



Planning for the Future Platte County School District

BOUNDARY COMMITTEE MEETING #1

2021/22 Enrollment Analysis Summary



RSP & Associates

Thank you to Platte County School District, Platte County, and the Census Bureau/Esri for making this happen!

Who are we? A professional educational planning firm with expertise in multiple disciplines

What is our experience? We have over... 20 years of planning experience; 80 years of education experience; and 20 years of GIS experience

What do we do? Project enrollment with projection accuracy of 97% or greater and assist school districts in long-range planning including (but not limited to) boundary analysis, facility planning, and demography studies.



Things to Consider...

- 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...
 - 1) 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
 - 2) This analysis is based on the same grade configuration and educational programming expectations the patrons have for each student
 - 3) 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.

Sophisticated Forecast Model

Built-Out

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

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

Developing

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

$$\text{Where: } BP_{t, x} = \left(\frac{(CP_x) (BT_x) (A_x)}{\sum_x (CP_x) (BT_x) (A_x)} \right) * CT$$

Let:

- 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
- t = Time (years)
- BP = Building permit forecast as given by the Building Permit Allocation Model (BPAM) model
- R_{c, 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

Over **200** Planning Areas are statistically analyzed in the district

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...

- natural cohort (district data)
- 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)
- future land use (county and city data)
- capital improvement plan (county and city data)
- future development (county and city data)
- in-migration of students (district data) & out-migration of students (district data)

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.



Part One: Past Enrollment and Demographics



100,000 Foot Perspective

Update 1/04/22

Enrollment



Overall Enrollment

- Increase by nearly **500 students**

Elementary School

- Increase by about **250 students**

Middle School

- Increase by about **100 students**

High School

- Increase by over **100 students**

Capacity



Capacity Challenges at:

- Compass Elementary
- Pathfinder Elementary
- Barry School

Growth in southern feeder of district will cause capacity challenges.

Note: Building capacities have been provided by Platte County R-3 School District, however these capacities will likely change in the near future as part of an updated Facility Master Plan and repurposing of several of the existing buildings.

Development



Housing Market

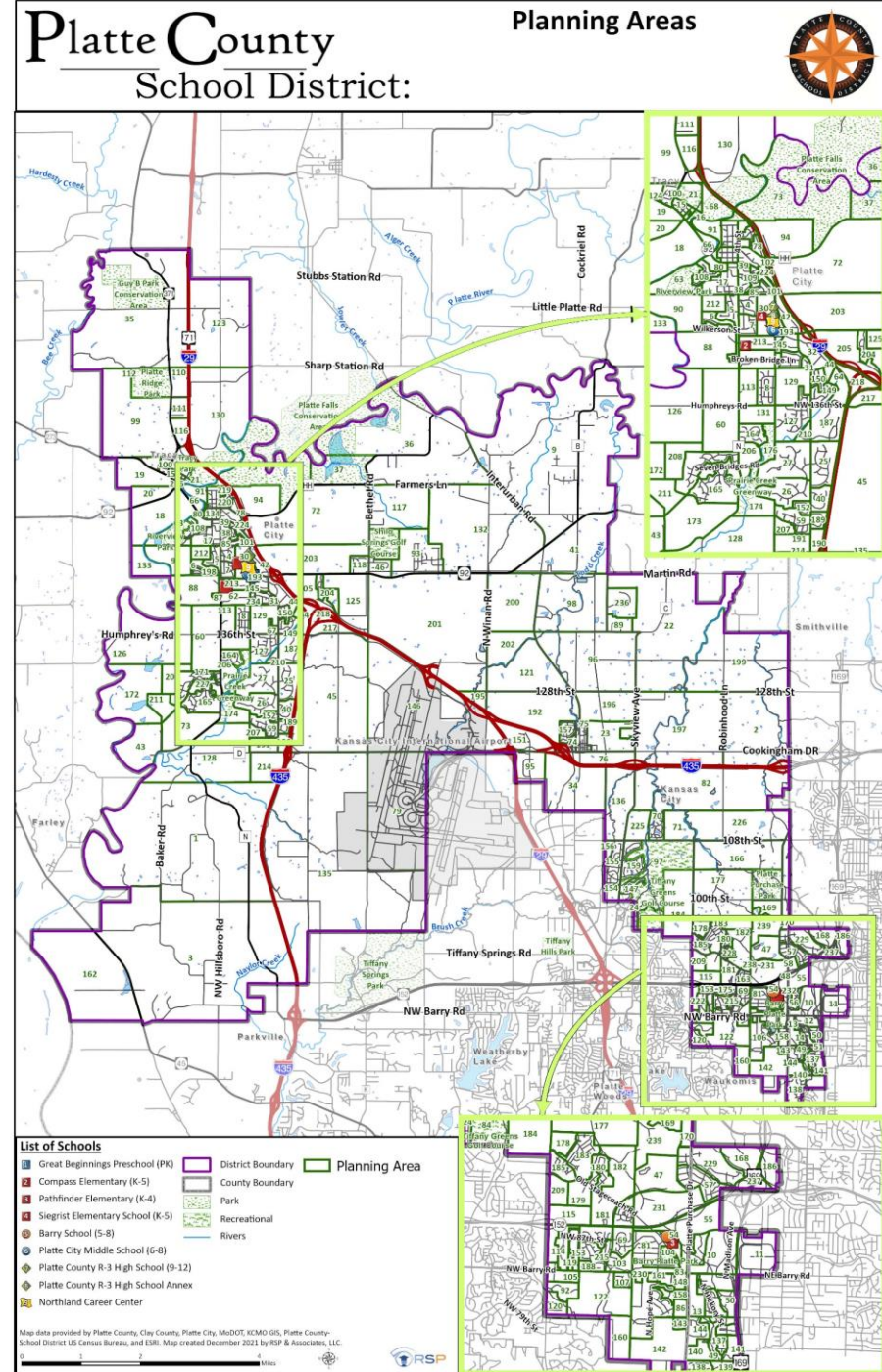
- Growth in southern part of the district
- Tiffany Springs

Affect on Student Population

- New housing for new families – will see an increase in student population

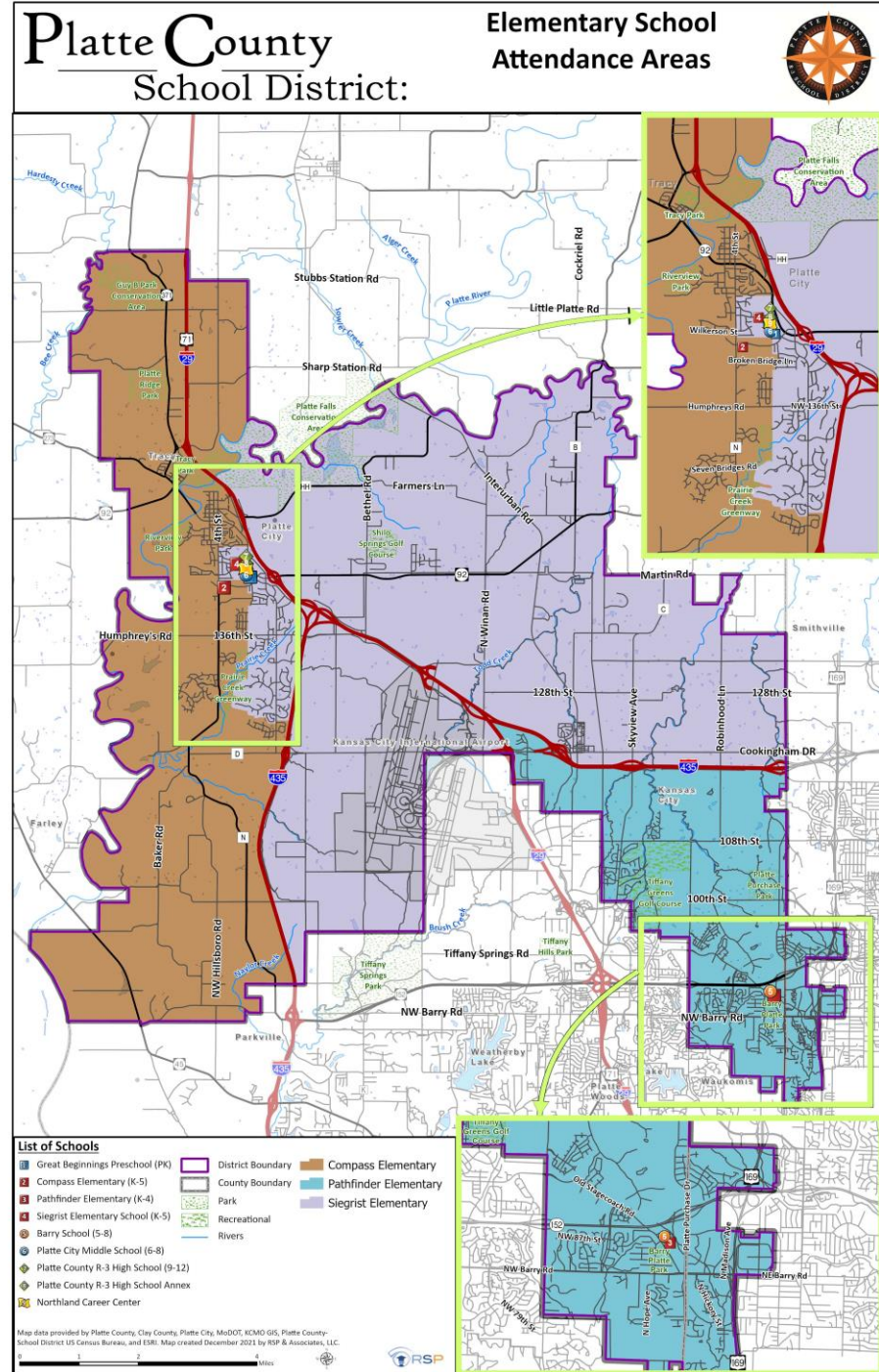
Planning Area Map

- **Purple Line:** District boundary
- **Green Outline:** Planning Areas
 - Over 200 unique areas are analyzed for demographic, development, and enrollment change (green)
 - Statistically analyzing data with this number of geographic based polygons will provide a deeper context to how change is happening resulting in a reliable tool to make credible planning decisions
 - Each planning area had a different outlook based on indicators such as value of housing, square footage of housing unit, when the housing product was constructed, as well as access to amenities such as shopping, parks, trails, and roads
 - Planning Areas are created from:
 - Land Use (Residential, Commercial, Industrial)
 - Residential Density (Single-Family, Mobile Home, Duplex, Apartment)
 - Natural Features (Rivers and Forests)
 - Manmade Features (Railroad and Streets)
 - Attendance Area



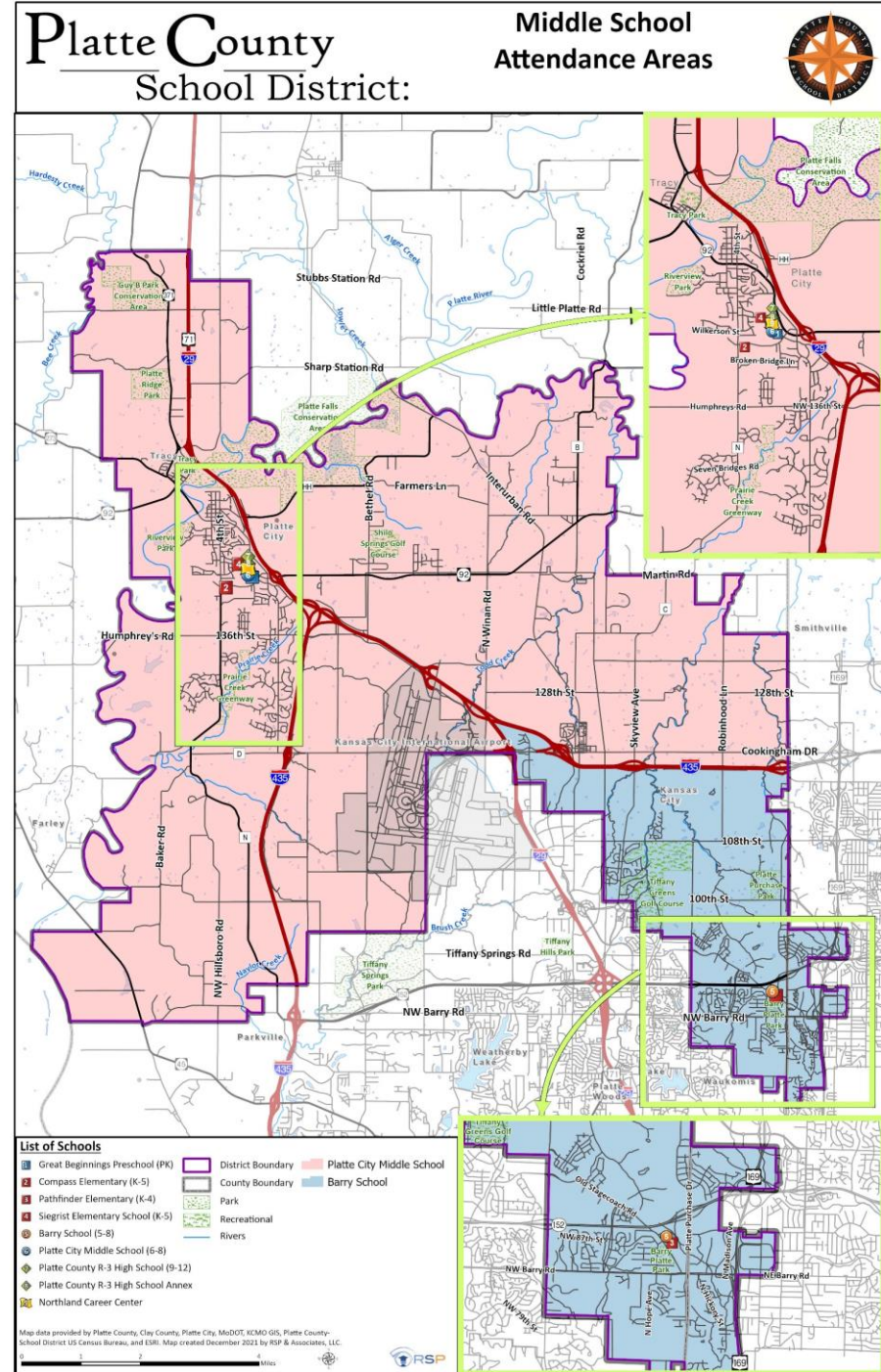
Elementary School Boundary Map

- **Purple Line:** District boundary
- Major Streets
- Major water features & cultural features
- Elementary Schools:
 - **Compass Elementary K-5**
 - **Pathfinder Elementary K-4**
 - **Siegrist Elementary K-5**



Middle School Boundary Map

- **Purple Line:** District boundary
- Major Streets
- Major water features & cultural features
- Middle Schools:
 - **Platte City Middle School 6-8**
 - **Barry School 5-8**



Enrollment By Grade

Update 12/28/21

Enrollment By Grade

Year	PK	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total	Change	% Change
2003/04	0	208	194	188	174	197	199	186	198	191	185	163	145	167	2,395		
2004/05	0	229	207	211	200	191	207	202	199	214	200	186	169	148	2,563	168	7.0%
2005/06	0	224	231	204	223	204	188	215	208	217	222	204	189	171	2,700	137	5.3%
2006/07	29	223	227	234	222	218	223	197	216	212	219	216	209	172	2,817	117	4.3%
2007/08	36	241	236	231	241	229	223	237	203	226	222	229	214	197	2,965	148	5.3%
2008/09	72	283	258	262	238	253	246	244	241	226	244	232	227	208	3,234	269	9.1%
2009/10	66	294	292	255	262	252	262	262	247	254	241	248	244	195	3,374	140	4.3%
2010/11	75	314	294	309	267	283	263	286	267	265	247	245	244	218	3,577	203	6.0%
2011/12	64	306	309	306	313	267	293	279	283	276	280	244	237	210	3,667	90	2.5%
2012/13	68	302	301	312	310	312	292	295	278	292	260	274	237	203	3,736	69	1.9%
2013/14	53	311	310	299	314	314	319	297	293	282	298	263	263	236	3,852	116	3.1%
2014/15	70	292	319	310	307	325	315	320	303	299	292	286	255	270	3,963	111	2.9%
2015/16	67	339	291	328	312	314	343	317	306	305	292	294	265	259	4,032	69	1.7%
2016/17	78	301	351	287	326	321	317	334	315	301	308	291	285	271	4,086	54	1.3%
2017/18	85	299	322	331	303	330	319	312	344	319	320	308	291	289	4,172	86	2.1%
2018/19	68	335	312	326	355	293	347	329	326	338	320	323	295	280	4,247	75	1.8%
2019/20	85	306	338	319	326	370	304	347	337	341	345	322	315	289	4,344	97	2.3%
2020/21	65	321	300	307	300	325	354	320	341	326	346	335	325	305	4,270	-74	-1.7%
2021/22	61	291	323	296	324	310	323	369	331	329	333	341	339	308	4,278	8	0.2%

Source: Platte County R-3 School District

Observations:

- Largest K-12 class in 2021/22 – 6th grade with 369 students
- Smallest K-12 class in 2021/22 – Kindergarten with 291 students
- Graduating senior class larger than the incoming Kindergarten class

Cohort Student Observation

Update 12/28/21

Enrollment Grade Change

From	To	PK PK	PK K	K 1st	1st 2nd	2nd 3rd	3rd 4th	4th 5th	5th 6th	6th 7th	7th 8th	8th 9th	9th 10th	10th 11th	11th 12th	Total Change
2002/03	2003/04	0	208	194	188	174	197	199	186	198	191	185	163	145	167	2395
2003/04	2004/05	0	229	-1	17	12	17	10	3	13	16	9	1	6	3	168
2004/05	2005/06	0	224	2	-3	12	4	-3	8	6	18	8	4	3	2	137
2005/06	2006/07	29	223	3	3	18	-5	19	9	1	4	2	-6	5	-17	117
2006/07	2007/08	7	212	13	4	7	7	5	14	6	10	10	10	-2	-12	148
2007/08	2008/09	36	247	17	26	7	12	17	21	4	23	18	10	-2	-6	269
2008/09	2009/10	-6	222	9	-3	0	14	9	16	3	13	15	4	12	-32	140
2009/10	2010/11	9	248	0	17	12	21	11	24	5	18	-7	4	-4	-26	203
2010/11	2011/12	-11	231	-5	12	4	0	10	16	-3	9	15	-3	-8	-34	90
2011/12	2012/13	4	238	-5	3	4	-1	25	2	-1	9	-16	-6	-7	-34	69
2012/13	2013/14	-15	243	8	-2	2	4	7	5	-2	4	6	3	-11	-1	116
2013/14	2014/15	17	239	8	0	8	11	1	1	6	6	10	-12	-8	7	111
2014/15	2015/16	-3	269	-1	9	2	7	18	2	-14	2	-7	2	-21	4	69
2015/16	2016/17	11	234	12	-4	-2	9	3	-9	-2	-5	3	-1	-9	6	54
2016/17	2017/18	7	221	21	-20	16	4	-2	-5	10	4	19	0	0	4	86
2017/18	2018/19	-17	250	13	4	24	-10	17	10	14	-6	1	3	-13	-11	75
2018/19	2019/20	17	238	3	7	0	15	11	0	8	15	7	2	-8	-6	97
2019/20	2020/21	-20	236	-6	-31	-19	-1	-16	16	-6	-11	5	-10	3	-10	-74
2020/21	2021/22	-4	226	2	-4	17	10	-2	15	11	-12	7	-5	4	-17	8
3-Yr Avg		-2.3	233.3	-0.3	-9.3	-0.7	8.0	-2.3	10.3	4.3	-2.7	6.3	-4.3	-0.3	-11.0	10.3
3-Yr Wavg		-5.8	231.3	-0.5	-11.2	2.2	7.2	-4.5	12.8	4.8	-7.2	6.3	-5.5	1.7	-12.8	-4.5

Source: Platte County R-3 School District

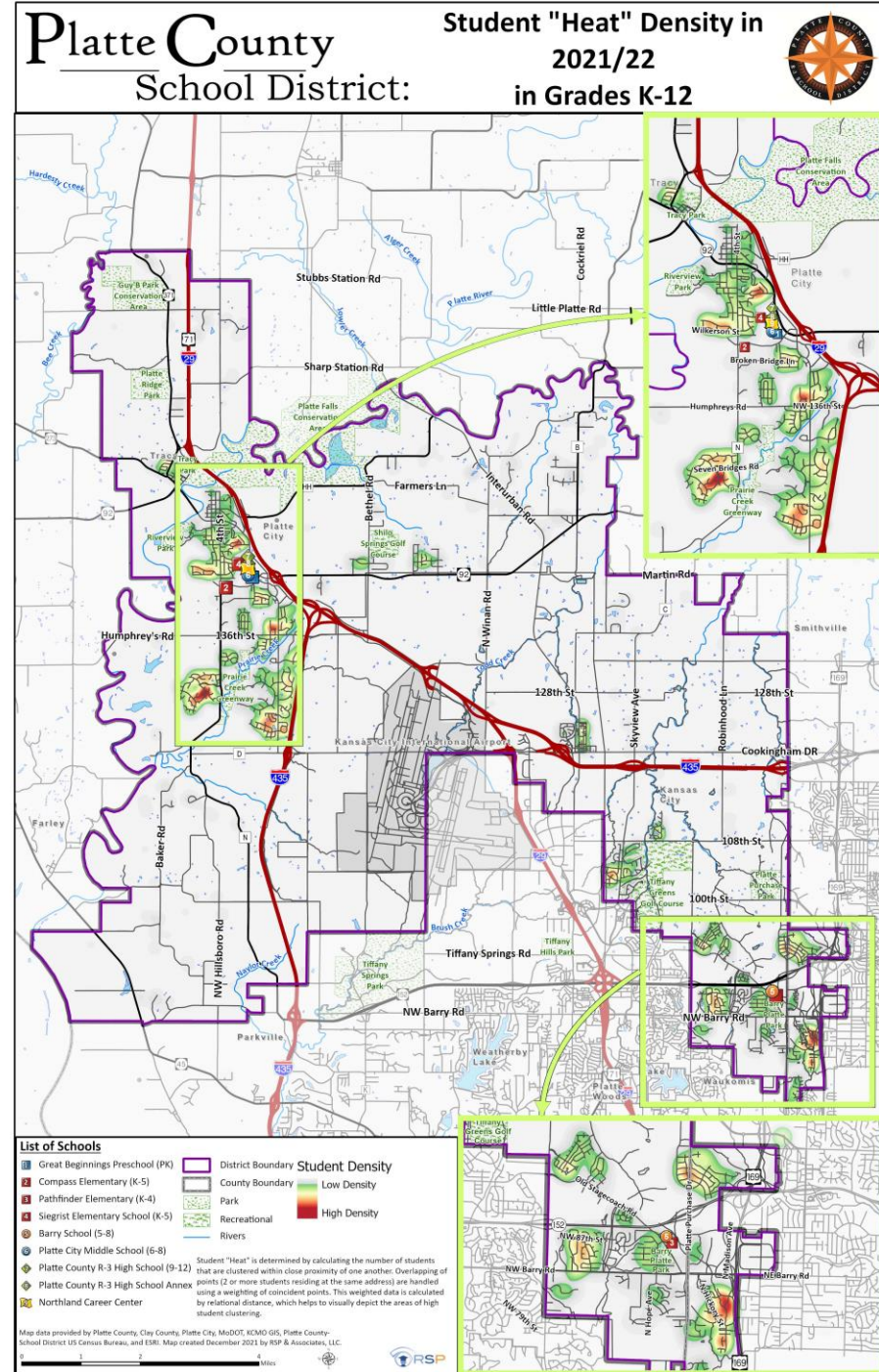
Table Explanation

- All data calculations from above table
- Largest 3-yr average K-12 class cohort increase – 5th to 6th grade with an additional 10 students
- Largest 3-yr average K-12 class cohort decrease – 11th to 12th grade with a loss of 11 students
- Total 3-yr average of cohort change is an increase of 10 students

Heat Map

Definition: shows the location of students in proximity to other students for a “heat effect” in the district.

- **Red** areas depict highest density of students
- **Gray** as lowest student density
- Overlapping points (2 or more students) are handled using a weighting of coincident points
- Newer developments and/or most affordable areas tend to have the greatest density



Enrollment Observations

Student Population:

- Live birth data for Platte County has increased in the last four years, signaling future kindergarten class size growth
- 2019 saw 7 less births than 2018; 2016 is the year with the most live births
- Platte County School District transfers had a district wide gain of 30 students

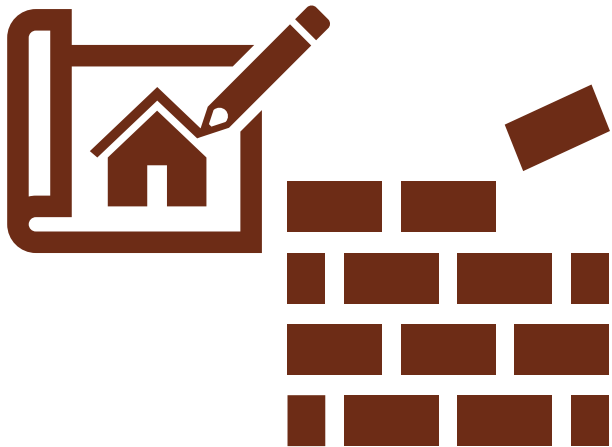
Historic Enrollment Observations:

- Enrollment has been steadily increasing the past ten years
- Enrollment has been above 4,000 since 2015/16
 - Last year saw a decline in an enrollment, likely due to the COVID-19 pandemic
- The largest increase was 2010/11 to 2011/12 with an increase of 203 students
- Kindergarten enrollment has fluctuated between 200 and 300 students consistently
 - This is projected to surpass 300 in the following years

Current School Year Observations:

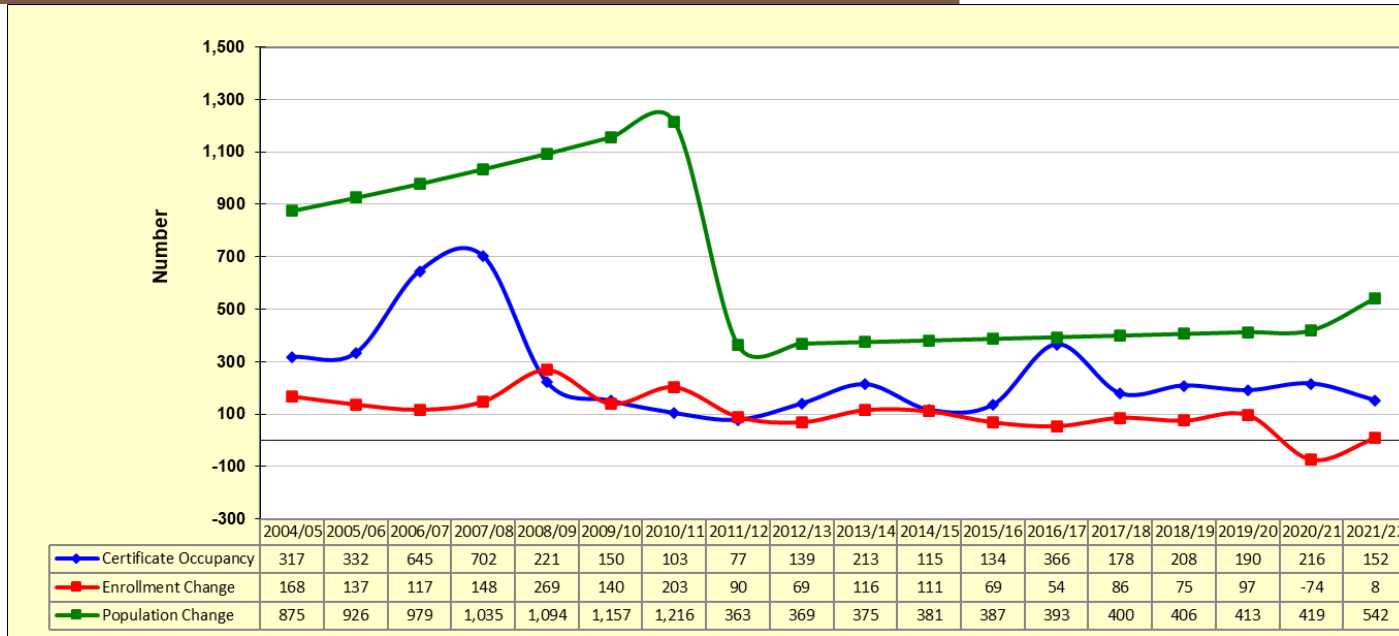
- Largest 2021/22 class: 6th grade with 371 students
- Smallest 2021/22 class: Kindergarten with 293 students
- District-Wide Enrollment: saw an increase from 2020/21 of 29 students

Part Two: Development and Growth Trends



Population, Development, & Enrollment

Update 12/28/21



Source: Census Bureau, Platte County, Platte County R-3 Schools and RSP SFM & Demographic Models

Graphic Explanation

- Census data indicates an increasing population
- Building trend indicates there has been steady new residential activity
- Student Enrollment has negatively decreased for the first time in over a decade

What Does This Mean

- Households moving into the district continue to have school aged children
- With development similar over the next five years there are likely to be more new students

Student Yield Rate

Schools	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Avg
Compass Elementary	0.22	0.22	0.21	0.21	0.21	0.22	0.25	0.27	0.27	0.27	0.24	0.24	0.25	0.26	0.25	0.25	0.25	0.25	0.23	0.24
Pathfinder Elementary	0.16	0.18	0.16	0.14	0.15	0.16	0.17	0.17	0.18	0.17	0.18	0.18	0.19	0.17	0.18	0.19	0.18	0.16	0.16	0.17
Siegrist Elementary	0.22	0.22	0.23	0.24	0.24	0.25	0.25	0.25	0.25	0.24	0.24	0.23	0.22	0.22	0.21	0.21	0.2	0.19	0.18	0.23
District (K-5):	0.2	0.21	0.2	0.2	0.2	0.21	0.22	0.23	0.23	0.23	0.22	0.22	0.22	0.21	0.21	0.21	0.21	0.2	0.19	0.21

Source: RSP & Associates, LLC.

- Tables shows the number of students per 100 singe-family units by year and elementary school
- District sees on average 21 students per 100 single-family households
- Compass has the largest SF Yield rate with 24 students per 100 single-family households
- Pathfinder has the smallest SF Yield rate with 17 students per 100 single-family households
- Adding new housing inventory can increase the yield rate
- **There were 1,474 single-family homes built from 2012 to 2021**

Schools	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Avg
Compass Elementary	0.1	0.1	0.1	0.12	0.1	0.1	0.1	0.12	0.11	0.12	0.12	0.13	0.14	0.11	0.11	0.12	0.1	0.11	0.1	0.11
Pathfinder Elementary	0.05	0.05	0.06	0.05	0.05	0.06	0.07	0.08	0.1	0.1	0.11	0.11	0.11	0.11	0.1	0.1	0.1	0.09	0.09	0.08
Siegrist Elementary	0.13	0.13	0.1	0.11	0.1	0.12	0.1	0.12	0.12	0.12	0.12	0.13	0.13	0.11	0.11	0.1	0.12	0.12	0.11	0.12
District (K-5):	0.08	0.08	0.08	0.08	0.07	0.08	0.09	0.1	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.1	0.1	0.1	0.1	0.1

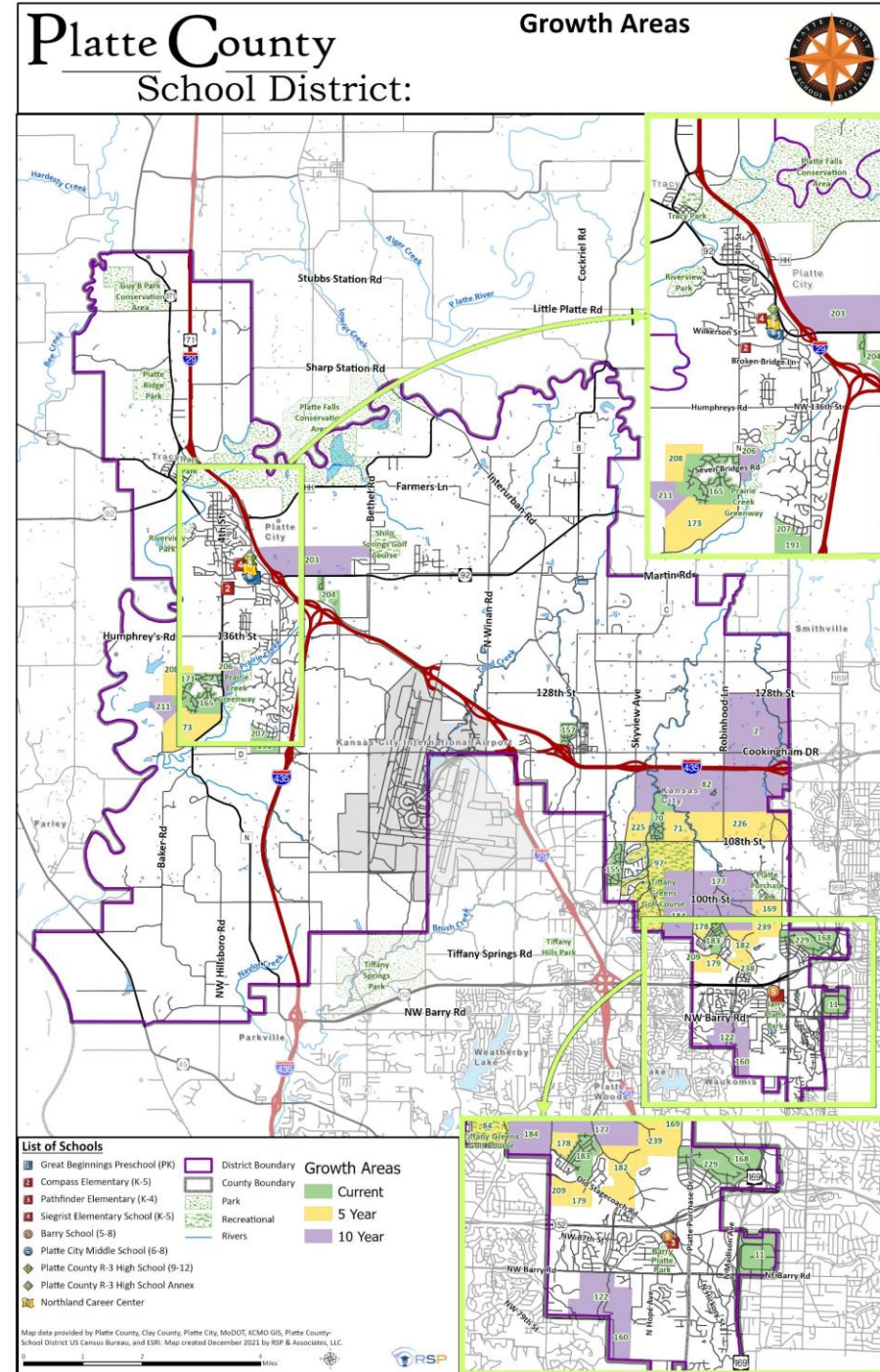
Source: RSP & Associates, LLC.

- Tables shows the number of students per 100 multi-family units by year and elementary school
- District sees on average 10 students per 100 multi-family households
- Siegrist has the largest MF Yield rate with 12 students per 100 multi-family households
- Pathfinder has the smallest MF Yield rate with 8 students per 100 multi-family households
- Adding new housing inventory can increase the yield rate
- **There were 437 multi-family homes built from 2012 to 2021**

Growth Areas Map

Growth areas are created from existing land use, future land use, capital improvement plan, zoning, and city staff input

- **Green:** Identifies where development activity is happening (current)
- **Yellow:** Identifies possible areas that could develop (5-year)
- **Purple:** Identifies possible areas that could develop (10-year)
- The market and property owners desire to build guides the timing of development
- Most growth areas dependent on infrastructure improvements
- Other properties not shown might develop while some shown might not develop
- The timing of development correlates with when each of the cities are extending infrastructure, as well as economic conditions



Development Table – All

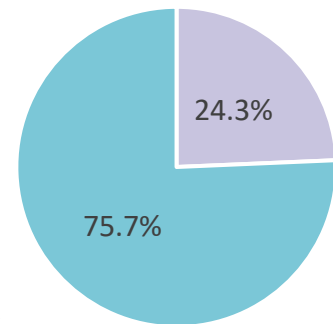
Key
SF: Single-Family
MU: Mixed-Use
AG: Agriculture
VAC: Vacant Land
Rural: Rural
MF: Multi-Family
TH: Town Homes
MHP: Mobile Home Park

RSP Plan Area Name	Type	Growth Area	Existing Units	Potential Units	Acres	Feeder
South of Running Horse	AG	Current	0	75	74.87	North
West of Running Horse 2nd	AG	Current	0	70	31.04	North
Cutting Crest	SF	Current	19	89	72.53	North
North Creek Village	SF	Current	152	67	56.05	North
Seven Bridges, North	SF	Current	178	71	131.46	North
Seven Bridges, South	SF	Current	196	103	139.88	North
Metro North Crossing	MU	Current	0	249	130.32	South
Fountain Hills	SF	Current	183	167	125.06	South
Fountain Hills Final Plats	SF	Current	0	105	72.03	South
Genesis Place 1st	SF	Current	222	14	88.61	South
Hawksbury 1st, 2nd, 3rd, and 4th	SF	Current	226	23	113.52	South
Tiffany Lakes	SF	Current	145	67	132.79	South
South of Seven Bridges	AG	5 Year	0	300	280.50	North
West of Seven Bridges	AG	5 Year	0	125	100.18	North
Bittersweet	AG	5 Year	0	175	77.98	South
South of Old Stagecoach near Genesis Village	AG	5 Year	0	70	50.42	South
Tiffany Greens (West)	MU	5 Year	0	460	502.77	South
Twin Creeks Village - Future Apartments	MF	5 Year	0	240	9.39	South
South of Old Stagecoach near Genesis Village	MU	5 Year	0	90	44.93	South
Genesis Place Estates 1st	Rural	5 Year	2	80	42.86	South
Twin Creeks Village - Townhomes /Big House Units	Rural	5 Year	2	484	129.62	South
Twin Creeks Village -"Erika's Place"	SF	5 Year	2	458	127.21	South
East of Tiffany Lakes	VAC	5 Year	4	250	529.08	South
Tiffany Greens (South)	VAC	5 Year	0	132	94.14	South
Vacant Land Surrounding Tiffany Lakes	VAC	5 Year	0	125	140.66	South
West of Tiffany Lakes	VAC	5 Year	1	175	120.94	South
West of Seven Bridges, 2	AG	10 Year	0	150	91.69	North
Johnston Farms	Rural	10 Year	2	125	68.72	North
Northland Reformed Church & Rural North of I-435 at Robinhood	Rural	10 Year	7	200	898.49	North
Rustic Acres Northeast	Rural	10 Year	1	250	516.82	North
West of Hunters Ridge 1st	AG	10 Year	0	165	79.52	South
East of WAU-LIN-CREE Apartments	Rural	10 Year	1	300	189.96	South
Lynn Acres	Rural	10 Year	13	300	1,096.67	South
Tiffany Greens (Central)	Rural	10 Year	1	828	355.39	South
Tiffany Greens (East)	Rural	10 Year	12	96	593.52	South
Current Total			1,321	1,100		
5 Year Total			11	3,164		
10 Year Total			37	2,414		
All Total			1,369	6,678		

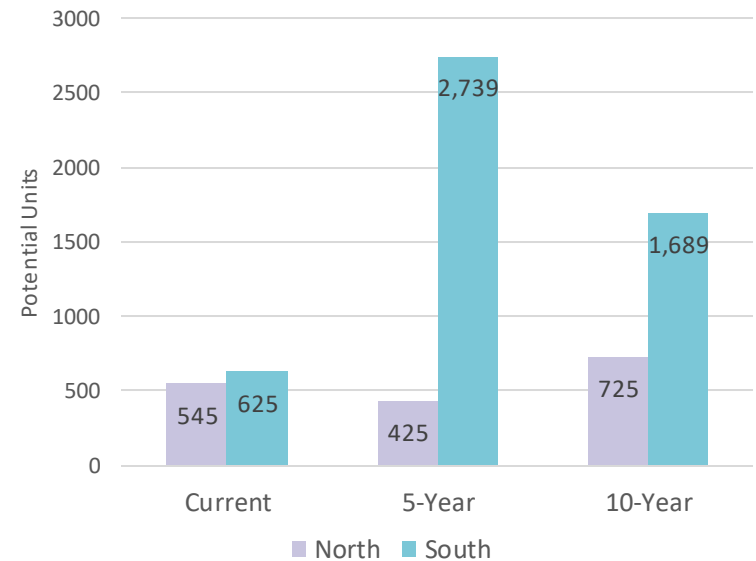
Source: Clay & Platte Counties, KCMO, Platte City & RSP

- Over 3,000 potential units district-wide could be developed in the next 5 years
- **Most of development potential in south**
- **North:** 475 current units, 425 5-year units, and 725 10-year units in the north (1,625 total units)
- **South:** 625 current units, 2,739 5-year units, and 1,689 10-year units in the south (5,053 total units)

Percent of Potential Units by North/South Feeder



Potential Units by North/South Feeder



Development Observation and Conclusion

The following are some general development observations:

Building activity continue to increase signaling for future student growth

- Almost 7,000 units that could be built within the next 10 years
- 75% of potential units to be built in southern feeder
- South feeder is increasing its percentage of total students every year
- Tiffany Springs plans to add 1,121 single family units in the next ten years – continual observation of this project is recommended

Student population is expected to increase due to building activity.

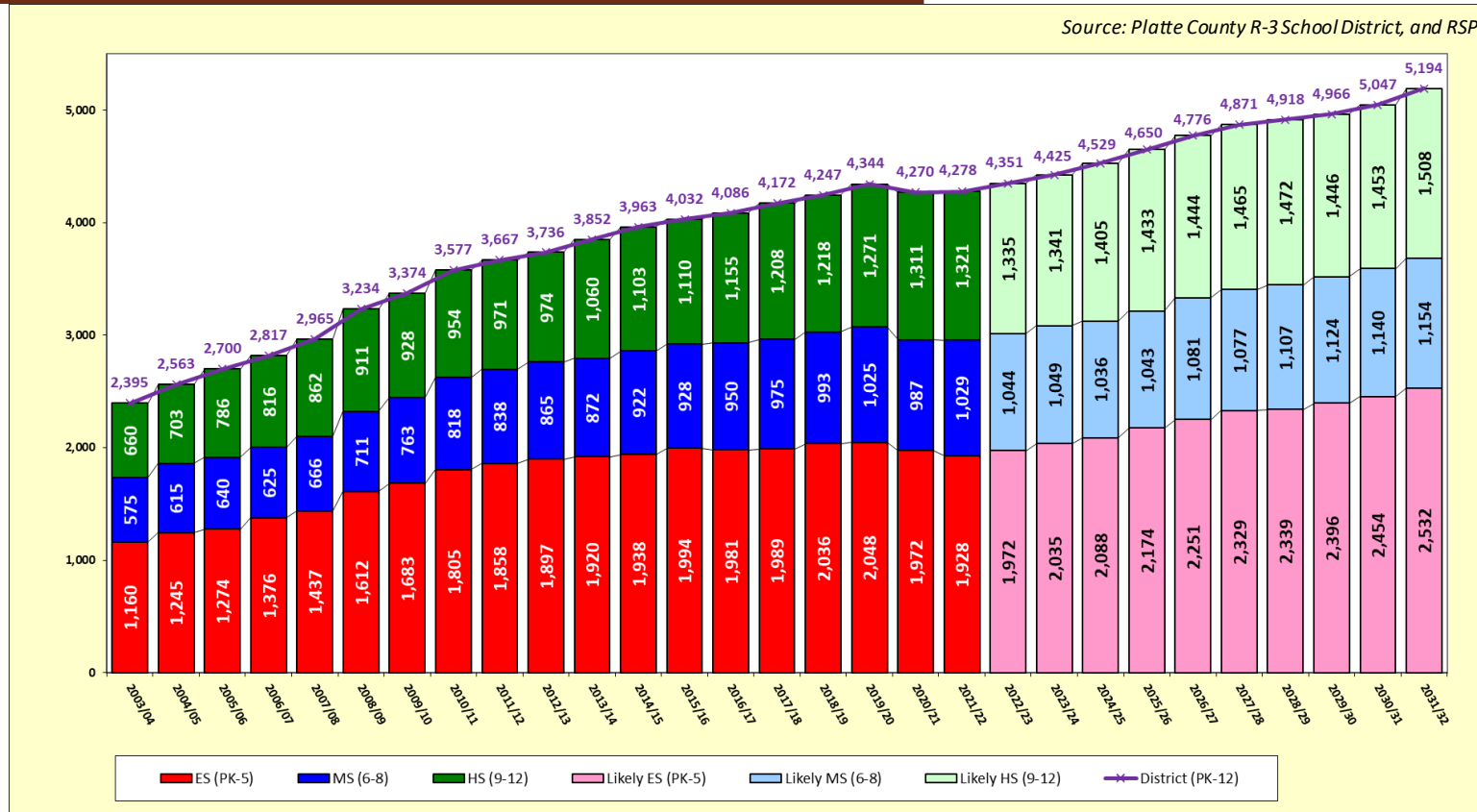
- Single-Family residential has the highest propensity to have school aged students, yield rates of this development type are much higher than that of Multi-Family
- Tracking the types of development is important to understand the yield rate of students for every part of the community – there are varying yield rates with all developments
- Local incentives will allow for future industrial development growth

Part Three: Enrollment Projections



Past, Current, & Future Enrollment

Update 01/10/22



- Enrollment Change – Overall enrollment increase anticipated (At all Grade Levels)
- Anticipated building activity opportunities will influence enrollment increase in the later years of the forecast
- District increases by nearly 500 students (+10.6%) (+1.2% to +2.7% a year)
- Elementary increases by about 250 students (+12.9%) (+0.7% to +4.0% a year)
- Middle School increases by about 100 students (+8.8%) (-1.6% to +5.5% a year)
- High School increases by over 100 students (+9.3%) (+0.4% to +4.8% a year)

Projection Notes

- Past Enrollment is shown three different ways:

1. Reside (Based on where a student Resides in relation to the attendance area – includes Open Enrollment)
2. Attend (Based on what school the student is attending includes Open Enrollment)
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)

- Projections are shown two ways:

1. Reside (Based on where a student Resides in relation to the attendance area: Includes Open Enrollment)
2. Attend (Based on what school the student is attending includes Open Enrollment)

- Capacity

- Provided by district administration
- Should be annually examined to ensure appropriate education space is available
- Model forecasted capacity challenges at Compass Elementary, Pathfinder Elementary, and Barry School

- Other Items

- Enrollment Grade Configuration in Student Forecast Model (K-5, 6-8, 9-12)
- Open enrollment trends are assumed to follow district policy and will continue like those trends during the projection time frame

Building Projections

Note: Building capacities have been provided by Platte County R-3 School District, however these capacities will likely change in the near future as part of an updated Facility Master Plan and repurposing of several of the existing buildings.

Update 1/04/22

Platte County R-3 School District Enrollment Projections By School (Based on Student Reside)

School	Functional Capacity	Student Location	Past School Enrollment			Projections Based on Residence				
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Great Beginnings Preschool PK	80	Reside/Attend	85	65	61					
		Reside	85	65	61	74	81	79	86	91
		Attend	85	65	61	74	81	79	86	91
Compass Elementary K to 5th NORTH FEEDER	615	Reside/Attend	575	592	565					
		Reside	613	626	589	587	589	604	615	631
		Attend	613	604	581	587	589	604	615	631
Pathfinder Elementary K to 4th SOUTH FEEDER	660	Reside/Attend	642	574	606					
		Reside	653	580	612	645	682	741	812	870
		Attend	652	580	607	645	682	741	812	870
Siegrist Elementary K to 5th NORTH FEEDER	680	Reside/Attend	552	570	547					
		Reside	590	577	559	543	545	532	522	493
		Attend	590	599	574	543	545	532	522	493
Barry School 5th to 8th SOUTH FEEDER	588	Reside/Attend	424	452	457					
		Reside	437	457	461	473	515	533	570	611
		Attend	431	455	457	473	515	533	570	611
Platte City Middle School 6th to 8th NORTH FEEDER	807	Reside/Attend	691	652	675					
		Reside	695	654	675	694	672	635	612	636
		Attend	702	656	677	694	672	635	612	636
Platte County High School 9th to 12th	1,604	Reside/Attend	1,271	1,311	1,321					
		Reside	1,271	1,311	1,321	1,335	1,341	1,405	1,433	1,444
		Attend	1,271	1,311	1,321	1,335	1,341	1,405	1,433	1,444
ES BUILDING SCHOOL TOTAL PK to 5th (Barry School 5th grade in MS Total)	2,035	Reside/Attend	1,854	1,801	1,779					
		Reside	1,941	1,848	1,821	1,849	1,897	1,956	2,035	2,085
		Attend	1,940	1,848	1,823	1,849	1,897	1,956	2,035	2,085
MS BUILDING SCHOOL TOTAL 6th to 8th (Barry School 5th grade in MS Total)	1,395	Reside/Attend	1,115	1,104	1,132					
		Reside	1,132	1,111	1,136	1,167	1,187	1,168	1,182	1,247
		Attend	1,133	1,111	1,134	1,167	1,187	1,168	1,182	1,247
HIGH TOTAL 9th to 12th	1,604	Reside/Attend	1,271	1,311	1,321					
		Reside	1,271	1,311	1,321	1,335	1,341	1,405	1,433	1,444
		Attend	1,271	1,311	1,321	1,335	1,341	1,405	1,433	1,444
DISTRICT TOTALS PK to 12th	5,034	Reside/Attend	4,240	4,216	4,232					
		Reside	4,344	4,270	4,278	4,351	4,425	4,529	4,650	4,776
		Attend	4,344	4,270	4,278	4,351	4,425	4,529	4,650	4,776

Source: RSP & Associates, LLC - December 2021 (2021/22 Enrollment Update 12/28/21)

Over School Functional Capacity

Building Grade Level Projections

Note: Building capacities have been provided by Platte County R-3 School District, however these capacities will likely change in the near future as part of an updated Facility Master Plan and repurposing of several of the existing buildings.


Update 1/04/22

RESIDE

2022/23 School Year

School	Functional Capacity	Grade														Total
		PK	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Great Beginnings Preschool	80	74														74
Compass Elementary	615		98	95	97	95	98	104								587
Pathfinder Elementary	660		142	136	117	118	132									645
Siegrist Elementary	680		82	69	110	91	101	90								543
Barry School	588							123	110	131	109					473
Platte City Middle School	807								220	248	226					694
Platte County High School	1,604											337	331	334	333	1,335
DISTRICT TOTALS	5,034	74	322	300	324	304	331	317	330	379	335	337	331	334	333	4,351

Source: RSP & Associates, LLC - December 2021


 Over School Functional Capacity

ATTEND

2022/23 School Year

School	Functional Capacity	Grade														Total
		PK	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Great Beginnings Preschool	80	74														74
Compass Elementary	615		92	89	91	98	101	105								576
Pathfinder Elementary	660		142	136	116	117	130									641
Siegrist Elementary	680		88	75	117	89	100	90								559
Barry School	588							122	109	130	109					470
Platte City Middle School	807								221	249	226					696
Platte County High School	1,604											337	331	334	333	1,335
DISTRICT TOTALS	5,034	74	322	300	324	304	331	317	330	379	335	337	331	334	333	4,351

Source: RSP & Associates, LLC - December 2021

 Over School Functional Capacity

Building Grade Level Projections

Note: Building capacities have been provided by Platte County R-3 School District, however these capacities will likely change in the near future as part of an updated Facility Master Plan and repurposing of several of the existing buildings.


Update 1/11/22

RESIDE

2023/24 School Year

School	Functional Capacity	Grade														Total
		PK	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Great Beginnings Preschool	80	81														81
Compass Elementary	615		98	100	95	98	99	99								589
Pathfinder Elementary	660		147	149	141	122	123									682
Siegrist Elementary	680		85	84	69	112	92	103								545
Barry School	588							138	128	115	134					515
Platte City Middle School	807								198	226	248					672
Platte County High School	1,604											343	340	328	330	1,341
DISTRICT TOTALS	5,034		330	333	305	332	314	340	326	341	382	343	340	328	330	4,425

Source: RSP & Associates, LLC - December 2021 (2021/22 Enrollment Update 12/28/21)


 Over School Functional Capacity

RESIDE

2024/25 School Year

School	Functional Capacity	Grade														Total
		PK	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Great Beginnings Preschool	80	79														79
Compass Elementary	615		103	101	101	97	102	100								604
Pathfinder Elementary	660		146	157	157	150	131									741
Siegrist Elementary	680		84	88	83	71	112	94								532
Barry School	588							132	146	135	120					533
Platte City Middle School	807								206	203	226					635
Platte County High School	1,604											393	346	339	327	1,405
DISTRICT TOTALS	5,034		333	346	341	318	345	326	352	338	346	393	346	339	327	4,529

Source: RSP & Associates, LLC - December 2021 (2021/22 Enrollment Update 12/28/21)

 Over School Functional Capacity

Building Grade Level Projections

Note: Building capacities have been provided by Platte County R-3 School District, however these capacities will likely change in the near future as part of an updated Facility Master Plan and repurposing of several of the existing buildings.


Update 1/11/22

RESIDE

2025/26 School Year

School	Functional Capacity	Grade														Total
		PK	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Great Beginnings Preschool	80	86														86
Compass Elementary	615		99	106	102	103	102	103								615
Pathfinder Elementary	660		170	155	164	165	158									812
Siegrist Elementary	680		81	86	85	85	72	113								522
Barry School	588							139	139	153	139					570
Platte City Middle School	807								198	211	203					612
Platte County High School	1,604											356	396	344	337	1,433
DISTRICT TOTALS	5,034		350	347	351	353	332	355	337	364	342	356	396	344	337	4,650

Source: RSP & Associates, LLC - December 2021 (2021/22 Enrollment Update 12/28/21)


 Over School Functional Capacity

RESIDE

2026/27 School Year

School	Functional Capacity	Grade														Total
		PK	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Great Beginnings Preschool	80	91														91
Compass Elementary	615		107	102	107	104	108	103								631
Pathfinder Elementary	660		186	178	162	172	172									870
Siegrist Elementary	680		82	83	84	87	85	72								493
Barry School	588							166	144	145	156					611
Platte City Middle School	807								221	203	212					636
Platte County High School	1,604											351	358	393	342	1,444
DISTRICT TOTALS	5,034		375	363	353	363	365	341	365	348	368	351	358	393	342	4,776

Source: RSP & Associates, LLC - December 2021 (2021/22 Enrollment Update 12/28/21)

 Over School Functional Capacity

Long Range Projections

Note: Building capacities have been provided by Platte County R-3 School District, however these capacities will likely change in the near future as part of an updated Facility Master Plan and repurposing of several of the existing buildings.

Update 1/04/22

Past, Current, and Future Enrollment

Grade	School Year																		
	2005/06	2010/11	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
PK	0	75	67	78	85	68	85	65	61	74	81	79	86	91	93	89	93	96	95
K	224	314	339	301	299	335	306	321	291	322	330	333	350	375	384	396	412	423	441
1st	231	294	291	351	322	312	338	300	323	300	333	346	347	363	377	385	396	414	431
2nd	204	309	328	287	331	326	319	307	296	324	305	341	351	353	367	366	389	385	402
3rd	223	267	312	326	303	355	326	300	324	304	332	318	353	363	364	363	366	394	391
4th	204	283	314	321	330	293	370	325	310	331	314	345	332	365	363	373	368	366	402
5th	188	263	343	317	319	347	304	354	323	317	340	326	355	341	381	367	372	376	370
6th	215	286	317	334	312	329	347	320	369	330	326	352	337	365	352	385	371	379	388
7th	208	267	306	315	344	326	337	341	331	379	341	338	364	348	369	356	390	375	385
8th	217	265	305	301	319	338	341	326	329	335	382	346	342	368	356	366	363	386	381
9th	222	247	292	308	320	320	345	346	333	337	343	393	356	351	375	360	373	367	378
10th	204	245	294	291	308	323	322	335	341	331	340	346	396	358	347	379	360	369	371
11th	189	244	265	285	291	295	315	325	339	334	328	339	344	393	358	350	375	355	375
12th	171	218	259	271	289	280	289	305	308	333	330	327	337	342	385	383	338	362	384
PK-5	1,274	1,805	1,994	1,981	1,989	2,036	2,048	1,972	1,928	1,972	2,035	2,088	2,174	2,251	2,329	2,339	2,396	2,454	2,532
6-8	640	818	928	950	975	993	1,025	987	1,029	1,044	1,049	1,036	1,043	1,081	1,077	1,107	1,124	1,140	1,154
9-12	786	954	1,110	1,155	1,208	1,218	1,271	1,311	1,321	1,335	1,341	1,405	1,433	1,444	1,465	1,472	1,446	1,453	1,508
District	2,700	3,577	4,032	4,086	4,172	4,247	4,344	4,270	4,278	4,351	4,425	4,529	4,650	4,776	4,871	4,918	4,966	5,047	5,194
Enrollment Change	137	203	69	54	86	75	97	-74	8	73	74	104	121	126	95	47	48	81	147

Sources: 2003/04 to 2021/22 Platte County R3 School District
 ○ 2022/23 to 2026/27 RSP & Associates SFM Projections from the 2021/22 Enrollment 5-Year Projections
 ● 2027/28 to 2031/32 RSP & Associates estimates based on past enrollment change factors

Future Considerations

- The projections are utilizing the best available information:
 - State, County, City, and Census
- The projections are created from a Sophisticated Forecast Model (SFM) that tracks past and emerging trends using a Regression Statistical formula
- Many things could change over the next Five years impacting how the projections play out:
 - Birth Rates, Household Demographics, Employment Opportunities
 - Residential Activity (Number of units constructed)
 - Type of Residential Activity (Single-Family, Duplexes, Apartments)

Conclusion & Key Considerations

Projected Enrollment

- District to increase by nearly 500 students in the next five years to total **4,776 students**
- Elementary enrollment to increase by about 250 students in the next five years to total **2,251 students**
- Middle School enrollment to increase by about 100 students in the next five years to total **1,081 students**
- High School enrollment to increase by over 100 students in the next five years to total **1,444 students**

Challenges & Future Steps...

- The district should expect capacity challenges at Compass Elementary, Pathfinder Elementary, and Barry School.

North and South Growth

- Over 75% of potential units in the district are in the south feeder
- Schools in south (Pathfinder ES and Barry School) are projected to have capacity challenges accommodating the growth in their boundaries
- Future building capacity might need to be provided in southern feeder of district to relieve schools
- Tiffany Springs has over a 1,000 units single-family units planned for the next ten years

Continue monitoring:

1. Development trends; specifically, growth in southern area of district and the Tiffany Springs Development
2. Size of incoming Kindergarten classes versus size of outgoing senior classes
3. Number of live birth reports year to year

Questions?

[illegible]

Appendix

North Feeder Distribution

Elementary School			Middle School			High School			Total District		
North	Number	% of District	North	Number	% of District	North	Number	% of District	North	Number	% of District
Sum of 03 PK-5	859	74.1%	Sum of 03 6-8	445	77.4%	Sum of 03 9-12	552	83.6%	Sum of 03 PK-12	1,856	77.5%
Sum of 04 PK-5	904	72.6%	Sum of 04 6-8	484	78.7%	Sum of 04 9-12	577	82.1%	Sum of 04 PK-12	1,965	76.7%
Sum of 05 PK-5	925	72.6%	Sum of 05 6-8	486	75.9%	Sum of 05 9-12	632	80.4%	Sum of 05 PK-12	2,043	75.7%
Sum of 06 PK-5	1,018	74.0%	Sum of 06 6-8	486	77.8%	Sum of 06 9-12	672	82.4%	Sum of 06 PK-12	2,176	77.2%
Sum of 07 PK-5	1,011	70.4%	Sum of 07 6-8	513	77.0%	Sum of 07 9-12	701	81.3%	Sum of 07 PK-12	2,225	75.0%
Sum of 08 PK-5	1,138	70.6%	Sum of 08 6-8	545	76.7%	Sum of 08 9-12	727	79.8%	Sum of 08 PK-12	2,410	74.5%
Sum of 09 PK-5	1,144	68.0%	Sum of 09 6-8	557	73.0%	Sum of 09 9-12	727	78.3%	Sum of 09 PK-12	2,428	72.0%
Sum of 10 PK-5	1,237	68.5%	Sum of 10 6-8	578	70.7%	Sum of 10 9-12	730	76.5%	Sum of 10 PK-12	2,545	71.1%
Sum of 11 PK-5	1,226	66.0%	Sum of 11 6-8	591	70.5%	Sum of 11 9-12	728	75.0%	Sum of 11 PK-12	2,545	69.4%
Sum of 12 PK-5	1,258	66.3%	Sum of 12 6-8	618	71.4%	Sum of 12 9-12	727	74.6%	Sum of 12 PK-12	2,603	69.7%
Sum of 13 PK-5	1,236	64.4%	Sum of 13 6-8	599	68.7%	Sum of 13 9-12	783	73.9%	Sum of 13 PK-12	2,618	68.0%
Sum of 14 PK-5	1,254	64.7%	Sum of 14 6-8	644	69.8%	Sum of 14 9-12	826	74.9%	Sum of 14 PK-12	2,724	68.7%
Sum of 15 PK-5	1,276	64.0%	Sum of 15 6-8	632	68.1%	Sum of 15 9-12	819	73.8%	Sum of 15 PK-12	2,727	67.6%
Sum of 17 PK-5	1,274	64.1%	Sum of 16 6-8	689	72.5%	Sum of 16 9-12	824	71.3%	Sum of 17 PK-12	2,787	68.1%
Sum of 16 PK-5	1,281	64.7%	Sum of 17 6-8	701	71.9%	Sum of 17 9-12	872	72.2%	Sum of 16 PK-12	2,854	68.5%
Sum of 18 PK-5	1,291	63.4%	Sum of 18 6-8	709	71.4%	Sum of 18 9-12	868	71.3%	Sum of 18 PK-12	2,868	67.5%
Sum of 19 PK-5	1,308	63.9%	Sum of 19 6-8	714	69.7%	Sum of 19 9-12	909	71.5%	Sum of 19 PK-12	2,931	67.5%
Sum of 20 PK-5	1,275	64.5%	Sum of 20 6-8	667	67.5%	Sum of 20 9-12	974	74.3%	Sum of 20 PK-12	2,916	68.2%
Sum of 21 PK-5	1,226	63.0%	Sum of 21 6-8	681	65.7%	Sum of 21 9-12	966	73.3%	Sum of 21 PK-12	2,873	66.8%

Source: Platte County R-3 School District, and RSP

North feeder is decreasing its percentage of students to the district. In 2003 77.5% of students lived in north, in 2021 66.8% of students live in north.

- In 2003 74.1% of elementary students lived in north, in 2021 63.0% of elementary students live in north
- In 2003 77.4% of middle school students lived in north, in 2021 65.7% of middle school students live in north
- In 2003 77.5% of high school students lived in north, in 2021 66.8% of high school students live in north

South Feeder Distribution

Elementary School			Middle School			High School			Total District		
South	Number	% of District	South	Number	% of District	South	Number	% of District	South	Number	% of District
Sum of 03 PK-5	301	25.9%	Sum of 03 6-8	130	22.6%	Sum of 03 9-12	108	16.4%	Sum of 03 PK-12	539	22.5%
Sum of 04 PK-5	341	27.4%	Sum of 04 6-8	131	21.3%	Sum of 04 9-12	126	17.9%	Sum of 04 PK-12	598	23.3%
Sum of 05 PK-5	349	27.4%	Sum of 05 6-8	154	24.1%	Sum of 05 9-12	154	19.6%	Sum of 05 PK-12	657	24.3%
Sum of 06 PK-5	358	26.0%	Sum of 06 6-8	139	22.2%	Sum of 06 9-12	144	17.6%	Sum of 06 PK-12	641	22.8%
Sum of 07 PK-5	426	29.6%	Sum of 07 6-8	153	23.0%	Sum of 07 9-12	161	18.7%	Sum of 07 PK-12	740	25.0%
Sum of 08 PK-5	474	29.4%	Sum of 08 6-8	166	23.3%	Sum of 08 9-12	184	20.2%	Sum of 08 PK-12	824	25.5%
Sum of 09 PK-5	539	32.0%	Sum of 09 6-8	206	27.0%	Sum of 09 9-12	201	21.7%	Sum of 09 PK-12	946	28.0%
Sum of 10 PK-5	568	31.5%	Sum of 10 6-8	240	29.3%	Sum of 10 9-12	224	23.5%	Sum of 10 PK-12	1,032	28.9%
Sum of 11 PK-5	632	34.0%	Sum of 11 6-8	247	29.5%	Sum of 11 9-12	243	25.0%	Sum of 11 PK-12	1,122	30.6%
Sum of 12 PK-5	639	33.7%	Sum of 12 6-8	247	28.6%	Sum of 12 9-12	247	25.4%	Sum of 12 PK-12	1,133	30.3%
Sum of 13 PK-5	684	35.6%	Sum of 13 6-8	273	31.3%	Sum of 13 9-12	277	26.1%	Sum of 13 PK-12	1,234	32.0%
Sum of 14 PK-5	684	35.3%	Sum of 14 6-8	278	30.2%	Sum of 14 9-12	277	25.1%	Sum of 14 PK-12	1,239	31.3%
Sum of 15 PK-5	718	36.0%	Sum of 15 6-8	296	31.9%	Sum of 15 9-12	291	26.2%	Sum of 15 PK-12	1,305	32.4%
Sum of 17 PK-5	715	35.9%	Sum of 16 6-8	261	27.5%	Sum of 16 9-12	331	28.7%	Sum of 17 PK-12	1,307	31.9%
Sum of 16 PK-5	700	35.3%	Sum of 17 6-8	274	28.1%	Sum of 17 9-12	336	27.8%	Sum of 16 PK-12	1,310	31.5%
Sum of 18 PK-5	745	36.6%	Sum of 18 6-8	284	28.6%	Sum of 18 9-12	350	28.7%	Sum of 18 PK-12	1,379	32.5%
Sum of 19 PK-5	740	36.1%	Sum of 19 6-8	311	30.3%	Sum of 19 9-12	362	28.5%	Sum of 19 PK-12	1,413	32.5%
Sum of 20 PK-5	701	35.5%	Sum of 20 6-8	321	32.5%	Sum of 20 9-12	337	25.7%	Sum of 20 PK-12	1,359	31.8%
Sum of 21 PK-5	719	37.0%	Sum of 21 6-8	355	34.3%	Sum of 21 9-12	352	26.7%	Sum of 21 PK-12	1,426	33.2%

Source: Platte County R-3 School District, and RSP

South feeder is increasing its percentage of students to the district. In 2003 22.5% of students lived in south, in 2021 33.2% of students live in south.

- In 2003 35.9% of elementary students lived in south, in 2021 37% of elementary students live in south
- In 2003 22.6% of middle school students lived in south, in 2021 26.7% of middle school students live in south
- In 2003 16.4% of high school students lived in south, in 2021 26.7% of high school students live in south