## Critical Academic Licensure Shortage Areas for the 2020-2021 School Year

In accordance with Arkansas Code § 6-15-403, the State Board of Education has authority to annually declare critical academic shortage areas. As described in Arkansas Code Annotated §§ 6-81-608 and 609 (Incentives for Additional Licensure), 6-81-1601 through 6-81-1606 (Financial Incentives for Teaching in Shortage Areas), teachers in shortage areas may be entitled to financial incentives.

The Arkansas Department of Education, Division of Elementary and Secondary Education has designated the following areas as critical academic shortage areas for the 2020-2021 school year.

| Art (K-12) | Business (4-12) | Biology (7-12) | Chemistry (7-12) |
| :--- | :--- | :--- | :--- |
| French (K-12) | Mathematics (7-12) | Physics (7-12) | Special Education (K-12) |

Written objective standards were used in developing the proposed teacher shortage areas. Accordingly, since waivers are granted to public schools as well as private schools in Arkansas, the proposed teacher shortage areas meet the specific requirements found in 34 CFR 682.210(q)(6)(iii). Standards used to determine the shortage areas are based on the most recent available data for the following factors:
a) Numbers of teachers preparing for Arkansas educator licenses
b) Numbers of teachers receiving Arkansas licenses for the first time
c) Numbers of long-term substitute teachers in classrooms, in Arkansas public schools
d) Numbers of ALP waivers granted to teachers teaching out of their area of licensure
e) Potential decreases in the teacher workforce due to attrition and retirement

|  |  | Preparing |  |  | Potential New Hires |  |  | Long-term Subs |  |  | Teachers Out-ofField (ALPs) |  |  | Potential for Need |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area |  |  |  |  |  |  |  | $\begin{aligned} & 0 \\ & \frac{0}{O} \\ & 0 \\ & 0 \\ & \# \end{aligned}$ |  | 0 <br> 0 <br> 0 <br> 0 <br> $\ddots$ | $\underset{\ddagger}{\frac{n}{1}}$ |  | $\begin{aligned} & 000 \\ & 00 \\ & 0 \\ & \text { Q1 } \end{aligned}$ | $$ |  |  | ㅍ. |
| Special Education | 3,082 | 1,186 | 38.48\% | 38.48 | 488 | 15.83\% | 15.83 | 127 | 4.12\% | 41.21 | 410 | 13.30\% | 13.30 | 310 | 10.06\% | 10.06 | 90 |
| Mathematics | 2,475 | 134 | 5.41\% | 5.41 | 113 | 4.57\% | 4.57 | 27 | 1.09\% | 10.91 | 43 | 1.74\% | 1.74 | 183 | 7.39\% | 7.39 | 90 |
| Art | 1,255 | 100 | 7.97\% | 7.97 | 100 | 7.97\% | 7.97 | 20 | 1.59\% | 15.94 | 12 | 0.96\% | 0.96 | 104 | 8.29\% | 8.29 | 91 |
| French | 129 | 5 | 3.88\% | 3.88 | 7 | 5.43\% | 5.43 | 1 | 0.78\% | 7.75 | 0 | 0.00\% | 0.00 | 13 | 10.08\% | 10.08 | 91 |
| Chemistry | 1,906 | 36 | 1.89\% | 1.89 | 49 | 2.57\% | 2.57 | 4 | 0.21\% | 2.10 | 30 | 1.57\% | 1.57 | 154 | 8.08\% | 8.08 | 93 |
| Physics | 1,797 | 24 | 1.34\% | 1.34 | 30 | 1.67\% | 1.67 | 1 | 0.06\% | 0.56 | 16 | 0.89\% | 0.89 | 150 | 8.35\% | 8.35 | 93 |
| Business | 1,775 | 77 | 4.34\% | 4.34 | 162 | 9.13\% | 9.13 | 12 | 0.68\% | 6.76 | 14 | 0.79\% | 0.79 | 176 | 9.92\% | 9.92 | 96 |
| Life Science (Biology) | 1,657 | 113 | 6.82\% | 6.82 | 137 | 8.27\% | 8.27 | 12 | 0.72\% | 7.24 | 7 | 0.42\% | 0.42 | 144 | 8.69\% | 8.69 | 99 |
| Library | 947 | 159 | 16.79\% | 16.79 | 103 | 10.88\% | 10.88 | 4 | 0.42\% | 4.22 | 45 | 4.75\% | 4.75 | 164 | 17.32\% | 17.32 | 101 |
| Social Studies | 2,409 | 232 | 9.63\% | 9.63 | 197 | 8.18\% | 8.18 | 13 | 0.54\% | 5.40 | 30 | 1.25\% | 1.25 | 210 | 8.72\% | 8.72 | 102 |
| English / Lang. Arts | 2,676 | 236 | 8.82\% | 8.82 | 227 | 8.48\% | 8.48 | 18 | 0.67\% | 6.73 | 12 | 0.45\% | 0.45 | 177 | 6.61\% | 6.61 | 104 |
| $\begin{aligned} & \text { Physical Ed / } \\ & \text { Health } \end{aligned}$ | 3,678 | 280 | 7.61\% | 7.61 | 316 | 8.59\% | 8.59 | 13 | 0.35\% | 3.53 | 26 | 0.71\% | 0.71 | 306 | 8.32\% | 8.32 | 104 |
| Spanish | 420 | 29 | 6.90\% | 6.90 | 27 | 6.43\% | 6.43 | 1 | 0.24\% | 2.38 | 4 | 0.95\% | 0.95 | 20 | 4.76\% | 4.76 | 105 |
| $\begin{aligned} & \hline \text { Middle Ch. - } \\ & \text { Eng } \\ & \hline \end{aligned}$ | 5,725 | 241 | 4.21\% | 4.21 | 307 | 5.36\% | 5.36 | 11 | 0.19\% | 1.92 | 36 | 0.63\% | 0.63 | 99 | 1.73\% | 1.73 | 105 |
| Fam \& Cons. Science | 645 | 55 | 8.53\% | 8.53 | 61 | 9.46\% | 9.46 | 1 | 0.16\% | 1.55 | 4 | 0.62\% | 0.62 | 66 | 10.23\% | 10.23 | 106 |
| Elementary Education | 14,303 | 1,354 | 9.47\% | 9.47 | 968 | 6.77\% | 6.77 | 34 | 0.24\% | 2.38 | 54 | 0.38\% | 0.38 | 1,069 | 7.47\% | 7.47 | 106 |
| Agriculture | 362 | 35 | 9.67\% | 9.67 | 36 | 9.94\% | 9.94 | 1 | 0.28\% | 2.76 | 5 | 1.38\% | 1.38 | 33 | 9.12\% | 9.12 | 106 |
| Drama/Speech | 731 | 68 | 9.30\% | 9.30 | 82 | 11.22\% | 11.22 | 3 | 0.41\% | 4.10 | 25 | 3.42\% | 3.42 | 47 | 6.43\% | 6.43 | 107 |
| Middle Ch. Math | 4,965 | 231 | 4.65\% | 4.65 | 316 | 6.36\% | 6.36 | 8 | 0.16\% | 1.61 | 17 | 0.34\% | 0.34 | 88 | 1.77\% | 1.77 | 107 |
| Music | 1,426 | 226 | 15.85\% | 15.85 | 142 | 9.96\% | 9.96 | 14 | 0.98\% | 9.82 | 5 | 0.35\% | 0.35 | 116 | 8.13\% | 8.13 | 108 |
| $\begin{aligned} & \text { Middle Ch. - } \\ & \text { Soc St } \end{aligned}$ | 4,358 | 226 | 5.19\% | 5.19 | 330 | 7.57\% | 7.57 | 5 | 0.11\% | 1.15 | 42 | 0.96\% | 0.96 | 91 | 2.09\% | 2.09 | 109 |
| $\begin{aligned} & \text { Middle Ch. - } \\ & \text { Sci } \\ & \hline \end{aligned}$ | 3,651 | 190 | 5.20\% | 5.20 | 317 | 8.68\% | 8.68 | 6 | 0.16\% | 1.64 | 29 | 0.79\% | 0.79 | 68 | 1.86\% | 1.86 | 110 |
| Computer Science | 256 | 16 | 6.25\% | 6.25 | 65 | 25.39\% | 25.39 | 0 | 0.00\% | 0.00 | 10 | 3.91\% | 3.91 | 12 | 4.69\% | 4.69 | 123 |
| Counseling | 1,324 | 481 | 36.33\% | 36.33 | 161 | 12.16\% | 12.16 | 2 | 0.15\% | 1.51 | 60 | 4.53\% | 4.53 | 196 | 14.80\% | 14.80 | 128 |
| Gifted Talented | 412 | 274 | 66.50\% | 66.50 | 59 | 14.32\% | 14.32 | 8 | 1.94\% | 19.42 | 59 | 14.32\% | 14.32 | 60 | 14.56\% | 14.56 | 133 |
| Ind. Tech.*** | 87 | 35 | 40.23\% | 40.23 | 45 | 51.72\% | 51.72 | 2 | 2.30\% | 22.99 | 1 | 1.15\% | 1.15 | 8 | 9.20\% | 9.20 | 159 |
| Marketing ** | 288 | 97 | 33.68\% | 33.68 | 172 | 59.72\% | 59.72 | 1 | 0.35\% | 3.47 | 0 | 0.00\% | 0.00 | 30 | 10.42\% | 10.42 | 180 |
| Journalism * | 467 | 236 | 50.54\% | 50.54 | 236 | 50.54\% | 50.54 | 2 | 0.43\% | 4.28 | 1 | 0.21\% | 0.21 | 44 | 9.42\% | 9.42 | 187 |
| * = Includes English in "Preparing" and "FTL" |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ** = Includes Business in "Preparing" and "FTL" |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***= Includes Agriculture in "Preparing" and "FTL" |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Definitions

Teachers in Area - Numbers of teachers teaching in each license area in Arkansas public schools
Preparing for license - Number enrolled in preparation programs to be licensed in the area
Potential New Hires - Number who received Arkansas educator licenses for the first time in the prior year
Long-term Subs - Number of long-term substitute teachers in classrooms, in Arkansas public schools
ALP Waivers - Number of teachers teaching out of their license area
Potential for need - Number of Arkansas public school educators who retired in the prior year or who are expected to retire in the near future based on age + years of service $>84$.

## Calculations

Each factor was calculated as a percentage of the \# of TIA and given a score accordingly.
Scores for Long-term Subs were weighted by a factor of ten.
Positive factors (Numbers of first time licenses issued and Numbers preparing for licenses) were compiled and added to the standard of 100 .
Negative factors (Long-term Subs, ALP Waivers and Retirement/Potential) were compiled and subtracted from the standard.
Scores less than 100 indicated the need was greater than the supply and were determined to be shortage areas.

