional teachers trained in language development and two teacher assistants, the schools would be able to create more flexibility in their daily schedules to accommodate more opportunities for directed language learning during and after the school day. These staff may be working with students in

Kindergarten through fifth grades to help build early language or they may be doing one-on-one instruction with older students from other countries with no language.

The DHHS school system would continue to exist, headed by a superintendent, to ensure that appropriate educational functions would still be carried out for all three residential schools and the other educational programs in DHHS. The current OES central office staff would be maintained to provide the full array of central office services to the three enhanced schools as well as the DHHS school system. In addition, the DHHS superintendent would gain the direct line responsibility for the educational programs currently in the Division of Mental Health, including all business and HR functions, and maintain its dotted line relationship with the educators in the developmental disabilities centers. The existing conceptual model for education programming in DHHS is in Appendix G and the recommended new schematic for educational programming for the Department is in Appendix J.

### **Analysis of Option Three: Enhanced Services**

#### **Potential Benefits**

- Travel will be no different than it is now since all three schools would remain open.
- Students will be able to receive more services specifically tailored to their additional disabilities and mental needs.
- Staff can obtain more specialized training since their roles will be better defined.
- A greater emphasis on technology and preparation for life as a productive citizen in the global economy can be provided.
- Graduates may expect to have more marketable skills with an enhanced focus on career and technical education opportunities in their middle and high school years.
- Students at the schools for the deaf will have more opportunities to increase their language and communication skill development with more staff specially trained in a variety of methods.
- Employment will be increased on the three campuses ensuring that current employees will keep their jobs and other positions will be created.

#### **Concerns**

- Implementation of this model represents incremental change.
- The model is more expensive than the current costs of operation of the schools. This means that the model is likely not sustainable since the state budget is not expected to rebound to 2007 levels until 2014.
- LEAs and families may still encounter confusion since there are still three schools for them to work with when referring students.
- Families may not seek as many services in their home counties since more services will be available to the children at the schools. Families may also not know as much about these services since they are likely to have difficulty traveling to the schools to participate in therapy sessions, meetings, etc.
- When students are graduated from the schools, the communities may not be as prepared to help serve them since they have been receiving the majority of their services at the schools.
- The residential schools may have difficulty recruiting the specialized staff needed to create the enhanced services because the DHHS supplement is small compared to what larger counties can pay. The continued discussions of the status of the schools causes recruitment and retention issues too because professionals are reluctant to be employed in a school that may be closed.

### Implications of Option Three

- For Students
  - More students will be able to be served in the new model since it maintains three campuses with increased services.
  - Students will learn skills that can be applied regardless of where they live or where they go to school.
  - Students will have better outcomes and be more prepared for effective participation in the global economy through increased career and technical education.
  - Students will have better access to staff which training focused on teaching students with multiple disabilities.
  - Students at the schools for the deaf should have more success increasing their language and communication skills since there will be more staff to focus on this area of development.
- For Families
  - Some families will have difficulty interacting with school staff face to face because of the distances.
  - Families will see more comprehensive services offered at the school for their children.
- For Staff
  - Staff in the new model will need to receive training to update their skills and build their capacity to focus on disability specific needs, career and technical education, and language and communication skill development.
  - There may be more job opportunities since increased services will be offered to students and their families.
- For LEAs
  - Creating programming to transition students successfully back to the LEA will be a challenge. However, the work of the Resource Support Program and the Visually Impaired Outreach Program will make this easier as the staff in those programs will grow and continue their work building capacity to serve these student populations in the future.
  - The work of the Free Appropriate Public Education (FAPE) Task Force has already laid the ground work for collaboratives among LEAs to ensure that there are more options in the continuum of services for children in the LEAs than what currently exists.

### Option Four: Two Consolidated Residential Schools

This option would provide two consolidated residential schools both of which would provide services to deaf, hard of hearing, blind, visually impaired, and deaf-blind students. Both schools would deliver day and residential services and include access to the enhanced services for diagnosis and treatment, career and technical education opportunities, and language and communication skill development as described in the other models. The schools would be staffed to accommodate 120 students.

Each school would need to increase its professional staff to add an occupational therapist, a physical therapist, two mental health professionals, a developmental psychologist, three speech language pathologists, and one audiologist. Schools would also add five more career and technical education teachers, two job coaches, and one community employment specialist. To ensure adequate access to language and communication skill development for students who are severely delayed, the schools for the deaf would add five teachers and two teacher assistants. Each school would also have two teachers of the deaf-blind and two deaf-blind intervenors.

Students in the seventh and eighth grades as well as high school students in the Future Ready Diploma Pathway would be mainstreamed in the local public schools and/or educated using the NC Virtual Public School to access higher level academics with their non-disabled peers. This may reduce the need for some of the academic high school staff.

The schools would also increase their emphasis on career and technical education through the addition of five teachers in that field as well as two more job coaches who would need to work more with students after school hours as they are working in the community. The schools would also gain one community employment specialist to help develop job opportunities in the community; this person would also interface with Vocational Rehabilitation and the Division of Services for the Blind to communicate with counselors in those agencies as students transition to the caseloads of those divisions.

Finally, both schools would refocus their efforts on students' language development. By adding five additional teachers trained in language development and two teacher assistants, the schools would be able to create more flexibility in their daily schedules to accommodate more opportunities for directed language learning during and after the school day. These staff may be working with students in Kindergarten through fifth grades to help build early language or they may be doing one-on-one instruction with older students from other countries with no language.

The DHHS school system would continue to exist, headed by a superintendent, to ensure that appropriate educational functions would still be carried out for both residential schools and the other educational programs in DHHS. The current OES central office staff would be maintained to provide the full array of central office services to the enhanced schools as well as the DHHS school system. In addition, the DHHS superintendent would gain the direct line responsibility for the educational programs currently in the Division of Mental Health, including all business and HR functions, and maintain its dotted line relationship with the educators in the developmental disabilities centers. The existing conceptual model for education programming in DHHS is in Appendix G and the recommended new schematic for educational programming for the Department is in Appendix K.

#### **Analysis of Option 4: Two Consolidated Residential Schools**

##### **Potential Benefits**

- This model represents a substantial cost savings for DHHS in the long run.
  - Fewer staff employed overall in OES
  - Maintenance of two campuses instead of three
- More concise programming can be provided for children who are deaf, hard of hearing, deaf blind, blind, and visually impaired since residential services will be concentrated in two locations.
- With residential programming at two schools, better budget management and oversight will occur.
- More students will be served in their LEA through the efforts of the Resource Support and Visually Impaired Outreach Programs.
- Fewer students and staff on campuses will lead to fewer incidents, accidents, and workman's compensation claims.
- Staff can obtain more specialized training since their roles will be better defined.
- Moving to fewer state residential schools represents a national trend and is aligned with the models in adjoining states (see Appendix E).

- A greater emphasis on technology and preparation for life as a productive citizen in the global economy can be provided.
- Deaf and hard of hearing students will receive more intense instruction in language and communication skill development.
- All students will benefit from the enhanced mental health and multiple disability focus areas.

### Concerns

- The residential school to close will need to be identified.
- Implementation of the new model represents a complete structural shift. However, we cannot afford to waste students' time or state resources. The Department of Health and Human Services and the Office of Education Services are committed to changing the way services are delivered in the state to improve the efficiency, effectiveness, quality, and variety to students who are deaf, hard of hearing, deaf-blind, blind, and visually impaired.
- Collaboration between DPI and DHHS will need to strengthen to make this process work smoothly. In addition, DPI will have to work closely with the LEAs to ensure that they support the new model, particularly through the development of programming for students who will be transitioning back to their LEAs instead of attending one of the two residential schools.
- It will take at least a year to assist LEAs in creating services to ensure a smooth transition for students. This will also mean that central office staff as well as school staff will spend the majority of their time focused on the planning for the new model, transitioning children and staff, and working with staff to keep them focused on educating children in the current model.
- Cost savings of the total budget of one school would not be immediately realized. There will be a need for some transitional costs such as those listed below.
  - RIF packages for employees who would not be employed in the new model
  - VI and HI outreach programs would need to have an increase in staff
  - Possible legal costs
  - Moving costs for OES
- Student travel distances for some residential students may actually increase; however, based on a review of students and their home LEAs, a low number of students and families would be impacted.
- Some students, again very few, would possibly go to school further away from their family and community than they do now.
- By shifting to a two residential school model, the employment opportunities for deaf, hard of hearing, and visually impaired staff may be impacted.
- Advocacy and constituent groups for these disability areas will disagree with the shift in service provision. Working with these groups to help involve them in the new model and to see its advantages will take a significant amount of time from DHHS and central office staff.

### Implications of Option Four

- For Students
  - Students will learn skills that can be applied regardless of where they live or where they go to school.
  - Students will have better outcomes and be more prepared for effective participation in the global economy.
  - Transitions to new schools and settings are always difficult for students, especially those with disabilities.



- Contact with families and communities will be even more difficult due to distance for the few students who may have to travel further.
- For Families
  - Some families will have difficulty interacting with school staff face to face because of the distance. This is not entirely new, but it may impact more families than the current situation.
  - Families will see more comprehensive services offered at the school for their children.
- For Staff
  - Opportunities for jobs for deaf, hard of hearing, and visually impaired staff are likely to increase in the public schools, especially in the counties currently surrounding the two Schools for the Deaf. This is due largely to the fact that an average of 22% percent of the students at NCSD live in Burke County and 9% of the students at ENCSD live in Wilson County. About 22% of students at GMS live in Wake County.
  - Some staff at all three schools will face a Reduction in Force (RIF). This may present the greatest problem for staff in Wilson County as those in Burke and Wake Counties are near other state facilities and programs where employment may be more readily available.
  - Staff in the new model will receive training to update their skills and build their capacity to focus on disability specific needs.
- For LEAs
  - Creating programming to transition students successfully back to the LEA will be a challenge. However, the work of the Resource Support Program and the Visually Impaired Outreach Program will make this easier as the staff in those programs will grow and continue their work building capacity to serve these student populations in the future.
  - The work of the Free Appropriate Public Education (FAPE) Task Force has already laid the ground work for collaboratives among LEAs to ensure that there are more options in the continuum of services for children than what currently exists.
  - LEAs will have the opportunity to employ some of the teachers who will be displaced from the two NC Schools for the Deaf and Governor Morehead School to work with the children who will be returning to the LEAs. This may be the first time ever that they will actually have a pool of applicants for positions as teachers of the deaf, hard of hearing, deaf blind, blind, and visually impaired.

Many of the changes proposed in this report will cause great consternation for families, children, staff, citizens, and interests groups. However, the question this report seeks to answer is whether the new opportunities and discomfort caused by the changes now will outweigh a dismantling of the current system with no real vision for change as fiscal realities continue to erode school budgets leaving them shells of their former selves unable to serve any truly useful function. The deaf, hard of hearing, deaf-blind, blind, and visually impaired students in our state deserve the best educational options our state can provide. Using all the resources of the 21<sup>st</sup> century, these students will redefine what a sensory impairment means and how it will impact their quest to become fully functional and contributing citizens to our state.

## APPENDICES

Appendix A: Trend Data for Deaf, Hard of Hearing, Blind, and Visually Impaired Children Ages Birth to 21

Appendix B: Background Data and Statistics on Hearing and Vision Loss

Appendix C: Current and Historical Cost Per Child at the Residential Schools

Appendix D: Graduation Data from Eastern NC School for the Deaf, Western NC School for the Deaf, and Governor Morehead School, 1999-2009

Appendix E: Transportation Data from the Three Residential Schools, December, 2009

Appendix F: Information on Residential Education in Other States

Appendix G: Current Educational Structure of DHHS

Appendix H: Future Educational Structure Based on Model Option One

Appendix I: Future Educational Structure Based on Model Option Two

Appendix J: Future Educational Structure Based on Model Option Three

Appendix K: Future Educational Structure Based on Model Option Four

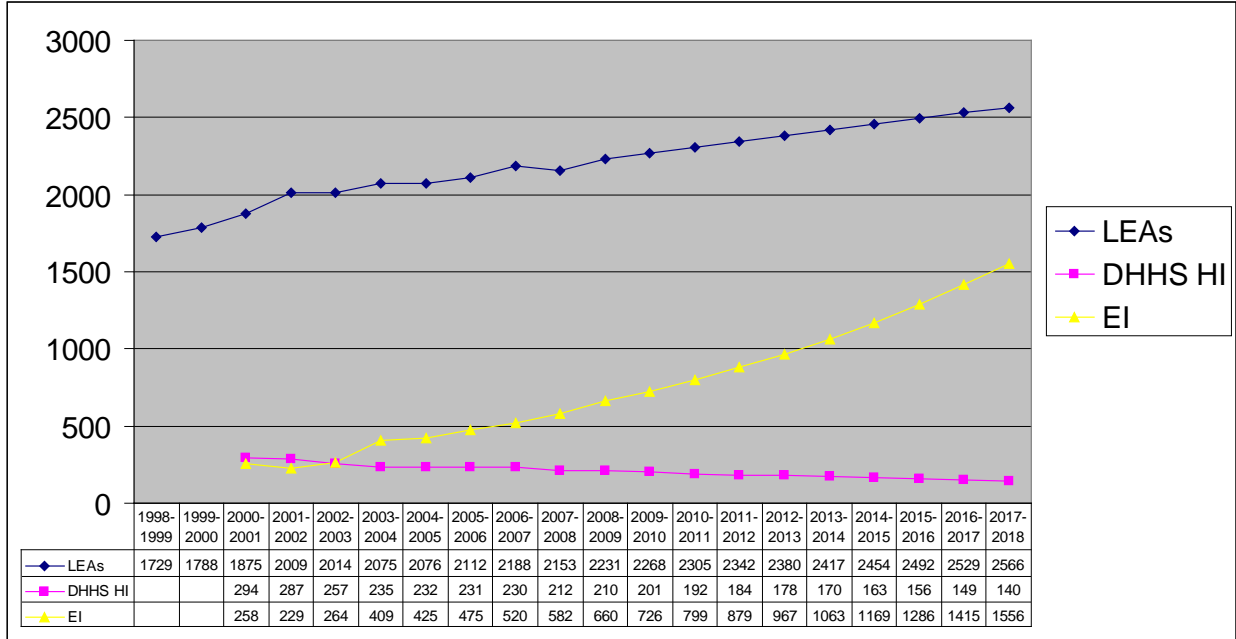
Appendix L: DHHS Residential School Testing Data

Appendix M: Teachers Licensed in Hearing and Visual Impairments by LEA

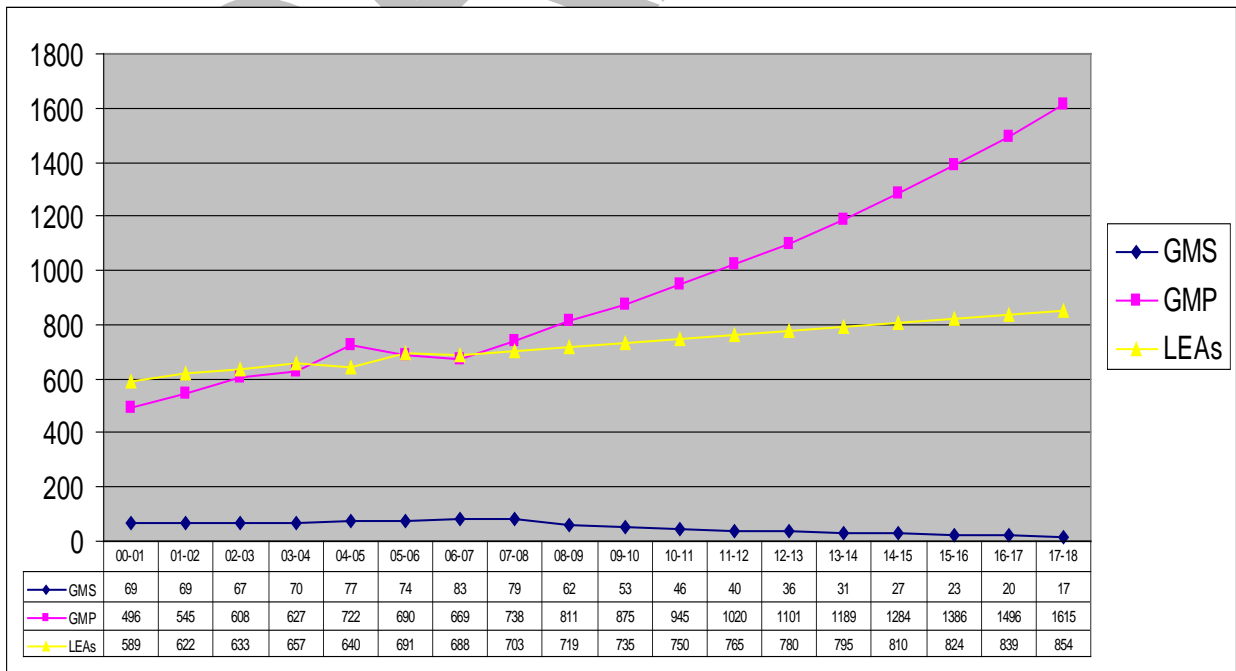
All data from the NC Public Schools and the State Board of Education can be found on the web site at [www.ncpublicschools.org](http://www.ncpublicschools.org).

## Appendix A: Trend Data for Deaf, Hard of Hearing, Blind, and Visually Impaired Children Ages Birth to 21

Historical and Projected Enrollment Patterns of Deaf and Hard of Hearing Children in LEAs, the NC Schools for the Deaf in DHHS, and the Early Intervention Program for Children who are Deaf and Hard of Hearing, 1999 through 2017



Historical and Projected Enrollment Patterns of Blind and Visually Impaired Children in LEAs, the Governor Morehead School, and the Governor Morehead Preschool, 2001 through 2017



## Appendix B: Background Data and Statistics on Hearing and Vision Loss

### HEARING LOSS BACKGROUND

#### Statistics on Hearing Loss and Early Intervention

- Hearing loss is the more frequently occurring birth defect. In North Carolina, two of every 1,000 babies born have a hearing loss.
- Early diagnosis is the key. In 1998, children averaged 25 months in age before their loss was diagnosed. In 2002, the average age was less than one month.
- In 2007, 94.4% of all babies born in the United States were screened for a hearing loss as a newborn. 98.24% of babies in North Carolina were screened. 131, 101 were screened for a loss; 243 were identified with a hearing loss. Of those 243, 186 requested services for their loss.
- Children identified with a hearing loss before they reach six months of age progress faster than children identified after six months.
- There is “substantial payback” from early intervention and/or aggressive medical intervention for children identified with a hearing loss.
- Early intervention can significantly improve language development and possibly other development outcomes.
- Enrollment in an early intervention program is one of the best predictors of positive developmental and educational outcomes for children who are deaf.

#### Cochlear Implant Technology

- Cochlear Implants are proven to be cost effective for children who are candidates. 40% of deaf children under age three receive a cochlear implant today. This is up from 25% in 2004. The cochlear implant has become the “standard of care” for hearing loss.
- Cost benefit analyses show that the savings for K-12 education for a deaf child with a cochlear implant ranges from \$30,000 to \$200,000.
- Studies show that “profoundly deaf children who had more than two years of experience with a cochlear implant were able to move out of special education into a mainstream setting at twice the rate of their age-matched peers without an implant.”
- These students also were in fewer self-contained special education classes and received fewer exceptional children's services.

#### Hearing Loss in Special School and Regular Educational Settings

- Based on five students, the average child with a unilateral loss in the third grade is 24 months behind his/her hearing peers in math, language, and social skills.
- In the 1997-98 Gallaudet Research Institute Annual Survey of Deaf and Hard of Hearing Children and Youth, it was estimated that 84% to 90% of deaf and hard of hearing students are taught outside of mainstream classrooms.
- American Sign Language is prevalent mostly in special schools. 74.3% of those schools use ASL while it is only used in 22.2% of regular education settings.
- Spoken language methods are used most predominantly in regular education classrooms (79.7%). Only 8.9% of special schools use spoken language methods.
- Special schools for deaf and hard of hearing also have a higher percentage of children with multiple disabilities (47.7%) as compared with regular education settings (29.3%).

- The Texas Youth Commission reports that children who do not develop normal language at the expected age are at a high risk for a variety of problems---academic, social, and emotional---that have not been previously linked to delays in language development.

### **Societal Impact of Hearing Loss**

- 44% of deaf individuals with a severe to profound loss do not graduate from high school; only 5% of these individuals graduate from college
- 42% of deaf adults ages 18-44 are underemployed; this is reflected in the average household income for deaf adults with a severe to profound loss. As of 1990 (the most recent figure), the average family income was \$25,000.
- Cost analyses vary as to what the cost is to society for a severe to profoundly deaf individual. In a study done in 1970, expected lifetime earnings for prelingually deaf was an average of \$275,000 less than that of a hearing person.
- The estimates on the societal loss vary from \$1.73 million for a child who has a prelingual loss (this does not include the cost of a cochlear implant) to a 1998 study that showed in a study of 15,400 persons born with a hearing loss a lifetime societal cost of \$4.6 billion.
- As compared with other disabilities, the cost is "so large that it warrants discussion." The societal costs for someone with a severe/profound hearing loss is three times that of someone who sustains injuries due to a near drowning incident or a firearm accident and two times that of someone who sustains a stroke, rheumatoid arthritis, and epilepsy.

### **VISION LOSS BACKGROUND**

#### **Statistics on Vision Loss and Children Birth to Five**

- Vision is the sense that provides the most information to the brain. Only vision can perceive shape, size, color, distance, and spatial location all in one glance.
- Vision impairment occurs in .01% of babies born annually.
- Early diagnosis is critical; in 1999, the average age of diagnosis was 14.5 months. Now it is about 5 months.
- Congenital vision impairments---those which exist at birth---will have lifelong affects on children; therefore, the diagnosis and intervention is critical to children's growth and development.
- Nationally, 65% of children with an identified vision loss also have other disabilities.
- Substantial payback for early intervening services comes in the areas of motor, cognitive, and sensory skill development.
- In the birth to five population served by the Governor Morehead Preschool Program, about 65% of children being served with vision loss also have another disability. About 5% of those children are identified with additional disabilities at a later date.

#### **Vision Loss in Special School and Regular Educational Settings**

- According to the American Printing House for the Blind Annual Report for 2007, 57,696 children in the US ages 0-21 are legally blind.
- Of those 57,696, 5626 use Braille as their primary reading medium.
- 9% of the legally blind students in the US attend residential schools. In NC, only 2% of blind and visually impaired students attend the Governor Morehead School for the Blind.
- Per the December 1, 2008, Exceptional Children's Headcount, there were 2251 students whose primary identification on their IEP was vision loss. Of those 573 were ages three to five.

- In 2008-2009 the Outreach Program operated by Governor Morehead School served 413 students ages 5-21 and provided services in 89 LEAs through over 3900 personal contacts (visits, observations, phone calls, etc.).

#### **Societal Impact of Vision Loss**

- According to data from the National Center for Health Statistics in 2008, 25.2 million Americans had a vision loss.
- Of those, about 5 million did not earn a high school diploma. About 6.3 million graduated with a high school diploma or earned a GED. Approximately, 6.5 million had more than a high school education, and 4
- Of those, about 5 million did not earn a high school diploma. About 6.3 million graduated with a high school diploma or earned a GED. Approximately, 6.5 million had more than a high school education, and 4.8 million held at least a bachelor's degree.

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## APPENDIX C: Graduation Data from the Eastern NC School for the Deaf, Western NC School for the Deaf, and Governor Morehead School

	ENCSD			WNCSD			GMS		
	Diploma	OCS Diploma	Certificate	Diploma	OCS Diploma	Certificate	Diploma	OCS Diploma	Certificate
1999	3	n/a	18	4	n/a	12	4	n/a	3
2000	4	n/a	22	11	n/a	4	1	n/a	6
2001	6	n/a	10	8	n/a	3	4	n/a	10
2002	3	n/a	8	8	n/a	3	1	n/a	9
2003	3	n/a	5	6	n/a	9	1	n/a	1
2004	0	10	2	5	7	1	4	0	1
2005	1	3	3	6	1	3	6	2	2
2006	0	7	3	0	14	0	3	1	5
2007	5	5	3	6	9	4	4	1	3
2008	5	4	1	3	3	6	7	2	8
2009	5	2	2	4	6	3	4	1	4
<b>TOTAL</b>	<b>35</b>	<b>31</b>	<b>77</b>	<b>61</b>	<b>40</b>	<b>48</b>	<b>39</b>	<b>7</b>	<b>52</b>

### Facts about Graduation Data

- From 1999 to 2003, ENCSD issued its own local certificate to students who completed work training and related courses during their years of high school. The number in the chart reflects those students and students with multiple disabilities who completed the class work specified in their Individualized Education Program (IEP) and aged out of eligibility for exceptional children's services at 21.
- Certificates are awarded to students who complete their IEP goals and/or aged out of eligibility for exceptional children's services or who do not complete all requirements of their academic course work before they aged out of eligibility for exceptional children's services.
- The Occupational Course of Study (OCS) diploma was instituted by the State Board of Education in 2004. Students who earn an OCS diploma have not completed the requirements to enter a four year college or university or to obtain a two year or associate's degree at a community or technical college. The diploma is designed for exceptional children who are training for the world of work after graduation.
- Diplomas earned by students in academic pathways from 2004 to 2009 may have been with a focus on Career and Technical Education, College/Technical Preparation, or College/University Preparation.

### Summary of Graduation Data

- 390 students have graduated and/or aged out of the schools in the past 10 years.
- Collectively, in the past ten years, the schools have awarded
  - 177 certificates;
  - 135 academic pathway diplomas, and
  - 78 Occupational Course of Study diplomas.
- 55% of the students who left the schools in the past 10 years did not earn academically based exit documents.
- Only 45% of students exited would have been qualified to enter two or four year institutions of higher learning.

**APPENDIX C (CONTINUED):  
Outcome Data on Residential School Graduates**

Graduation Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Number of Graduates	41	36	24	30	24	38	38	26	16
Graduates Attending a 4 Year School	4	1	3	3	2	1	1	2	2
Graduates Attending a 2 Year School	7	3	3	2	2	6	9	4	5
Graduates who Received a Degree	1	1	0	1	0	0	n/a	n/a	n/a
Graduates Employed	16	11	9	10	7	10	11	6	0
Graduates In Job Training	1	3	2	1	2	10	5	0	1
Graduates Unemployed	7	11	7	11	9	11	7	6	6
Other*	5	6	0	2	2	0	4	8	3

\* The category Other may indicate that students are either not able to be located to gather information or are involved in other programming options such as a sheltered workshop.



**APPENDIX D:  
CURRENT AND HISTORICAL COST PER CHILD AT THE RESIDENTIAL SCHOOLS**

**NC Department of Health and Human Services  
Office of Education Services  
Covering SFY 2001/2002 Thru SFY 2008/2009  
Based on June 30th Average Per Pupil Cost**

	<b>SCHOOL</b>	<b>2001- 2002</b>	<b>2002- 2003</b>	<b>2003- 2004</b>	<b>2004- 2005</b>	<b>2005- 2006</b>	<b>2006- 2007</b>	<b>2007- 2008</b>	<b>2008- 2009</b>
Total Expenditures	<b>NCSD</b>	8,286,524	7,693,563	7,373,256	7,713,463	8,456,185	9,149,773	9,573,951	8,812,664
# of Students		145	136	127	134	131	125	108	103
Cost Per Student		57,148	56,570	58,057	57,563	64,551	73,198	94,475	91,094
Total Expenditures	<b>ENCSD</b>	8,036,581	7,385,028	8,488,469	8,902,865	9,167,012	10,287,424	9,867,009	8,413,566
# of Students		142	121	108	98	100	105	104	107
Cost Per Student		56,596	61,033	78,597	90,846	91,670	97,975	98,605	82,053
Total Expenditures	<b>GMS</b>	6,398,983	6,205,033	6,664,479	6,722,538	7,674,726	7,607,640	6,853,971	6,560,490
# of Students		69	67	70	77	74	83	79	62
Cost Per Student		92,739	92,612	95,207	87,306	103,713	91,658	86,759	112,314
<b>TOTAL Expenditures</b>		22,722,088	21,283,624	22,526,204	23,338,866	25,297,923	27,044,837	26,294,931	23,786,720
<b>TOTAL # Students</b>		356	324	305	309	305	313	291	272
<b>TOTAL Cost Per Student</b>		63,826	65,690	73,856	75,530	82,944	86,405	90,361	87,451

## Appendix E:

## Transportation Data from the Three Residential Schools as of December, 2009

## Travel Distances and Times

	GMS	NCS D	ENCSD	Totals
Travel Distance from School				
30 Minutes	16 (14 Day)	7 (7 Day)	17 (12 Day)	40 (33 Day)
1 Hour	10 (3 Day)	11 (11 Day)	34 (13 Day)	55 (27 Day)
90 Minutes	5 (1 Day)	22 (7 Day)	16	43 (8 Day)
2 Hours	11 (1 Day)	20	20	51 (1 Day)
2 ½ Hours	1 (1 Day)	23 (1 Day)	5	29 (2 Day)
3 Hours	7	4	3	14
3 ½ Hours	1	1	0	2
4 Hours	0	3	0	3 (1 Day)
4+ Hours	1	0	0	1
	52 (20 Day)	91 (26 Day)	95 (25 Day)	238 (71 Day)

## Notes:

- This data indicates one-way travel distance from the respective school to a student's house.
- 29% of children are day students.
- 79% of students live within a 2 hour drive from the schools.
- 21% of students live further than a 2 hour drive from the schools.

## Mode of Transportation

School	Residential Students Transported by Bus	Day Students Transported by Bus	Residential Students Transported by Parents	Day Students Transported by Parents
GMS	30	9	2	11
NCS D	62	10	3	16
ENCSD	69**	20***	1	5
Totals	161	39	6	32

## Notes:

- \*Two students ride on Friday bus but parent transports on Sunday and a different two students arrive on Sunday by parent but ride bus on Friday;
- \*\* Three students are transported by parents on Sundays;
- \*\*\* Two students are transported by parents on Fridays.

Appendix E: (continued)

Travel Distances and Times by Mode of Transportation

Travel Distances and Times	Mode of Transportation by School											
	Residential Students Transported by Bus			Day Students Transported by Bus			Residential Students Transported by Parents			Day Students Transported by Parents		
	GMS	ENCSD	NCSD	GMS	ENCSD	NCSD	GMS	ENCSD	NCSD	GMS	ENCSD	NCSD
30 Minutes	2	4	0	8	9	0	0	1	0	6	5	7
1 Hour	5	21	0	1	11	6	2	0	0	2	0	5
90 Minutes	4	16	15	0	0	4	0	0	0	1	0	3
2 Hours	10	20	20	0	0	0	0	0	0	1	0	0
2 ½ Hours	0	5 <u>Miles:</u> 120, 120, 136, 139 136	19 <u>Miles:</u> 90,95,112,10 6,107,95,95, 95,100,105, 116,13,87, 86,87,86, 86,110,115	0	0	0	0	0	3 <u>Miles:</u> 115, 120, 120	1 <u>Miles:</u> 152	0	1 <u>Miles:</u> 130
3 Hours	7 <u>Miles:</u> 168 211 180 180 166 190 187	3 <u>Miles:</u> 168, 160, 150	4 <u>Miles:</u> 116, 110, 120, 125	0	0	0	0	0	0	0	0	0
3 ½ Hours	1 <u>Miles:</u> 198	0	1 <u>Miles:</u> 137	0	0	0	0	0	0	0	0	0
4 Hours	0	0	3 <u>Miles:</u> 180, 175, 150	0	0	0	0	0	0	0	0	0
4+ Hours	1 <u>Miles:</u> 275	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>30</b>	<b>69</b>	<b>62</b>	<b>9</b>	<b>20</b>	<b>10</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>11</b>	<b>5</b>	<b>16</b>

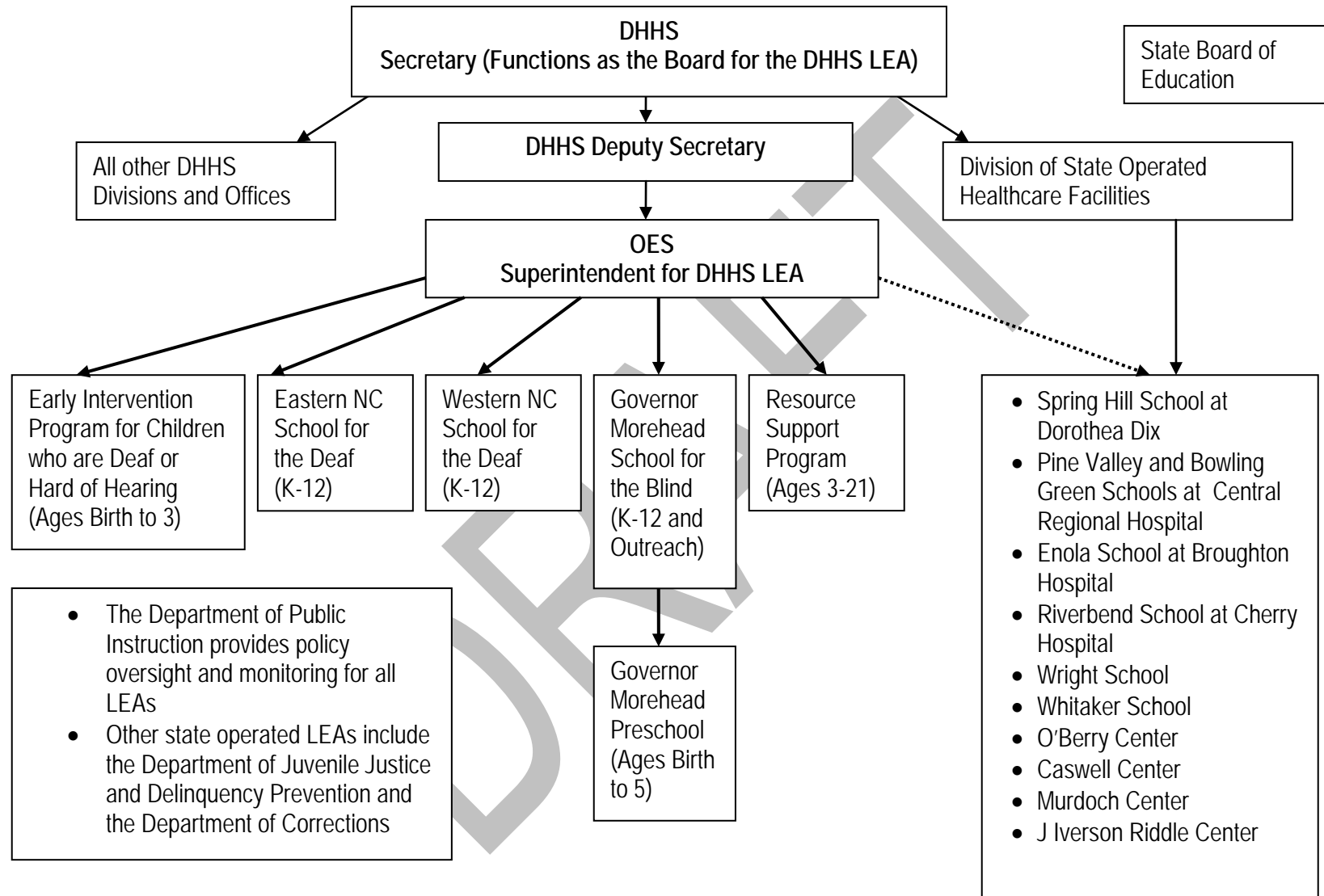
Notes:

- Top number in each data cell is representative of the number of students traveling for identified time periods;
- Other numbers in each data cell represents the one-way travel mileage for each student counted in the total for each cell.
- One-way travel mileage is from the respective school to a student's house. Actual mileage from established bus stops to each school would be a shorter distance.

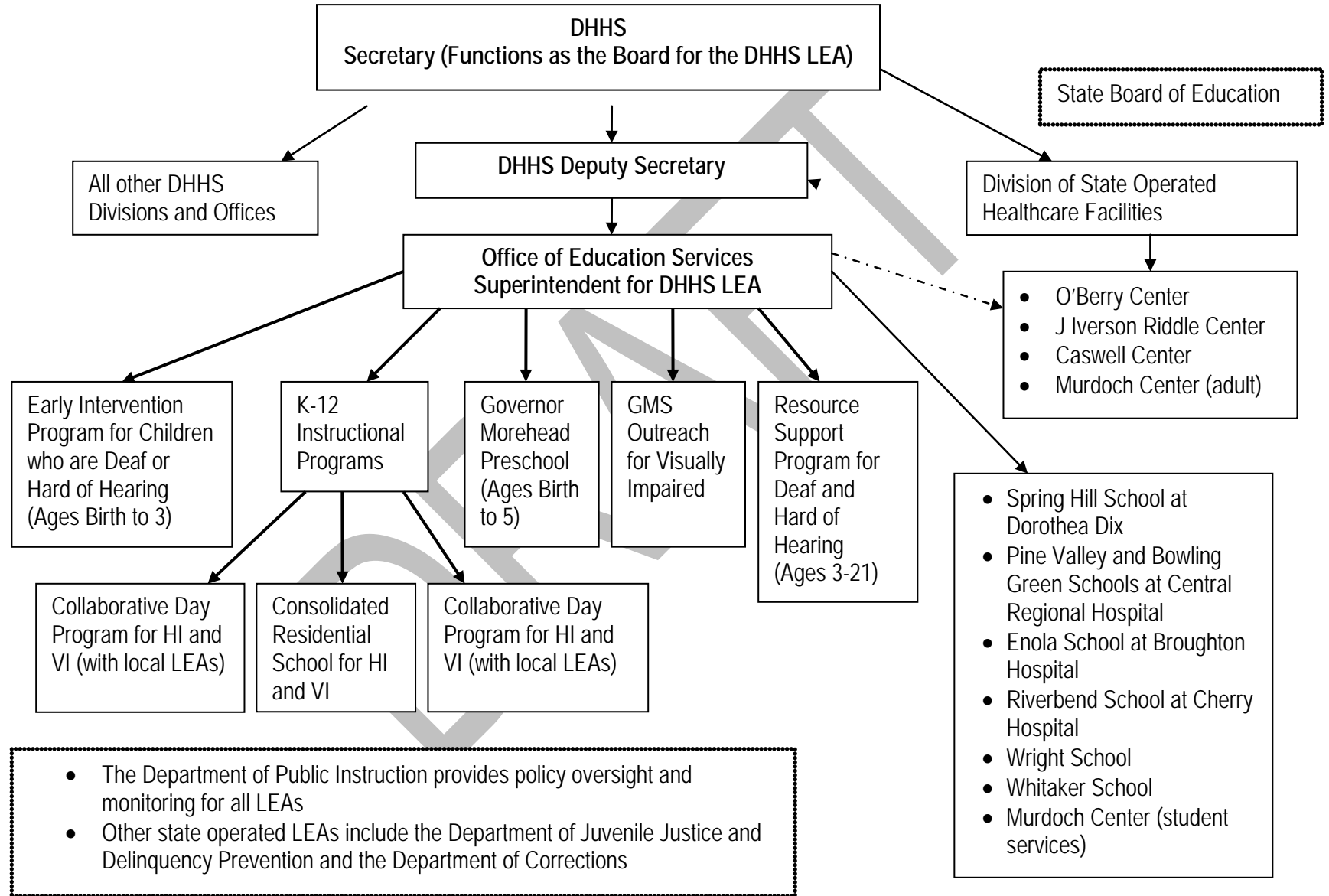
## APPENDIX F: Information on Residential Education in Other States

State	School for the Blind/Year Established	School for the Deaf/Year Established	Combined School Yes or No	Other Notes
AL			YES	1858
AK	1859	YES ?		
AZ			YES	1912
AR	1859	1850		
CA	1860	3 schools		
CO			YES	1874
CT	1893	1817		
DE		1969		
FL			YES	1885
GA	1852	2 schools		
HI			YES	1914
ID			YES	1906
IL	1849/1957	YES ?		
IN	1847	1843		
IA	1853	1855		
KS	1864	1861	YES	2010
KY	1842	1823		
LA	1897	1852		
ME		Pre1948		
MD	1853	2 schools		
MA	1829	3 schools		
MI			YES	1848
MN	1866	1863		
MS	1848	1829		
MO	1851	1851		
MT			YES	1893
NE	1875	Closed in 1998		
NV		Day Only 2008		
NH		Send to VT		
NJ	1891	1883		
NM	1903	1885		
NY	1831/1904	7 schools	YES	
NC	1845			
ND	1908	1890		
OH	1837	2 schools		
OK	1897	1898		
OR	1873	1870		
PA	1832/1887/1921	3 schools		
RI		Day only		
SC			YES	1849
SD	1900	Day only		
TN	1844	1844		
TX	1856	1857		
UT			YES	1896
VT		1912		
VA		1839	YES	1906
WA	1886	1886		
WV	1870	1870		
WI	1849	1852		
WY		Closed in 2000		

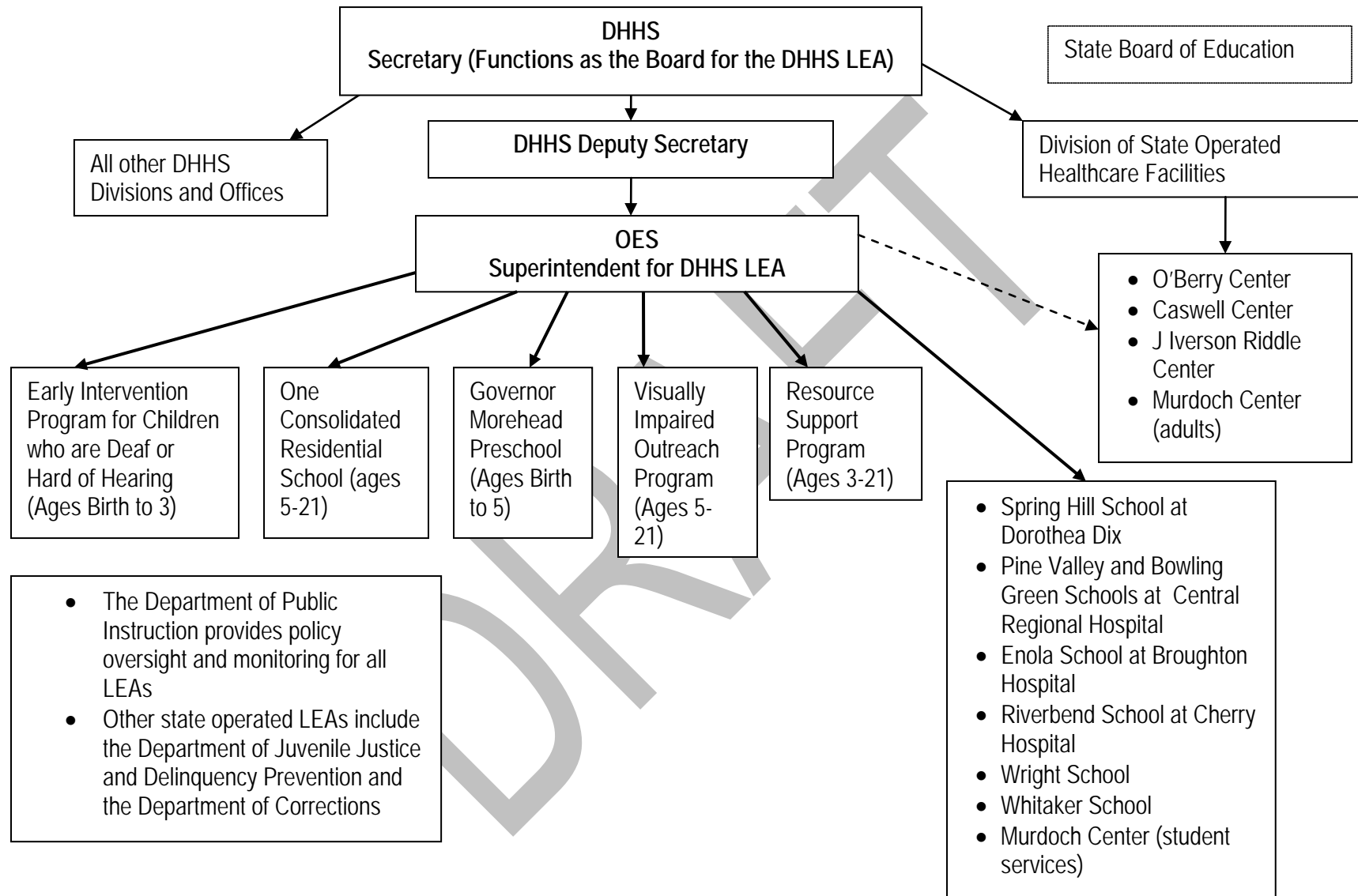
### Appendix G: DHHS Educational Flow Chart as of January, 2010



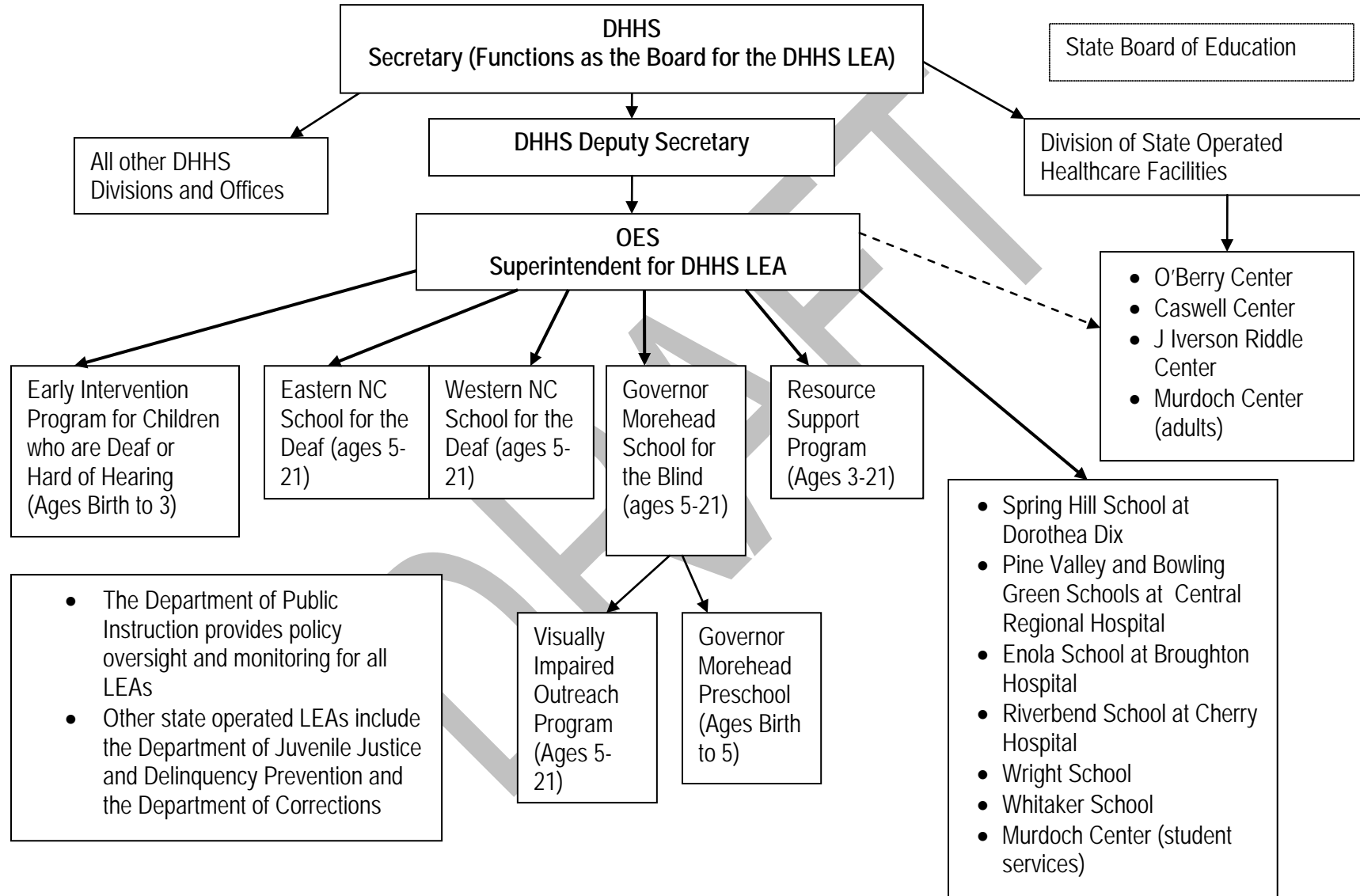
### Appendix H: Future Structure of Educational Services in DHHS, Model Option One



### Appendix I: Future Structure of Educational Services in DHHS, Model Option Two

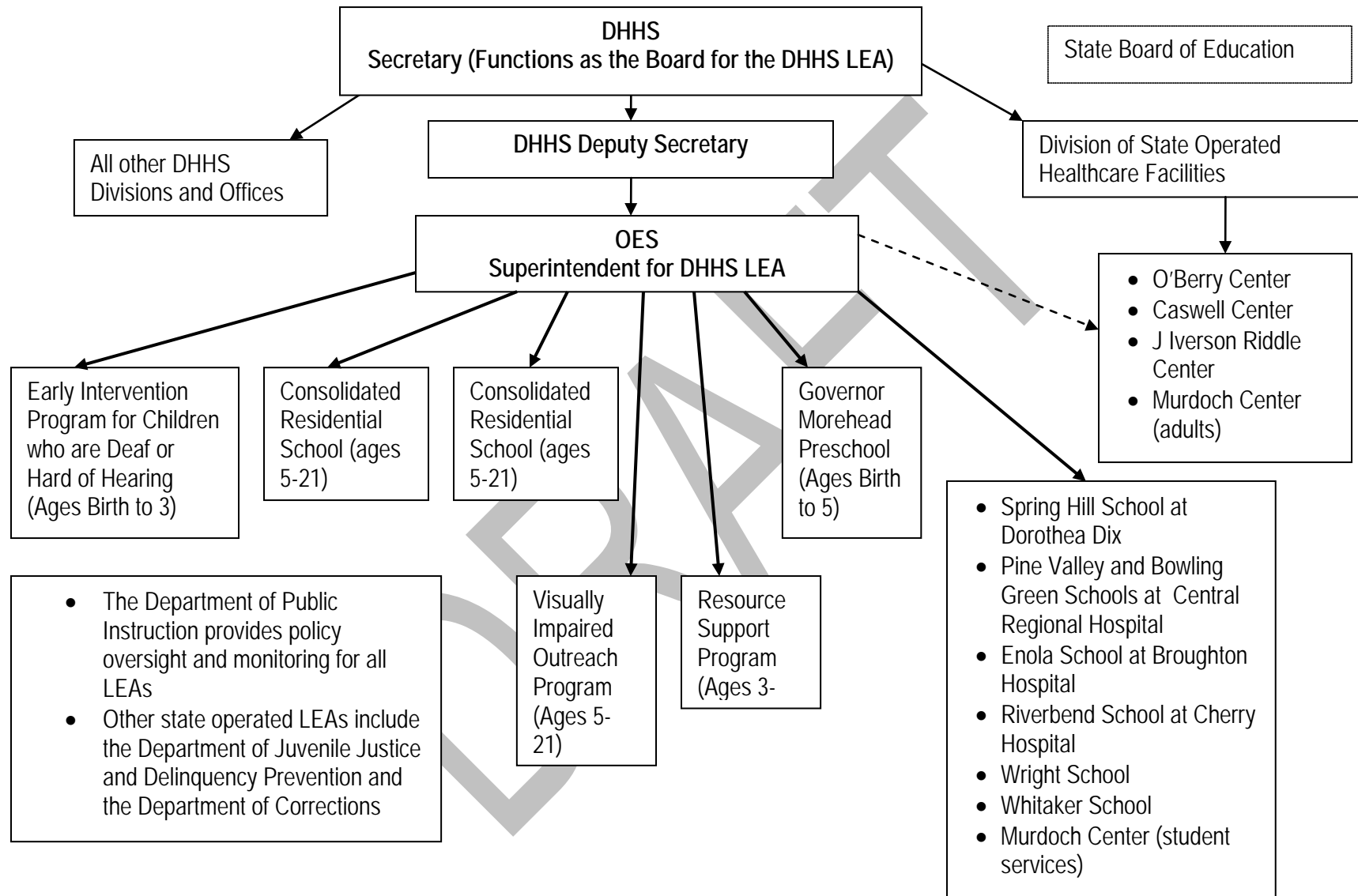


### Appendix J: Future Structure of Educational Services in DHHS, Model Option Three





### Appendix K: Future Structure of Educational Services in DHHS, Model Option Four



APPENDIX L: DHHS Student Testing Data

State and DHHS Percent Proficient 2008-09 EOG Tests			2005-06 thru		2005-06		2006-07		2007-08		2008-09	
			State	DHHS	State	DHHS	State	DHHS	State	DHHS		
Reading Grades 3-8 Composite	Multiple Choice	All Students	86.7%	11.3%	87.4%	7.1%	56.8%	<5%	68.7%	<5%		
		HI	62.2%	10.0%	65.3%	<5%	26.3%		38.7%	<5%		
		VI	80.8%	40.0%	78.2%	Too Small	47.5%		61.7%	25.0%		
	NCEXTEND2	All Students	19.2%	<5%	22.5%	5.7%	21.3%	8.8%	36.6%	<5%		
		HI	11.5%	<5%	13.0%	<5%	10.6%		21.2%	<5%		
		VI	19.0%	N/A	36.8%	N/A	27.3%		40.0%	40.0%		
	Portfolio (0506) NCEXTEND1 (0607-0809)	All Students	81.1%	92.3%	82.3%	85.2%	55.1%	42.9%	66.3%	43.5%		
		HI	81.3%	85.7%	82.1%	83.3%	70.8%		84.0%	<5%		
		VI	81.8%	N/A	75.0%	N/A	42.9%		46.7%	40.0%		
	NCCLAS	All Students	28.2%	N/A	36.9%	N/A	23.5%	N/A	44.6%	N/A		
		HI	N/A	N/A	N/A	N/A	37.5%		N/A	N/A		
		VI	51.7%	N/A	83.3%	N/A	80.0%		50.0%	N/A		
	All Assessments	All Students	84.9%	26.7%	85.5%	25.2%	55.6%	14.5%	67.6%	13.4%		
		HI	50.8%	14.7%	52.9%	8.3%	23.8%		35.2%	9.4%		
		VI	71.1%	38.5%	72.9%	44.4%	45.6%		57.9%	35.7%		
Math Grades 3-8 Composite	Multiple Choice	All Students	64.2%	<5%	67.2%	<5%	71.0%	<5%	80.9%	11.4%		
		HI	34.1%	<5%	40.5%	<5%	49.2%		59.8%	9.5%		
		VI	50.0%	20.0%	50.6%	Too Small	59.6%		71.3%	16.7%		
	NCEXTEND2	All Students	25.0%	<5%	32.5%	<5%	38.1%	13.3%	53.4%	20.0%		
		HI	27.3%	<5%	29.3%	5.6%	37.0%		50.2%	18.5%		
		VI	20.9%	<5%	22.9%	Too Small	36.1%		43.6%	25.0%		
	Portfolio (0506) NCEXTEND1 (0607-0809)	All Students	81.1%	88.5%	78.3%	74.1%	53.8%	53.6%	69.0%	65.2%		
		HI	75.0%	85.7%	79.0%	83.3%	83.3%		88.0%	80.0%		
		VI	72.7%	N/A	87.5%	N/A	28.6%		73.3%	60.0%		
				<b>State</b>	<b>DHHS</b>	<b>State</b>	<b>DHHS</b>	<b>State</b>	<b>DHHS</b>	<b>State</b>	<b>DHHS</b>	
	NCCLAS (0506-0809)	All Students	38.8%	N/A	46.8%	N/A	56.1%	N/A	64.3%	N/A		
		HI	N/A	N/A	N/A	N/A	N/A		N/A	N/A		
		VI	N/A	N/A	60.0%	N/A	71.4%		60.0%	N/A		
	All Assessments	All Students	63.4%	21.0%	66.4%	18.5%	69.9%	17.1%	80.0%	27.6%		
		HI	33.6%	8.8%	39.0%	8.3%	47.4%		58.3%	20.8%		
VI		46.5%	21.4%	48.5%	<5%	56.0%		67.8%	33.3%			

## APPENDIX L: DHHS Student Testing Data - continued

State and DHHS Percent Proficient 2008-09 EOC Tests		2005-06 thru	2005-06		2006-07		2007-08		2008-09	
			State	DHHS	State	DHHS	State	DHHS	State	DHHS
EOC Composite	Multiple Choice	All Students	71.8%	23.7%	66.4%	6.8%	68.4%	16.9%	71.5%	14.5%
		HI	47.0%	10.4%	34.6%	<5%	37.5%		41.9%	6.5%
		VI	61.7%	50.0%	58.3%	13.0%	62.4%		66.0%	32.0%
	NCCLAS	All Students	49.9%	N/A	65.0%	N/A	76.1%	N/A	86.7%	N/A
		HI	N/A	N/A	N/A	N/A	N/A		N/A	N/A
		VI	N/A	N/A	N/A	N/A	N/A		N/A	N/A
	All Assessments	All Students	71.8%	23.7%	66.4%	6.8%	68.4%	16.9%	71.4%	14.5%
		HI	47.0%	10.4%	34.6%	<5%	37.5%		41.9%	6.5%
		VI	61.7%	50.0%	58.3%	13.0%	62.4%		66.0%	32.0%

## APPENDIX M: Teachers Licensed in Hearing and Visual Impairments by LEA

LEA Name	Licensed Teachers			EC Licensed and EC Funded Teachers		
	Hearing Impaired	Visually Impaired	Both Licenses	Hearing Impaired	Visually Impaired	Both Licenses
Alamance-Burlington Schools	14	2	0	5	2	0
Alexander County Schools	3	0	0	0	0	0
Alleghany County Schools	1	0	0	1	0	0
Anson County Schools	0	0	0	0	0	0
Ashe County Schools	1	2	0	1	1	0
Avery County Schools	1	0	0	1	0	0
Beaufort County Schools	2	1	0	2	1	0
Bertie County Schools	1	0	0	1	0	0
Bladen County Schools	0	0	0	0	0	0
Brunswick County Schools	2	0	0	0	0	0
Buncombe County Schools	9	3	0	6	1	0
Asheville City Schools	0	1	0	0	1	0
Burke County Schools	5	1	0	2	1	0
Cabarrus County Schools	10	1	0	7	1	0
Kannapolis City Schools	2	0	0	1	0	0
Caldwell County Schools	5	1	0	1	1	0
Camden County Schools	0	0	0	0	0	0
Carteret County Public Schools	3	1	0	2	1	0
Caswell County Schools	0	0	0	0	0	0
Catawba County Schools	11	0	0	6	0	0
Hickory City Schools	0	0	0	0	0	0
Newton Conover City Schools	1	0	0	0	0	0
Chatham County Schools	2	0	0	2	0	0
Cherokee County Schools	1	1	0	0	1	0
Edenton/Chowan Schools	2	1	0	1	0	0
Clay County Schools	0	1	0	0	1	0
Cleveland County Schools	7	2	0	5	2	0
Columbus County Schools	2	1	0	2	0	0
Whiteville City Schools	0	0	0	0	0	0
Craven County Schools	5	2	0	4	1	0
Cumberland County Schools	15	2	0	11	0	0
Currituck County Schools	0	0	0	0	0	0
Dare County Schools	5	1	0	0	0	0
Davidson County Schools	8	0	0	6	0	0
Lexington City Schools	1	0	0	1	0	0
Thomasville City Schools	0	0	0	0	0	0
Davie County Schools	6	0	0	3	0	0
Duplin County Schools	1	0	0	0	0	0
Durham Public Schools	20	2	0	9	0	0
Edgecombe County Schools	3	0	0	1	0	0
Forsyth County Schools	23	3	0	10	1	0

LEA Name	Licensed Teachers			EC Licensed and EC Funded Teachers		
	Hearing Impaired	Visually Impaired	Both Licenses	Hearing Impaired	Visually Impaired	Both Licenses
Franklin County Schools	2	0	0	1	0	0
Gaston County Schools	10	4	0	6	3	0
Gates County Schools	0	0	0	0	0	0
Graham County Schools	0	0	0	0	0	0
Granville County Schools	4	1	0	1	1	0
Greene County Schools	0	0	0	0	0	0
Guilford County Schools	31	8	0	21	8	0
Halifax County Schools	1	1	0	0	0	0
Roanoke Rapids City Schools	0	0	0	0	0	0
Weldon City Schools	0	0	0	0	0	0
Harnett County Schools	4	1	0	3	1	0
Haywood County Schools	2	1	0	1	1	0
Henderson County Schools	3	1	0	2	0	0
Hertford County Schools	0	0	1	0	0	1
Hoke County Schools	0	0	0	0	0	0
Hyde County Schools	0	0	0	0	0	0
Iredell-Statesville Schools	5	1	0	3	0	0
Mooresville City Schools	1	1	0	1	1	0
Jackson County Schools	1	0	0	1	0	0
Johnston County Schools	18	0	2	10	0	2
Jones County Schools	0	0	0	0	0	0
Lee County Schools	2	0	0	1	0	0
Lenoir County Public Schools	2	1	0	2	1	0
Lincoln County Schools	4	0	0	3	0	0
Macon County Schools	0	0	0	0	0	0
Madison County Schools	0	0	0	0	0	0
Martin County Schools	0	0	0	0	0	0
McDowell County Schools	0	1	0	0	1	0
Charlotte-Mecklenburg Schools	34	9	0	16	6	0
Mitchell County Schools	0	0	0	0	0	0
Montgomery County Schools	1	0	0	0	0	0
Moore County Schools	3	1	0	1	1	0
Nash-Rocky Mount Schools	7	2	0	2	0	0
New Hanover County Schools	4	1	0	4	1	0
Northampton County Schools	0	0	0	0	0	0
Onslow County Schools	6	1	0	2	1	0
Orange County Schools	3	2	0	3	1	0
Chapel Hill-Carrboro Schools	2	2	2	0	1	1
Pamlico County Schools	1	1	0	1	1	0
Pasquotank County Schools	2	0	0	1	0	0
Pender County Schools	1	1	0	1	0	0
Perquimans County Schools	0	0	0	0	0	0
Person County Schools	1	1	1	1	0	1

LEA Name	Licensed Teachers			EC Licensed and EC Funded Teachers		
	Hearing Impaired	Visually Impaired	Both Licenses	Hearing Impaired	Visually Impaired	Both Licenses
Pitt County Schools	12	1	0	4	0	0
Polk County Schools	1	0	0	0	0	0
Randolph County Schools	9	3	0	5	2	0
Asheboro City Schools	5	1	0	2	1	0
Richmond County Schools	1	0	0	0	0	0
Robeson County Schools	3	2	0	3	2	0
Rockingham County Schools	7	1	0	2	1	0
Rowan-Salisbury Schools	5	1	2	2	1	2
Rutherford County Schools	3	0	0	1	0	0
Sampson County Schools	3	1	0	3	1	0
Clinton City Schools	2	0	0	1	0	0
Scotland County Schools	3	0	0	1	0	0
Stanly County Schools	2	0	0	1	0	0
Stokes County Schools	2	1	0	1	1	0
Surry County Schools	1	0	0	1	0	0
Elkin City Schools	0	0	0	0	0	0
Mount Airy City Schools	0	0	0	0	0	0
Swain County Schools	0	0	0	0	0	0
Transylvania County Schools	1	2	0	0	1	0
Tyrrell County Schools	0	0	0	0	0	0
Union County Public Schools	10	1	0	5	1	0
Vance County Schools	0	0	0	0	0	0
Wake County Schools	46	18	1	26	11	0
Warren County Schools	1	0	0	1	0	0
Washington County Schools	0	0	0	0	0	0
Watauga County Schools	2	0	0	1	0	0
Wayne County Public Schools	9	1	0	7	1	0
Wilkes County Schools	2	1	0	1	1	0
Wilson County Schools	13	0	0	4	0	0
Yadkin County Schools	2	0	0	2	0	0
Yancey County Schools	0	1	0	0	1	0

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