# **EXHIBIT C**

An Interim Report of Vision Screenings

In

**Arkansas Public and Charter Schools** 

Fall Semester, School Year 2010-2011

As required by Act 1438 of 2005

Prepared by Paula Smith, MNSc, RNP State School Nurse Consultant Arkansas Department of Education Act 1438 of 2005 requires that all Pre-kindergarten, Kindergarten, first, second, fourth, sixth and eighth grade and all transfer students undergo a vision screening. School nurses who receive training from the Community Health Nurse Specialist (CHNS) housed in the educational cooperatives across the state conduct these screenings. In 2006, these CHNS received training from the Eye and Vision Commission members as well as other volunteer optometrists and ophthalmologists. In addition, Act 1438 requires that the Eye and Vision Commission and the Department of Education report its findings and updates to the Governor, the Legislative Council, and the House and Senate Interim Committees on Public Health, Welfare, and Labor two times per year. To meet this mandate, in 2006 school nurses in all 245 school districts as well as the charter schools completed the Vision Summary Form for their school/district. Beginning with the 2007-2008 school year, school nurses were able to enter vision screening results into the Arkansas Public School Computer Network (APSCN). This data is compiled and reported to the State School Nurse Consultant twice a year.

### School Year 2010-2011

<u>Overall.</u> Students receiving a vision screening in the required grades (pre-K, K, 1, 2, 4, 6, 8 and all transfers) numbered 167,779. Referrals to an eye doctor numbered 9,630 students (6%) of which 2,233 students (23%) actually reported to the school nurse they received an exam. Of these students, 2,000 (90%) were identified as having a confirmed vision difficulty by an eye doctor.

<u>Pre-Kindergarten</u>. Of the 5,011 pre-kindergarten students screened, 170 students (3%) were referred to an eye doctor for an exam. Forty-seven students (28%) actually reported to the school nurse they had received an eye exam and 38 students (81%) had a confirmed vision difficulty by an eye doctor.

<u>Kindergarten.</u> Twenty-six thousand eight hundred ten kindergarten students received a vision screening and 1,087 students (4%) were referred to an eye doctor for an exam. Of these referrals, 330 (30%) actually reported to the school nurse they received an eye exam and 277 students (84%) had a confirmed vision difficulty by an eye doctor.

<u>First Grade.</u> There were 27,491 first-grade students who received a vision screening and as a result, 1,323 students (5%) were referred to an eye doctor for an exam. Three hundred forty-seven students (26%) actually reported to the school nurse they received an eye exam and 301 students (87%) had a confirmed vision difficulty by an eye doctor.

<u>Second Grade</u>. Of the 27,912 second-grade students screened for vision, 1,529 students (6%) were referred to an eye doctor for an exam. Three hundred seventy-one students (24%) actually reported to the school nurse they received an exam and 332 students (90%) had a confirmed vision difficulty by an eye doctor.

<u>Fourth Grade</u>. Twenty-eight thousand three hundred ninety-one fourth grade students were screened for vision and 1,643 students (6%) were referred to an eye doctor for an exam. Three hundred eighty students (23%) actually reported to the school nurse they received an exam with 354.students (93%) receiving a confirmed vision difficulty by an eye doctor.

<u>Sixth Grade</u>. There were 27,132 students screened for vision. Of these, 2,157 students (8%) were referred to an eye doctor for an exam. Four hundred ten students (19%) actually reported to the school nurse they received an exam and 380 students (93%) had a confirmed difficulty by an eye doctor.

<u>Eighth Grade</u>. Of the 25,032 eighth grade students screened for vision, 1,721 students (7%) were referred to an eye doctor for an exam. Three hundred forty-eight students (20%) actually reported to the school nurse they received an exam and 318 students (91%) had a confirmed difficulty by an eye doctor.

<u>Transfer students.</u> Transfer students were reported in their respective grades as opposed to reporting them separately.

<u>Other.</u> All students receiving a vision screening in grades Pre-Kindergarten through 12 were 186,111. That is an additional 18,332 students screened that were not previously reported in the above grades. As a result of these extra screenings, an additional 1,419 students were referred to an eye doctor with 410 students reporting to the school nurse they received an exam. As a result, 384 students reported a confirmed vision difficulty by an eye doctor.

### Ark. Code Ann. 6-18-1502. Eye exams.

- (a) (1) A child who does not pass the eye and vision screening tests, except for the color perception test, shall be required to have a comprehensive eye and vision examination conducted by an optometrist or ophthalmologist within sixty (60) days of receipt of the vision screening report identifying the need for the examination.
- (2) The parent or guardian of the child shall be responsible for ensuring that the child receives the appropriate eye and vision examination.
- **(b) (1)** If a child does not receive an appropriate examination, as evidenced by a certificate signed by an optometrist or ophthalmologist acknowledging the examination, then the public school or public charter school where the child is registered shall report the child to the Department of Education.
- (2) The local school district shall take such action as necessary to encourage that the child receive an appropriate examination

Students who do not pass the vision screening are referred to an optometrist or ophthalmologist for a comprehensive eye and vision examination. The parent notification/referral letter is available in English and Spanish on the Arkansas Coordinated School Health website, <a href="www.arkansascsh.org">www.arkansascsh.org</a>. School nurses provide information concerning funds available to cover the cost of the vision exam and glasses, if needed. Such resources include the Lions Club International, National Association of School Nurses, Vision America, Medicaid, and Brandon Burlsworth Foundation. This information is also available on the Coordinated School Health website, <a href="www.arkansascsh.org">www.arkansascsh.org</a>.

## Vision Screenings, Fall Semester, 2010-2011

Grade	Screened	Referred	Received Exam	Confirmed Difficulty	Confirmed Normal
Pre-kindergarten	5011	170	47	38	9
Kindergarten	26,810	1,087	330	277	53
First	27,491	1,323	347	301	46
Second	27,912	1,529	371	332	39
Fourth	28,391	1,643	380	354	26
Sixth	27,132	2,157	410	380	30
Eighth	25,032	1,721	348	318	30
TOTALS	167,779	9,630	2,233	2,000	233

## Vision Screenings, Fall Semester, 2009-2010

Grade	Screened	Referred	Received Exam	Confirmed Difficulty	Confirmed Normal
Pre-kindergarten	4,829	121	19	10	9
Kindergarten	25,571	987	258	192	66
First	26,132	1,186	300	256	44
Second	25,589	1,162	288	249	39
Fourth	26,465	1,478	305	280	25
Sixth	26,432	1,875	322	292	30
Eighth	24,387	1,809	246	233	13
TOTALS	159,405	8,618	1,738	1,512	226

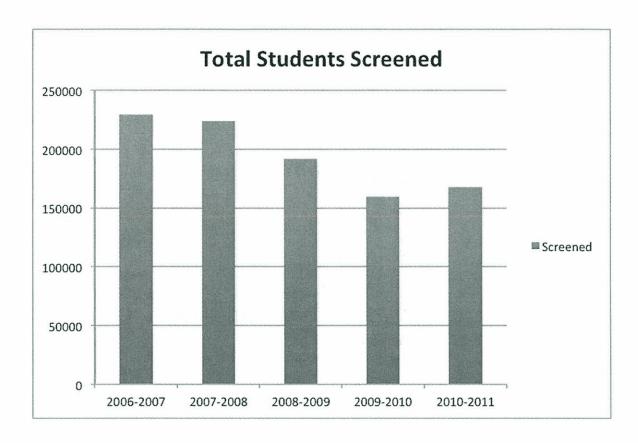
### Vision Screenings, Fall Semester, 2008-2009

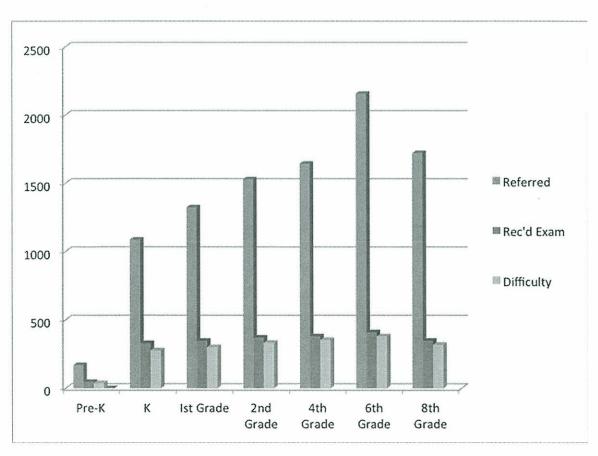
Grade	Screened	Referred	Received Exam	Confirmed Difficulty	Confirmed Normal
Pre-kindergarten	5,621	181	51	24	27
Kindergarten	32,051	1,214	329	268	61
First	32,230	1,564	434	365	69
Second	32,121	1,664	428	385	43
Fourth	32,118	2,115	526	478	48
Sixth	30,314	2,120	420	400	20
Eighth	27,089	1,633	266	251	15
TOTALS	191,544	10,491	2,454	2,171	283

# Vision Screenings, Fall semester 2007-2008

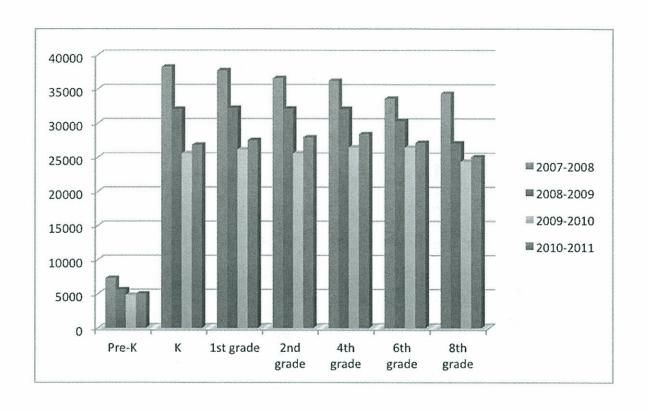
Grade	Screened	Referred	Received Exam
Pre-kindergarten	7,956	305	137
Kindergarten	35,912	2,469	914
First	35,836	2,876	1,038
Second	34,604	2,983	1,121
Fourth	34,810	3,413	1,228
Sixth	32,654	3,288	1,286
Eighth	32,931	2,951	763
TOTALS	185,063	18,285	5,724

### **2010 Interim Results**





# Total Students Screened in School Years 2007-08, 2008-09, 2009-10 & 2010-2011



### Map Description:

Geographic Information Systems (GIS) are now providing us the vehicles to think about, analyze, and utilize our data in dramatically innovative ways. By creating layers of data, which can be shown together on a map, we can now visualize our data in ways that allow us ultimately to make more data driven decisions about resource placement. We can quickly identify areas of concern and can easily visualize associations between variables by *layering* our data. The layers used to create this map were as follows:

Green Area (Primary Office Locations) – Optometrists primary offices were located on a map and were indicated by points. A polygon was drawn around each office (point) that represented 30 minutes of driving time from those points outward; generally referred to as "Service Areas". The service areas are calculated with street data that includes information on barriers such as speed limits, turns, one ways, traffic signs, etc. They were then merged together wherever they overlapped creating one continuous area.

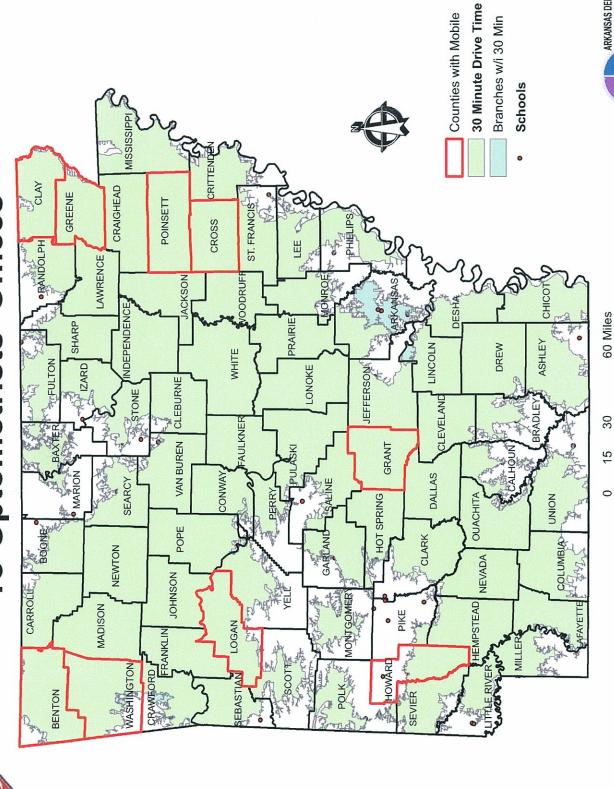
Blue Area (Branch Offices) – The locations of branch offices were located and service areas were calculated as they were with the primary offices. This layer was then placed under the primary office layer allowing us to see any new areas that were now within 30 minute service areas that were not there before.

Red Outlines (Counties where "Mobile" was reported) – Some branch offices could not be mapped in the traditional method because the addresses were reported as "Mobile". However, knowing the counties in which they reside, we can create a layer showing those counties.

**Schools** - Each school was located on the map and indicated by a red point. When we lay that layer under the drive time layers we can see which schools fall outside the 30 minute service areas. Upon closer inspection we can also identify the schools lying at the very edge of the service areas.

White Areas – Indicate the parts of the state lying outside the thirty minute service areas.

# K-12 Schools Outside 30 Minute Drive Time To Optometrists' Offices



Date: June 2011 Data Source: Arkansas School Vision Screening Data 2010-2011

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