

PROMOTING EQUITY:

ACCESS TO HIGH-PERFORMING SCHOOLS
IN NORTHWEST ARKANSAS



ABOUT IFF

IFF, the largest nonprofit community development financial institution (CDFI) in the Midwest, provides comprehensive community development services across the region through capital solutions, real estate consulting and development, and action-oriented research for nonprofits and institutions serving low-income communities. As part of IFF's mission to strengthen nonprofits and the communities they serve, IFF Research & Evaluation conducts analyses to facilitate strategic planning and resource allocation for states, municipalities, districts, schools, foundations, and nonprofits throughout the country. Over the course of nearly fifteen years of involvement in K-12 school improvement, IFF Research & Evaluation has developed a signature approach to assessing need in public education.

IFF's needs assessment methodology is distinctive for its spatial analysis of performing capacity at the neighborhood level. Its school studies are also driven by careful examination of the contextual factors that influence the public school landscape. Decision-makers have utilized insights from IFF's education research to inform strategic initiatives such as investments in districts and schools, reallocation or sale of vacant school buildings, facilities planning and site selection, identification of schools for potential turnarounds or as sources of best practices, solicitations and selection criteria for charter schools, and targeted communication regarding public school options.

IFF's education needs assessments evolved out of a partnership with the leadership of Chicago Public Schools. In 2003, the district sought to identify neighborhoods to prioritize for the location of new performing schools. IFF's research enhanced the district's ability to target its school improvement efforts and led to a better distribution of K-12 options for families. IFF's needs assessments have evolved and been adapted to guide policy and practice in many other cities, including Cleveland, Denver, Detroit, Indianapolis, Kansas City, Milwaukee, Minneapolis, St. Louis, and Washington, DC. IFF has also completed statewide analyses of public school access in Illinois and Indiana and needs assessments for early care and education throughout the Midwest.

PROMOTING EQUITY:

ACCESS TO HIGH-PERFORMING SCHOOLS
IN NORTHWEST ARKANSAS

November 2018

ACKNOWLEDGEMENTS

This study was conducted by IFF with financial support from the Walton Family Foundation.

IFF PROJECT STAFF

Jesse Bakker

Former GIS Analyst

Jenny Boyts

Director of School Services

Jordan Brown

Research and Evaluation Manager

Katie Coleman

Director of Communications

Kirby Burkholder

President, Social Impact Accelerator

Nicholas V. DiRago

Former Research Associate

Rachel Gordon

Research and Evaluation Manager

David Mieksztyn

GIS Analyst

Tara Townsend

Vice President, Research and Evaluation

ADVISORY COMMITTEE

Marlin Berry

Superintendent

Rogers Public Schools

Charles Cudney

Director

Northwest Arkansas Education Service Cooperative

Kim Davis

Senior Program Officer

Walton Family Foundation

Mike Harvey

Interim CEO,

NW Arkansas Council

Cambre Horne-Brooks

Executive Director

Fayetteville Public Education Foundation

Debbie Jones

Superintendent

Bentonville Public Schools

Mary Ley

Chief Executive Officer

Arkansas Arts Academy

Sarah McKenzie

Executive Director, Office for Education Policy

University of Arkansas

Mireya Reith

Chair
State Board of Education

Gary Ritter

Office for Education Policy Faculty Director
University of Arkansas

Jim Rollins

Superintendent
Springdale Public Schools

Megan Slocum

Associate Superintendent for Support Services at
Fayetteville Public Schools & Former Superintendent
of Springdale Public Schools

Tina Smith

Director, Policy and Special Projects
Arkansas Department of Education

Katie Tennant

Executive Director
Fayetteville Area (Washington County),
Arkansas Community Foundation

Andrew Wendt

Former Superintendent
Fayetteville Public Schools

Jody Wiggins

Assistant Superintendent
Siloam Springs School District

TABLE OF CONTENTS

Executive Summary 6

Needs Assessment 10

Demographic Analysis..... 24

District Value-Added Analysis 30

School Choice Analysis 34

Conclusion 36

Appendix: Data Sources 40

MAPS

Map 1: Northwest Arkansas Study Area Boundaries 14

Map 2: Northwest Arkansas Study Area Ranks, Grade K-12 16

Map 3: Northwest Arkansas Study Service Level, Grade K-12..... 18

Map 4: Northwest Arkansas Study Areas: Number of Students per Square Mile Enrolled in Public Schools..... 25

Map 5: Northwest Arkansas Study Areas: Students Enrolled in Public Schools Eligible for Subsidized Meals 26

Map 6: Northwest Arkansas Study Areas: Hispanic/Latino Students Enrolled in Public Schools 28

Map 7: Value-Add by District..... 31

CHARTS

Chart 1: Northwest Arkansas School Performance Rating by School Count and Student Enrollment 2016–2017 11

Chart 2: Northwest Arkansas School Performance Rating by School Type, 2016–2017 12

Chart 3: Northwest Arkansas School Performance Rating by Grade Span, 2016–2017 13

Chart 4: Students Exercising School Choice by County, Northwest Arkansas, Grades K–12, 2016–2017 34

Chart 5: Students Exercising School Choice by County, and Race, Northwest Arkansas, Grades K–12, 2016–2017 34

TABLES

Table 1: Northwest Arkansas Student Enrollment by Grade Span and School Type, 2016–2017 15

Table 2: K-12 Supply & Demand by Grade Span, Northwest Arkansas, 2016–2017 17

Table 3: K-12 Supply & Demand by Grade Span, Highest-Need Areas, 2016–2017 19

Table 4: K-12 Supply & Demand, Highest-Need Areas, 2016–2017..... 20

Table 5: K-12 Supply & Demand, All Schools Zones by Priority Ranking, 2016–2017 21

EXECUTIVE SUMMARY

OVERVIEW

At IFF, we believe every child deserves the opportunity to attend a good school in his or her neighborhood and, with hard data and a local focus, we aim to provide stakeholders with the tools to achieve that aspiration. To that end, IFF was commissioned to conduct a needs assessment for K-12 public education in Northwest Arkansas with ***the objective of measuring student accessibility to high-performing public schools in their neighborhood***. The study will seek to equip local school leaders, public officials, philanthropy, and other stakeholders to make data-informed decisions at the county level to improve school performance and, subsequently, student outcomes.

In this study, IFF evaluated the access to quality public education at the neighborhood level for the 2016-2017 school year by comparing student enrollment at high-performing public schools (i.e. supply) to the population of students enrolled in public schools (i.e. demand). These estimates informed both the ***service gap***, or the number of students without access to a high-performing school (i.e. demand less supply), as well as the ***service level***, or the percent of students with access to a high-performing school (i.e. supply divided by demand). IFF determined “high-performing” or “high-quality” schools based on those that were A-rated or B-rated by the Arkansas Department of Education’s (ADE) statewide rating tool. Additionally, this study exclusively focuses on public schools and categorizes schools by governance types and grade span.

In addition, IFF completed spatial analyses to supplement the core needs assessment by examining various student demographic characteristics, the actual vs. expected performance-based value add provided by school districts

in the counties compared to statewide peers, and the rate at which students exercise school choice in the counties.

KEY FINDINGS

Service Gap & Service Level

- Almost 70% of students in Northwest Arkansas had access to high-performing K-12 public schools in the 2016-2017 school year.
- To ensure that every child in both Washington and Benton counties have access to a high-performing school, 26,000 additional seats are required at high-performing public schools.
- Less densely populated school districts experienced the largest service gaps and smallest service levels across Northwest Arkansas. Additionally, these more rural school districts saw higher rates of poverty among their enrolled students, as measured by the percentage of subsidized meals provided.

High-Need Areas

- 60% of the K-12 service gap was concentrated in the fourteen school zones identified as high-need areas. Yet service levels vary greatly among these areas from as low as 6% in the Lincoln school zone to as high as 62% in the Springdale D2 North school zone of students enrolled in high-performing schools.
- In high-need areas, high school students had the most limited access to high-performing schools, with a service level of just 12%, and middle school students had the greatest access, with a service level of 72%. Overall, 45% of students living in the identified

high-need areas were enrolled in high-performing schools.

- The high-need areas with the largest service gaps across both counties are listed below:
 - o Siloam Springs South D1/D3/D4
 - o Siloam Springs North D2/D5
 - o Gravette
 - o Rogers D2
 - o Springdale D3 Central
 - o Springdale D4
 - o Lincoln
 - o Springdale D5
 - o Pea Ridge
 - o Springdale D3 East
 - o Rogers D1
 - o Springdale D5 Central
 - o Springdale D2 North
 - o Greenland

School Performance

- Over 65% of K-12 public schools in Northwest Arkansas (specifically 90 individual school campuses) were rated as high-performing by the Arkansas Department of Education (ADE).
- Charter and traditional school governance types were both similarly rated with about 65% receiving A- or B-ratings in the 2016-2017 school year.
- 83% of all high performing schools were concentrated in just four school districts (Bentonville, Springdale, Rogers and Fayetteville). While the Siloam Springs and Springdale districts had the greatest amounts of low performing schools, with 32% located in these districts.

RECOMMENDATIONS

Prioritize high schools in high-need areas for targeted school improvement activities

- Over half of the service gap is concentrated in high schools located throughout Northwest Arkansas. Additionally, of the eight high schools located in high-need areas, only one was rated as high-performing in the 2016-2017 school year.
- By targeting additional resources in these relatively small number of high schools, especially in the more densely populated school districts, Northwest Arkansas can achieve greater impact by reaching more high-need students while taking steps to minimize this gap.
- Create individual strategic plans for each of the seven low-performing high schools located in high-need areas to address specific challenges and establish tangible plans of action to improve school performance.

Evaluate special programming needs to serve diverse regional population

- Though this report did not evaluate quality of or access to special programming in public schools, Northwest Arkansas' regional emphasis on its growing Hispanic/Latino population may require additional and better targeted educational services in the future.
- Promote equity in access and quality to English as a Second Language (ESL) service offerings on a school district level in public schools.

Coordinate strategic planning for K-12 public education across governing bodies

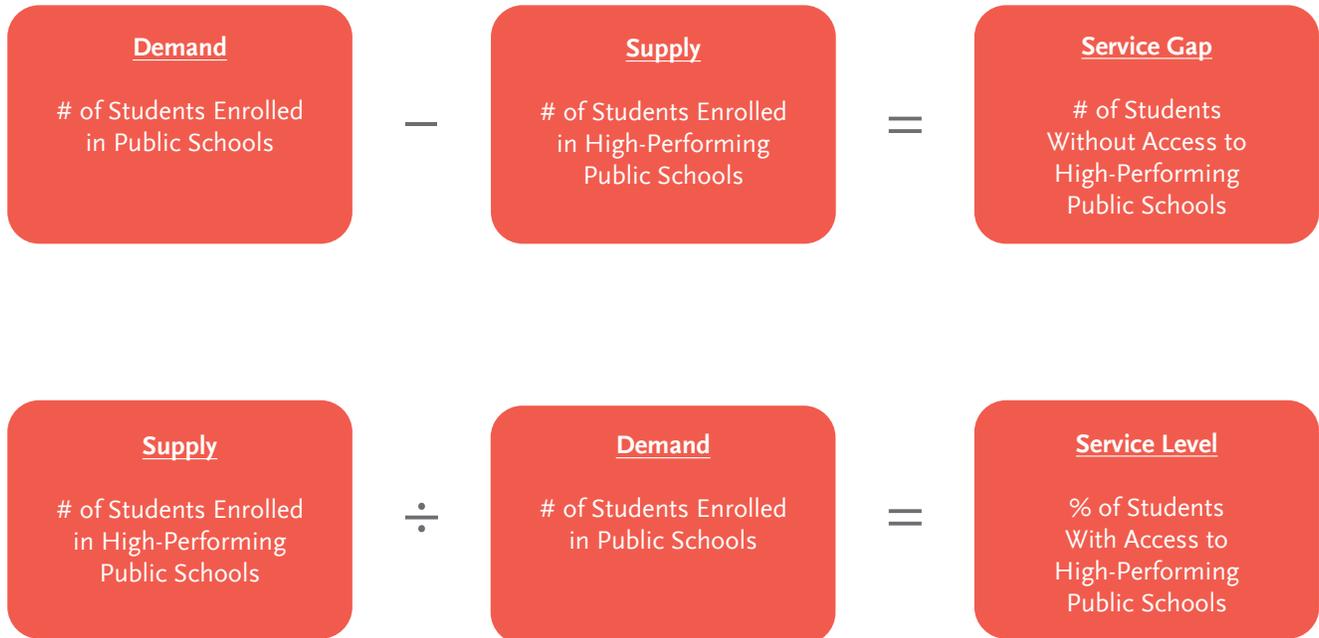
- Identify opportunities to enhance engagement across the various school governing bodies, such as traditional school district boards, charter school leadership, and other government agencies, within Northwest Arkansas and establish concrete mechanisms and forums for ongoing collaboration.
- As a result, better coordination across governing bodies can lead to:
 - o A shared understanding and unified response to school performance challenges,
 - o Minimal redundancies in school improvement efforts,
 - o Streamlined enrollment strategies to fill vacant seats in high-performing schools,
 - o A forum to share best practices and lessons learned, and
 - o Enhanced integration of available data across educational entities.

lowest performing schools in need of intervention and determining necessary improvement actions.

Utilize findings to inform the implementation of the State of Arkansas' ESSA Plan

- The Every Student Succeeds Act (ESSA) will go into effect during the 2018-2019 school year and aims to provide opportunity for all students by increasing school standards and teacher quality, defining measures of accountability and emphasizing school improvement efforts.
- Key findings related to low-performing schools, especially in Northwest Arkansas' high-need areas, can better target school improvement efforts, as the ESSA Plan mandates greater flexibility in identifying the

NEEDS ASSESSMENT



METHODOLOGY OVERVIEW

At its core, this study uses the supply-and-demand needs assessment approach that IFF has applied in many geographies to measure access to quality K-12 education. *The basic methodology calculates the number of students accessing high-performing public schools and compares it to the total number of students participating in the public school system.* Accordingly, in this needs assessment, **supply** is the total capacity at high-performing public schools, which is measured by the number of students enrolled at a high-performing public school in Northwest Arkansas. While **demand** is the total number of students enrolled in the county's public schools (i.e. district and charter).

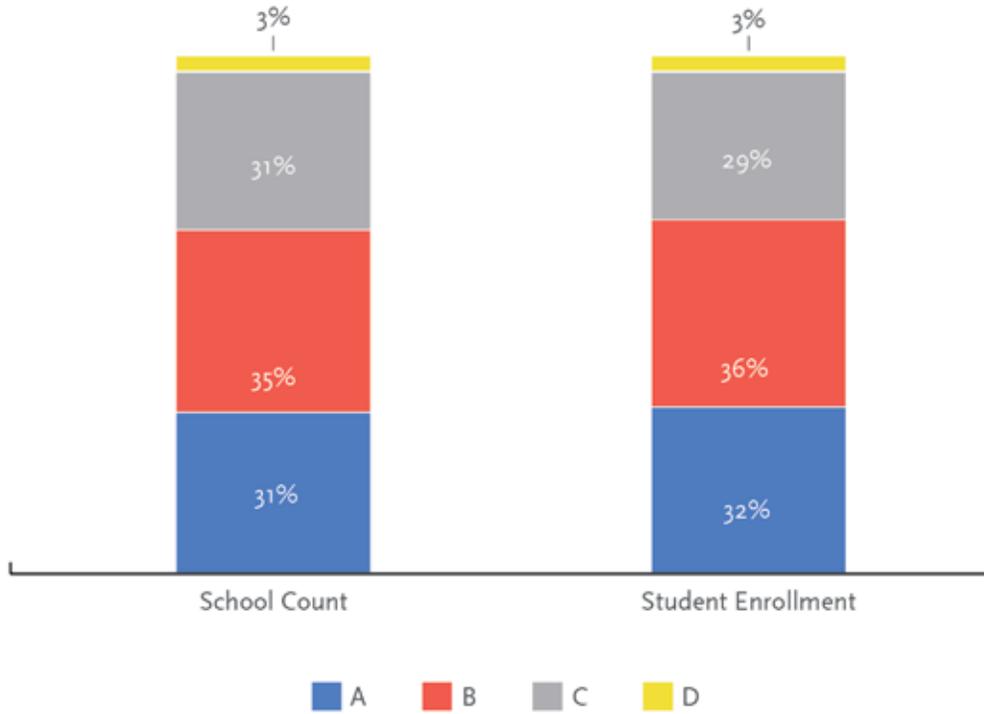
Once supply and demand are calculated, the service gap and service level are computed at the neighborhood level by combining all K-12 grade spans: elementary (grades K-5), middle (grades 6-8), and high school (grades 9-12).

The **service gap** is the number of students without access to a high-performing school (i.e. the difference between demand and supply). The service gap quantifies students currently enrolled at low-performing schools in need of seats at high-performing schools.

Similarly, the **service level** is the percent of students with access to a high-performing school (i.e. the quotient of supply over demand). The service level quantifies the percent of students enrolled at a high-performing school.

A composite ranking is then created from the average of each neighborhood's individual school rankings by service gap. The **highest-need areas** will have the highest composite ranks and, therefore, the largest service gap as measured by the number of students lacking access to high-performing schools in the counties.

Chart 1: Northwest Arkansas School Performance Rating by School Count and Student Enrollment, 2016–2017



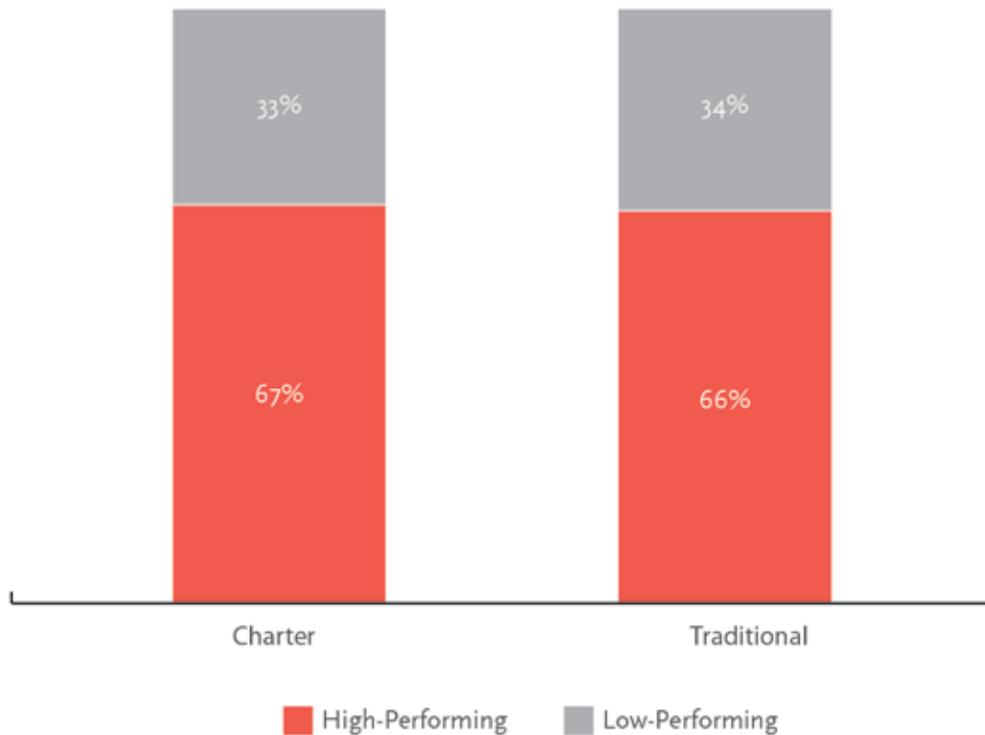
SCHOOL PERFORMANCE RATING

The Arkansas Department of Education (ADE) annually publishes a Performance Report rating public schools on a scale of A to F based on data collected on test performance, teacher qualification, retention, discipline, etc. For the purpose of this study, *IFF categorized high-performing schools as those that were A-rated or B-rated by the state’s 2017 Performance Report.*

Key findings related to school performance in Northwest Arkansas are highlighted below:

- Approximately **66% of general education public schools were A-rated or B-rated thus considered high-performing** in this study. Similarly, 32% of students attended A-rated schools and 36% of students attended B-rated schools (Graph 1).
- Traditional public schools are the most common school type in the county comprising over 90% of school types and over 60% of them are considered high-performing (Graph 2).
- While charter schools make up just 7% of school types, 2 in 3 are rated as high-performing throughout the counties (Graph 2).

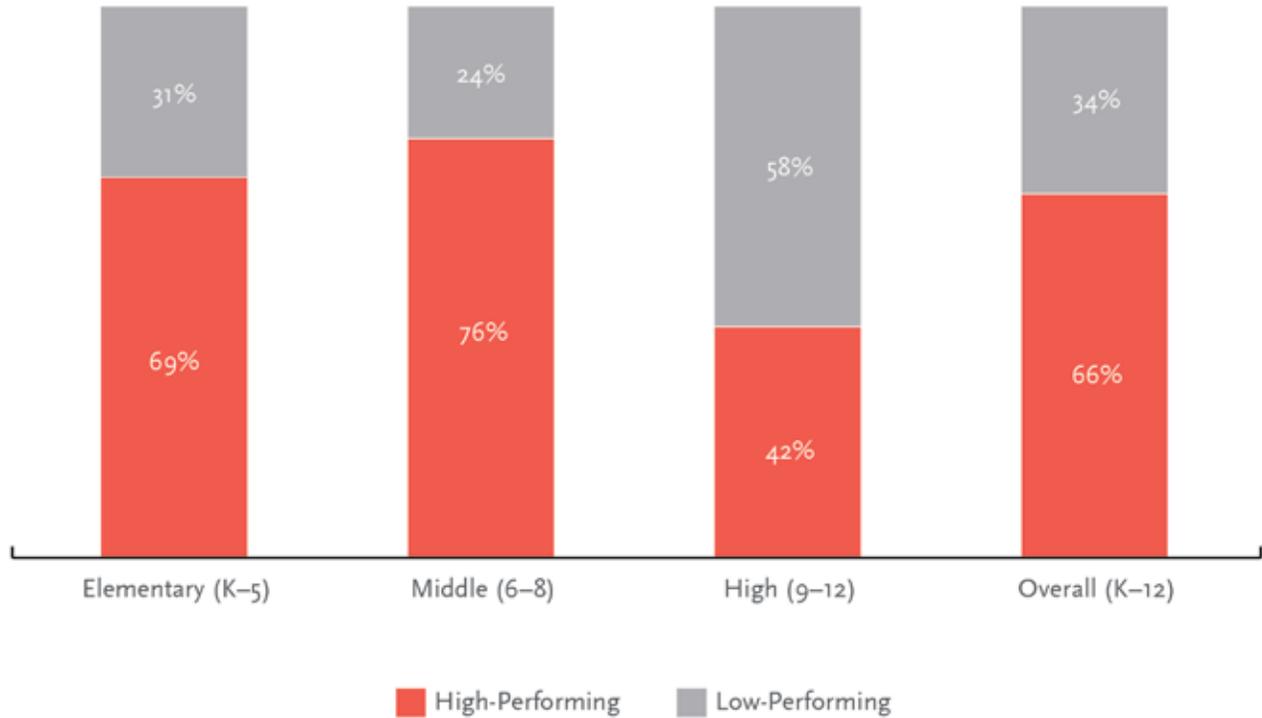
Chart 2: Northwest Arkansas School Performance Rating by School Type, 2016–2017



- Overall, *two thirds of public schools received high-performance ratings when analyzed by grades K-12 in aggregate*. However, when analyzed by individual grade span, high schools have the lowest rate of high-performing schools at just over 40% of all campuses. Over 70% of both elementary and middle schools received high-performance ratings (Graph 3).

SECTION
CONTINUED
ON NEXT PAGE

Chart 3: Northwest Arkansas School Performance Rating by Grade Span, 2016–2017



STUDY AREA DEVELOPMENT

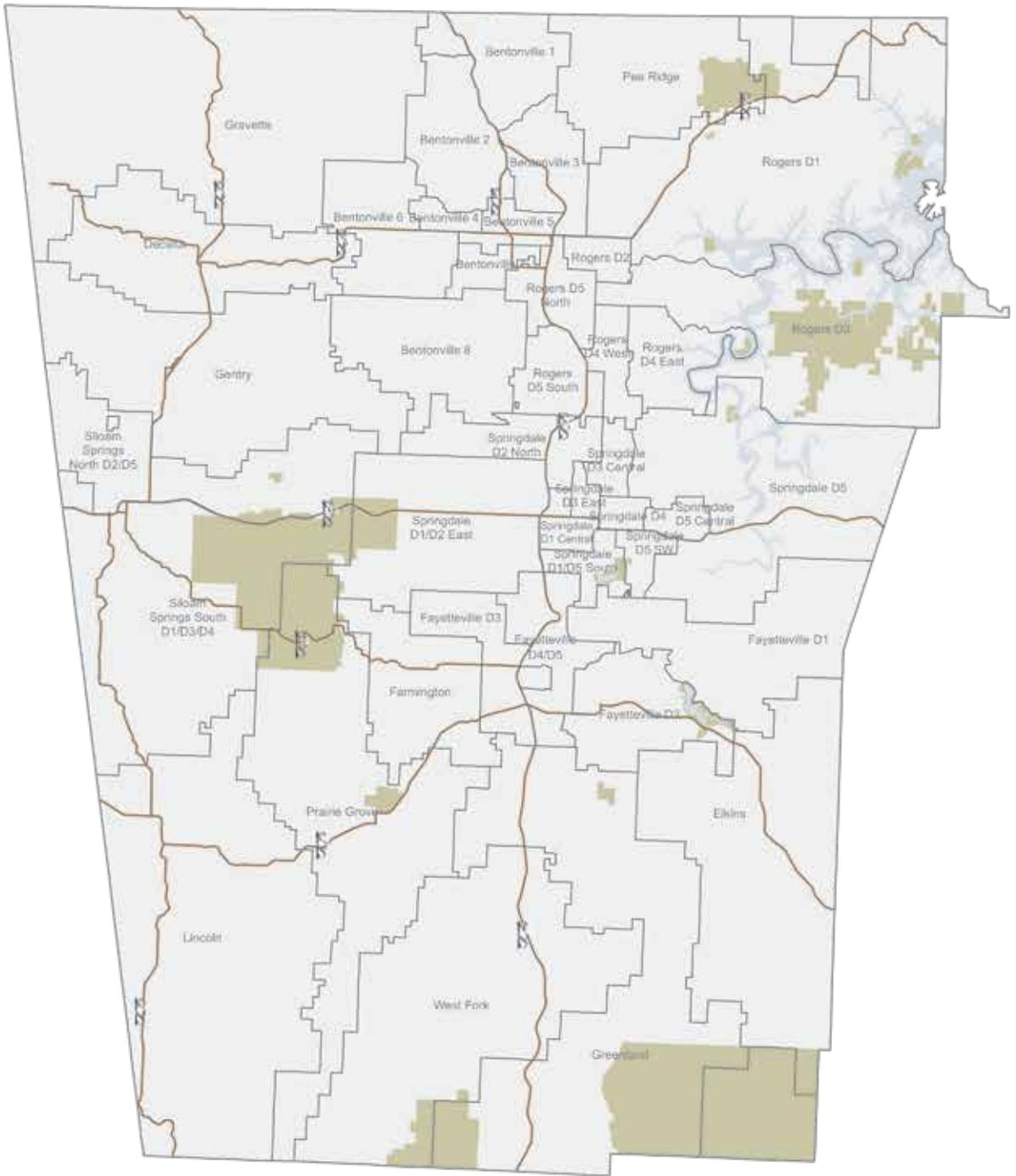
For this analysis, the neighborhoods for analysis were derived from the local school district board election zone boundaries in 2016-2017. Northwest Arkansas includes 14 school districts located throughout Benton and Washington Counties and, in this study, the smaller study areas within these larger school districts are referred to as “school zones”. Overall, there were 41 school zones in Northwest Arkansas.

Additionally, the maps included in this report spatially distribute demand and supply into neighborhoods and attendance boundaries in proportion to the population of

enrolled students. For traditional district schools with an assigned attendance boundary, each school’s enrollment is distributed spatially throughout the boundary.

**SECTION
CONTINUED
ON NEXT PAGE**

Map 1: Northwest Arkansas Study Area Boundaries



- Study Geography
- Parks
- Water
- Roads



Table 1: Northwest Arkansas Student Enrollment by Grade Span and School Type, 2016–2017

School Type	Count of Schools	Student Enrollment				
		Elementary (K-5)	Middle (6-8)	High (9-12)	Overall (K-12)	% Total by School Type
Public	137	39,917	19,405	25,275	84,597	92%
Traditional	121	38,894	18,390	20,678	77,962	85%
Charter	16	1,023	1,015	4,597	6,635	7%
District Conversion	7	—	297	3,836	4,133	5%
Open Enrollment	9	1,023	718	761	2,502	3%
% of Total by Grade Span		47%	23%	30%	100%	
Private ^x	19	*	*	*	3,266	4%
Home School ^x	*	*	*	*	3,828	4%
Total	156	39,917	19,405	25,275	91,691	100%

* Data unavailable at this level of detail

^x Excluded from Needs Assessment Analysis

PUBLIC SCHOOL ENROLLMENT

The unit of analysis for this needs assessment is the school – not the individual student. Therefore, the methodology uses school-level data to make determinations about educational quality and access at the school zone and county levels. This study exclusively focuses on public schools and categorizes schools by school governance type (i.e. traditional, charter) and grade span (i.e. Elementary – Grades K-5, Middle – Grades 6-8, High – Grades 9-12). Subsequently, home school and private schools were considered out of the scope for the study.

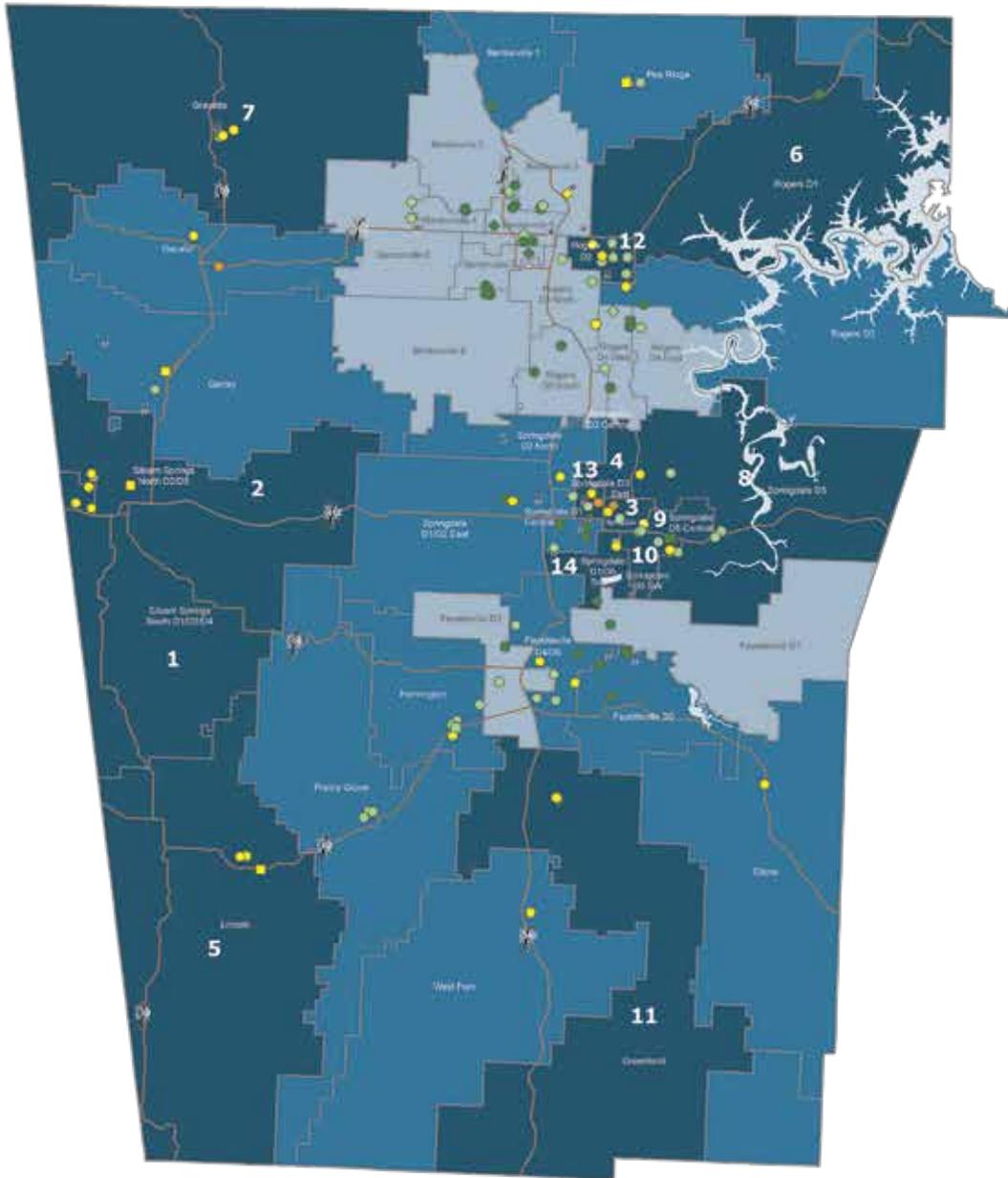
Key findings related to public school enrollment in Northwest Arkansas are highlighted below:

- *Benton and Washington Counties enrolled over 84,000 students in its public schools*, representing over 92% of the students in the counties.
- In terms of school governance type, most students were enrolled at traditional public schools while approximately 7% of students were enrolled at both charter school types.
- Additionally, almost half of all students in the counties were enrolled in elementary schools at 47% of the school-age population. Furthermore, 30% of students were enrolled at high schools and 23% of students were enrolled at middle schools according to available data.

**SECTION
CONTINUED
ON NEXT PAGE**

Map 2: Northwest Arkansas Study Area Ranks, Grade K-12

Rank based on 2016-2017 School Performance



Service Gap Ranked

- High Need (1 - 14)
- Medium Need (15 - 28)
- Low Need (29 - 41)

- Study Geography
- Parks
- Water

School Performance

- A
- B
- C
- D
- F
- No Grade

School Type

- Traditional Public
- Open Enrollment Charter
- District Conversion Charter
- Alternative
- Private



Table 2: K–12 Supply & Demand by Grade Span, Northwest Arkansas, 2016–2017

Grade Span	High-Performing Schools	Demand	Supply	Service Gap	Service Level	Percent of Countywide Gap
Elementary (K-5)	60	39,348	29,371	9,977	75%	38%
Middle (6-8)	34	19,064	16,622	2,442	87%	9%
High (9-12)	13	24,861	11,120	13,741	45%	53%
Overall (K-12)	90*	83,273*	57,113	26,160	69%	100%

*Count of high-performing schools do not total due to certain schools overlapping the established grade spans.

x Total demand varies slightly from total public school enrollment due to inability to geocode all student addresses for the needs assessment analysis.

NEEDS ASSESSMENT ANALYSIS

In the 2016 – 2017 school year, 156 individual school campuses were in operation within the Washington and Benton County boundaries including public, private and home school governance types. Of these 156 schools, 137, or 92% of the total, were included in the analysis of supply and demand based on their school governance type (i.e. private schools and home schools were excluded). **Furthermore, 90 of the 137 public schools were rated as high-performing offering over 57,000 high-quality seats to K-12 students (Table 2).**

Overall, of the approximately 83,000 students attending public schools in the counties, **about 70% of them were enrolled in a high-performing K-12 school.** In contrast, just over 26,000 students lacked access to high-performing public schools. Specifically, 13,700 high school students were not enrolled in high-performing public schools representing over half of the county-wide service gap at 53% of the total (Table 2). Accordingly, **access to high-performing schools was lowest among high school students in the counties.** Just 45% of high school students were enrolled in high-performing schools during the 2016-

2017 school year, compared to 75% of elementary school students and 87% of middle school students (Table 2).

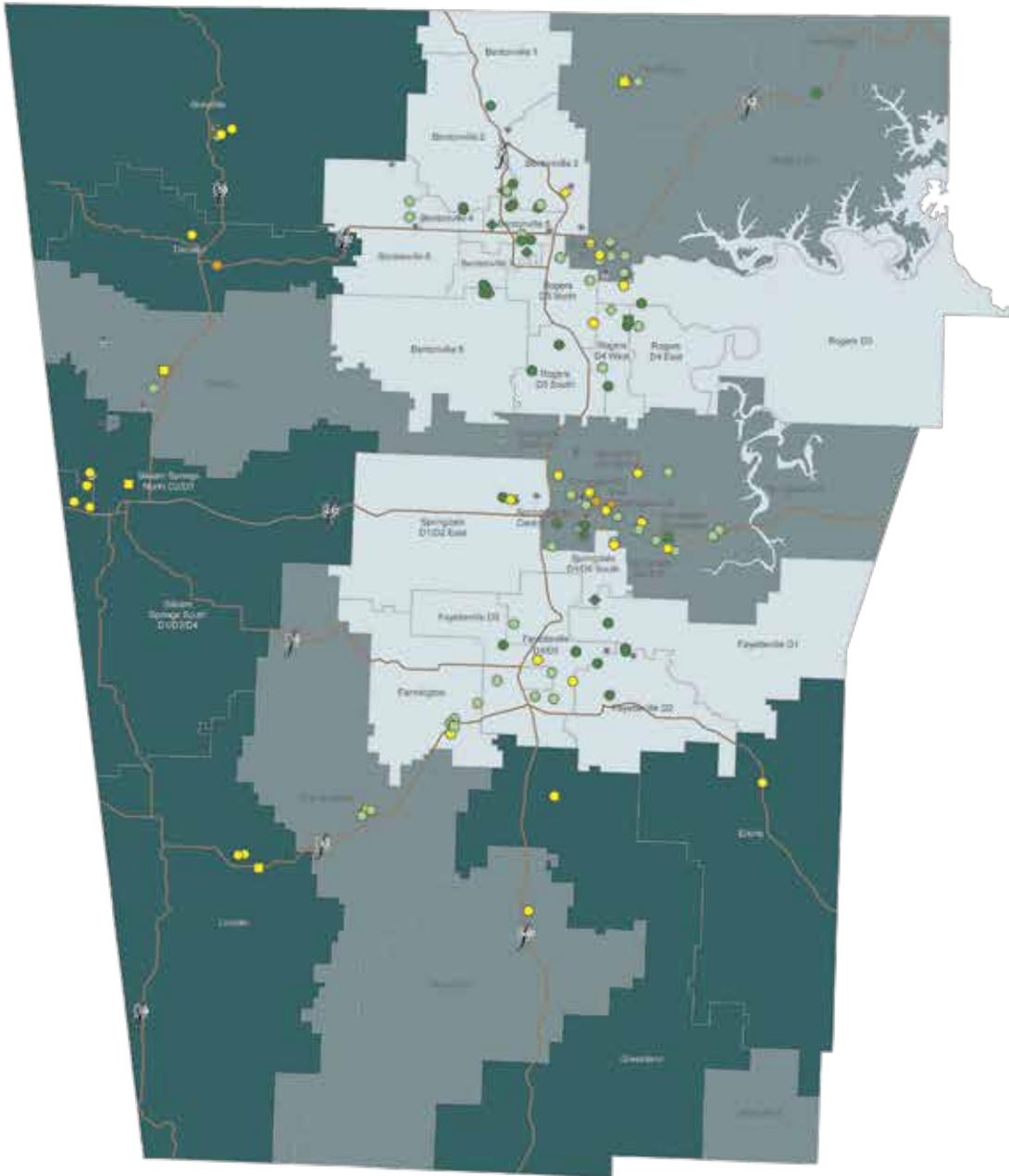
The highest-need areas represent school zones where the service gap, or the number of students lacking access to high-performing public schools, is the greatest. In the 2016-2017 school year, **60% of the service gap in Washington and Benton Counties was concentrated in the fourteen highest-need areas (Table 3).**

Similar to the county-wide analysis, **in the highest need areas, high school students had the lowest access to high-performing schools.** Specifically, only 12% of high school students were enrolled in high-performing public schools in the highest-need areas, compared to 52% of elementary school students and 72% of middle school students. Overall, **across the highest-need areas, about 45% of students were enrolled in public schools rated as high-performing by the ADE (Table 3).**

Among the fourteen highest-need areas, the individual service levels varied greatly by school zone ranging from 62% in Springdale D2 North to just 6% of students in Lincoln enrolled in high-performing K-12 public schools.

Map 3: Northwest Arkansas Study Service Level, Grade K-12

Percent of Students Enrolled in a High-Performing School, based on 2016-2017 School Performance



Service Level

- High Service (>66%)
- Medium Service (33% - 66%)
- Low Service (<33%)

- Study Geography
- Parks
- Water

School Performance

- A
- B
- C
- D
- F
- No Grade

School Type

- Traditional Public
- Open Enrollment Charter
- District Conversion Charter
- + Alternative
- * Private



Table 3: K–12 Supply & Demand by Grade Span, Highest-Need Areas, 2016–2017

Grade Span	High-Performing Schools	Demand	Supply	Service Gap	Service Level	Percent of Countywide Gap
Elementary (K-5)	14	13,458	7,063	6,395	52%	24%
Middle (6-8)	6	6,393	4,632	1,761	72%	7%
High School (9-12)	1	8,343	971	7,372	12%	28%
Overall (K-12)	18*	28,194	12,666	15,528	45%	59%

*Count of high-performing schools do not total due to certain schools overlapping the established grade spans.

Additionally, the **largest service gap existed in the Siloam Springs districts** where only 670 out of over 4,100 students were enrolled in high-performing K-12 schools (Table 4). Lastly, all school zones are prioritized by their service gap to understand neighborhood-level need for high-performing schools. (Table 5).

Service Gap (Grade K – 12)

The service gap, or the number of students without access to a high-performing school (i.e. the difference between demand and supply), varied greatly across the public schools included in this analysis.

Key findings related to the K-12 service gap in Northwest Arkansas are highlighted below:

- Apart from Fayetteville D1, the less dense school zones surrounding the north-central region of Northwest Arkansas had the greatest service gaps. These school zones were all identified as either medium or high-need areas, as designated by the darker blue shaded areas on the map.
- In contrast, most of the school zones in the Bentonville and Rogers districts were identified as low-need in terms of their respective service gaps and they

also contained a higher volume of high-performing K-12 schools. These correspond to the more densely populated districts within Northwest Arkansas.

Service Level (Grades K-12)

The highest-need areas are the sections of Northwest Arkansas where the most students cannot access a high-performing school, yet they are not the only areas where a substantial share of students require access to higher quality public schools. For this reason, the service level – the percentage of students currently accessing high-performing schools – is helpful context alongside the service gap.

Key findings related to the K-12 service level in Northwest Arkansas are highlighted below:

- All school zones located in the Bentonville and Fayetteville school districts had high levels of service, meaning that 66% or more of students were enrolled in high-performing schools during the 2016-2017 school year. Furthermore, all but one of the school zones in the Rogers school district also had a high K-12 service level.
- Low service levels were more commonly seen in the less densely populated school districts, as designated by the

Table 4: K–12 Supply & Demand, Highest-Need Areas, 2016–2017

Rank	School Zone	Demand	Supply	Service Gap	Service Level
1	Siloam Springs South D1/D3/D4	2,105	314	1,791	15%
2	Siloam Springs North D2/D5	2,030	355	1,675	17%
3	Gravette	1,810	481	1,329	27%
4	Rogers D2	2,592	1,323	1,269	51%
5	Springdale D3 Central	2,257	1,067	1,190	47%
6	Springdale D4	2,311	1,159	1,152	50%
7	Lincoln	1,167	74	1,093	6%
8	Springdale D5	2,208	1,227	981	56%
9	Pea Ridge	1,796	819	977	46%
10	Springdale D3 East	2,184	1,215	969	56%
11	Rogers D1	2,354	1,405	949	60%
12	Springdale D5 Central	1,942	1,024	918	53%
13	Springdale D2 North	2,239	1,380	859	62%
14	Greenland	982	145	837	15%
Total		27,977	11,988	15,989	43%

lighter green shaded areas on the map. For example, students enrolled in school zones on the west side of Northwest Arkansas experienced the lowest service levels with less than 33% of students enrolled in high-performing schools.

Table 5: K–12 Supply & Demand, All Schools Zones by Priority Ranking, 2016–2017

Rank	Prioritization	School Zone	Demand	Supply	Service Gap	Service Level
1	High Need	Siloam Springs South D1/D3/D4	2,105	314	1,791	15%
2	High Need	Siloam Springs North D2/D5	2,030	355	1,675	17%
3	High Need	Gravette	1,810	481	1,329	27%
4	High Need	Rogers D2	2,592	1,323	1,269	51%
5	High Need	Springdale D3 Central	2,257	1,067	1,190	47%
6	High Need	Springdale D4	2,311	1,159	1,152	50%
7	High Need	Lincoln	1,167	74	1,093	6%
8	High Need	Springdale D5	2,208	1,227	981	56%
9	High Need	Pea Ridge	1,796	819	977	46%
10	High Need	Springdale D3 East	2,184	1,215	969	56%
11	High Need	Rogers D1	2,354	1,405	949	60%
12	High Need	Springdale D5 Central	1,942	1,024	918	53%
13	High Need	Springdale D2 North	2,239	1,380	859	62%
14	High Need	Greenland	982	145	837	15%
15	Moderate Need	Springdale D1 Central	2,064	1,291	1,257	63%
16	Moderate Need	Springdale D5 SW	2,160	1,412	1,237	65%
17	Moderate Need	Prairie Grove	1,955	1,224	1,221	63%
18	Moderate Need	Rogers D3	2,574	1,876	1,213	73%
19	Moderate Need	Elkins	898	245	1,195	27%
20	Moderate Need	Springdale D1/D5 South	2,092	1,465	1,174	70%
21	Moderate Need	West Fork	884	314	1,132	36%
22	Moderate Need	Rogers D4 West	2,186	1,619	1,128	74%
23	Moderate Need	Decatur	619	55	1,123	9%
24	Moderate Need	Gentry	1,400	857	1,091	61%
25	Moderate Need	Rogers D4 East	2,206	1,677	1,009	76%
26	Moderate Need	Springdale D1/D2 East	2,073	1,552	939	75%
27	Moderate Need	Rogers D5 South	2,234	1,713	874	77%
28	Moderate Need	Rogers D5 North	1,988	1,488	824	75%

Rank	Prioritization	School Zone	Demand	Supply	Service Gap	Service Level
29	Low Need	Farmington	2,283	1,784	774	78%
30	Low Need	Fayetteville D4/D5	2,563	2,111	756	82%
31	Low Need	Fayetteville D2	2,559	2,269	591	89%
32	Low Need	Fayetteville D1	2,749	2,665	535	97%
33	Low Need	Fayetteville D3	2,243	2,162	534	96%
34	Low Need	Bentonville Bella Vista North	2,319	2,254	319	97%
35	Low Need	Bentonville South Cave Springs	2,227	2,193	286	98%
36	Low Need	Bentonville Bella Vista West	2,327	2,298	287	99%
37	Low Need	Bentonville Centerton	2,189	2,161	288	99%
38	Low Need	Bentonville West Central	2,254	2,229	289	99%
39	Low Need	Bentonville Northeast	2,134	2,115	290	99%
40	Low Need	Bentonville Central	2,022	2,008	291	99%
41	Low Need	Bentonville Southeast	2,094	2,088	292	100%
Total			83,273	57,113	42,005	69%

DEMOGRAPHIC ANALYSIS

Analyses of student density, poverty levels and race in this section of the report help to clarify and dive deeper into trends related to the K-12 service gap in Northwest Arkansas. Therefore, local stakeholders should review the following demographic-based maps alongside other key findings in this report to obtain a more comprehensive understanding of the state of K-12 education as well as use this information to inform future policy and programmatic decision-making.

DENSITY OF PUBLIC SCHOOL STUDENTS

Student density serves as a key determinant for prioritizing school improvement efforts, as it helps to localize where the greatest potential for impact may occur in a given area. In this study, density is measured by the number of students enrolled in public schools in the 2016 – 2017 school year per square mile.

Key findings related to student density in Northwest Arkansas are highlighted below:

- The school zones clustered in the north-central region of Northwest Arkansas had the highest density of public school students, ranging from 301 to 2,343 students per square mile. These are primarily located in the southern Bentonville as well as western Rogers, Fayetteville and Springdale school zones. Accordingly, these more densely populated school zones experienced lower service gaps.
- In contrast, Siloam Springs had pockets of higher density specifically located on its border with Oklahoma yet had the largest service gap of all school zones analyzed in this study.
- The surrounding, more rural areas of the region were less dense, with only as many as 75 students per square mile in most school zones. Overall, these less densely populated school zones along the southern and western borders of Northwest Arkansas also contained many of the highest-need areas in terms of service gap.

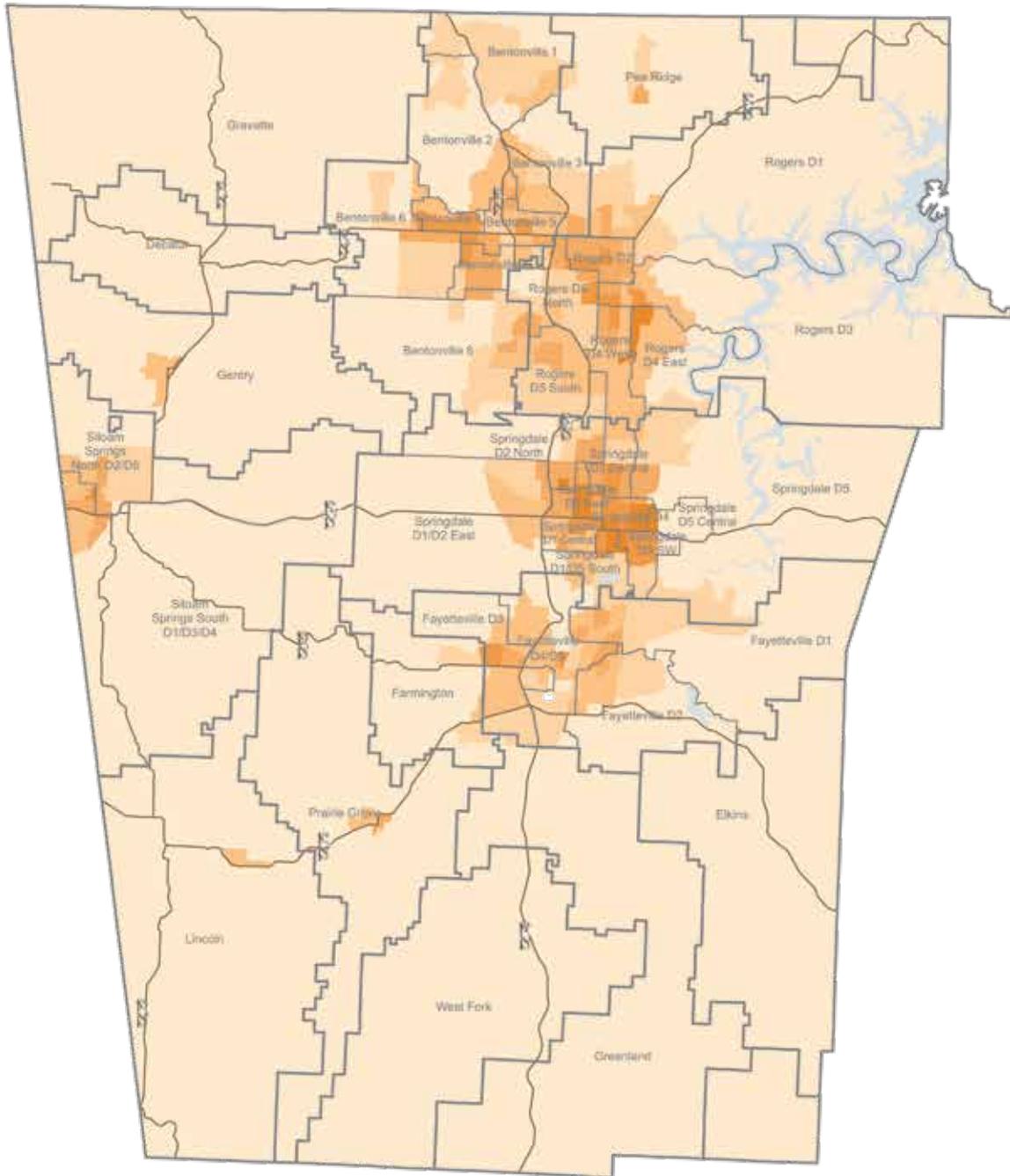
POVERTY LEVEL

According to the American Community Survey (ACS), approximately 11% of Benton County residents and 19% of Washington County residents lived below the poverty level in 2017. Accordingly, the statewide poverty rate of 19% mirrors the rate of poverty experienced by Washington County residents. To estimate the poverty level among public school students in Northwest Arkansas, this study quantifies the percent of enrolled students eligible for subsidized meals, or Free or Reduced-Price Lunch (FRPL), during the 2016 – 2017 school year.

Key findings related to the poverty level in Northwest Arkansas are highlighted below:

- Public school students living below 185% of the federal poverty level and, therefore, eligible for FRPL were widely geographically dispersed across Northwest Arkansas school zones.
- The less dense school zones surrounding the north-central region of Northwest Arkansas not only experienced greater service gaps but also enrolled higher rates of FRPL eligible students. Specifically, school zones where 75% or more students were eligible for FRPL included the eastern Springdale school district as well as portions of the central Fayetteville and

Map 4: Northwest Arkansas Study Areas: Number of Students per Square Mile Enrolled in Public Schools by U.S. Census Block Group



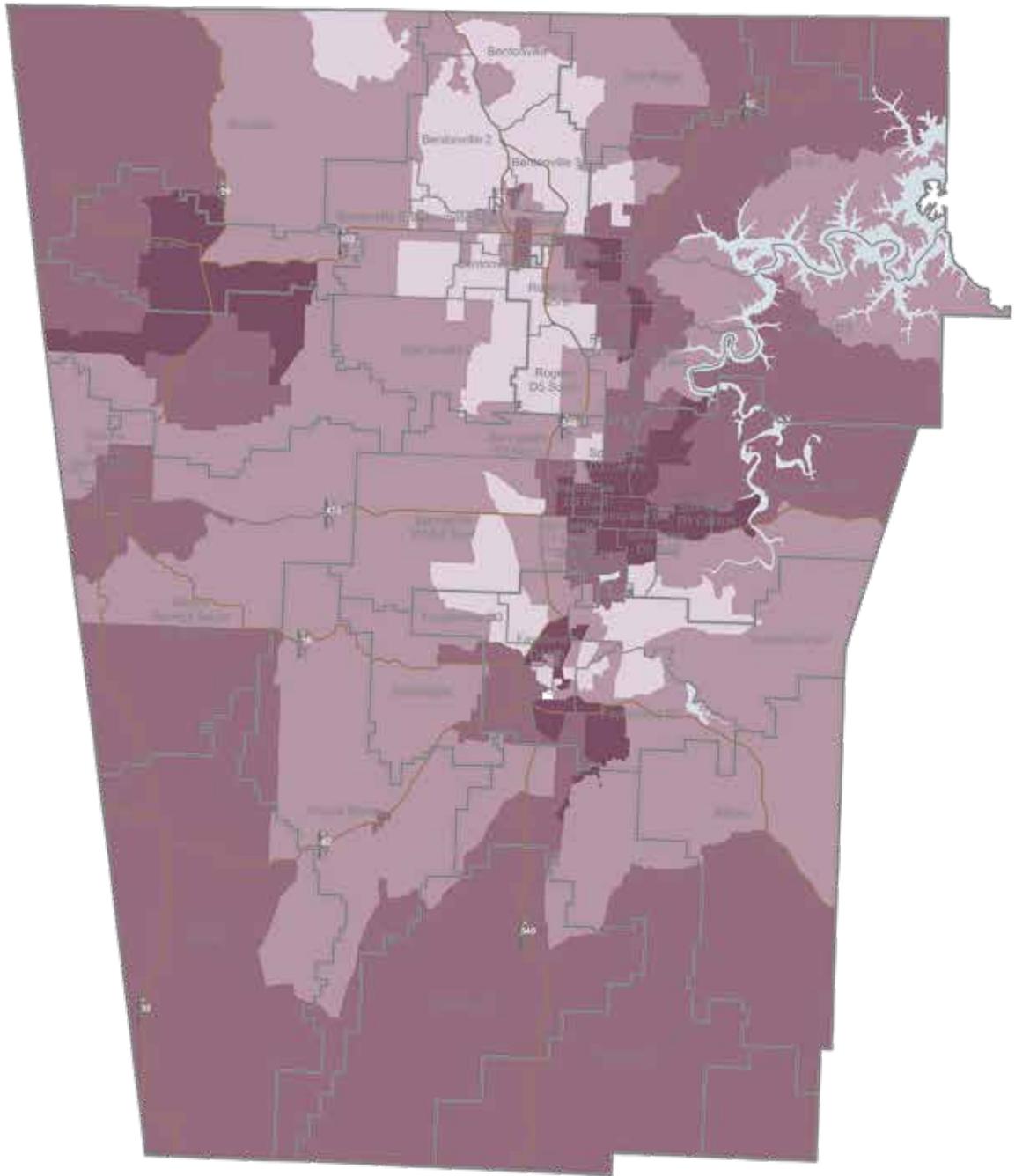
-  Study Geography
-  Parks
-  Water
-  Roads

Number of Students Per Square Mile Enrolled in Public Schools

-  2 - 75
-  76 - 150
-  151 - 300
-  301 - 600
-  601 - 1,000
-  1,001 - 2,343



Map 5: Northwest Arkansas Study Areas: Students Enrolled in Public Schools Eligible for Subsidized Meals
 Students Living Below 185% Federal Poverty Level, by U.S. Census Block Group



-  Study Geography
-  Parks
-  Water
-  Roads

- Enrolled Public Students Eligible for Subsidized Meals**
-  Up to 25%
 -  25.1% to 50%
 -  50.1% to 75%
 -  Greater than 75.1%

Decatur school districts. Small pockets of high FRPL eligible students were also found in the centrally located Rogers school district.

- School zones in the Bentonville and Fayetteville districts enrolled lower rates of FRPL eligible students at proportions less than 25% compared to neighboring communities in Northwest Arkansas. Students enrolled in these school districts also experienced higher service levels.

- Hispanic/Latino students were primarily enrolled in the central Rogers and Springdale school districts at rates of 40% or more of the total public school population there. While the school zones in the Rogers district had low service gaps, the Hispanic/Latino students attending schools in the Springdale district were concentrated in the high-need areas.

RACE: HISPANIC/LATINO POPULATION GROWTH

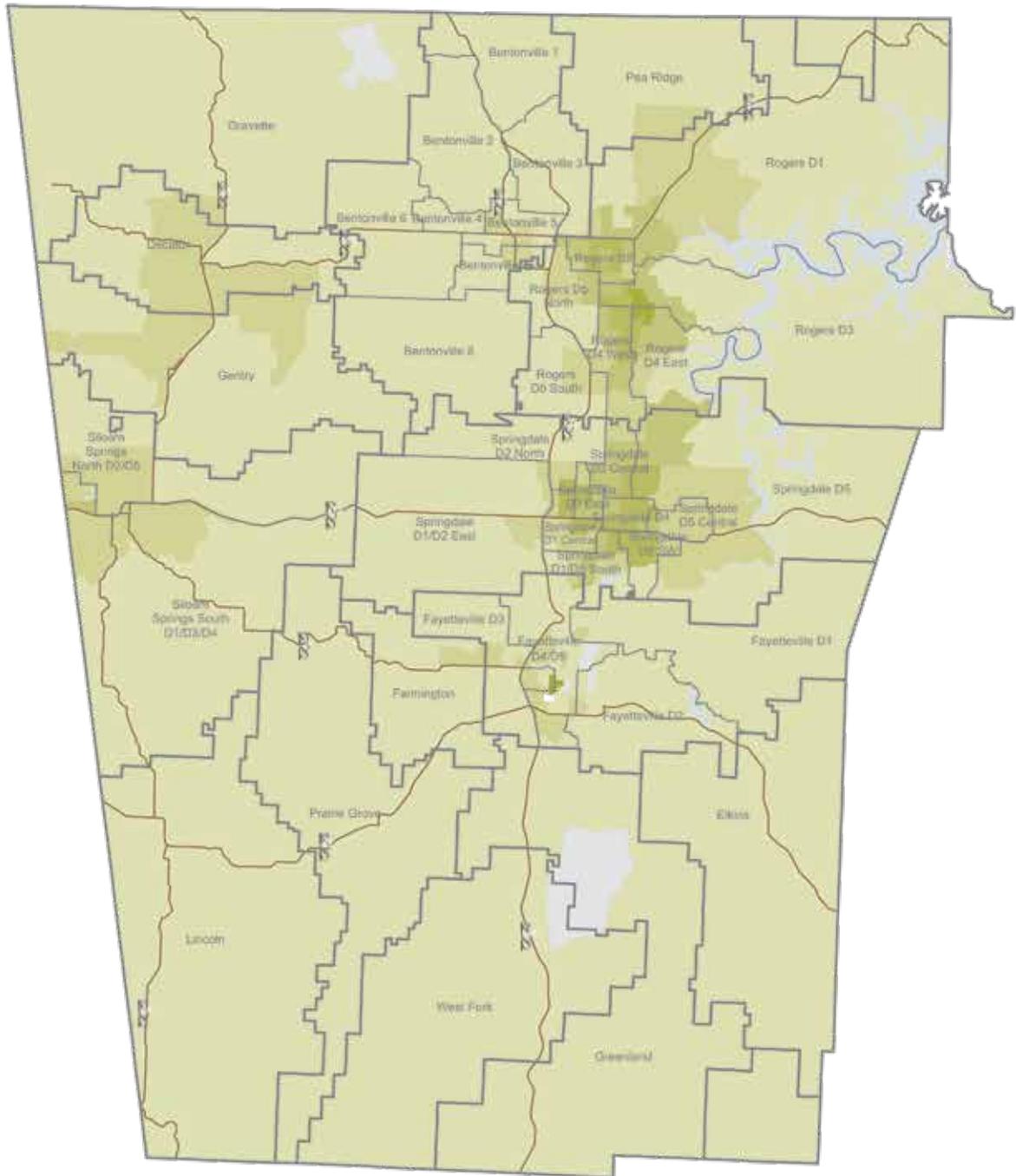
White residents in Benton and Washington Counties made up a majority at approximately 70% or more of the total population in 2017. However, the Hispanic/Latino population has grown exponentially over the past two decades, making up less than 2% of the Northwest Arkansas population in 1990 to over 16% in 2017.

Regional organizations project continued growth in its racial diversity in the coming years, which will likely have educational service implications, such as a greater need for additional English as a Second Language (ESL) offerings in its K-12 public schools.

Key findings related to Hispanic/Latino public school student enrollment in Northwest Arkansas are highlighted below:

- For the most part, high rates of Hispanic/Latino student enrollment in a given schools zone were concentrated in more densely populated areas where a greater proportion of higher rated schools are located.

Map 6: Northwest Arkansas Study Areas: Hispanic/Latino Students Enrolled in Public Schools by U.S. Census Block Group



□ Study Geography

■ Parks

■ Water

— Roads

Percent of Public Students Hispanic/Latino

■ Less than 1%

■ 1% to 20%

■ 21% to 40%

■ 41% to 60%

■ 61% to 80%

■ 81% and Up



DISTRICT VALUE-ADDED ANALYSIS

Variable	Detail
Per-Pupil Spending (adjusted)	Adjusted using the Comparable Wage Index (CWI), which is commonly used to address labor market impacts, such as cost of living and local amenities.
Enrollment, Number of Students	Factored in to control for variations between school districts.
Free & Reduce Lunch Program (FRLP), % Students Enrolled	May require specialized and/or cost-intensive resources to adequately serve population. Weighted based on district enrollment and controlled for in model.
English Language Learners (ELL), % Students Enrolled	
Special Education Participants (SPED) % Students Enrolled	

METHODOLOGY OVERVIEW

Similar in concept to a Return on Investment (ROI) Analysis, the District Valued-Added Analysis **examined five key variables to predict expected school performance in a given district based on Arkansas statewide trends.**

These variables were built into a statistical model to assess school performance across a variety of factors for a normalized comparison across the county and at the state level. Specifically, IFF identified the following variables to inform this analysis as well as highlighted key insights for inclusion of that specific variable into the analysis.

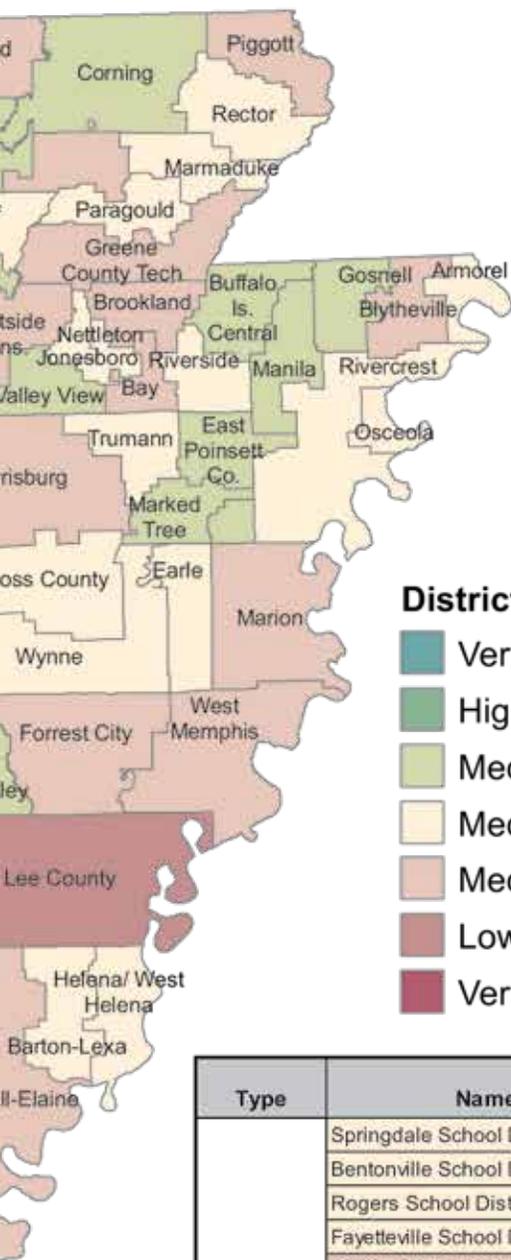
At a high level, these variables seek to measure both student need and school spending at a district-level to compare actual performance outcomes to expectations at both traditional, magnet and charter schools. Subsequently, these districts were ranked on a 7-point scale ranging from “very low” to “very high” based on the calculated value-add in school performance provided.

DISTRICT VALUE-ADDED ANALYSIS

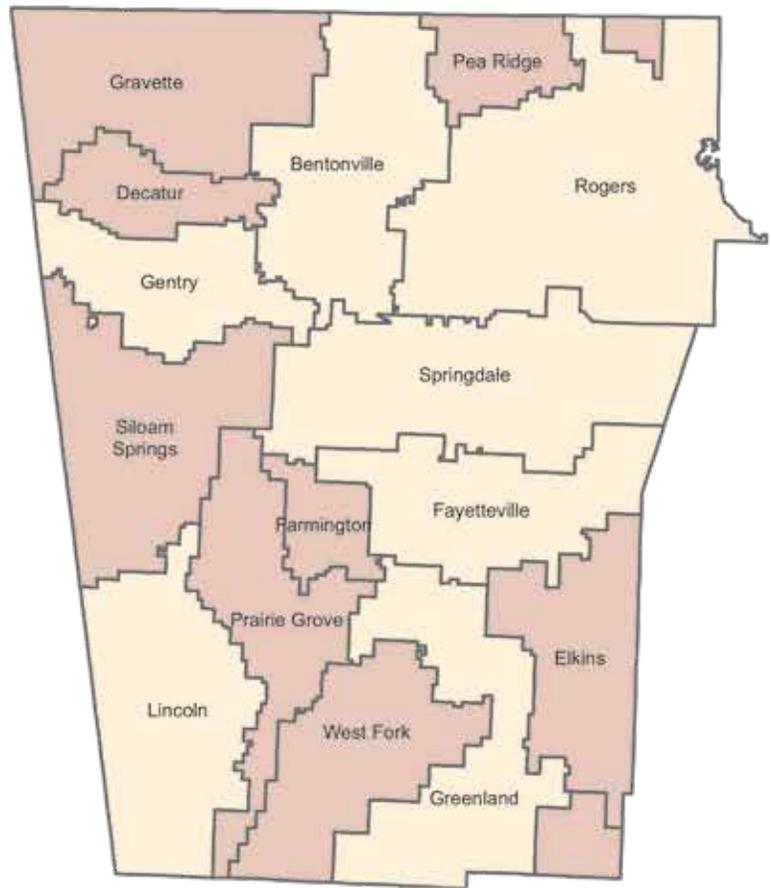
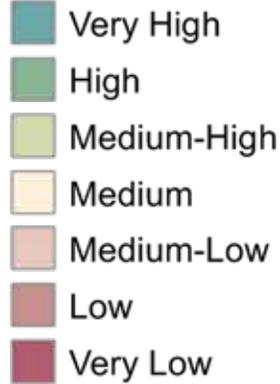
As demonstrated in the preceding sections of this report, school performance varies greatly across urban and rural, income, and racial divides within Northwest Arkansas. To more holistically compare how school districts performed, **this analysis helps to determine which districts are doing better (or worse) than their neighbors at serving public school students based on expected state-wide trends.**

Key findings related to value-added analysis in Northwest Arkansas are highlighted below:

- Compared to statewide peers, **Northwest Arkansas school districts provided a medium to low value compared to expectations** related to student needs and per pupil spending.
- **Charter schools with smaller enrollments had higher value-add ratings** compared to the traditional school districts with larger annual enrollments.



District Value-Add



Type	Name	Enrollment	Size	Avg. Score	Student Needs	Spending Level	Spending Impact	Value-Add
Traditional	Springdale School District	21,527	Very Large	74	Very High	Medium-Low	Medium-High	Medium
	Bentonville School District	16,609	Very Large	81	Medium-Low	Medium	Medium	Medium
	Rogers School District	15,399	Very Large	76	High	Low	High	Medium
	Fayetteville School District	9,864	Very Large	78	Medium	Medium	Medium	Medium
	Siloam Springs School District	4,211	Large	70	Medium-High	Medium-Low	Medium-High	Medium-Low
	Farmington School District	2,503	Large	75	Medium-Low	Medium-Low	Medium-High	Medium-Low
	Pea Ridge School District	2,066	Medium	72	Medium-Low	Medium-Low	Medium-High	Medium-Low
	Prairie Grove School District	1,909	Medium	73	Medium-Low	Medium-Low	Medium-High	Medium-Low
	Gravette School District	1,854	Medium	72	Medium	Medium-Low	Medium-High	Medium-Low
	Gentry School District	1,407	Medium	73	Medium	Medium-Low	Medium-High	Medium
	Elkins School District	1,190	Medium	71	Medium-Low	Medium-Low	Medium-High	Medium-Low
	Lincoln School District	1,188	Medium	71	Medium-High	Low	High	Medium
	West Fork School District	1,074	Medium	68	Medium	Medium-Low	Medium-High	Medium-Low
	Greenland School District	795	Medium	68	Medium	Medium-Low	Medium	Medium
Decatur School District	573	Small	65	High	Medium-Low	Medium-High	Medium-Low	
Charter	Arkansas Arts Academy	779	Medium	79	Low	Medium-Low	Medium-High	Medium
	Responsive Ed Solutions	556	Small	86	Very Low	Medium-Low	High	Medium
	Haas Hall Academy	344	Small	98	Very Low	Low	Very High	High
	Arkansas Connections Academy	343	Small	67	Medium-Low	Very Low	Very High	Medium-Low
	Haas Hall Bentonville	301	Small	97	Very Low	Low	Very High	High
	Ozark Montessori Academy	179	Small	66	Medium-Low	Medium-Low	Medium	Low

SCHOOL CHOICE ANALYSIS

Chart 4: Students Exercising School Choice by County, Northwest Arkansas, Grades K-12, 2016-2017

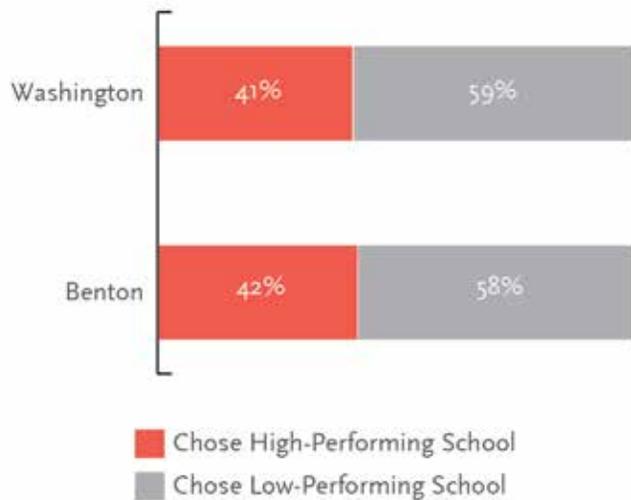
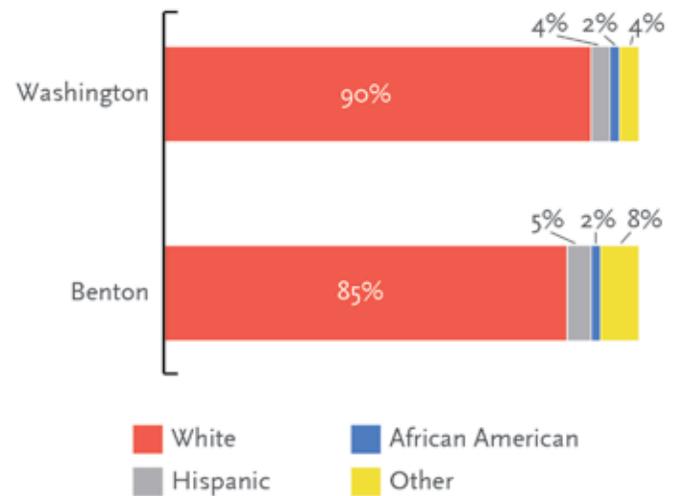


Chart 5: Students Exercising School Choice by County and Race, Northwest Arkansas, Grades K-12, 2016-2017



School choice has tremendous equity implications for a community, as students with more resources are oftentimes better equipped to take advantage of higher quality learning environments. To identify trends in school choice across Northwest Arkansas, this study examined rates of school choice at the district-level as well as the racial composition of students exercising this right.

METHODOLOGY OVERVIEW

The School Choice Analysis seeks to identify occurrences and subsequent demographic trends related to students who exercised school choice by opting out of their assigned school to attend another school (that is assumedly higher-performing) either within or outside of their home district. The Arkansas Department of Education provided de-identified student data for the 2016-2017 school year with variables denoting whether a student transferred to a school either within or outside of their home district and whether that transfer resulted in attendance at a higher-performing school.

FINDINGS

Overall, **2% of K-12 students exercised school choice** during the 2016-2017 school year in both Benton and Washington Counties. Additionally, elementary school students represented over 40% of all students exercising school choice, with high school students and middle school students representing the remaining 35% and 25%, respectively. At the county-level, **just over 40% of students who exercised school choice ended up at a high-performing school** (Graph 4).

In terms of racial differences in school choice, **approximately 90% of all Northwest Arkansas students who exercised school choice were white** (Graph 5). With the growing rates of diversity in this region, racial equity concerns may arise, as fewer minorities took advantage of school choice opportunities in this primarily white region.

CONCLUSION

In order to identify school zones where improvement efforts are needed, the findings in this report focus on student need, as assessed by the service gap and service level, as well as school performance ratings alongside overlapping demographic factors. The recommendations draw on best practices in K-12 public education as well as the unique location-based considerations at play in Northwest Arkansas.

RECOMMENDATIONS

Prioritize high schools in high-need areas for targeted school improvement activities.

- Over half of the service gap is concentrated in high schools located throughout Northwest Arkansas. Additionally, of the eight high schools located in high-need areas, only one was rated as high-performing in the 2016-2017 school year.
- By targeting additional resources in these relatively small number of high schools, especially in the more densely populated school districts, Northwest Arkansas can achieve greater impact by reaching more high-need students while taking steps to minimize this gap.
- Create individual strategic plans for each of the seven low-performing high schools located in high-need areas to address specific challenges and establish tangible plans of action to improve school performance.

Evaluate special programming needs to serve diverse regional population.

- Though this report did not evaluate quality of or access to special programming in public schools, Northwest

Arkansas' regional emphasis on its growing Hispanic/Latino population may require additional and better targeted educational services in the future.

- Promote equity in access and quality to English as a Second Language (ESL) service offerings on a school district level in public schools.

Coordinate strategic planning for K-12 public education across governing bodies.

- Identify opportunities to enhance engagement across the various school governing bodies, such as traditional school district boards, charter school leadership, and other government agencies, within Northwest Arkansas and establish concrete mechanisms and forums for ongoing collaboration.
- As a result, better coordination across governing bodies can lead to:
 - o A shared understanding and unified response to school performance challenges,
 - o Minimal redundancies in school improvement efforts,
 - o Streamlined enrollment strategies to fill vacant seats in high-performing schools,
 - o A forum to share best practices and lessons learned, and
 - o Enhanced integration of available data across educational entities.

Utilize study to inform the implementation of the State of Arkansas' ESSA Plan

- The Every Student Succeeds Act (ESSA) will go into effect during the 2018-2019 school year and aims to provide opportunity for all students by increasing school standards and teacher quality, defining

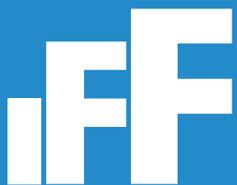
measures of accountability and emphasizing school improvement efforts.

- Key findings related to low-performing schools, especially in Northwest Arkansas' high-need areas, can better target school improvement efforts, as the ESSA Plan mandates greater flexibility in identifying the lowest performing schools in need of intervention and determining necessary improvement actions.

APPENDIX: DATA SOURCES

The various data sources that IFF used to inform this study are summarized below.

- U.S. Census, American Community Survey, 2015 5-Year Estimates
- ESRI, Population Estimates 2016
- Arkansas Department of Education, Student and School Data
- University of Arkansas, Office of Education Policy, State Demographics, 2007 – 2018



333 South Wabash Avenue
Suite 2800
Chicago, IL 60604
iff.org