

Empowering All Learners to Succeed

Proposal for Services from RSP & Associates

Presented to: Dickinson Public Schools

December 10, 2018



# **RSP & Associates**

Building custom, data-driven strategic initiatives to help educational institutions support students and achieve academic success. Our team works closely with the district team, educators, government organizations, and developers to insure a shared vision becomes a shared reality.

# **A Distinctive Focus**

RSP & Associates was founded in 2003 with the sole purpose of bringing meaningful planning to school districts. Our team works closely with our clients to develop data-driven solutions, focusing our expertise on assisting school districts with enrollment projections, demographics, planning, and public facilitation throughout the Midwest. RSP brings a unique blend of planners, education experts, and GIS technicians working to provide real solutions backed by student driven data. Our skills are enhanced by our continued collaboration with different stakeholders in the community (County/City, School District, Developers, Builders, Realtors, etc). This partnership establishes credibility and buy-in from patrons.

Forward-thinking school districts plan for the balance of school enrollment between facilities, changing demographics, and educational programming enhancements, in order to prepare for future change in the district. Utilizing the planning services of RSP leads our clients to prepare and plan for future challenges.

# **Full Service Planning Firm**

RSP & Associates provides school districts with a wide body of services and products. As no two school districts are the same, we have the ability to tailor and modify our services to meet the needs of each school district we serve.

RSP utilizes a customized Student Forecast Model (SFM) to project future student enrollment in a 5 or 10 year time frame. The projections can be viewed at a district-wide level, by geographical area, or by an individual facility. Variables that are integrated into the model include historical enrollment data, birth data, development activity, demographic trends, facility capacity, and other data sets that would assist in generating accurate projections. RSP projections are highly credible with a track record of 98% or greater in fast changing districts 5 years later.

# We provide answers to important questions

- Where in the District is enrollment change increasing and decreasing?
- Are new developments having similar yield rates to housing products built a decade ago?
- Are older neighborhoods "greying" or "regreening"?
- Based on current demographic changes in a neighborhood, how quickly will facilities experience enrollment change?
- Are there other changes happening with educational choices that impact enrollment?



**Our Story** 

RSP & Associates began with a unique focus; our founder recognized the need for school districts to have strategic planning services. We focus on complex situations and provide answers and analysis in an easy to understand format that clients can use to create successful academic environments. This singular mission has grown our firm into a regional leader in planning and demographic innovations targeted exclusively to school districts. As we grow we will continue to meet the challenges and changes faced by leaders in education.



### Education:

Master of Urban Planning, University of Kansas, 1999; Bachelor of Art in History, University of Kansas, 1996

#### Affiliations:

The American Institute of Certified Planners; American Planning Association (APA); Association for Learning Environments (A4LE); State of Kansas Registered Planners Certification List

## ROBERT S. SCHWARZ, CEO, AICP, ALEP, REFP, CEFP

I have over sixteen years of planning experience in military, county, city, and school district planning. Each professional planning position, as well as the school district projects I have worked on has been part of an exciting journey, where after 15 years has positioned me to utilize my experience to create an effective and long-lasting planning result, meaning students can achieve academic success. Specifically, as school budgets continue to become more difficult to manage with anticipated cuts, providing tools that help the school district respond in a meaningful way that will maximize dollars being spent in the classroom.

I have provided numerous school district clients with information that can assist them in better understanding how their student enrollment projections impact the use of their existing facilities, need for additional facilities, redistricting their current attendance areas, site acquisition or hiring the appropriate number of certified staff. In addition to having the required analytical skills to compile highly accurate projections, I lead our team in the facilitation of Redistricting processes and Facility Master Plan processes, as well as present challenging information in an easy to understand format to administration, School Board, committee, and community meetings.

## Places of Employment:

### RSP & Associates, LLC, CEO

2003 to Present Project student enrollment for clients with a 98% or greater accuracy Facilitate redistricting meetings

Capacity and Site Analysis

#### Blue Valley School District, Planning Director

2001 to 2007

Projected student enrollments, development, and land use trends Research and analysis for future school sites

Facilitated meetings for the Planning and Facilities Committee

#### Johnson County Government, Long Range Planner

2000 to 2001

Project Manager for the update of the Comprehensive Plan Wrote reports on current land use requests

Conducted research on special county projects

#### City of Wellsville, Planner

Wellsville, KS

1998 to 2000

Wrote and facilitated adoption of Zoning regulations Created a Computer Network Plan for the city

Facilitated Planning Committee meetings







Overland Park, KS

Overland Park, KS

Olathe, KS

## **RSP Team Members**

We have a highly skilled and creative team, ready to meet our clients' needs with resourceful problem solving, high-level data analysis and project management.



Grant Lang, Planning Coordinator

### **Education:**

Bachelor of Arts in Urban Planning + Design; University of Missouri-Kansas City, 2017

#### Affiliations:

American Planning Association (Missouri Chapter)

### Role in Project:

Manage Data Collection, Develop Boundary Scenarios, Project time line Manager



Tyler Link, GIS Analyst

### Education:

Master of Arts in Geography; Kansas State University, 2015 Bachelor of Science in Geography; Kansas State University, 2012

#### Affiliations:

Association of American Geographers; Conference of Latin American Geographers

#### Role in Project:

Create/Edit Planning Areas, Analyze Student Data in Relation to Planning Areas, Analyze Current and Potential Residential Growth, Create redistricting scenarios and other needed analysis.



Brandon Sylvester, GIS Analyst

#### **Education:**

Master of Science in Geospatial Sciences; Mississippi State University, 2014 Bachelor of Science in Geosciences; Mississippi State University, 2012

#### Affiliations:

American Meteorological Society

#### Role in Project:

Create/Edit Planning Areas, Analyze Student Data in Relation to Planning Areas, Analyze Current and Potential Residential Growth, Create redistricting scenarios, and Address Locator Development



# **RSP Education Consultants**

Our team includes Education Consultants with over 60 years of education and public engagement experience. Our staff understands the importance of good planning for a community. Our team strives for effective and long lasting planning which informs our clients and leads to the goal of providing World Class Education.

### Clay Guthmiller, Education Planner

#### Education:

Bachelor of Science; South Dakota State University, 1973 Master of Arts; South Dakota State University, 1974

Certificate of Advanced Study (Administration) 1983, Iowa State University

#### Affiliations

American Association of School Administrators, Association Supervision and Curriculum Development, School Administrators of Iowa

#### Role in Project:

Assist with any facilitation of public meetings and provide any needed feedback to educational programming

### Jay Harris, Education Planner

#### **Education:**

Education Specialists Degree; Central Missouri State University, 2007 Masters in Secondary School Administration; Washburn University, 1998 Bachelor of Science in Education, Baker University, 1991

#### **Affiliations:**

American Association of School Administrators, Missouri Association of School Administrators, Association for Supervision and Curriculum Development, Association for Learning Environments

#### Role in Project:

Assist with any facilitation of public meetings and provide any needed feedback to educational programming

### David Stoakes EdD., Education Planner

#### Education:

Doctorate in Educational Leadership; University of Northern Iowa, 1991 Master of Arts in Educational Leadership; University of Northern Iowa, 1981 Bachelor of Arts in Behavioral Science: Central College, 1976

#### Affiliations:

UNI; Adjunct Instructor-Educational Leadership, American Association of School Administrators, School Administrators of Iowa, Grinnell Regional Medical Center-Board of Directors, Grinnell Golf and Country Club-Board of Directors Vice President; Grinnell Lion's Club Vice-President, GNC School Foundation; Board of Directors

#### **Role in Project:**

Assist with any facilitation of public meetings and provide any needed feedback to educational programming

### Dave Wilkerson Ph.D., Education Planner

#### **Education:**

Doctorate in Educational Leadership and Policy Studies; Iowa State University, 1997 M.S. Educational Administration; Iowa State University, 1994

Bachelor of Arts in Social Science Education; University of Northern Iowa, 1982

#### **Affiliations:**

Science Center of Iowa, Waukee Community Schools APEX Advisory Board, IASB Administrator Advisory Council, School Administrators of Iowa, American Association of School Administrators

#### Role in Project:

Assist with any facilitation of public meetings and provide any needed feedback to educational programming

RSP may utilize other consultants not listed based on the project scope. All our Education Consultants are current or former school superintendents.





# **RSP Project Experience**

We pride ourselves on our close partnerships with local processionals, community members, and administrators which have led to continued long term client services and the ability to cast a credible planning vision which addresses changing demographic, development and enrollment.

# Waukee CSD Waukee, IA

Enrollment Analysis 2007/08 – 2018/19 Boundary Analysis 2009, 2015 Public Facilitation 2017/18

### Lawrence USD 497 Lawrence, KS

Enrollment Analysis 2005/06 - 2012/13, 2014/15-2017/18 Boundary Analysis 2007/08

### Cedar Rapids CSD Cedar Rapids, IA

Enrollment Analysis 2010/11- 2018/19 Boundary Analysis 2011/12 Facility Master Plan 2016/17

### Bismarck SD Bismarck, ND

Enrollment Analysis 2012/13–2016/17 Boundary Analysis 2012/13, 2015/16 Public Facilitation 2012/13, 2015/16

### CUSD 308 Oswego IL

Enrollment Analysis 2010/11- 2016/17 Boundary Analysis 2016/17 Public Facilitation 2016/17

### Spring Hill USD 230 Spring Hill, KS

Enrollment Analysis 2005/06 –2018/19 Boundary Analysis 2005/06, 2016/17 Demographic Analysis 05/06 – 07/08

# Rockford SD Rockford, IL

Enrollment Analysis 2014/15–2018/19 Boundary Analysis 2015/16 Public Facilitation 2015/16

### Ankeny CSD Ankeny, IA

Enrollment Analysis 2006/07–2018/19 Future Site Analysis 2007/08 Boundary Analysis 07/08, 08/09, 13/14

### Minot PS Minot, ND

Enrollment Analysis 2012/13-2016/17 Boundary Analysis 2015/16 Public Facilitation 2015/16

### KCK SD Kansas City, KS

Enrollment Analysis 2015/16–2016/17 Facility Analysis 2007/08 Staffing Analysis 2006/07 & 2008/09

# Johnston CSD Johnston, IA

Enrollment Analysis 2006/07 -2018/19 Facility Planning Analysis 2006/07 Boundary Analysis 2008/09

# Fargo PS

Fargo, ND Enrollment Analysis 2012/13–2018/19

### Wichita USD 259 Wichita, KS

Enrollment Analysis 2009/10, 2011/12 Demographic Analysis 2009/10 Boundary Analysis 2011/12

# WDM CSD WestDesMoines, IA

Enrollment Analysis 2007/08 – 2018/19 Capacity Analysis 2014/15

### Yukon PS Yukon, OK

Enrollment Analysis 2015/16 Boundary Analysis 2016/17

### Hutchinson 308 Hutchinson, KS

Enrollment Analysis 2009/10, 2015/16 Boundary Analysis 2009/10, 2015/16 Public Facilitation 2009/10,2015/16

### CCA CSD Oxford, IA

Enrollment Analysis 2013/14-2018/19 Boundary Analysis 2013/14 Public Facilitation 2013/14, 2015/16

# Grand Forks SD Grand Forks, ND

Enrollment Analysis 2015/16–2018/19

# Cedar Falls CSD Cedar Falls, IA

Enrollment Analysis 2008/09- 2018/19 Boundary Analysis 2013/14, 2014/15 Public Facilitation 2014/15

### Lincoln County Troy, MO

Enrollment Analysis 2007/08 – 2018/19 Boundary Analysis 2008/09 Site Analysis 2008



## **Enrollment Analysis**

The Enrollment Analysis seeks to answer the immediate questions related to enrollment shifts, demographic trends, economic impact, and how that information effects students throughout the district. Outlined below are the steps in the analysis process. Our analysis is customized to each client to provide the best, most accurate and long-lasting planning information.

Step 1 -Creating the Student Forecast Model

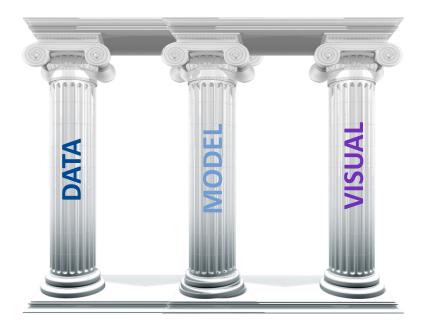
The accuracy of RSP & Associates modelina requires a significant amount of data. The data that will be collected includes, the past five years of student enrollment that will include information such as the address, grade, and ethnicity of each student for each school year. Geographic Information Systems (GIS) data that will either be collected or created includes street centerlines, district boundaries, parcels, attendance areas, and other planimetric data. Other information collected and analyzed revolves around immediate building trends and current development activity.

Step 2 -Analyze the Data

RSP & Associates will carefully review and analyze all the data collected to have a comprehensive understanding of the past and current demographic and socio-economic conditions of the District. Various organizations will provide insight and ultimately give their approval to these model variables.

Step 3 -

The Enrollment Report will include detailed analysis of the District enrollment by each school for five school years with a likely range projection. There will Create the Enrollment Report be information about the model methodology, model components, types of student growth, development activity, census information, migration, distribution by housing type, facility capacity and population trends within the District. The report is rich with information presented with a variety of graphics, charts, tables and pictographs that identify trends and issues in the district. Thematic and geographic maps are included to visually represent these trends.







## **Enrollment Analysis Sample Pages**

# **Building Enrollment Projections**

School	Student Past School Enrollment				Fu	ture Enrolln	nent By Stud	dent Resider	nce	Future Enrollment By Student Attendance					
	Location	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2018/19	2019/20	2020/21	2021/22	2022/23	
Kenwood	Reside/Attend	226	225	225											
Capacity 485	Reside	269	253	255	248	251	252	244	243	414	417	418	410	409	
Grades K-5	Attend	308	410	429											
Madison	Reside/Attend	197	192	206											
Capacity 317	Reside	235	238	259	267	263	264	272	275	283	279	280	288	291	
Grades K-5	Attend	259	257	271											
Nixon	Reside/Attend	253	245	222											
Capacity 461	Reside	324	332	329	337	329	328	332	336	290	282	281	285	289	
Grades K-5	Attend	313	306	261											
Pierce	Reside/Attend	335	345	315											
Capacity 387	Reside	393	418	381	368	363	348	346	337	367	362	347	345	336	
Grades K-5	Attend	387	414	382											
Taylor	Reside/Attend	162	147	145											
Capacity 392	Reside	281	281	295	286	290	288	290	289	215	219	217	219	218	
Grades K-5	Attend	255	219	215											
Truman	Reside/Attend	167	166	198											
Capacity 352	Reside	206	204	239	229	216	219	209	222	286	273	276	266	279	
Grades K-5	Attend	268	266	290											
Van Buren	Reside/Attend	346	350	412											
Capacity 470	Reside	437	438	502	518	521	524	531	530	459	462	465	472	471	
Grades K-5	Attend	379	379	442											
Viola Gibson	Reside/Attend	401	412	435											
Capacity 547	Reside	432	445	468	477	484	490	498	504	502	509	515	523	529	
Grades K-5	Attend	447	470	493											
Wright	Reside/Attend	253	232	250											
Capacity 385	Reside	323	304	324	315	305	301	292	298	307	297	293	284	290	
Grades K-5	Attend	323	294	317											

Source: RSP & Associates, LLC - February 2018

Note 1: Student Projections are based on the residence of the student

Note 2: School Choice Options between Facilities are depicted in the Projections (Attend) Exceed Educational Capacity

Note 3: PreKindergarten students not in the enrollment projections

Note 4: Capacity of each facility provided by the Cedar Rapids School District (Educational Capacity)

Note 5: Reside is based on the student address

Note 6: Attend is based on where the facility a student may attend

Note 7: Reside/Attend is are students who reside in the attendance area and attend that facility

Note 8: Utilize the shown projections for planning purposes - Comprehensive Boundary Changes happened began in the 2012/13 School Year

The information in the table above shows the students who Attend, Reside, and Reside + Attend by school, as well as a forecast for both Reside and Attend enrollments. This data takes into account private, parochial, and open enrollment choice. The data in the table above was integral to the Cedar Rapids CSD Board decision to implement a plan to reduce elementary facilities in the district from 23 ES to 15 ES. This decision was the result of a 14 month Facility Master Plan Process facilitated by RSP.

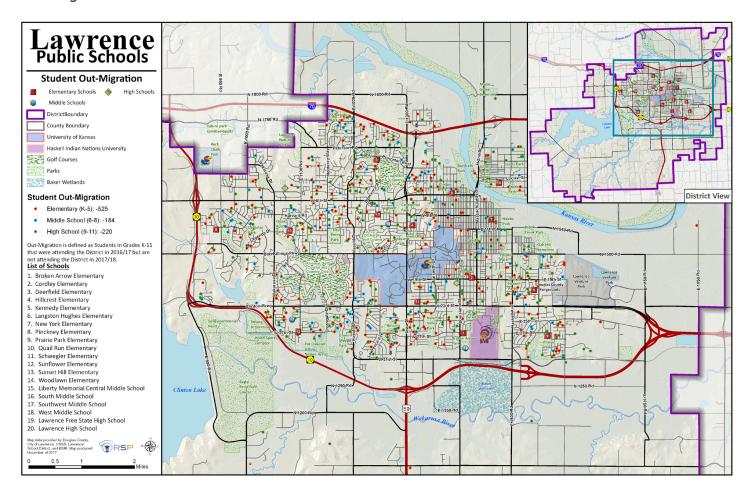




## **Enrollment Analysis Sample Pages**

## **Student Out-Migration**

- Students attending the District in 2016/17 who were in Kindergarten through 11<sup>th</sup> grade that did not attend in 2017/18 as 1<sup>st</sup> through 12<sup>th</sup> graders
- 991 students left the district in 2016/17,
  Total Migration +4
  929 students left the district in 2017/18,
  Total Migration +54



The data in the map above provides Lawrence Public Schools with information as the district plans for a change they have never experienced before. This map shows that as development is pushing outside the district boundary, there likely will be increased demand for students outside the district boundary wanting to enroll in the district. Understanding where student migration occurs is valuable to plan ahead for this type of change.



## **Enrollment Analysis Sample Pages**

RSP provides detailed attendance matrices that show enrollment for each school defined by both attend and reside. This analysis provides a baseline for other educational analysis.

Kdg to 4th																													
Rockford Public Schools 1718 K-4 Students with 1819 Bo	undary	,																											
		Attend School:																											
18/19 Reside	Bloom Elementary	Brookview Elementary	Carlson Elementary	Cherry Valley and White Swan Elementary New ES2 (18/19)	Conklin Elementary	Ellis Elementary	Froberg Elementary	Grego ry Elementa ry	Hillman Elementary	Johnson Elementany	King Elementary / Washington Elementary	Kishwaukee Elementary New ES1 (19/20)	Lathrop Elementary	Lewis Lemon Elementary	Marsh Elementary	Mcintosh Elementary	Nashold Elementary		Riverdahl Elementary	Rolling Green Elementary	Spring Creek Elementary	Welsh Elementary	West View Elementary	Whitehead Elementary	Barbour Language Academy	Haskell Elementary	Montessori School	Thurgood Marshall School	total
Bloom Elementary	234	3	1	4	1	2	0	7	3	64	7	37	2	2	0	0	0	25	5	4	2	2	0	9	12	14	18	31	489
Brookview Elementary	2	384	2	6	0	3	0	35	8	4	0	0	1	2	0	0	0	7	0	10	27	0	0	7	13	1	22	52	586
Carlson Elementary	47	2	230	2	0	3	2	6	4	2	1	1	0	0	0	1	0	6	0	4	7	0	1	1	14	8	26	21	389
Cherry Valley and White Swan Elementary New ES2 (18/19)	0	3	0	472	0	0	0	20	34	4	2	0	0	0	0	2	0	1	0	39	3	0	0	16	19	1	13	53	682
Conklin Elementary	1	0	1	0	193	0	0	0	0	2	2	1	7	1	0	3	0	1	0	6	1	5	1	4	15	18	25	12	299
Ellis Elementary	0	0	2	2	6	334	1	2	1	1	6	3	25	4	0	3	0	3	7	2	1	5	2	5	22	43	15	6	501
Froberg Elementary	1	2	3	2	0	0	339	3	30	2	1	0	1	0	0	2	0	2	12	8	0	0	0	8	24	0	10	17	467
Gregory Elementary	3	1	0	4	3	0	0	173	9	0	0	0	0	1	0	0	0	2	1	10	6	1	0	12	7	4	11	13	261
Hillman Elementary	1	3	2	11	7	0	10	11	287	1	4	5	1	0	0	0	0	3	131	17	2	1	0	21	22	4	14	12	570
Johnson Elementary	1	1	0	0	0	0	0	13	4	301	3	2	3	0	0	4	0	15	1	46	2	1	0	13	18	0	22	27	477
King Elementary / Washington Elementary	3	1	0	0	2	0	0	0	1	0	271	1	41	2	0	3	0	8	2	0	2	0	1	1	59	13	4	1	416
Kishwaukee Elementary New ES1 (19/20)	3	3	3	3	2	3	0	2	2	0	8	180	10	0	0	3	0	11	8	1	1	1	0	1	26	4	6	4	285
Lathrop Elementary	0	0	0	0	1	1	4	2	0	1	11	1	155	0	0	1	0	0	0	1	0	0	0	1	19	3	10	2	213
Lewis Lemon Elementary	1	3	0	0	10	4	0	1	0	1	7	2	31	240	0	5	0	3	2	3	3	4	1	0	9	32	6	1	369
Marsh Elementary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
McIntosh Elementary	1	1	0	0	6	7	0	1	1	1	3	0	21	8	0	252	0	1	1	0	0	4	2	1	24	26	16	5	382
Nashold Elementary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nelson Elementary	1	2	0	0	0	3	1	1	6	1	7	13	3	0	0	1	0	230	2	6	1	0	0	12	18	6	6	5	325
Riverdahl Elementary	6	2	1	2	3	4	10	7	47	5	10	69	16	5	0	4	0	26	356	13	2	0	0	49	45	22	8	5	717
Rolling Green Elementary	2	0	0	0	0	1	1	7	22	1	0	4	0	0	0	2	0	3	3	282	3	0	1	26	12	0	5	16	391
Spring Creek Elementary	3	5	99	3	0	0	0	6	5	5	0	0	2	0	0	0	0	0	1	0	269	0	2	4	10	0	38	70	522
Welsh Elementary	2	1	3	0	31	2	0	1	3	1	6	0	11	12	0	7	0	2	4	0	1	380	13	3	31	24	22	6	566
West View Elementary	2	2	0	3	16	1	1	1	1	0	10	0	12	2	0	2	0	6	1	2	3	5	385	3	24	20	25	29	556
Whitehead Elementary	2	2	2	3	1	0	0	3	20	2	2	5	4	0	0	0	0	1	2	42	0	0	0	289	11	2	9	13	415
Barbour Language Academy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haskell Elementary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Montessori School	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thurgood Marshall School	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	316	421	349	517	282	368	369	302	488	399	361	324	346	279	0	295	0	356	539	496	336	409	409	486	454	245	331	401	9,878

#### NOTES

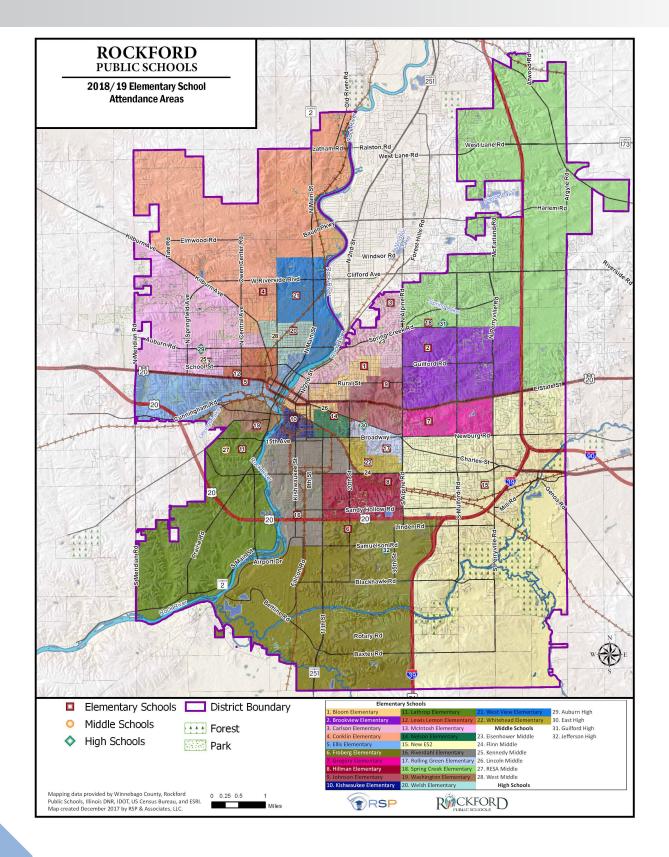
Move All Beyer ES (Closed) to Kishwaukee
Have all of Cherry Valley and White Swan (ES2) in Same Attendance Area
Move all of Thompson (Closed) to Cherry Valley and White Swan (ES2)
Out of District or Unmatched Alternative Schools assigned to ES2

The data in the map table provides Rockford School District with information to plan for mono and dual language programs at district facilities. This table, along with the complementary maps shown on the next page, assisted in making sound educational programming decisions, which as led to improved student academic achievement. RSP works to create visuals that eliminate the need to have lengthy reports. This provides our clients with a quality product that can be used day to day to extract and use important information for successful student outcomes.





## **Enrollment Analysis Sample Pages**





## **Enrollment Analysis Sample Pages**

RSP provides detailed yield analysis that depicts enrollment and yield analysis for different housing types.

## Single Family (SF)

School	Year													
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Brookview Elementary	0.40	0.41	0.43	0.43	0.45	0.43	0.38	0.36	0.34	0.34	0.32	0.31	0.30	0.29
Eason Elementary	0.43	0.43	0.42	0.41	0.41	0.39	0.38	0.36	0.36	0.34	0.33	0.32	0.32	0.31
Grant Ragan Elementary	0.29	0.27	0.30	0.31	0.34	0.34	0.34	0.32	0.31	0.31	0.31	0.30	0.29	0.32
Maple Grove Elementary	0.28	0.29	0.26	0.28	0.28	0.30	0.32	0.32	0.33	0.32	0.34	0.35	0.37	0.37
Shuler Elementary	0.31	0.37	0.37	0.36	0.38	0.38	0.39	0.41	0.38	0.39	0.39	0.39	0.40	0.39
Walnut Hills Elementary	0.29	0.32	0.34	0.34	0.38	0.40	0.40	0.37	0.37	0.38	0.39	0.39	0.38	0.39
Waukee Elementary	0.31	0.32	0.31	0.30	0.30	0.30	0.30	0.29	0.29	0.28	0.28	0.29	0.27	0.30
Woodland Hills Elementary	0.16	0.18	0.18	0.20	0.21	0.18	0.18	0.15	0.16	0.17	0.20	0.21	0.24	0.25

Source: Waukee Community School District and Dallas County

## Multi-Family (MF)

School		Year												
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Brookview Elementary	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.05	0.07	0.07	0.07	0.07	0.08	0.09
Eason Elementary	0.03	0.04	0.06	0.08	0.08	0.07	0.11	0.11	0.13	0.15	0.17	0.09	0.12	0.12
Grant Ragan Elementary	0.16	0.16	0.15	0.13	0.14	0.15	0.14	0.12	0.13	0.13	0.10	0.12	0.12	0.11
Maple Grove Elementary	0.05	0.05	0.06	0.05	0.07	0.06	0.06	0.07	0.10	0.10	0.11	0.12	0.12	0.11
Shuler Elementary	0.00	0.00	0.01	0.01	0.02	0.04	0.02	0.02	0.01	0.01	0.01	0.03	0.05	0.05
Walnut Hills Elementary	0.01	0.01	0.02	0.03	0.04	0.04	0.07	0.06	0.07	0.06	0.06	0.07	0.08	0.09
Waukee Elementary	0.08	0.08	0.11	0.09	0.10	0.08	0.10	0.10	0.11	0.10	0.11	0.10	0.13	0.11
Woodland Hills Elementary	0.08	0.09	0.11	0.11	0.11	0.09	0.07	0.09	0.10	0.10	0.10	0.09	0.08	0.09

Source: Waukee Community School District and Dallas County

- More students reside in single -family housing inventory
- Each attendance area has seen an increase in the MF yield rate
- Follow Brookview row to 2017 and the .29 means that for every 100 single-family units in Brookview they average about 29 K-5 students enrollment and yield analysis for different housing types.
- The single-family yield rate for Brookview has decreased from 40 K-5 students in 2004 to 29 K-5 students in 2017

In Waukee, this table illustrates that the yield rate of students from Single-Family housing is higher. However, in many districts there could be multi-family projects which could yield closer to single family yield rates. RSP monitors this as part of our full service planning package. A key element for future yield rates is an understanding of what the Millennial demographic can choose and/or afford for housing choices available throughout the district.





## **Enrollment Analysis Sample Pages**

	Waukee Community School District	Polk County	Dallas County	State of Iowa
Unemployment Rate	1.0%	3.4%	1.2%	3.0%
Average Household Size	2.64	2.50	2.61	2.42
Median Age	33.3	35.9	35.4	38.9
Total Population	53,271	488,405	85,873	3,199,548
Median Household Income	\$92,161	\$62,085	\$78,997	\$54,832
Total Housing Units	21,474	203,335	35,016	1,403,034
Owner Occupied Housing Units	15,841	129,051	25,207	905,162
Renter Occupied Housing Units	4,325	62,133	7,487	374,016
Vacancy Rate	6.1%	6.0%	6.6%	8.8%

Ethnicity	Waukee Community School District	Polk County	Dallas County	State of Iowa
White	80.9%	77.6%	79.0%	82.9%
Black	3.0%	6.8%	2.3%	3.6%
American Indian	0.2%	0.3%	0.3%	0.4%
Asian	8.5%	4.6%	5.7%	2.5%
Pacific Islander	0.0%	0.1%	0.1%	0.1%
Other Race	1.0%	3.3%	2.7%	2.2%
Two or More Races	2.4%	2.8%	2.3%	2.2%
Hispanic	4.0%	4.5%	7.6%	6.1%

- Waukee Community Schools has the lowest unemployment rate and the highest median household income comparatively to the other geographies in the area.
- Unemployment Rate of the district and the surrounding geographies are lower than the National average of 5.5%
- The district has a higher percentage of Asian residents compared to the National average of 5.6%

This is the core demographic comparison analysis RSP provides its clients so as to provide a general benchmark of how the district may compare to some other regional jurisdictions. While it is not necessary to know what is happening in other jurisdictions, having the general information allows greater understanding of the District community as a part of a larger area.



## **Boundary Analysis**

### **Boundary Analysis**

Any attendance area changes will be critically monitored by the community. RSP has extensive experience assisting school districts in creating new elementary, middle, and high school attendance areas. This could involve opening or closing a school or relocating educational programs. The boundary criteria and guiding principles RSP recommends include the following and should be prioritized by the Board of Education. If the District does not yet already have boundary criteria RSP can assist in creating those elements or review and update them.

### **Guiding Principles Examples**

- The School Board considers this work as part of the district plan. It's one part of a whole
- The Boundary should reflect providing better educational opportunities at each school for there to be an equitable student experience at each school
- The committee recognizes the power of an elementary school to create community
- The boundary can anticipate future growth of the neighborhood
- The boundary proposed should utilize all of the available District resources
- Consider boundary lines that follow natural /man-made boundaries
- Grandfathering/Transfers/Student Options are determined by Administration

### **Boundary Criteria Examples**

- Contiguous Planning Areas
- Demographic Considerations
- Duration of Boundaries
- Feeder System Considerations
- Fiscal Consideration Capital
- Fiscal Consideration Operational
- Neighborhoods Intact
- Projected Enrollment / Building Utilization
- Student Impacted Boundary Change (SIBC)
- Transportation Considerations

## **Redistricting Tool**

The redistricting tool analysis uses RSP projections which are based on planning areas. RSP projections have a statistical accuracy of 97% or greater. The tool allows the RSP GIS team of experts to create what-if scenarios that are based on best planning practices that follow Board Guiding Principles and Prioritized Boundary Criteria. The robust tool allows our team to see spatially and numerically what a boundary change would look like. The tool can display students who are impacted by a boundary change. When RSP is the gate-keeper of the numbers the committee, administration and community can then focus on the Guiding Principles and Boundary Criteria which will help direct solutions toward a successful outcome students.





## **Boundary Analysis**

### **Boundary Analysis**

Utilizing information from the Enrollment Analysis RSP will examine district facilities and determine areas that can be shifted into new attendance areas. Following the Boundary Criteria established by the BOE, RSP will develop scenarios for potential future boundaries with current district facilities.

RSP can provide Boundary Analysis for potential future school sites. This analysis will follow the criteria established by the BOE for Boundary Analysis with existing facilities. RSP can develop additional scenarios that rearrange existing boundaries and incorporate the future sites into the attendance areas as a whole. The analysis would examine the population, development and location of the future site to determine if it fit within the BOE determined need.

#### **Boundary Analysis Scope**

- Utilizing information from the Enrollment Analysis RSP will develop new attendance areas for Elementary schools currently in the District
- The Analysis will contain population, enrollment and capacity information for facilities for the five years of the enrollment projections

### **Future Site Boundary Analysis Scope**

- The district will provide RSP with three future building sites
- RSP will develop two scenarios per future site for new attendance areas
- The Analysis will contain population, enrollment and capacity information for facilities for the five years of the enrollment projections
- RSP will not conduct site visits of future building locations

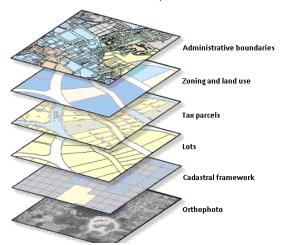




## Methodology

### **Student Forecast Models Defined**

The accuracy of the information RSP & Associates provides our clients is dependent on the creation of a geographic based Enrollment Projection Model. Additionally, the level, credibility, and accuracy of the data driving the model will also be a factor in how the information can be utilized for other planning decisions. The graphic below depicts the data level and the possible forecast models ability to drill down to the lowest level:



#### **Enrollment Projection Model Level of Accuracy**

Data Level Model Accuracy
School District
School Attendance Area Traditional Projection Model
Zip Code
Census Block/Tract Census Projection Model
Subdivision
Street

While each of the three models depicted in the graphic above can provide accurate enrollment forecasts, the RSP Projection Model has been designed upon a proven demographic forecasting methodology that will allows our clients to strategically plan for current and future issues to positively impact all of its educational programing for students. RSP recommends a process that validates how the planning areas were created and aligned with known GIS features in the school district, as well as creating significantly more planning areas than the District currently utilizes so as to more appropriately track students by specific planning layers. Spending time up front creating these planning areas will pay dividends later when trying to create "what if" scenarios.

RSP & Associates will create and maintain data sets that drive the dynamic Student Forecast Model (SFM). Some of these variables in the data sets include economic cycles, demographic transiency, current housing choices, development activity, and lifestyle decisions. Additionally, we utilize census data to better understand the demographic complexities occurring in a school district. Meetings will be scheduled with local developers, city and county staff to better understand existing housing inventory and future developments to include in-fill developments. The statistical formula that illustrates how all these elements are factored in, including the Geographic Information System Logical Model RSP built to track data sets is located on the following page.





## Methodology

### **Built Out Planning Area Formula**

Let:

S = The number of students, either an actual count or a projected count

x = A subscript denoting an attendance area in the School District

c = Grade level t = Time (Years)

GC = Growth component either modeling enrollment increase or decrease based on historical information,

expressed as a real number

Then:  $S_{c, t, x} = S_{c-1, t-1, x} * GC$ 

### **Developing Planning Area Formula**

Let:

S = The number of students, either an actual count or a projected count

x = A subscript denoting an attendance area in the School District

c = Grade level t = Time (Years)

BP = Building permit forecast as given by the Building Permit Allocation Model (BPAM) model

Rc, x = Student enrollment ratio of cohort c in planning area x

CP = Capacity of a planning area as expressed by available housing units

BT = Building history trend of a planning area

A = An index which models the likelihood of development

CT = Building permit control total forecast

Then:  $S_{c,t,x} = S_{c-1,t-1,x} + (BP_{t,x} * R_{c,x})$ 

Where:  $BP_{t,x} = \left( -\frac{\left(CP_{x}\right) \left(BT_{x}\right) \left(A_{x}\right)}{\sum_{x} \left(CP_{x}\right) \left(BT_{x}\right) \left(A_{x}\right)} \right) * CT$ 



### **Data Collection**

#### **Student Data:**

- 18/19 student enrollment, as of Official Headcount 2018
- 17/18 student enrollment, as of Official Headcount 2017
- 16/17 student enrollment, as of Official Headcount 2016
- 15/16 student enrollment, as of Official Headcount 2015
- 14/15 student enrollment, as of Official Headcount 2014
- 13/14 student enrollment, as of Official Headcount 2013
- 12/13 student enrollment, as of Official Headcount 2012
- 11/12 student enrollment, as of Official Headcount 2011
- 10/11 student enrollment, as of Official Headcount 2010
- 09/10 student enrollment, as of Official Headcount 2009
- 08/09 student enrollment, as of Official Headcount 2008

RSP utilizes the following data sets for analysis of the district. Additional data is utilized on an as needed basis, and is dependent on availability.

Fields sent with the student data should include, but are not limited to: student ID, address, grade, school, attending, gender, ethnicity, lunch program status, special needs status, and ESL/ELL program status.

Additional fields of use, if available, include: district resident status, enrollment status, second language spoken at home, gifted program status, and school of residence.

#### **Municipal/Other Data:**

- Address Points
- Street Centerlines with Ranges
- Subdivision/Plat Polygons
- Zoning
- **Future Land Use**
- Transportation (Roads, Railroads, Trails)
- Infrastructure (Water, Sewer, Electric, Gas)
- Government Jurisdictions and Political Boundaries
- Landmarks and Cultural Features
- Census Boundaries and Associated Demographic Data
- Fertility and Live Birth Rate
- Hydrology Data sets including FEMA Flood Hazards and Watersheds
- Planimetrics

- Parcel Polygons and associated attributes
  - **Property Value**
  - Ownership
  - Situs Address
  - Identification Number (PIN)
  - **Property Class**
  - Year Structure Built
  - **Occupancy Description**
  - Living Units
- **Building Permits Issued**
- Satellite Imagery
- Surface/Terrain Elevation Models
- Capital Improvement Plans including **New Sewer Lines and Streets**
- Conservation and Soil Geography

The accuracy of the input data directly relates to the accuracy of the analysis. RSP utilizes the latest data from multiple sources to ensure the accuracy of the findings.





### **Data Collection**



#### **RSP & ASSOCIATES: STUDENT DATA SUBMISSION**

RSP is studying your current and past enrollment to assist the District in being able to understand enrollment trends, student demographics, building utilization, and school boundaries. RSP is requesting the following information from your student database software:

The end product is one file per school year.

- 1) 09-10 student enrollment, as of Official Head Count 2009
- 2) 10-11 student enrollment, as of Official Head Count 2010
- 3) 11-12 student enrollment, as of Official Head Count 2011
- 4) 12-13 student enrollment, as of Official Head Count 2012
- 5) 13-14 student enrollment, as of Official Head Count 2013
- 6) 14-15 student enrollment, as of Official Head Count 2014
- 7) 15-16 student enrollment, as of Official Head Count 2015
- 8) 16-17 student enrollment, as of Official Head Count 2016
- 9) 17-18 student enrollment, as of Official Head Count 2017
- 10) 18-19 student enrollment, as of Official Head Count 2018

File format can be sent as MS Excel spreadsheets, MS Access database, or dBase/ delimited text files.

Each spreadsheet needs to contain ONLY ONE RECORD PER STUDENT (no duplicate ID's), and have the following fields:

Student ID

Grade

**School** – Ideally, the full school name instead of the school number or code.

Gender

**Ethnicity** - If multiple ethnicity fields are maintained, please include these, as well as a Hispanic indicator **Lunch Status** - Free and Reduced Lunch (FRL)

Special Needs - Individual Education Programs (IEP)

ESL - English as a Second Language, or English Language Learners (ELL)

Address - This MUST be the address of the PRIMARY HOUSEHOLD where the student resides, not a mailing address, P.O. Box, etc.

City

State

Zip

**Any additional fields that could be of value** – This may include, but is not limited to, district resident status, enrollment status, override codes, second language spoken at home, etc.

If there are codes for any of the above fields, please provide a description of what each code means.

\*NOTE: It is critical that the district thoroughly check data before sending to RSP. This includes summarizing student enrollment counts by facility, by grade, and district-wide totals. The goal is to ensure that the data sent to RSP reflects the state certified enrollment as closely as possible. If additional time is required by RSP to clean up student data, or if multiple iterations of data are exchanged before reaching necessary accuracy, this could result in additional expenses to the district as a result of significant extra time and resources used.

\*District verified student data sent by the designated District representative is considered final. If there are errors/oversights/omissions of data that will need to be changed, it will result in an additional fee of \$1,000 per day.

If you have any questions, please contact RSP & Associates:

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September 2018

## **Approach and Time line**

# Throughout each component of the project RSP will be in communication with district staff and provide requested Board updates.

## **Enrollment Analysis**

Listed below are the steps that must be taken to ensure completion of the analysis:

- Receive student data and planning area data from District
- · Receive school capacity for each facility from District
- Receive information about educational programming (type and location) from District
- Receive County /City/State data (RSP preliminary examination suggests all available fields needed)
- Validate how the existing planning areas align with other GIS layers (Parcels, Streets, existing attendance areas, etc.)
- Modify existing planning areas and create new planning areas that align with other GIS layers
- Associate all Student data with new planning areas
- Create District and Development maps
- Analyze all the data
- Finalize the analysis and create the presentation

## **Boundary Analysis (Current and Future Buildings)**

Listed below are the steps that must be taken to ensure completion of the analysis:

- Utilize data sets from Enrollment Analysis
- Utilize the RSP Redistrict Tool to develop three boundary scenarios for existing buildings
- Utilize the RSP Redistrict Tool to develop boundary scenarios for three future building locations



## Other items listed in Scope of Service

- RSP will maintain a rich data file for the district that allows for future analysis.
   RSP would maintain ownership of our modeling components and custom data sets.
- RSP has vast experience with site analysis and boundary realignment in school district of varying size.
- RSP evaluates each district and custom creates planning areas that follow defined land areas, residential density and type, natural features, man-made features and attendance area. These are evaluated and adjusted for each annual Enrollment Analysis.
- RSP has access to data that will provide the district with housing data that can be used for analysis to discover trends and changes
- RSP has experience presenting and discussing our analysis to a variety of audiences including Board of Education, Board Committees, Public Committees and other groups.





## **Financial Proposal**

The financial proposal demonstrates our commitment to provide high quality planning services at costs that our clients can afford. In order to meet the planning and scheduling needs, RSP & Associates has prioritized the most important data/reports in which that analysis should take place. An official contract will be signed when the services are agreed upon. Below is the services and costs as requested:

### Enrollment Analysis \$14,000

Includes Housing Development data, 5- year Student Population Projections, 5-year student growth projections, migration information, attendance matrices, complete build-out analysis, and Yield rate analysis

#### **Boundary Analysis/Future Sites**

\$8,000

Includes development of three attendance area scenarios with current district facilties. Utilizes information from Enrollment analysis to develop boundary scenarios. Includes development of attendance areas scenarios with three proposed future building sites, two scenarios per future location

BOE Presentations \$1,000

Presentation of Enrollment Analysis to the BOE via GOTO meeting.

#### NOTES:

County/City Data (possible addition costs)
Time line dependent on quality of District data
If additional public meetings are needed the public facilitation cost will increase

#### **Timeline for Project Completion**

Enrollment Analysis and BOE Presentation March 2019

Boundary Analysis (Current and Future)

May 2019





# **RSP Client References**

RSP clients welcome the opportunity to speak to your team about the services RSP has provided. We value our client relationships and encourage open communication.

#### **CUSD 308**

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### Cedar Rapids CSD

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## RSP is the Best Choice

- RSP works closely with administration, BOE, and community, resulting in increased credibility for decisions made by the district.
- RSP is over 97% accurate with midpoint projections. RSP's Student Forecast Model (SFM) is a statistically based model in which accuracy is based on the ability to create planning areas that are influenced by many local variables, and correspond geographically with property parcels.
- RSP has assembled a team that are experts in many disciplines, allowing a multitude of available services to include: enrollment analysis, demographic analysis, boundary analysis, site selection and analysis, public facilitation, and other services that will have a positive impact on district decisions.
- RSP has extensive experience working with school districts in communities which have rapidly increasing population and development, drastic demographic shifting, as well as college and university communities with migrant populations.
- RSP provides information as an impartial 3rd party which allows our clients to achieve each element in its Comprehensive School Improvement Plan.
- RSP collaborates with many different entities and persons within the community, which allows the best available information to be utilized in all aspects of the analysis.
- RSP is not a data or demographic firm we are a full-service planning firm. We bring the full breadth of the best planning practices to each project. Our focus is not to reformulate or regurgitate known data, but to discern through in-depth analysis what information is most beneficial for the district and work toward successful solutions.
- RSP strives to create a seamless transition that benefits the district and provides confidence in future planning decisions, which ultimately leads to successful college and career ready students.
- RSP has proven success and credibility as a leader with District administration, the BOE, and the Community.