

## NEWTON Community school district

# Planning for the Future

**Enrollment Analysis** 

December 2023

### **RSP & Associates**



#### **RSP Quick Facts:**

Founded in 2003 Professional educational planning firm Expertise in multiple disciplines (GIS, Planning, Facilitation) Over 20 years of planning experience Over 80 years of education experience Over 20 years of GIS experience Projection accuracy of 97% or greater

#### **RSP Planning Team:**

Robert Schwarz, CEO Military, County, City, and School District Planner University of Kansas – Master of Urban Planning (MUP) American Institute of Certified Planners (AICP) Accredited Learning Environment Planner (ALEP)

#### Ginna Wallace, Planner

University of Kansas – Master of Urban Planning (MUP) American Institute of Certified Planners (AICP)

#### **RSP Clients:**

RSP was started with the desire and commitment to assist school districts in long-range planning. RSP has served over **130** clients in:

- Arkansas Colorado Iowa Illinois Kansas
- Minnesota Missouri Nebraska North Dakota Oklahoma
- South Dakota Tennessee Wisconsin

#### **RSP Recent Projects:**

Bondurant-Farrar Community School District Enrollment Analysis, 2022/23

Southeast Polk Community School District Enrollment Analysis, 2023/24

Marshalltown Community School District Enrollment Analysis, 2020/21

Our Partners:





### Expectations

Thank you to Newton Community School District, Jasper County, City of Newton, State of Iowa Census Bureau, and ESRI for assisting in this analysis!





#### Helpful Hints to Read the Report:

how each indicator contributes to the analysis:

 Slides that have the flagged star symbol are SIGNATURE SLIDES and are the most important variables in this unique analysis

• Each variable is analyzed as an indicator of future student population.

Use the PLUS (student growth) and MINUS (student loss) icons to note





 Click the APPENDIX symbol on a page to reference additional analysis on this topic

#### Timeline

Project timeline is a result of ensuring student data could represent as close as possible to the Official County Data with attributes that would allow RSP to forecast enrollment at a parcel level geography.

#### **Findings**

The findings were not focused on supporting or contradicting any past internal or outsourced studies. This analysis is based on data, data, and more data.

#### Study

This study factored in many different data sets to provide data driven analysis that is the foundation to the **RSP** Statistical Forecast Model (SFM).

Change

Enrollment change in the community is influenced by, but not limited to, the birth rate, demographics, types of development and/or housing affordability.

#### Facts:

The study does not provide specific information about which site would be best suited for a new facility or for that matter should the district build any new facility – this analysis is one portion of how to make that decision This analysis is based on the same grade configuration and educational programming expectations the patrons have for each student

Projecting enrollment is not a science – like life in general some assumptions happen that may lead to greater enrollment while others toward a smaller enrollment

The goal of this study is to help the board, administration, and public understand how to make the best decision for the students at the classroom level.

### **Discussion Points**

#### HELPFUL HINTS TO READ THE REPORT:



Slides that have the flagged star symbol are SIGNATURE SLIDES



- PLUS: indicator of student growth
- MINUS: indicator of student loss

Click the APPENDIX symbol on a page to reference additional analysis





PART 1 Enrollment & Demographics

- Things to Consider
- Student Analysis Maps & Data
- Sophisticated Forecast Model
- Demographics
- Past Enrollment & Change





District wide enrollment forecasted to decrease by about 115 students to be about 2,650 by 2028/29

- Elementary forecasted to decrease by about 10 students and enroll almost 1,080 total ES students
- Middle School forecasted to decrease by over 25 students and enroll under 800 total MS students
- High School forecasted to decrease by almost 80 students and enroll under 800 total HS students

### 100,000 Foot Perspective

An overview of what is most notable for your school district, students, and community.



The district is reviewing elementary facilities and will begin working on a strategic plan to better utilize facilities:

 Thomas Jefferson, Aurora Heights, Woodrow Wilson, and Emerson Hough



### Factors of residential and economic growth were analyzed in this forecast

- New residential inventory has been minimal the last decade
- There are over 1,000 potential units that could be added in the district over the next decade
- Job and economic growth is expected in the region as TPI Composites reopens

### **District Boundary**



### **Elementary Boundary**



### RSP Planning Areas Map

![](_page_8_Figure_1.jpeg)

# Sophisticated Forecast Model

#### Built-Out $S_{c,t,x} = S_{c-1,t-1,x} * GC$

Let:

×

С

t

- S = The number of students, either an actual count or a projected count
- A subscript denoting an attendance ares in the School District
- = Grade level
- = Time (years)
- GC = Growth component either modeling enrollment increase or decrease based on historical information, expressed as a real number

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

Where: 
$$BP_{t,x} = \left( \begin{array}{c} \frac{(CP_x) (BT_x) (A_x)}{\sum x (CP_x) (BT_x) (A_x)} \end{array} \right) * CT$$

Let:

t

- S = The number of students, either an actual count or a projected count
- x = A subscript denoting an attendance area in School District

c = Grade level

- = 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 planning area
- A = An index which models the likelihood of development
- CT = Building permit control total forecast

#### This is the **central focus** of everything RSP does.

The model is based on what is happening in a school district. The best data is statistically analyzed to provide an accurate enrollment forecast. The District will be able to use RSP's report and maps to better understand demographic trends, school utilization, and the timing of construction projects.

The SFM is...

- a social science... not an exact science; it identifies behavior trends to determine the propensity of them to be recreated
- valuable in how our team created and analyzes the geography at a planning area level for any commonality which while help produce an accurate forecast

Some variables examined for each planning area (but not limited to) are...

- o natural cohort (district data)
- o planning area subdivision lifecycle (a RSP variable)
- the value of homes (county assessor data)
- type of residential units like single-family, multi-family, townhome, mobile home, etc. (county assessor data)
- year units were built
- estimated female population (census data)
- estimated 0-4 population (census data)
- existing land use (county and city data)
- o future land use (county and city data)
- o capital improvement plan (county and city data)
- o future development (county and city data)
- in-migration of students (district data) & out-migration of students (district data)

Each variable is analyzed as an indicator of the future student population:

![](_page_9_Picture_40.jpeg)

Indicator of Student Growth

![](_page_9_Picture_42.jpeg)

![](_page_10_Picture_1.jpeg)

#### Jasper County Iowa Live Births and Newton Kindergarteners 5 Years Later

Calendar Vear	# Live	Birth	% Birth	School	#Kda	%Kdg of
	Births	Change	Change	Year	# Kug	Live Births
2005	474			2010/11	251	53.0%
2006	402	-72	-15.2%	2011/12	251	62.4%
2007	423	21	5.2%	2012/13	238	56.3%
2008	441	18	4.3%	2013/14	252	57.1%
2009	389	-52	-11.8%	2014/15	211	54.2%
2010	415	26	6.7%	2015/16	206	49.6%
2011	417	2	0.5%	2016/17	197	47.2%
2012	441	24	5.8%	2017/18	212	48.1%
2013	404	-37	-8.4%	2018/19	202	50.0%
2014	424	20	5.0%	2019/20	197	46.5%
2015	395	-29	-6.8%	2020/21	187	47.3%
2016	429	34	8.6%	2021/22	205	47.8%
2017	385	-44	-10.3%	2022/23	207	53.8%
2018	404	19	4.9%	2023/24	177	43.8%
2019	401	-3	-0.7%	2024/25	176	229
2020	411	10	2.5%	2025/26	180	235
2021	398	-13	-3.2%	2026/27	174	227
2022	360	-38	-9.5%	2027/28	158	206
3-Year Average	411.8	-13.7				
3-Year Weighted Average	381.2	-21.7			C	Low Range

#### **Live Birth Observations**

- Tracks the number of county live births and the corresponding number of kindergarten students in five years later
- The number of live births have decreased the past two years with less than 400 per year (3-year average of 13 less live births per year)
- Kindergarten enrollment has varied
   between 177 to 252 students per year
- Kindergarten was the lowest this year with 177 students (44% of live births)
- The kindergarten classes moving forward are forecasted to be between:
  - Low End: 158 to 180 students
  - High End: 206 to 235 students

Source: Iowa Department of Public Health (IDPH) and Newton Community School District

**Main Takeaway:** The decline of live births in the Jasper County can potentially result in smaller kindergarten classes. To keep similar or greater enrollment will require an increased in the market share of future kindergarten students. RSP recommends continuing to monitor this variable for more understanding on demographic trends as propensity of Jasper County live births enrolling in Newton Community School District.

High Range

### Past Enrollment by Grade

#### **Observations:**

- Largest K-12 class in 2023/24 12<sup>th</sup> grade with 225 Students
- Smallest K-12 class in 2023/24 Kindergarten 177 students
- o Graduating senior class is larger than the incoming Kindergarten class which will decrease total enrollment
- Largest historical increase was from 2016/17 to 2017/18 with increase of 6.0%
- o Largest total enrollment since 2005/06 was in 2005/06 with 3,271 students
- The district decreased by 88 students from last year (-3.1%)

**IOWA SCHOOL DISTRICT - Dept of Education Enrollment By Grade** PK-12 РК к 1st 2nd 3rd 4th 5th 6th 7th 8th 10th 11th 12th Total % Change Year 9th Change 2005/06 3,271 3,271 2006/07 3,147 -124 -3.8% 2007/08 3.224 2.4% 2008/09 3,219 -5 -0.2% 3,138 -81 -2.5% 2009/10 2010/11 3,070 -68 -2.2% 2011/12 3,034 -36 -1.2% 2012/13 3.034 0.0% 2013/14 3,061 0.9% 2014/15 2,911 -150 -4.9% 2015/16 2,955 1.5% 2016/17 2,731 -224 -7.6% 2017/18 2.895 6.0% 2018/19 2,914 0.7% 2019/20 2.878 -36 -1.2% 2020/21 2,822 -56 -1.9% 2021/22 2,864 1.5% 2022/23 2.859 -5 -0.2% 2023/24 2,771 -88 -3.1%

Source: Iowa Department of Education and Newton Community Schools (2005/06 to 2023/24)

#### **Observations:**

- Largest 3-year average K-12 class cohort increase 1<sup>st</sup> to 2<sup>nd</sup> grade (+5.3)
- $\circ$  Largest 3-year average K-12 class cohort decrease 10<sup>th</sup> to 11<sup>th</sup> grade (-8.7)
- Overall percent change from previous year of -3.1% decrease of 88 students
- Instructional Modality will have to be monitored to determine if the students who are not attending the district still reside in the district and if or how many return to receive services in the future years

|--|

		РК	к	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	РК	-12
From	То	к	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Change	% Change
2005/06	2006/07	217	-60	-9	-10	-10	-1	-4	0	4	0	-12	-10	6	-124	-3.8%
2006/07	2007/08	277	-12	1	4	3	5	23	13	3	8	-6	-14	22	77	2.4%
2007/08	2008/09	243	-44	-2	7	-4	3	5	-11	-2	-6	8	-12	32	-5	-0.2%
2008/09	2009/10	201	-44	-8	5	-5	-8	4	0	1	2	1	-25	12	-81	-2.5%
2009/10	2010/11	189	-40	-7	0	-8	-2	6	3	-8	-16	-10	-15	-7	-68	-2.2%
2010/11	2011/12	136	-38	-8	11	2	4	2	-8	2	6	-6	-18	2	-36	-1.2%
2011/12	2012/13	110	-30	5	-2	2	0	2	1	-3	-10	-7	-8	9	0	0.0%
2012/13	2013/14	111	-18	9	6	10	4	-7	-4	-4	-1	-5	2	17	27	0.9%
2013/14	2014/15	82	-35	-1	-13	-2	-14	-3	-7	-2	-7	-11	-22	-15	-150	-4.9%
2014/15	2015/16	84	-13	-2	5	4	5	5	2	0	8	10	-4	11	44	1.5%
2015/16	2016/17	64	-24	-20	-21	-26	-10	-23	-7	-5	-15	-17	-9	-13	-224	-7.6%
2016/17	2017/18	105	-8	7	33	18	7	24	18	10	8	14	2	0	164	6.0%
2017/18	2018/19	88	3	-1	5	2	4	4	-1	14	7	6	-8	10	19	0.7%
2018/19	2019/20	86	5	7	6	14	3	8	7	12	-12	4	-29	-19	-36	-1.2%
2019/20	2020/21	88	-20	1	-13	-2	-6	2	9	11	-3	-4	-6	-4	-56	-1.9%
2020/21	2021/22	113	4	10	-6	2	6	10	-3	-10	-3	-1	-13	-1	42	1.5%
2021/22	2022/23	74	-3	3	7	7	-1	-2	3	1	5	-5	1	-6	-5	-0.2%
2022/23	2023/24	52	-4	3	-7	0	-5	-5	2	2	-1	-10	-14	-18	-88	-3.1%
3-Year Averag	ge	79.7	-1.0	5.3	-2.0	3.0	0.0	1.0	0.7	-2.3	0.3	-5.3	-8.7	-8.3	-17.0	-0.6%
3-Year Weigh	ted Average	69.5	-2.3	4.2	-2.2	2.7	-1.8	-1.5	1.5	-0.3	0.7	-6.8	-8.8	-11.2	-38.7	-1.3%

Source: Iowa Department of Education and Newton Community Schools (2005/06 to 2023/24)

### 3-Year Student Migration Trend

![](_page_13_Figure_1.jpeg)

Source: Newton Community School District and RSP

#### Definition

**Out-Migration**: Shows number of students in grade K to 11<sup>th</sup> that were attending the District in the previous year, but are not attending the District in the current year.

**In-Migration:** Shows number of students in grade 1<sup>st</sup> to 12<sup>th</sup> that are attending the District in the current year, but were not attending the District in the previous year.

#### **Observations**

- 2021/22 lost 213 students and gained 210 students; NET: -3
- 2022/23 lost 164 students and gained 178 students; NET: +14
- 2023/24 lost 230 students and gained 191 students; NET: -59

#### Main Takeaway:

The district had a negative net loss of transfer students this year. High school saw a larger out-migration than the past two years.

### Out of District Student Analysis

![](_page_14_Figure_1.jpeg)

■ 19-20 ■ 20-21 ■ 21-22 ■ 22-23 ■ 23-24

#### **Total Out of District Students per Year**

![](_page_14_Figure_4.jpeg)

#### **Observations:**

- Open enrollment decreased slightly in 2021/22 but has increase back to around 50 students
- Prairie City Monroe Community School District tends to contribute the largest share of open enrollment students
- Grinnell-Newburg Community School District open enrollment has decreased over the past five year

Source Newton Community School District and RSP

### Student Count Change Map

![](_page_15_Figure_1.jpeg)

### Heat Map

![](_page_16_Picture_1.jpeg)

![](_page_16_Figure_2.jpeg)

### Heat Density Change Map

![](_page_17_Figure_1.jpeg)

### **Enrollment Observation and Conclusion**

θ	RSP & Associates monitors almost 250 planning areas for demographic, development, and enrollment data sets
	Live births in Jasper County have decreased the last two years – indicator of student loss
	<ul> <li>District enrollment decrease by 88 students from last year – <i>indicator of student loss</i></li> <li>Pandemic cohort recovery was non-existent</li> <li>Most grade levels decrease as they work their way through the system</li> <li>Average class sizes have all decrease over the past decade</li> </ul>
	Graduating senior classes are larger than incoming kindergarten classes – indicator of student loss
	District had a negative migration trend this year with more students migrating out – <i>indicator of student loss</i>
	Greatest student density is west of the middle school
	Open enrollment trends should continually be analyzed as change to open enrollment policy have impact on enrollment outlook.

![](_page_19_Picture_0.jpeg)

![](_page_19_Picture_1.jpeg)

Part 2 Development

- Population, Development, & Enrollment Trends
- Yield Rate
- Housing Market Maps & Data
- Potential Growth Analysis

![](_page_19_Picture_7.jpeg)

![](_page_20_Picture_0.jpeg)

### Population, Development, & Enrollment

![](_page_20_Figure_2.jpeg)

#### **Graphic Explanation**

- BLUE LINE: Building activity was at its greatest in 2018/19; the past two years has seen minimal development
- o **GREEN LINE:** Census data indicates a slightly decreasing population
  - · Population shows the estimate growth of the whole decade
  - · New decennial census often affect year-to-year change
- o **RED LINE:** Student enrollment has been generally decreasing year to year
  - Enrollment has decreased for 6 of the past 10 school years

Table Legend

### Student Yield Rate

+3 and greater from District Average

-3 and greater from District Average

Single-Family Yield Rate:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Avg
Aurora Heights Elementary School	11	12	11	10	12	11	12	11	12	12	12	10.89
Emerson Hough Elementary School	14	15	15	12	14	13	14	14	15	15	14	13.95
Thomas Jefferson Elementary School	12	11	11	10	11	12	12	12	13	12	11	11.89
Woodrow Wilson Elementary School	13	14	13	12	11	12	13	12	12	13	12	13.68
District (K-4):	12	13	12	11	12	12	13	12	13	13	12	12.47

Source: Jasper County and Newton Community School District

#### **Single-Family Yield Rate Observations**

• Table shows the number of students per 100 single-family (SF) units by year and by elementary boundary

- $\circ$  District sees on average 12 K-4 students per 100 single-family households
- o Emerson Hough has the largest 2023 SF yield rate with 14 students per 100 single-family households
- o Thomas Jefferson has the smallest 2023 SF Yield rate with 11 students per 100 single-family households
- o Adding new housing can typically increase the yield rate there were 116 single-family homes built from 2013 to 2023

Multi-Family Yield Rate:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Avg
Aurora Heights Elementary School	9	7	7	7	8	6	6	6	6	7	6	7.95
Emerson Hough Elementary School	14	15	17	17	14	17	9	9	9	9	10	12.53
Thomas Jefferson Elementary School	16	13	12	11	12	11	12	11	10	9	10	12.79
Woodrow Wilson Elementary School	10	11	11	10	11	10	8	6	5	6	8	9.05
District (K-4):	13	11	11	11	11	10	9	9	8	8	8	10.74

Source: Jasper County and Newton Community School District

#### **Multi-Family Yield Rate Observations**

- $\circ~$  Table shows the number of students per 100 multi-family (MF) units by year and by elementary boundary
- $\,\circ\,\,$  District sees on average 10 students per 100 multi-family households
- Emerson Hough and Thomas Jefferson have the largest 2023 MF yield rate with 10 students per 100 multi-family households
- o Aurora Heights has the smallest 2023 MF yield rate with 6 students per 100 multi-family households
- Adding new housing can typically increase the yield rate there were 71 multi-family homes built from 2013 to 2023

#### Main Takeaway:

The single-family district yield rate has been stable around 12 students while the multi-family yield rate has been decreasing from 13 to 8 students

### Average Year Built Map

![](_page_22_Figure_1.jpeg)

### Median Home Value Map

![](_page_23_Figure_1.jpeg)

### Recent Year Built Map

![](_page_24_Figure_1.jpeg)

### Development Activity Over Time

![](_page_25_Figure_1.jpeg)

#### New V.S. Existing Units by Decade Built

Source: Jasper County and ESRI

#### **Observations:**

- $\circ\;$  Table has been created to illustrate the number of units by year built
- The average number of units built per year from 2010 to 2019 (19.8 per year) is lower than from 2000 to 2009 (56.1 per year)
- $\,\circ\,$  The decade with the most units built was 1970 to 1979 with over 1,000 new units
- $\circ~$  Building activity will need to increase a lot to have a significant impact on enrollment
- $\,\circ\,\,$  The average year for all units built was 1951 and the median year built in 1955

### Growth Area Map

![](_page_26_Picture_1.jpeg)

![](_page_26_Figure_2.jpeg)

### Development Table

	Type of	Timing of	Existing	Potential
Growth Areas (RSP Planning Area Name)	Development	Growth	Units	Units
E of DMACC Campus Apartments	Multi-Family	Current	0	71
North of Fairmeadows North	Single-Family	Current	3	80
East of Fairmeadows North	Single-Family	Current	17	12
Fountain Hills Estate	Single-Family	Current	8	20
Cardinal Hills Golf Course (Future Res)	Townhomes	Current	14	110
Northeast of 11 Ave E at 19 St N	Industrial	5 Year	1	135
Hatchery Homes	Multi-Family	5 Year	0	43
North of Berg ES/MS	Single-Family 5 Year		0	155
South of Wright's 1st Addition	Agriculture	10 Year	2	24
Birkenholz Development (Zoned Multi-Family)	Agriculture	10 Year	0	12
Eastgate Acres (Birkenholz Development)	Single-Family	10 Year	0	27
Four Way Acres	Single-Family	10 Year	0	40
Corner of W28th and HWY F48	Single-Family	10 Year	0	264
Corner of W4th and S 20th Ave	Single-Family	10 Year	0	76
	rrent Total:	42	293	
	Year Total:	1	333	
	) Year Total:	2	443	
	(	Grand Total:	45	1069

**Disclaimer:** The market demand and property owners desire to build guides the timing and type of development. Some growth areas may require infrastructure improvements. There is no guarantee any of these growth areas will develop or that other areas not shown as a growth area will develop

Source: Jasper County, City of Newton, and RSP

#### **Observations:**

- o Growth areas are created from existing land use, future land use, capital improvement plan, zoning, and city staff input
- Over 600 total units are identified for potential development in the next decade. Development activity will need to increase for this to be attained.
  - **Green:** identifies where development activity is happening (222 units)
  - Yellow: identifies possible areas that could develop within a 5-year range (290 units)
  - **Purple:** identifies possible areas that could develop within a 10-year range (103 units)

- TPI Composites plans to reopen manufacturing plant
  - Plans to restore 700-employee workforce
  - Signed a 10-year lease agreement to supply wind turbine blades to GE Renewable Energy
  - Production is expected to begin in 2024

![](_page_28_Picture_5.jpeg)

https://www.desmoinesregister.com/story/money/business/2022/11/04/tpi-composites-newton-iowa-10-year-lease-reopen-plant/69619151007/

### **Development Observation and Conclusion**

Over 1,000 units identified for potential development within the next 10+ years

Building activity has been decreased the past couple of years

- Opportunities of residential growth still exist however the speed of the activity is forecasted to continue decreasing
- Monitor local factors that may affect development timing and economic outlook to gauge how the new decade of residential growth will play out

Single-family residential has the highest propensity to have school aged students, yield rates of this development type are higher than that of multi-family

- Single-family units are being developed at a higher rate than multi-family 2023 saw 12 single-family units built and 5 multi-family units built
- Tracking the types of development is important to understand the yield rate of students for every part of the community there are varying yield rates with all developments

The most active area of development is north of the Middle School

Residential development will continue if the housing product is affordable and have active residential projects – infrastructure connectivity also plays a role in the desirability and timing of residential development. Potential for a slight decrease in unit production with a national election year (2024).

As of February 2022, construction costs have increased over 100% from August 2020 and supply chain challenges impact the potential of new development and where new developments will occur in the district

![](_page_30_Picture_0.jpeg)

![](_page_30_Picture_1.jpeg)

Part 3 Projections

- Past, Current, & Future Enrollment
- Building Projections

![](_page_30_Picture_5.jpeg)

# ×

### Past, Current, & Future Enrollment

![](_page_31_Figure_2.jpeg)

#### District-wide enrollment projected to continue decreasing for the next five years. By 2028/29...

- District-wide enrollment forecasted to decrease by 116 students (-4.2%)
- Elementary enrollment forecasted to decrease by 11 students (-1.0%)
- Middle School enrollment forecasted to decrease by 26 students (-3.2%)
- High School enrollment forecasted to decrease by 79 students (-9.2%)

### **Projection Notes & Clarifications**

#### Past Enrollment is shown three ways:

- 1. Reside (Based on where a student Resides in relation to the district boundary)
- 2. Attend (Based on both a student residing in the district and attending and students not residing in the district attending)
- 3. Reside/Attend (Subset of Reside to know how many of the Reside attend the school based on the attendance area they are assigned to)

#### Projected Enrollment is shown two ways:

- 1. Reside (Based on where a student Resides in relation to the district boundary)
- 2. Attend (Based on both a student residing in the district and attending and students not residing in the district attending)
- o Other Items
  - Enrollment Grade Configuration in Student Forecast Model (PK-4, 5-8, and 9-12)
  - Open enrollment trends are assumed to follow District policy and follow similar trends as the last few years
  - Projection accuracy is limited by the number of years of student data which matches the State enrollment
  - Out of District trends are assumed to follow District policy and may continue or may take place like those trends during the projection
  - Integrated potential outcomes as a result of potential continued impact of COVID-19
  - Housing challenges that may result in a slowdown in new housing starts and challenges with the economy as it adapts to a "New Normal" of supply challenges, cost increases, and other housing policy changes

### Projections by Building

#### Newton School District Enrollment Projections By School (Based on Student Reside)

School	District	Enrollment	Past School Enrollment				Projections Based on Residence					
School	Canacity	Type (Past)	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	
Aurora Heights Elementary School	capacity	Posido (Attend	170	2021/22	2022/23	2023/24	2024/23	2023/20	2020/21	2027/20	2020/23	
	257	Reside Recide	266	213	230	227	204	202	212	210	227	
PN-4	557	Attend	200	293	315	200	294	303	315	319	327	
Emergen Heuseh Elementeru Ceheel		Attenu Deside (Attend	228	259	205	260	259	208	279	283	292	
Emerson Hough Elementary School	257	Reside/Attend	155	170	183	167	224	220	210	204	210	
PK-4	357	Reside	230	237	244	222	224	220	216	204	210	
		Attend	238	221	221	205	209	200	199	191	193	
Thomas Jefferson Elementary School		Reside/Attend	211	241	241	244						
РК-4	471	Reside	276	286	264	268	272	266	264	264	271	
		Attend	338	380	371	361	366	360	358	355	363	
Woodrow Wilson Elementary School		Reside/Attend	202	226	236	224						
РК-4	357	Reside	293	314	310	306	285	295	281	276	265	
		Attend	261	270	274	258	241	256	238	234	225	
Berg Middle School		Reside/Attend	880	847	837	824						
5-8	1,000	Reside	880	847	837	824	801	792	805	813	798	
		Attend	880	847	837	824	801	792	805	813	798	
Newton High School		Reside/Attend	807	793	830	798						
9-12	1,250	Reside	873	881	889	858	837	817	816	807	782	
		Attend	807	793	830	798	777	754	757	749	720	
West Academy		Reside/Attend	70	94	61	5						
9-12	65	Reside	4	6	2	5	3	2	6	4	2	
		Attend	70	94	61	65	64	65	65	62	64	
ELEMENTARY SCHOOL TOTAL		Reside/Attend	738	852	890	862						
PK to 4th	1,542	Reside	1,065	1,130	1,131	1,084	1,075	1,084	1,074	1,063	1,073	
		Attend	1,065	1,130	1,131	1,084	1,075	1,084	1,074	1,063	1,073	
MIDDLE SCHOOL TOTAL		Reside/Attend	880	847	837	824						
5th to 8th	1,000	Reside	880	847	837	824	801	792	805	813	798	
		Attend	880	847	837	824	801	792	805	813	798	
HIGH SCHOOL TOTAL		Reside/Attend	877	887	891	803						
9th to 12th	1.315	Reside	877	887	891	863	840	819	822	811	784	
	,	Attend	877	887	891	863	840	819	822	811	784	
DISTRICT TOTALS		Reside/Attend	2,495	2.586	2.618	2,489						
PK to 12th	3.857	Reside	2.822	2.864	2,859	2.771	2,716	2,695	2,701	2.687	2,655	
	5,007	Attend	2 822	2 864	2,859	2 771	2 716	2,695	2 701	2 687	2,655	
L	1	Accenta	2,022	2,007	2,000	-,	2,710	2,000	2,701	2,007	2,000	

#### Item of Understanding:

Elementary Reside past and future enrollment includes PK, while the Attend past and future enrollment factors in that all PK students attend Thomas Jefferson

Source: RSP & Associates, LLC - October 2023

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

Note 2: The Enrollment Model is based on a Head count of students by Planning Area at each facility

Note 3: Transfers between Facilities are shown with Attend Projections

Note 4: The Enrollment Model assumes ES(PK-4) MS(5-8) and HS (9-12)

Note 5: Each planning area is assigned the 2023/24 boundary

Note 6: School capacity provided by the District

Note 7: Reside is based on the student home address

*Note 8: Attend is based on which facility the student attends* 

Note 9: Res/Att (Reside/Attend) are the students who reside in the attendance area that they have chosen to attend

#### School Utilization Legend

Over 100% School Capacity Under 70% School Capacity

### **Projection Observations and Conclusion**

#### **Projection Overview**

- District is projected to decrease by 116 students, totaling 2,655
- Elementary schools are projected to decrease by 11 students, totaling 1,073
- Middle schools are projected to decrease by 26 students, totaling 798
- High schools are projected to decrease by 79 students, totaling 784

Facilities are likely to see under-utilization (less than 70%) challenges over the next five years.

#### **Driving Themes of Enrollment**

- 1. 2023/24 Student population
  - Smallest classes in history
  - Smaller kindergarten classes than senior classes

#### 2. Development Activity

- Decreasing yield rates
- Minimal development building trends
- · Potential new developments require infrastructure improvement and market indication
- 3. Migration Trends
  - Negative student migration
  - · Cohorts tend to decrease or increase minimally thoughout the years

![](_page_35_Picture_0.jpeg)

Part 4 Next Steps

- Moving Forward
- Next Steps & Key Considerations

![](_page_35_Picture_5.jpeg)

### Next Steps

- Admin Boundary meetings begin in January 2024
- Public input is held in February
- Plan comes back to Board of Education for final adoption in March 2024
- Discussion for Boundaries and Grade Configuration:
  - Thomas Jefferson
  - Aurora Heights
  - Woodrow Wilson
  - Emerson Hough

#### TOP BOUNDARY CRITERIA (11/13/2023 meeting)

- 1. Students Impacted by Boundary Change
- Focus on number of transitions for students
- 2. Fiscal Considerations Operational
- 3. Neighborhoods/Schools Intact

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#### 2023/24 COMPREHENSIVE BOUNDARY PROCESS

![](_page_36_Figure_16.jpeg)

![](_page_36_Picture_17.jpeg)

### Key Considerations

#### The following items will assist the district advance its educational goals:

- Annually review enrollment projections, demographics, and development trends
- District administration and the Board of Education further study the enrollment, demographic, and development information presented
- Utilize the enrollment model to assist with planning for staffing needs at each facility for the following school year which will address how quickly areas are "Regreening" and "Emerging"
- The type of residential development and how affordable it is will determine likely location and number of students
- Annually monitor the impact of future educational programming that will be integrated into each facility to ensure equitable and appropriate space is utilized in the building which will experience enrollment change
- Recent economic indicators have been in-flux (interest rates, housing prices, supply chain). Continued economic changes will impact the likelihood of new people moving into the district and increasing enrollment.
- RSP Enrollment forecasting is based on the best-known information at the time

#### **Key Considerations:**

- 1. Number of live births in Jasper County (continue to monitor)... see page 11
- 2. Size of outgoing senior class (larger) compared to the incoming Kindergarten and PK classes (smaller)... see page 12
- 3. Migration trends (In-Migration tends to be more than Out-Migration)... see page 14
- 4. Development trends and timing of identified projects (1,000-unit production potential next ten years)... see pages 27-28

### Conclusion

×

RSP Recommended to continually monitor the following indicators:

Enrollment may decrease more than forecasted if	Enrollment may increase more than forecasted if					
Decreasing share of live births	Increasing share of live births					
Current housing stock does not re-green (continues to age)	• Current housing stock re-greens (turns over)					
• Housing development experiences minimal potential growth	Housing development experience more potential growth					
<ul> <li>Economic indicators challenge the ability for new homeowners and affordability aspects of the district</li> </ul>	<ul> <li>Economic indicators improve the ability for new homeowners and the affordability aspects of the district</li> </ul>					
Demographic shifts in community and/or surrounding communities	<ul> <li>Demographic shifts in community and/or surrounding communities</li> </ul>					
• Incoming Kindergarten class smaller than outgoing senior class	Incoming Kindergarten class larger than outgoing senior class					

See graphic below to illustrate how the different variables may impact forecasted enrollment outlook:

#### Main Takeaway:

- These factors are not all positive or negative. Each have a different impact on future outlooks.
- State education policy change may impact enrollment outlook. This analysis assumes policies will continue as they currently operate throughout the projection time frame.
- It is important to continue to monitor these factors RSP modeling attempts to find the most likely outcome:

The goal of this study is to help the board, administration, and public understand how to make the best decision for the students at the classroom level.

#### Example of Forecast Evolution

![](_page_38_Figure_11.jpeg)

![](_page_39_Picture_0.jpeg)

![](_page_39_Picture_1.jpeg)

- Community Demographics
- Intra-transfer Tables
- Student Density Maps

![](_page_39_Picture_5.jpeg)

### 2023/24 Guiding Principles (RSP Modified)

#### **RSP Draft of Guiding Principles:**

The following are to be considered:

- The boundary adjustment plan reflects a two-to-three-year transition plan to allow for facility renovation
- The boundary adjustment plan should reflect providing better educational opportunities at each school for there to be an equitable student experience at each school
- The end grade configuration should be: PK to 1<sup>st</sup>, 2 to 4<sup>th</sup>, 5 to 8<sup>th</sup>, and 9 to 12<sup>th</sup>
- Elementary inventory is reduced to two core facilities by 2025/26
- Attendance boundaries are modified over the next two to four years to allow for building renovations
- Building renovations and boundary transition plan contingent on bonding capability and timing of projects
- Boundaries could be modified to create flexible/transition areas with high transition residential areas to help balance enrollment
- Grandfathering/Transfers/Student Options are determined by Administration could happen if space allowed

### Demographic Summary

![](_page_41_Picture_1.jpeg)

Percent Change of Annual Rate

2000 to 2010: -0.24% 2010 to 2020: 0.53% 2020 to 2023: -0.03% 2023 to 2028: -0.08%

Observations: Population is forecasted to decrease the next five years

![](_page_41_Picture_5.jpeg)

Housing

Percent Change of Annual Rate of Housing Inventory 2000 to 2010: 0.21% 2010 to 2020: -0.08% 2020 to 2023: 0.09% 2023 to 2028: -0.05% Observations: Housing development is forecasted to decrease the next five years

Percent Change of Income per Capita

![](_page_41_Picture_9.jpeg)

2023: \$31,338 2028: \$35,480 2023 to 2028: 2.47%

Income

Observations: Income is increasing in the district

![](_page_41_Picture_13.jpeg)

Workforce

Unemployment Rate

4% as of July 2023

Observations: Unemployment is higher than the State of Iowa (2.4%)

### Demographics

Demographic Overview	Newton Community School District	Grinnell-Newburg School	City of Newton	Jasper County	lowa
Unemployment Rate	4.0%	3.1%	4.3%	3.1%	2.4%
Average Household Size	2.3	2.20	2.26	2.39	2.39
Median Age	43.2	40.6	43.3	43.5	39.7
Total Population	21,826	12,178	15,848	37,792	3,226,869
Median Household Income	\$55,021	\$63,670	\$51,798	\$62,483	\$67,730
Total Housing Units	9,405	5,325	7,350	16,190	1,444,666
Owner Occupied Housing	6,237	3,280	4,585	11,452	946,080
Renter Occupied Housing	2,443	1,563	2,211	3,576	363,174
Vacancy Rate	7.7%	9.1%	7.5%	7.2%	9.4%
Race/Ethnicity	Newton Community School District	Grinnell-Newburg School	City of Newton	Jasper County	lowa
White	87.7%	87.8%	87.3%	90.3%	81.4%
Black	3.3%	2.9%	3.2%	2.0%	4.4%
American Indian/Alaskan	0.4%	0.3%	0.4%	0.3%	0.3%
Asian	0.7%	1.7%	0.8%	0.6%	2.4%
Pacific Islander	0.1%	0.3%	0.1%	0.1%	0.3%
Other Race	0.2%	0.2%	0.2%	0.3%	0.3%
Two or More Races	3.5%	3.3%	3.8%	3.2%	3.6%
Hispanic	4.0%	3.5%	4.2%	3.1%	7.3%

Source: U.S. Census, ESRI BAO

Notes:

• Demographic Information for Newton Community School District is similar to Grinnell-Newburg Schools

• The Median Age is higher in Newton Community School District than it is in Iowa and Grinnell-Newburg School

• The Unemployment Rate is higher than the State of Iowa (estimates from July 2022 from the US Census)

### Employment Information

Employment Sectors	Newton Community School District	Grinnell-Newburg School	City of Newton	Jasper County	Iowa
2023 Agriculture/Mining (SIC01-14)	1.1%	1.1%	0.4%	2.0%	1.5%
2023 Construction (SIC15-17)	2.0%	1.3%	1.2%	3.3%	4.1%
2023 Manufacturing (SIC20-39)	8.1%	5.7%	8.1%	7.2%	10.3%
2023 Transportation (SIC40-47)	1.5%	1.2%	1.2%	2.8%	3.2%
2023 Communication (SIC48)	0.4%	0.2%	0.4%	0.5%	0.8%
2023 Utility (SIC49)	0.9%	0.0%	0.7%	0.8%	0.6%
2023 Wholesale Trade (SIC50-51)	1.6%	2.7%	0.9%	2.6%	5.4%
2023 Home Improvement (SIC52)	0.5%	5.7%	0.5%	0.6%	1.5%
2023 General Merchandise (SIC53)	3.1%	1.4%	3.2%	2.7%	1.8%
2023 Food Stores (SIC54)	4.7%	2.9%	4.9%	5.2%	3.5%
2023 Auto Dealer/Gas Station (SIC55)	2.4%	1.5%	2.6%	2.6%	2.3%
2023 Apparel/Accessory (SIC56)	0.2%	0.1%	0.2%	0.2%	0.5%
2023 Furniture/Home Furnishings (SIC57	0.3%	0.1%	0.2%	0.3%	0.7%
2023 Eating & Drinking (SIC58)	7.2%	3.5%	7.5%	6.8%	6.0%
2023 Miscellaneous Retail (SIC59)	1.8%	1.8%	1.9%	1.8%	2.6%
2023 Banks (SIC60-61)	1.7%	1.1%	1.8%	1.8%	1.8%
2023 Securities Broker (SIC62)	0.2%	0.2%	0.2%	0.2%	1.5%
2023 Insurance (SIC63-64)	0.4%	32.9%	0.4%	0.4%	2.4%
2023 Real Estate/Holding (SIC65-67)	0.9%	0.7%	0.9%	0.9%	2.5%
2023 Hotel/Lodging (SIC70)	0.8%	0.5%	0.9%	0.9%	1.1%
2023 Auto Services (SIC75)	0.5%	0.2%	0.5%	0.9%	1.1%
2023 Movie/Amusement (SIC78-79)	0.8%	8.5%	0.7%	1.2%	2.7%
2023 Health Services (SIC80)	14.6%	8.6%	15.5%	11.7%	12.1%
2023 Legal Services (SIC81)	0.6%	0.3%	0.6%	0.5%	0.7%
2023 Education/Library (SIC82)	8.5%	11.3%	8.4%	11.2%	8.5%
2023 Other Service (SIC72-89SEL)	29.0%	4.7%	30.0%	24.7%	14.7%
2023 Government (SIC91-97)	5.9%	1.3%	5.9%	6.1%	5.9%
2023 Unclassified Establishments (SIC99)	0.2%	0.3%	0.2%	0.2%	0.4%

Source; U.S. Census and Esri BAO Notes:

• Highest percentage of employees are in Other Services (28.98%); 2nd Highest percentage of are in Health Services (14.62%)

• When compared to neighboring geographies the district has a higher percentage of in Utilities (0.93%) and the lowest in Insurance (0.38%)

### Intra-District Transfer Table

		Attend								
Reside	Arthur Elementary	Emerson Hough	Thomas Jefferson	Woodrow Wilson	Attend Total					
Aurora Heights	0	17	9	11	37					
Emerson Hough	10	0	12	13	35					
Thomas Jefferson	7	7	0	10	24					
Woodrow Wilson	16	14	15	0	45					
Grand Total	33	38	36	34	141					

#### **Observations:**

- Illustrates school choice that could be impacted by location of educational programming
- $\circ$  Reviewed on an annual basis and approved based on capacity availability
- Emerson Hough ES had the most transferring in (+38), but Thomas Jefferson ES had the largest net gain of students (+12)
- Woodrow Wilson ES had the most transferring out (-45) and the largest net loss of students (-11)
- Over 140 total elementary students attended a school where they do not reside this year

Source: Newton Community School District and RSP

**NOTE:** The schools in the left column are associated with the current attendance area. Reading to the right indicates a school choice change from where they are assigned based on the Reside attendance area.

For example: Aurora Heights has 37 students attending a different elementary school and 33 students from another elementary school choosing to attend Aurora Heights. This results in a 4 less students attending Aurora Heights than what reside in that attendance area.

### Planning Areas – Detailed Map

![](_page_45_Figure_1.jpeg)

### Planning Areas – Aerial Map

![](_page_46_Picture_1.jpeg)

### Elementary Student Count Change Map b

![](_page_47_Figure_1.jpeg)

### Middle School Student Count Change Map

![](_page_48_Figure_1.jpeg)

### High School Student Count Change Map

![](_page_49_Figure_1.jpeg)

### 2019/20 Student Density Map

![](_page_50_Figure_1.jpeg)

### 2023/24 Student Density Map

![](_page_51_Figure_1.jpeg)

### Student Density Change Map

![](_page_52_Figure_1.jpeg)

### Yield Rate Analysis Map

![](_page_53_Figure_1.jpeg)

### East Growth Areas Map

![](_page_54_Figure_1.jpeg)

### South Growth Areas Map

![](_page_55_Figure_1.jpeg)

### West Growth Areas Map

![](_page_56_Figure_1.jpeg)

### By Building By Grade

#### RESIDE

#### 2024/25 School Year

School	District								Grade							
	Capacity	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Aurora Heights Elementary School	357	28	52	51	60	51	52									294
Emerson Hough Elementary School	357	19	38	34	44	38	51									224
Thomas Jefferson Elementary School	471	35	48	42	47	51	49									272
Woodrow Wilson Elementary School	357	32	45	49	56	64	39									285
Berg Middle School	1,000							193	204	206	198					801
Newton High School	1,250											216	210	212	199	837
West Academy	65											0	0	2	1	3
DISTRICT TOTALS	3,857	114	183	176	207	204	191	193	204	206	198	216	210	214	200	2,716

Source: RSP & Associates, LLC - November 2023

#### ATTEND

#### 2024/25 School Year

School	District								Grade							
	Capacity	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Aurora Heights Elementary School	357	0	47	46	61	56	49									259
Emerson Hough Elementary School	357	0	41	37	44	38	49									209
Thomas Jefferson Elementary School	471	114	54	48	47	54	49									366
Woodrow Wilson Elementary School	357	0	41	45	55	56	44									241
Berg Middle School	1,000							193	204	206	198					801
Newton High School	1,250											216	205	192	164	777
West Academy	65											0	5	22	36	63
DISTRICT TOTALS	3,857	114	183	176	207	204	191	193	204	206	198	216	210	214	200	2,716

Source: RSP & Associates, LLC - November 2023

<u>Item of understanding</u>: Elementary Reside past and future enrollment includes PK, while Attend past and future enrollment factors in that all PK students attend Thomas Jefferson

### By Building By Grade

#### RESIDE

#### 2025/26 School Year

School	District								Grade							
	Capacity	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Aurora Heights Elementary School	357	30	58	52	52	59	52									303
Emerson Hough Elementary School	357	25	38	39	35	44	39									220
Thomas Jefferson Elementary School	471	32	45	48	43	47	51									266
Woodrow Wilson Elementary School	357	32	45	46	51	56	65									295
Berg Middle School	1,000							189	193	205	205					792
Newton High School	1,250											197	211	203	206	817
West Academy	65											0	0	1	1	2
DISTRICT TOTALS	3,857	119	186	185	181	206	207	189	193	205	205	197	211	204	207	2,695

Source: RSP & Associates, LLC - November 2023

#### RESIDE

#### 2026/27 School Year

School	District								Grade							
	Capacity	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Aurora Heights Elementary School	357	29	60	58	53	52	61									313
Emerson Hough Elementary School	357	22	35	39	40	35	45									216
Thomas Jefferson Elementary School	471	34	46	44	49	43	48									264
Woodrow Wilson Elementary School	357	36	45	45	47	51	57									281
Berg Middle School	1,000							206	194	199	206					805
Newton High School	1,250											210	197	211	198	816
West Academy	65											1	1	2	2	6
DISTRICT TOTALS	3,857	121	186	186	189	181	211	206	194	199	206	211	198	213	200	2,701

Source: RSP & Associates, LLC - November 2023

<u>Item of understanding</u>: Elementary Reside past and future enrollment includes PK, while Attend past and future enrollment factors in that all PK students attend Thomas Jefferson

### By Building By Grade

#### RESIDE

#### 2027/28 School Year

School	District								Grade							
	Capacity	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Aurora Heights Elementary School	357	31	61	61	60	53	53									319
Emerson Hough Elementary School	357	18	34	36	40	40	36									204
Thomas Jefferson Elementary School	471	34	47	46	46	48	43									264
Woodrow Wilson Elementary School	357	35	48	46	47	48	52									276
Berg Middle School	1,000							209	207	198	199					813
Newton High School	1,250											205	205	191	206	807
West Academy	65											0	0	1	3	4
DISTRICT TOTALS	3,857	118	190	189	193	189	184	209	207	198	199	205	205	192	209	2,687

Source: RSP & Associates, LLC - November 2023

#### RESIDE

#### 2028/29 School Year

School	District								Grade							
	Capacity	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Aurora Heights Elementary School	357	30	57	62	63	60	55									327
Emerson Hough Elementary School	357	23	35	35	36	40	41									210
Thomas Jefferson Elementary School	471	36	46	47	47	45	50									271
Woodrow Wilson Elementary School	357	33	41	48	47	47	49									265
Berg Middle School	1,000							184	210	207	197					798
Newton High School	1,250											198	200	198	186	782
West Academy	65											0	0	0	2	2
DISTRICT TOTALS	3,857	122	179	192	193	192	195	184	210	207	197	198	200	198	188	2,655

Source: RSP & Associates, LLC - November 2023

<u>Item of understanding</u>: Elementary Reside past and future enrollment includes PK, while Attend past and future enrollment factors in that all PK students attend Thomas Jefferson

# Definitions

- o Cohort: a group of individuals having a statistical factor (such as grade level) in common in a demographic study
- Out-migration: shows number of students in grade Kindergarten to 11<sup>th</sup> that are attending the district in the previous year, but were not attending the district in the current year
- In-migration: shows number of students in grade 1<sup>st</sup> to 12<sup>th</sup> that are attending the district in the current year, but were not attending the district in the previous year
- Yield-rate: ratio of students that attend each school to the number of housing units in that school's attendance area
- o Single-family: a house that is may be fully detached or semi-detached occupied by one household or family
- Multi-family: a classification of housing where multiple separate housing units for residential inhabitants are contained within one building or several buildings within one complex
- o Town Homes: Side by side housing units that do not meet the definition of single-family houses
- Mobile Home Park: movable dwelling, 8 feet or more wide and 40 feet or more long, designed to be towed on its own chassis, with transportation gear integral to the unit when it leaves the factory, and without need of a permanent foundation.
- Vacant Land: means any undeveloped land/ erf within a proclaimed township or a land development area and will continue to be rated as vacant until such time as a certificate of occupancy
- Mixed-use development: development that blends two or more residential, commercial, cultural, institutional, and/or industrial uses
- Median Year Built: equal to the middle point of all reported years when each dwelling unit was built based on information from the local assessor's office
- Median Home Value: equal to the middle point of all reported home values from the assessor's office in the district