Planning for the Future

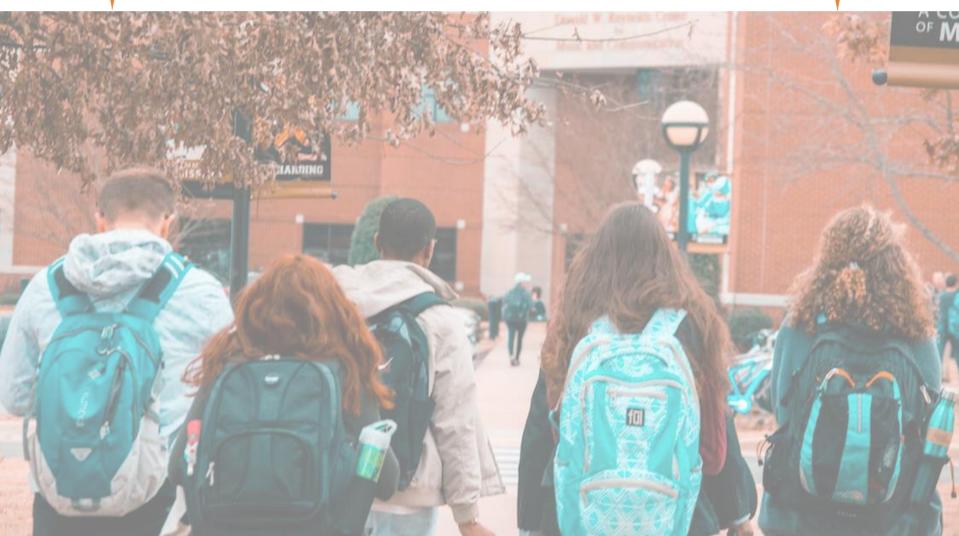
RSP

ROOT

Platte County R-3 School District

Enrollment Analysis | December 2022

00



Expectations

Thank you to Platte County R-3 School District, Platte County, Cities of Platte City and Kansas City, and the Census Bureau/Esri for making this happen!

\star





Helpful Hints to Read the Report:

- 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 how each indicator contributes to the analysis:

 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.

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

Study

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.

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, AICP, CEFP Military, County, City, and School District Planner University of Kansas – Master of Urban Planning (MUP) American Institute of Certified Planners (AICP) Certified Educational Facility Planner (CEFP)

Ginna Wallace, Planner University of Kansas – Master of Urban Planning (MUP)

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:

Shawnee Mission School District

- Enrollment Analysis, 2021/22
- Boundary Analysis, 2021/22

Kansas City, Kansas Public Schools

- Enrollment Analysis, 2022/23
- Boundary Analysis, 2021/22

Lone Jack C-6 School District

Enrollment Analysis, 2022/23

Our Partners:





Discussion Items

PART 1 ENROLLMENT & DEMOGRAPHICS

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

Part 2 Development



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

Part 3 Projections



- Past, Current, & Future Enrollment
- Building Level Projections
- Grade Level Projections

Part 4 Next Steps



- Future Facility Plan
- Moving Forward
- Next Steps & Key Considerations

APPENDIX



- Community Demographics
- Intra-transfer Tables
- Student Density Maps
- Detailed Growth Areas Maps
- Definitions

PART 1 ENROLLMENT & DEMOGRAPHICS

17

Things to Conside

Student Analysis Maps & Data

Sophisticated Forecast Mode

Demographics

Past Enrollment & Change

100,000 Foot Perspective

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



District enrollment forecasted to increase by about 200 students in the next five years

- Elementary forecasted to increase by about 175 students and enroll under 4,480 total ES students
- Middle School forecasted to decrease by about 30 students and enroll under 1,000 total MS students
- High School forecasted to increase by about 55 students and enroll under 1,390 total HS students



Capacity was provided by the district and analyzed in regard to projected enrollment for schools.

Building capacity for the next ten years can adequality serve the forecasted student population.



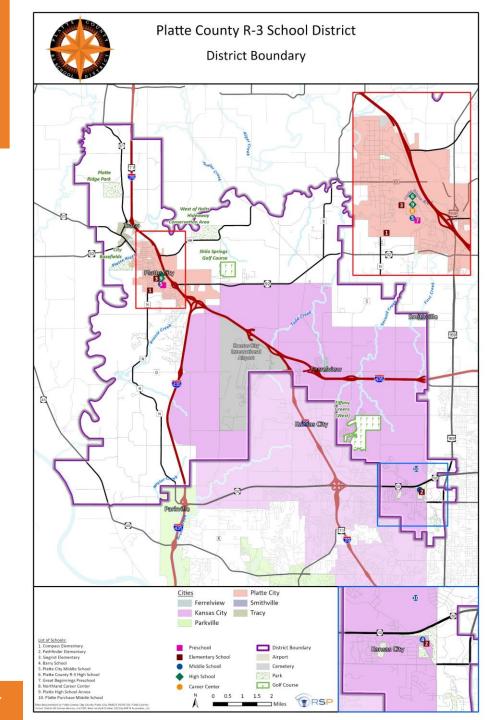
Development activity is continuing to expand in the community, but at a slower rate than 2018-2020

- o 61 single-family were built in 2022
- Over 6,500 total potential units could be added to the district in the next ten years
- \circ \quad Most growth is located to the southern areas of district

District Boundary Map

Map Details

- District boundary: Purple Line
- Major Streets
- Major water features & cultural features
- Municipalities:
 - Kansas City, MO
 - Platte City, MO

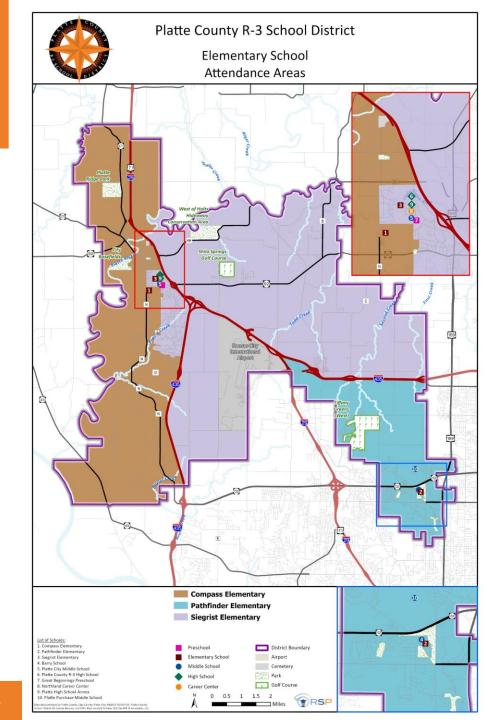


7

2022/23 Elementary Boundary Map

Map Details

- District boundary: Purple Line
- o 2022/23 Elementary Boundaries:
 - Compass Elementary
 - Pathfinder Elementary
 - Siegrist Elementary



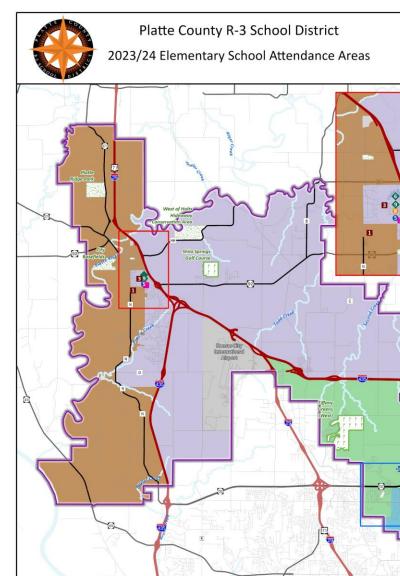
2023/24 Elementary Boundary Map

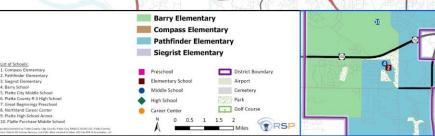
Map Details

- District boundary: Purple Line
- o 2023/24 Elementary Boundaries:
 - **Barry Elementary** Currently serves 5th to 8th grade; will transition next year to an elementary school serving K to 5th grade
 - Compass Elementary
 - Pathfinder Elementary

Currently serves K to 4th grade; will transition next year to serving K to 5th grade

Siegrist Elementary



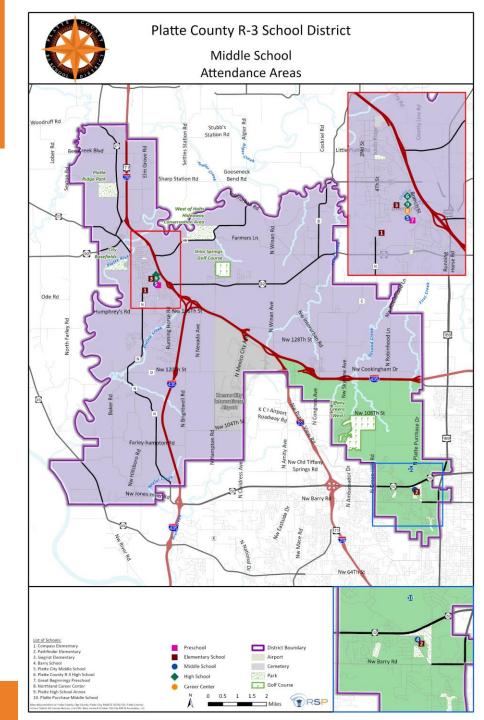


ĝ

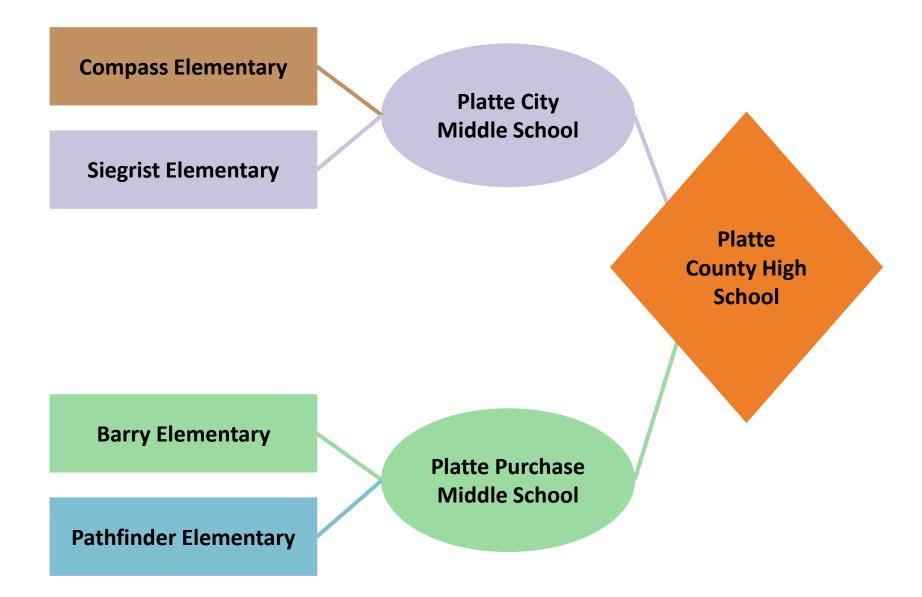
2023/24 Middle School Boundary Map

Map Details

- District boundary: Purple Line
- o 2023/24 Middle School Boundaries:
 - Platte City Middle School
 - Platte Purchase Middle School Opens next year as a second middle school to feed into Platte County High School



School Feeder Diagram – 2023/24



Planning Areas

Map Details

- District Boundary: Purple Line
- o Planning Areas: Green Line
 - Planning Areas are created from: Land Use, Residential Density, Natural Features, Manmade Features, Attendance Areas

Notes

- 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





Sophisticated Forecast Model Methodology

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

Let:

- S = The number of students, either an actual count or a projected count
- = 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
- 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
- = 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)
- planning area subdivision lifecycle (a RSP variable)
- the value of homes (county assessor data)
- type of residential units like single-family, multifamily, 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)
- future development (county and city data)
- in-migration of students (district data) & outmigration of students (district data)



×

Birth Rate Information

Platte County MO L	ive Births an	d Platte Cou	unty R-3 Kind	dergarten 5-	Years Later	
Calendar Year	# Live Births	Birth Change	% Birth Change	School Year	# Kdg	%Kdg of Live Births
2005	1,112		0.5%	2010/11	314	90.1%
2006	1,068	-44	-4.0%	2011/12	306	28.7%
2007	1,092	24	2.2%	2012/13	302	27.7%
2008	1,088	-4	-0.4%	2013/14	311	28.6%
2009	1,091	3	0.3%	2014/15	292	26.8%
2010	1,157	66	6.0%	2015/16	339	29.3%
2011	1,158	1	0.1%	2016/17	301	26.0%
2012	1,136	-22	-1.9%	2017/18	299	26.3%
2013	1,142	6	0.5%	2018/19	335	29.3%
2014	1,106	-36	-3.2%	2019/20	306	27.7%
2015	1,198	92	8.3%	2020/21	321	26.8%
2016	1,242	44	3.7%	2021/22	293	23.6%
2017	1,190	-52	-4.2%	2022/23	294	24.7%
2018	1,219	29	2.4%	2023/24	288	358
2019	1,212	-7	-0.6%	2024/25	286	356
3-Year Average	1,207.0	-10			\bigcirc	Low Range
3-Year Weighted Average	1,210.7	-2.5			\bigcirc	High Range

Live Birth Observations

- Tracks the number of live births and the corresponding number of kindergarten students five years later
- The number of live births have been stable around 1,200 live births per years the past five years
- Kindergarten enrollment has remained stable around 300 students per year
- The kindergarten classes moving forward are forecasted to be:
 - 286 to 288 students on the low end
 - 356 to 358 students on the high end

Main Takeaway: The decline of live births in the county can potentially result in smaller kindergarten classes. Continue monitoring this variable to analyze the relationship between Platte County live births and kindergarten class sizes five years later.

Source: DHSS - MOPHIMS - Birth MICA and Platte County R-3 School District

Past Enrollment by Grade



Enrollmen	t By Grade														PK-12		
Year	РК	к	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%
2022/23	73	294	307	316	304	323	308	322	379	324	337	324	340	330	4,281	3	0.1%

Source: Platte County R-3 School District

Observations:

- Largest K-12 class in 2022/23 7th grade with 379 students
- Smallest K-12 class in 2022/23 Kindergarten with 294 students

The 2021/22 graduating senior class is larger than the 2022/23 incoming Kindergarten class

- This is an indicator of enrollment stabilization or slight decline
- o Largest total enrollment was in 2019/20 with 4,344 students enrollment has not exceeded 4,300 since then
- Kindergarten classes the past two year have been below 300 students (the only classes below 300)
- o 2022/23 has the largest grades since 2003/04 in: 7th, 11th, and 12th grades

Cohort Student Change

Enrollment Grade Change

LINGHINCH																
		РК	РК	к	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	Total
From	То	РК	к	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Change
2000/01	2001/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2001/02	2002/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
2021/22	2022/23	12	233	16	-7	8	-1	-2	-1	10	-7	8	-9	-1	-9	3
3-Yr Avg		-4.0	231.7	4.0	-14.0	2.0	2.7	-6.7	10.0	5.0	-10.0	6.7	-8.0	2.0	-12.0	-21.0
3-Yr Wavg		1.3	231.2	7.7	-10	6.5	2.7	-4.3	7.2	7.7	-9.3	7.2	-7.8	1.3	-11.8	-8.2

Source: Platte County R-3 School District

Observations:

- Largest 3-year average K-12 class cohort increase 5th to 6th grade (+10 students)
- Largest 3-year average K-12 class cohort decrease 11th to 12th grade (-12 students)
- District increased by 3 students this year
- \circ Cohorts tend to decrease at 1st to 2nd, 4th to 5th, 7th to 8th, 9th to 10th, and 11th to 12th

3-Year Student Migration Trend

Out-Migration (students leaving the district)

In-Migration (students entering the district)



Source: Platte County R-3 School District and RSP

Definition

Out-Migration: Shows number of students in grade K to 11th that were attending the District in 2021/22, but are not attending the District in 2022/23.

In-Migration: Shows number of students in grade 1st to 12th that are attending the District in 2022/23, but were not attending the District in 2021/22.

Observations

- 2019/20 lost 455 students and gained 505 students; NET +50
- 2020/21 lost 504 students and gained 421 students; NET: -83
- 2021/22 lost 491 students and gained 507 students; NET: +16
- 2022/23 lost 452 students and gained 456 students; NET: +4

Main Takeaway:

The district tend to have a positive gain of migration students. Only 200/21 had a negative net gain of transfer students the past four years (this is likely due to COVID-19 pandemic).

Student Count Change Map

Map Details

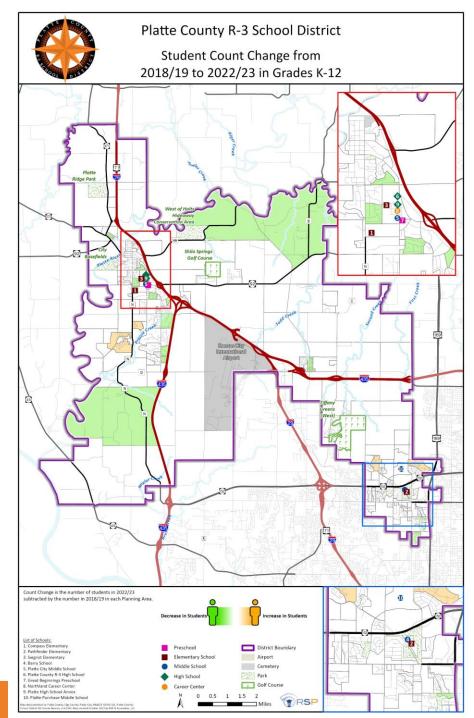
- Depicts student movement at each Planning Area from 2018/19 to 2022/23
- o Orange: student increase year to year
- o Green: student decrease year to year
- White: no net change of students

Notes

- New developments have a greater propensity to have more students in future years
- Current colors do not indicate area will continue to increase or decrease
- Each of these planning areas are fluid with respect to change – the visual shown is a snapshot: Areas shown as increasing will not always increase just like areas shown as decreasing will not always decrease

Main Takeaway: Areas of student increase are in the new developing areas: South of Compass Elementary and north of Pathfinder Elementary





Heat Map

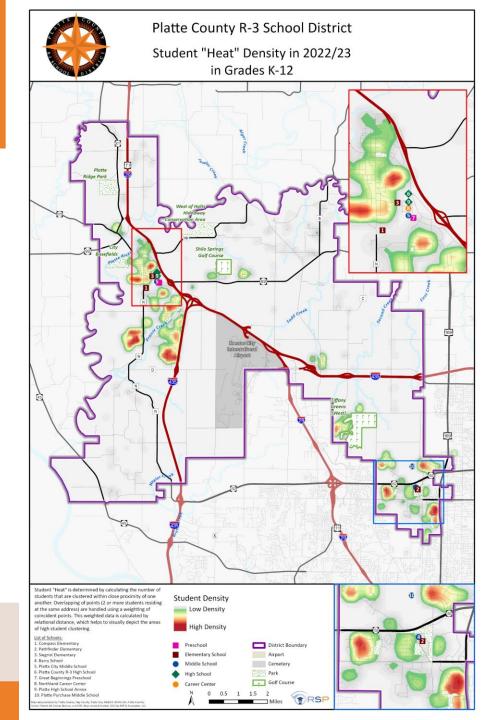
Map Details

- Visual shows the location of students in proximity to other students for a "heat affect" in the district.
- Red: highest student density
- o Gray: lowest student density

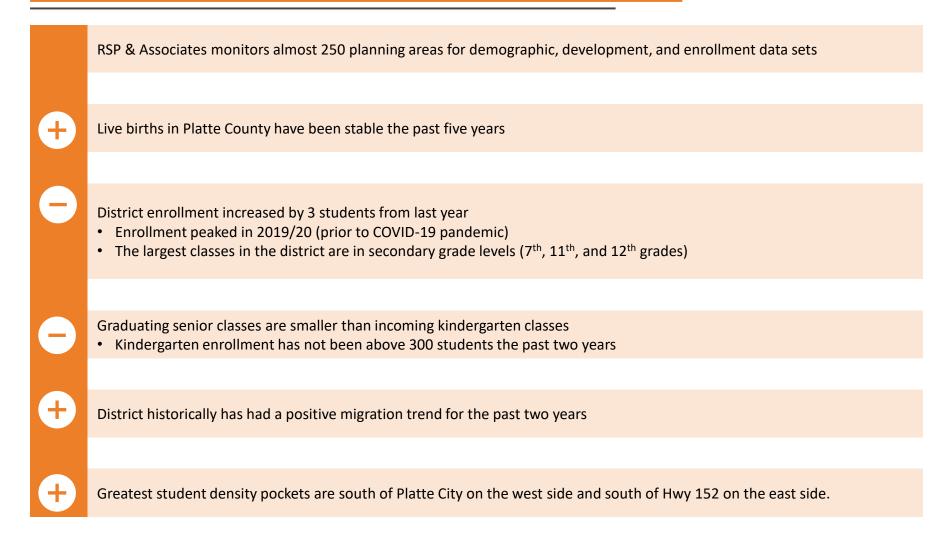
Notes

- 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

Main Takeaway: Areas of highest student density are centralized south of Platte City on the west side and south of Hwy 152 on the east side.



Enrollment Observation and Conclusion





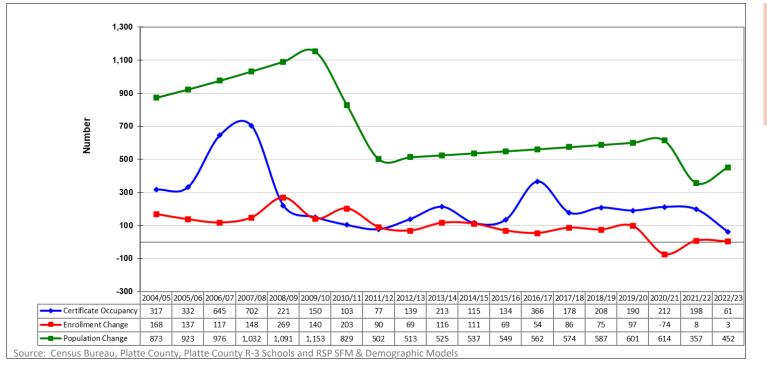
Population, Development, & Enrollment Trends

Yield Rate

Housing Market Maps & Data

Potential Growth Analysis

Population, Development, & Enrollment



Graphic Explanation

- BLUE LINE: Building activity has averaged about 200+ units a year from 2018/19 to 2021/22
 - 2022/23 low unit production signals a slow down of housing market likely due to increasing interest rates, supply chain challenges, and other economic factors
- **GREEN LINE:** Census data indicates a stable, slightly increasing population
 - · Population shows the estimate growth of the whole decade
 - New decennial census often affects year-to-year change
- **RED LINE:** Student enrollment has been generally increasing year to year
 - 2020/21 saw a decrease in students, likely due to COVID-19 pandemic

Benchmark data to determine if there is a correlation between:

- Population change
- Building activity
- School enrollment

Student Yield Rate

Legend: Greater than 3 from District Average



Less than 3 from District Average

Single-Family Yield Rate	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Avg
Compass Elementary	55	52	55	55	59	58	57	57	57	56	54	53
Pathfinder Elementary	34	35	36	37	35	35	36	36	33	33	33	33
Siegrist Elementary	54	54	53	52	52	50	51	49	47	46	44	52
District (K-12):	47	47	47	47	47	47	47	46	45	44	43	46

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

- Table shows the number of students per 100 single-family (SF) units by year and current elementary boundary
- o District sees on average 46 K-12 students per 100 single-family households
- Compass has the largest 2022 SF yield rate with 54 students per 100 single-family households
- Pathfinder has the smallest 2022 SF Yield rate with 33 students per 100 single-family households
- Adding new housing inventory can increase the yield rate there were 1,580 single-family homes built from 2012 to 2022

Multi-Family Yield Rate	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Avg
Compass Elementary	25	25	26	26	24	24	23	21	22	21	21	23
Pathfinder Elementary	16	18	17	18	18	18	18	18	17	18	18	15
Siegrist Elementary	25	24	27	26	21	24	24	25	25	23	22	24
District (K-12):	20	21	21	22	20	21	20	20	20	20	20	18

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

- Table shows the number of students per 100 multi-family (MF) units by year and current elementary boundary
- o District sees on average 18 students per 100 multi-family households
- o Siegrist has the largest 2022 MF yield rate with 22 students per 100 multi-family households
- Pathfinder has the smallest 2022 MF yield rate with 18 students per 100 multi-family households
- o Adding new housing inventory can increase the yield rate there were 434 multi-family homes built from 2012 to 2022

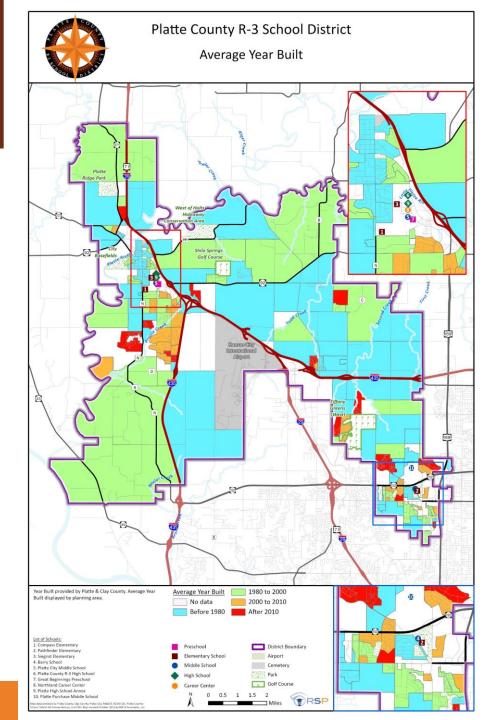
Average Year Built Map

Map Details

- $\,\circ\,$ Year built data provided by Platte and Clay County
- $\,\circ\,$ Colors to show decade units were built
 - White no data
 - Blue before 1980
 - Green 1980 to 2000
 - Orange 2000 to 2010
 - Red After 2010

Notes

- Averages based on RSP Planning Areas and the units built in them
- Based on a planning area and could be influenced by the number of units prior to new units being built



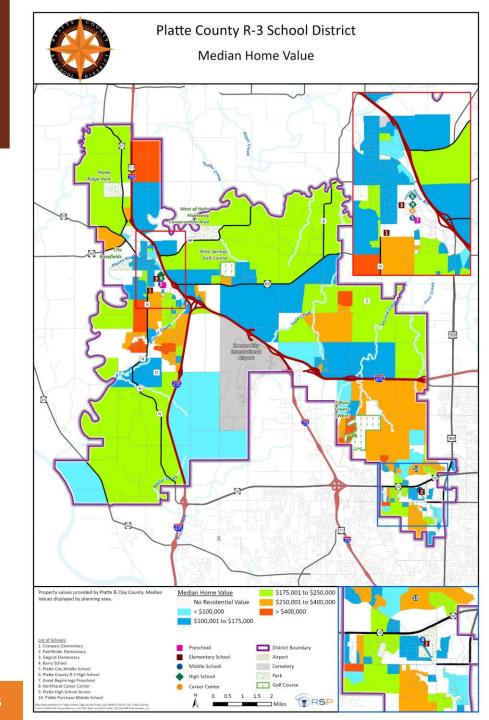
Median Home Value Map

Map Details

- Orange to Red: greatest Median Home Value
- o Green to Blue: greatest affordability

Notes

- Based on assessed Home Value as provided and maintained by Platte and Clay County assessor's office
- Depicted by Median Value in each Planning Area Based on a planning area and could be influenced by the number of units prior to new units being built
- Home values likely correlated to socio-economic status new areas tend to be the least affordable



Recent Year Built Map

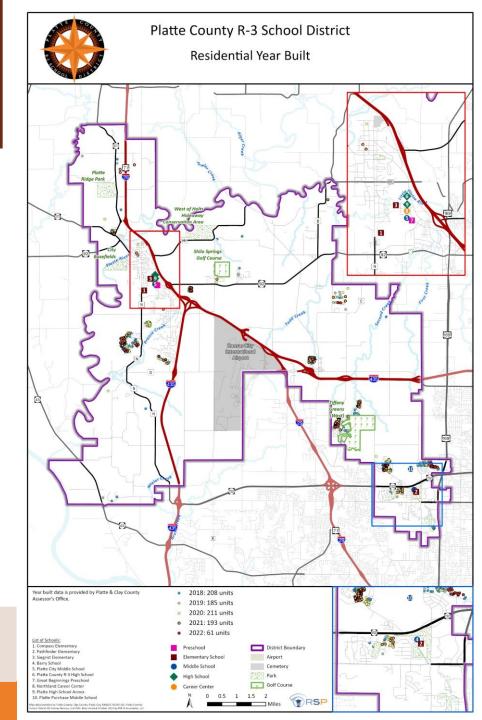
Map Details

- Reveals the clusters of where recent residential development has occurred
- Colors of dots represent a specific year according to the county assessor's office
 - Red: 2022, 61 units
 - Orange: 2021, 193 units
 - Yellow: 2020, 211 units
 - Green: 2019, 295 units
 - Blue: 2018, 208 units

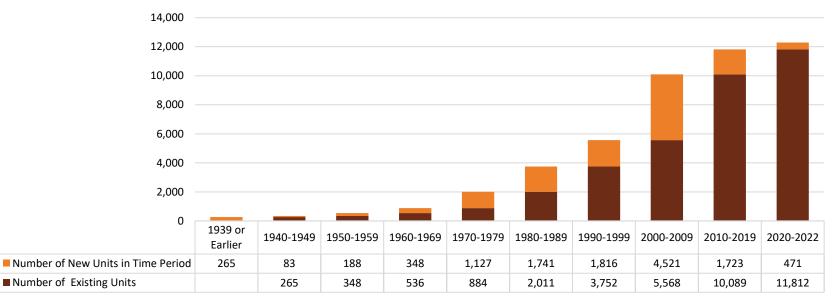
Notes

- Type of housing is monitored as some planning areas (single-family or multi-family) do not necessarily lead to similar yield rates and may change from year to year
- $\circ~$ Only partial record for 2022

Main Takeaway: 2022 building activity is slower than the past four years (likely due to increasing interest rates, supply chain challenges, and other economic factors)



Development Activity Over Time



New VS Existing Units by Decade

Source: Platte and Clay 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 (172 per year) is lower than from 2000 to 2009 (452 per year)
- $\,\circ\,$ The decade with the most units built was 2000 to 2009
- $\circ\,$ The average year for all units built was 1996

Growth Area Map

Map Details

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

 \star

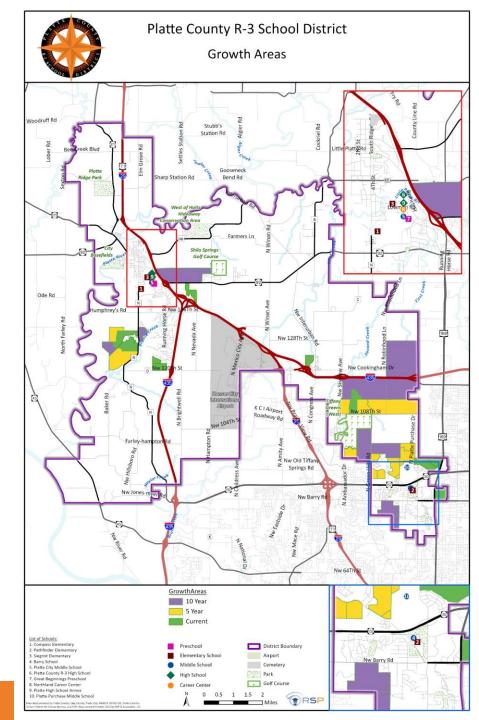
Green: identifies where development activity is happening

Yellow: identifies possible areas that could develop within a 5-year range

Purple: identifies possible areas that could develop within a 10-year range

Notes

- 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



Potential Development Outlook

Definition

- Table has been created to illustrate type and amount of development
- The speed in which any developments are built are influenced by who owns the property, access to infrastructure, and economic indicators
- 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 **Yellow:** identifies areas that could develop within 5-years **Purple:** identifies areas that could develop within 10-years

Main Takeaway

- 990+ current potential units
- o 3,100+ 5-year potential units
- o 2.400+ 10-year potential units
- o 6,500 total potential units

RSP Plan Area Name	Туре	Growth Area	Existing Units	Potential Units
Metro North Crossing	MU	Current	0	249
Cutting Crest	SF	Current	24	84
Fountain Hills	SF	Current	200	150
Fountain Hills Final Plats	SF	Current	0	105
North Creek Village	SF	Current	177	42
Seven Bridges, North	SF	Current	186	63
Seven Bridges, South	SF	Current	203	96
South of Running Horse	AG	Current	0	75
Tiffany Lakes	SF	Current	151	61
West of Running Horse 2nd	AG	Current	0	70
Bittersweet	AG	5 Year	0	175
East of Tiffany Lakes	VAC	5 Year	4	250
Genesis Place Estates 1st	Rural	5 Year	2	80
South of Old Stagecoach near Genesis Village	AG	5 Year	0	70
South of Old Stagecoach near Genesis Village	MU	5 Year	0	90
South of Seven Bridges	AG	5 Year	0	300
Tiffany Greens (South)	VAC	5 Year	0	132
Tiffany Greens (West)	GC	5 Year	0	460
Twin Creeks Village - Future Apartments	MF	5 Year	0	240
Twin Creeks Village - Townhomes / Big House Units	Rural	5 Year	2	484
Twin Creeks Village - "Erika's Place"	SF	5 Year	2	458
Vacant Land Surrounding Tiffany Lakes	VAC	5 Year	0	125
West of Seven Bridges	AG	5 Year	0	125
West of Tiffany Lakes	VAC	5 Year	1	175
West of Hunters Ridge 1st	AG	10 Year	0	165
East of WAU-LIN-CREE Apartments	Rural	10 Year	1	300
Johnston Farms	Rural	10 Year	2	125
Lynn Acres	Rural	10 Year	13	300
Northland Reformed Church & N I-435 at Robinhood	Rural	10 Year	7	200
Rustic Acres Northeast	Rural	10 Year	1	250
Tiffany Greens (Central)	Rural	10 Year	1	828
Tiffany Greens (East)	Rural	10 Year	12	96
West of Seven Bridges, 2	AG	10 Year	0	150
	941	995		
	11	3,164		
	Year Total	37	2,414	
	All Total	989	6,573	

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

North VS South Development Outlook

Definition

- Table has been created to illustrate type and amount of development
- The speed in which any developments are built are influenced by who owns the property, access to infrastructure, and economic indicators
- 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 Yellow: identifies areas that could develop within 5-years Purple: identifies areas that could develop within 10-years

Main Takeaway

- 5,000 of 6,500 potential units are in the southern feeder
 - 76% of total potential units
- Most 5- and 10-year potential development is in the southern feeder while current developing units are distributed between north and south feeders

Growth Areas in Northern Feeder	Туре	Growth Area	Existing Units	Potential Units
South of Running Horse	AG	Current	0	75
West of Running Horse 2nd	AG	Current	0	70
North Creek Village	SF	Current	177	42
Seven Bridges, South	SF	Current	203	96
Seven Bridges, North	SF	Current	186	63
Cutting Crest	SF	Current	24	84
South of Seven Bridges	AG	5 Year	0	300
West of Seven Bridges	AG	5 Year	0	125
West of Seven Bridges, 2	AG	10 Year	0	150
Northland Reformed Church & N I-435 at Robinhood	Rural	10 Year	7	200
Rustic Acres Northeast	Rural	10 Year	1	250
Johnston Farms	Rural	10 Year	2	125
	Cu	irrent Total	590	430
	5 Year Total	0	425	
	10	725		
	600	1,580		

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

Growth Areas in Southern Feeder	Туре	Growth Area	Existing Units	Potential Units
Metro North Crossing	MU	Current	0	249
Tiffany Lakes	SF	Current	151	61
Fountain Hills Final Plats	SF	Current	0	105
Fountain Hills	SF	Current	200	150
Bittersweet	AG	5 Year	0	175
South of Old Stagecoach near Genesis Village	AG	5 Year	0	70
Tiffany Greens (West)	GC	5 Year	0	460
Twin Creeks Village - Future Apartments	MF	5 Year	0	240
South of Old Stagecoach near Genesis Village	MU	5 Year	0	90
Genesis Place Estates 1st	Rural	5 Year	2	80
Twin Creeks Village - Townhomes / Big House Units	Rural	5 Year	2	484
Twin Creeks Village - "Erika's Place"	SF	5 Year	2	458
Vacant Land Surrounding Tiffany Lakes	VAC	5 Year	0	125
Tiffany Greens (South)	VAC	5 Year	0	132
West of Tiffany Lakes	VAC	5 Year	1	175
East of Tiffany Lakes	VAC	5 Year	4	250
West of Hunters Ridge 1st	AG	10 Year	0	165
Lynn Acres	Rural	10 Year	13	300
East of WAU-LIN-CREE Apartments	Rural	10 Year	1	300
Tiffany Greens (Central)	Rural	10 Year	1	828
Tiffany Greens (East)	Rural	10 Year	12	96
	irrent Total	351	565	
	5 Year Total	11	2,739	
) Year Total	27	1,689	
		All Total	389	4,993

© 2022 RSP. All rights reserved

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

Development Observation and Conclusion

Over 6,500 units identified for potential development within the next 10+ years

• Over 75% of potential units reside in the south feeder of the district

Building activity is a positive indicator of growth in the district

- Opportunities for residential growth continue
- The speed of the activity should continue to be monitored 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 2022 saw 61 single-family units built and no 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

Growth areas are mostly located south of I-435 and east of I-29

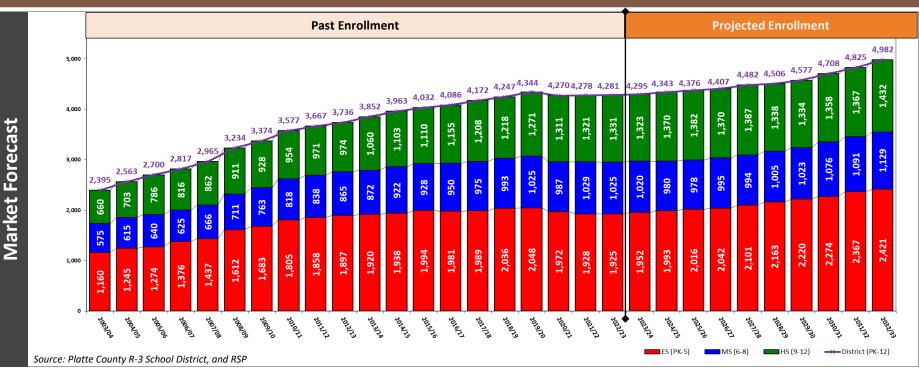
Residential development will continue if the housing product is affordable and have active residential projects – infrastructure connectivity also plays a role in the desirability and timing of residential development

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

Part 3 Projections

Past, Current, & Future Enrollment Building Projections

Past, Current, & Future Enrollment



NOTE: Enrollment will continue to increase, but with recent enrollment, demographic, and development trends, it will not be as fast as what was projected in 2021/22.

10 Year Forecast broken into two 5-Year Increments:								
First 5-Year (2023/24 to 2027/28)	Second 5-Year (2028/29 to 2032/33)							
District forecasted to increase to 4,482 total students (+201 students)	District forecasted to increase to 4,982 total students (+500 students)							
Elementary: 2,101 students; Increase of 176 students	Elementary: 2,421 students; Increase an additional 320 students							
Middle School: 994 students; Decrease of 31 students	Middle School: 1,129 students; Increase of an additional 135 students							
High School: 1,387 students; Increase of 56 students	High School: 1,432 students; Increase of an additional 45 students							

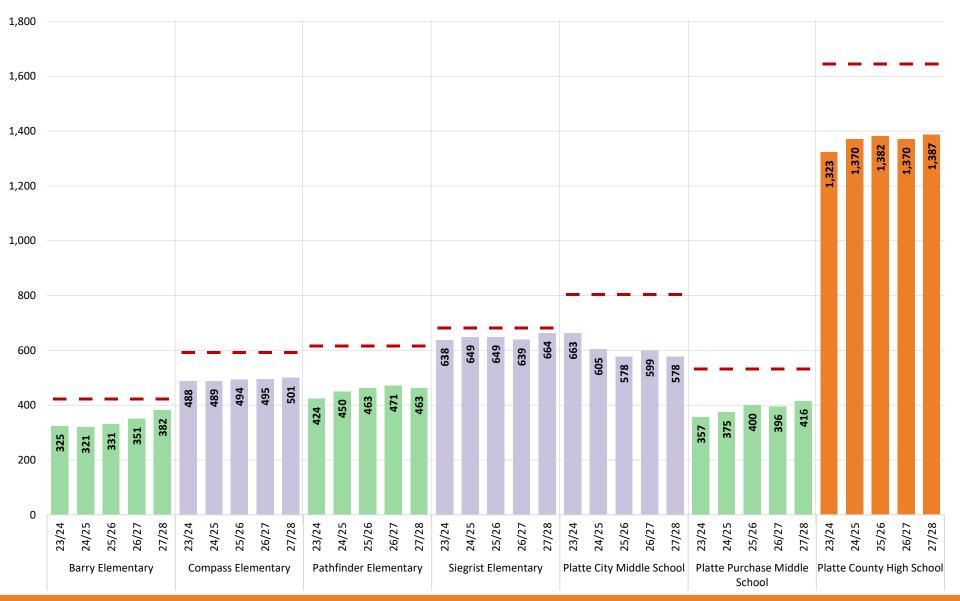
*All past student data is exported from the district student database allowing the ability to do robust statistical analysis by student geography The student database export will not always align perfectly with the Official Counts (Statistically 99% greater match by grade)

Platte County R-3 Projections by Building

Red Dash: Functional Capacity North Feeder: Purple South Feeder: Green

34

Note: Starting in 2023/24 Barry School transitions to a K-5 Elementary school as Platte Purchase Middle School comes online.



Note: Building capacities have been provided by Platte County R-3 School District. School capacities are subject to change as the Long-Range Planning Committee examines utilization of buildings and location of district programs.

Projection Notes & Clarifications

• 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)

Capacity

- Building capacities have been provided by Platte County R-3 School District. School capacities are subject to change as the Long-Range Planning Committee examines utilization of buildings and location of district programs
- Provided by district administration Updated for the 2023/24 school year
 - Barry School only serves elementary (K-5)
 - Platte Purchase MS opens (6-8)
 - $\circ~$ Platte County High School capacity includes the full building out of phases to total 1,645
- \circ Should be annually examined to ensure appropriate education space is available

Other Items

- Enrollment Grade Configuration in Student Forecast Model (PK-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

Understanding Capacity

The district utilizes Functional Capacity in this analysis:

• Functional Capacity is calculated similar to Design Capacity -- applies a building wide adjustment (baseline -10%) to the student to teacher ratio. Functional Capacity allows for flexibility in program demand or enrollment fluctuations.

What Counts?	Variables?	Calculating Functional Capacity:
At Elementary Schools: Only grade level core learning environments	Physical Variables	#LE * RUR * SAF * STR = Capacity
At Middle Schools: All core and specialty learning environment (special education and resource	Operational Variables	#LE = Number of Learning Environments
space is generally excluded)	Programmatic Variables	RUR = Room Utilization Rate
At High School: All core and specialty learning	Student to Teach Ratios	SAF = Size Adjustment Factor
environments; in some cases, flex space is included	Square Foot per Student	STR = Student to Teacher Ratio

Capacities of District Facilities:

- Great Beginnings Early Learning = 80
- Barry Elementary = 422 (plus four Early Learning classrooms and two Autism classrooms)
- Compass Elementary = 592 (plus one Early Learning Tuition classroom and one Behavior Support classroom)
- □ Pathfinder Elementary = 617 (plus one Cross Categorical classroom)
- □ Siegrist Elementary = 682 (plus one Functional Life Skills classroom)
- Platte City MS = 805 (plus one Functional Life Skills classroom and one Behavior Support classroom)
- □ Platte Purchase MS = 532 (plus one Cross Categorical classroom and one Autism classroom)
- Platte County HS = 1,645 (plus two Functional Life Skills classrooms and one Behavior Support classroom)

Building Projections

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

School	Functiona	al Capacity	Student	Past	School Enrol	Iment		Projection	ns Based on	Residence	
	Old	New	Location	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Great Beginnings Preschool			Reside/Attend	65	61	73					
РК	80	80	Reside	65	61	73	77	84	79	86	91
			Attend	65	61	73					
Compass Elementary			Reside/Attend	592	565	536					
K to 5th	615	592	Reside	626	589	566	488	489	494	495	501
NORTH FEEDER			Attend	604	581	552					
Siegrist Elementary			Reside/Attend	570	547	550					
K to 5th	680	682	Reside	577	559	563	638	649	649	639	664
NORTH FEEDER			Attend	599	574	586					
Barry Elementary			Reside/Attend	0	0	0					
K to 5th (Change to ES in 23/24)	0	422	Reside	0	0	0	325	321	331	351	382
SOUTH FEEDER			Attend	0	0	0					
Pathfinder Elementary			Reside/Attend	574	606	600					
, K to 5th	660	617	Reside	580	612	719	424	450	463	471	463
SOUTH FEEDER			Attend	580	607	601					
Barry School			Reside/Attend	452	457	343					
, 5th to 8th (23/24 only serves ES)	588	0	Reside	457	461	346	0	0	0	0	0
SOUTH FEEDER			Attend	455	457	452					
Platte City Middle School			Reside/Attend	652	675	683					
6th to 8th	807	805	Reside	654	675	683	663	605	578	599	578
NORTH FEEDER			Attend	656	677	686					
Platte Purchase Middle School			Reside/Attend	0	0	0					
6th to 8th (Opens in 23/24)	0	532	Reside	0	0	0	357	375	400	396	416
SOUTH FEEDER			Attend	0	0	0					
Platte County High School			Reside/Attend	1,311	1,321	1,331					
9th to 12th	1,604	1,645	Reside	1,311	1,321	1,331	1,323	1,370	1,382	1,370	1,387
			Attend	1,311	1,321	1,331	· ·		· ·	· · ·	, i
ES BUILDING SCHOOL TOTAL			Reside/Attend	1,801	1,779	1,759					
PK to 5th	2,035	2,393	Reside	1,848	1,821	1,921	1,952	1,993	2,016	2,042	2,101
	_,	_,	Attend	1,848	1,823	1,812	_,	_,	_,	_,	_,
MS BUILDING SCHOOL TOTAL			Reside/Attend	1,104	1,132	1,026					
6th to 8th	1,395	1,337	Reside	1,111	1,136	1,029	1,020	980	978	995	994
	2,000	2,007	Attend	1,111	1,134	1,138	2,020	500	570	555	
HIGH TOTAL			Reside/Attend	1,311	1,321	1,331					
9th to 12th	1,604	1,645	Reside	1,311	1,321	1,331	1,323	1,370	1,382	1,370	1,387
5010 1201	1,004	1,040	Attend	1,311	1,321	1,331	1,525	1,370	1,502	1,570	1,507
DISTRICT TOTALS			Reside/Attend	4,216	4,232	4,116					
PK to 12th	5,034	5,375	Reside	4,210	4,232	4,110	4,295	4,343	4,376	4,407	4,482
1 K to 12 th	3,034	5,575	Attend	4,270	4,278	4,281	4,200	4,545	4,570	4,407	4,402

Source: RSP & Associates, LLC - December 2022

Over School Functional Capacity

Note: Building capacities have been provided by Platte County R-3 School District. School capacities are subject to change as the Long-Range Planning Committee examines utilization of buildings and location of district programs.

Building Grade Level Projections

RESIDE

2023/24 School Year

School	Functional								Grade							
	New	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Great Beginnings Preschool	80	77														77
Compass Elementary	592		81	76	83	84	81	83								488
Siegrist Elementary	682		106	113	86	124	105	104								638
Barry Elementary	422		58	50	53	46	53	65								325
Pathfinder Elementary	617		73	61	83	66	70	71								424
Platte City Middle School	805								189	221	253					663
Platte Purchase Middle School	532								125	108	124					
Platte County High School	1,645											329	336	325	333	1,323
DISTRICT TOTALS	5,375	77	318	300	305	320	309	323	314	329	377	329	336	325	333	4,295

Source: RSP & Associates, LLC - December 2022

Over School Functional Capacity

RESIDE

2024/25 School Year

Functional								Grade							
New	PK	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
80	84														84
592		81	81	76	84	86	81								489
682		113	108	110	89	124	105								649
422		61	59	49	54	47	51								321
617		81	78	64	84	70	73								450
805								193	193	219					605
532								137	129	109					375
1,645											382	330	338	320	1,370
5,375		336	326	299	311	327	310	330	322	328	382	330	338	320	4,343
	New 80 592 682 422 617 805 532 1,645	New PK 80 84 592 - 682 - 422 - 617 - 805 - 532 - 1,645 -	New PK Kind 80 84 592 81 682 113 422 61 617 81 805 . 532 . . 1,645 . . .	New PK Kind 1st 80 84 592 81 81 81 682 113 108 422 61 59 617 81 78 805 . . 532 . . 1,645 . .	New PK Kind 1st 2nd 80 84 592 81 81 76 682 113 108 110 422 61 59 49 617 81 78 64 805 . . . 532 . . . 1,645 . . .	New PK Kind 1st 2nd 3rd 80 84 Image: Second Seco	New PK Kind 1st 2nd 3rd 4th 80 84 I I I I I 592 81 81 76 84 86 682 113 108 110 89 124 422 61 59 49 54 47 617 81 78 64 84 70 805 I <	New PK Kind 1st 2nd 3rd 4th 5th 80 84 I I I I I I 592 81 81 76 84 86 81 682 113 108 110 89 124 105 422 61 59 49 54 47 51 617 81 78 64 84 70 73 805 I I I I I I I 532 I I I I I I I I 1,645 I I I I I I I I I	New PK Kind 1st 2nd 3rd 4th 5th 6th 80 84 I I I I III IIII III IIII IIIII IIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIIII IIIIII IIIIIII IIIIII IIIIIII	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 80 84 Image: Second Seco	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 80 84 Image: Second Seco	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 80 84 I I I I I I I I III IIII IIII IIII IIII IIII IIII IIII IIIII IIIII IIIII IIIII IIIIII IIIIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 80 84 Image: Second Sec	NewPKKind1st2nd3rd4th5th6th7th8th9th10th11th 80 84 1	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 80 84 Image: Second S

Source: RSP & Associates, LLC - December 2022

Over School Functional Capacity

Note: Building capacities have been provided by Platte County R-3 School District. School capacities are subject to change as the Long-Range Planning Committee examines utilization of buildings and location of district programs.

Building Grade Level Projections

RESIDE

2025/26 School Year

School	Functional								Grade							
	New	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Great Beginnings Preschool	80	79														79
Compass Elementary	592		84	82	81	77	85	85								494
Siegrist Elementary	682		97	117	106	114	91	124								649
Barry Elementary	422		59	63	58	51	55	45								331
Pathfinder Elementary	617		72	85	80	66	88	72								463
Platte City Middle School	805								189	198	191					578
Platte Purchase Middle School	532								129	141	130					400
Platte County High School	1,645											334	383	332	333	1,382
DISTRICT TOTALS	5,375		312	347	325	308	319	326	318	339	321	334	383	332	333	4,376
Source: RSP & Associates, LLC - Decemb											\sim	>	Over Sch	nool Func	tional Ca	pacity

Source: RSP & Associates, LLC - December 2022

RESIDE

2026/27 School Year

School	Functional								Grade							
	New	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
Great Beginnings Preschool	80	86														86
Compass Elementary	592		83	85	82	82	78	85								495
Siegrist Elementary	682		110	100	114	110	114	91								639
Barry Elementary	422		60	61	62	60	53	55								351
Pathfinder Elementary	617		75	74	85	80	68	89								471
Platte City Middle School	805								209	194	196					599
Platte Purchase Middle School	532								123	132	141					396
Platte County High School	1,645											325	334	383	328	1,370
DISTRICT TOTALS	5,375		328	320	343	332	313	320	332	326	337	325	334	383	328	4,407
Source: RSP & Associates, LLC - Decemb					4		!	4	!	4			Over Sch	nool Func	tional Ca	pacity

Note: Building capacities have been provided by Platte County R-3 School District. School capacities are subject to change as the Long-Range Planning Committee examines utilization of buildings and location of district programs.

Building Grade Level Projections

RESIDE

2027/28 School Year

Functional	Grade														
New	РК	Kind	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
80	91														91
592		87	84	85	83	84	78								501
682		112	113	98	117	110	114								664
422		69	64	63	67	64	55								382
617		75	78	75	85	81	69								463
805								171	214	193					578
532								156	127	133					416
1,645											345	327	336	379	1,387
5,375		343	339	321	352	339	316	327	341	326	345	327	336	379	4,482
	New 80 592 682 422 617 805 532 1,645	New PK 80 91 592 - 682 - 422 - 617 - 805 - 532 - 1,645 -	New PK Kind 80 91 592 87 682 112 422 69 617 75 805 9 532 1 1,645	New PK Kind 1st 80 91 592 87 84 682 112 113 422 69 64 617 75 78 805 . . . 532 . . . 1,645 . . .	New PK Kind 1st 2nd 80 91 I I I 592 87 84 85 682 112 113 98 422 69 64 63 617 75 78 75 805 I I I I 532 I I I I 1,645 I I I I	New PK Kind 1st 2nd 3rd 80 91 I I I I 592 87 84 85 83 682 112 113 98 117 422 69 64 63 67 617 75 78 75 85 805 I I I I I 532 I I I I I 1,645 I I I I I	New PK Kind 1st 2nd 3rd 4th 80 91 I I I I I 592 87 84 85 83 84 682 112 113 98 117 110 422 69 64 63 67 64 617 75 78 75 85 81 805 I <	New PK Kind 1st 2nd 3rd 4th 5th 80 91 I I I I I I I 592 87 84 85 83 84 78 682 112 113 98 117 110 114 422 69 64 63 67 64 55 617 75 78 75 85 81 69 805 I I III IIII IIII IIII IIII	New PK Kind 1st 2nd 3rd 4th 5th 6th 80 91 I I I I III IIII III IIII IIII <td>New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 80 91 I I I I I I I III IIII IIIII</td> <td>New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 80 91 Image: Second Seco</td> <td>New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 80 91 I<</td> <td>New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 80 91 I I I I I I I I III III III III III III III III III IIII IIIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIIII IIIIII IIIIII IIIIII IIIIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</td> <td>NewPKKind1st2nd3rd4th5th6th7th8th9th10th11th$80$91</td> <td>NewPKKind1st2nd3rd4th5th6th7th8th9th10th11th12th8091II</td>	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 80 91 I I I I I I I III IIII IIIII	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 80 91 Image: Second Seco	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 80 91 I<	New PK Kind 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 80 91 I I I I I I I I III III III III III III III III III IIII IIIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIIII IIIIII IIIIII IIIIII IIIIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	NewPKKind1st2nd3rd4th5th6th7th8th9th10th11th 80 91	NewPKKind1st2nd3rd4th5th6th7th8th9th10th11th12th8091II

Source: RSP & Associates, LLC - December 2022

Over School Functional Capacity

Long Range Projections

Past, Current, and Future Enrollment

Grade								Schoo	l Year							
	2005/06	2010/11	2015/16	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/3
РК	0	75	67	65	61	73	77	84	79	86	91	92	94	98	101	100
к	224	314	339	321	291	294	318	336	312	328	343	352	359	373	383	399
1st	231	294	291	300	323	307	300	326	347	320	339	346	357	363	403	391
2nd	204	309	328	307	296	316	305	299	325	343	321	346	356	366	372	407
3rd	223	267	312	300	324	304	320	311	308	332	352	324	354	364	370	378
4th	204	283	314	325	310	323	309	327	319	313	339	357	333	366	364	378
5th	188	263	343	354	323	308	323	310	326	320	316	346	367	344	374	368
6th	215	286	317	320	369	322	314	330	318	332	327	323	351	374	351	381
7th	208	267	306	341	331	379	329	322	339	326	341	334	331	362	382	360
8th	217	265	305	326	329	324	377	328	321	337	326	348	341	340	358	388
9th	222	247	292	346	333	337	329	382	334	325	345	331	355	344	348	351
10th	204	245	294	335	341	324	336	330	383	334	327	346	327	361	340	351
11th	189	244	265	325	339	340	325	338	332	383	336	322	330	320	356	345
12th	171	218	259	305	308	330	333	320	333	328	379	339	322	333	323	385
РК-5	1,274	1,805	1,994	1,972	1,928	1,925	1,952	1,993	2,016	2,042	2,101	2,163	2,220	2,274	2,367	2,421
6-8	640	818	928	987	1,029	1,025	1,020	980	978	995	994	1,005	1,023	1,076	1,091	1,129
9-12	786	954	1,110	1,311	1,321	1,331	1,323	1,370	1,382	1,370	1,387	1,338	1,334	1,358	1,367	1,432
District	2,700	3,577	4,032	4,270	4,278	4,281	4,295	4,343	4,376	4,407	4,482	4,506	4,577	4,708	4,825	4,982
Enrollment Change	137	203	69	-74	8	3	14	48	33	31	75	24	71	131	117	157

Sources: 2005/06 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

1,

Optimal Capacity

- o The projections are utilizing the best available information: State, County, City, and Census
- o 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)

 \bigcirc

Type of Residential Activity (Single-Family, Duplexes, Apartments)

Note: Building capacities have been provided by Platte County R-3 School District. School capacities are subject to change as the Long-Range Planning Committee examines utilization of buildings and location of district programs.

Projection Observations and Conclusion

Forecast Overview

- District to increase by 200 students in the first five years (2027/28) and 500 students in the next five years (2032/33)
- PK-5th grade enrollment to increase by 175 students in the first five years and 320 students in the next five years
- 6-8th grade enrollment to decrease by 30 students in the first five years and increase by 135 students in the next five years
- 9-12th grade enrollment to increase by 55 students in the first five years and 45 students in the next five years

Challenges

Building capacity, as provided by the district, can adequality serve the future student population without facing major capacity challenges.

Driving Themes of Forecast

- 1. 2022/23 Student population *Indicators:*
 - Largest classes are in secondary grade levels to be replaced with smaller elementary classes
 - Larger senior classes than kindergarten classes
 - District growth year to year
- 2. Development Activity Indicators:
 - Lower development of units in 2022 so far
 - Economic downturned has limited production of new residential inventory that would yield higher rates of students
 - Single-Family students yield rates have been decreasing

3. Migration Trends Indicators:

- Positive student migration
- Stable county live births relationship with kindergarten classes five years later

+

+

+



Moving Forward Next Steps & Key Considerations



Conclusion & 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
- RSP Enrollment forecasting is based on the best-known information at the time

Key Considerations:

- 1. Number of live births in Platte County... see page 14
- 2. Size of outgoing senior class (larger) compared to the incoming Kindergarten and PK classes (smaller)... see page 15
- 3. Migration trends (In-Migration tends to be more than Out-Migration)... see page 17
- 4. Development and timing of identified projects (+6,500-unit production potential next ten years)... see pages 30-32

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.



APPENDIX

Community Demographics

Intra-transfer Tables

Student Density Maps

Demographic Summary



Observations:

- The population as been increasing the past two decades and is forecasted to continue increasing at a lower rate
- o The housing inventory has increased since 2000 and is forecasted to continue increasing, but at a slower rate than the previous decade
- o Income has increased in the district
- o The unemployment rate is lower than the State of Missouri

Demographics

	Platte County R-III School District	Park Hill School District	North Kansas City 74 School District	Platte City	Platte County	Clay County	Missouri
Unemployment Rate	2.9%	2.6%	3.7%	3.2%	2.6%	3.3%	3.5%
Average Household Size	2.41	2.48	2.38	2.29	2.49	2.50	2.41
Median Age	37.8	39.7	38.8	38.9	40.2	38.2	39.6
Total Population	28,484	77,162	142,854	4,822	110,691	259,794	6,186,582
Median Household Income	\$83,583	\$89,079	\$67,356	\$69,538	\$89,024	\$75,934	\$61,811
Total Housing Units	12,389	32,740	62,748	2,240	46,837	108,121	2,814,998
Owner Occupied Housing	7,067	19,853	37,698	1,080	29,368	70,585	1,696,082
Renter Occupied Housing	4,635	10,842	21,982	948	14,614	32,441	802,324
Vacancy Rate	5.5%	6.2%	4.9%	9.5%	6.1%	4.7%	11.2%
	Platte County R-III School District	Park Hill School District	North Kansas City 74 School District	Platte City	Platte County	Clay County	Missouri
White	77.0%	72.8%	69.6%	81.5%	75.8%	75.8%	75.3%
Black	7.5%	9.3%	9.9%	4.4%	7.8%	7.2%	11.3%
American Indian/Alaskan	0.3%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%
Asian	2.3%	3.0%	3.2%	1.4%	2.6%	2.4%	2.2%
Pacific Islander	0.4%	0.9%	0.6%	0.6%	0.7%	0.4%	0.2%
Other Race	0.6%	0.4%	0.5%	0.4%	0.4%	0.4%	0.4%
Two or More Races	5.3%	5.8%	6.4%	5.3%	5.6%	5.9%	5.3%
Hispanic	6.6%	7.5%	9.4%	6.1%	6.8%	7.5%	5.0%

Source: U.S. Census, ESRI BAO

- Demographic attribute information for Platte County R-3 School District is similar to Platte County
- The Median Age is the lowest in Platte County R-3 School District when compared to neighboring geographies
- The Unemployment Rate is lower than the State of Missouri (estimates from July 2021 from the US Census)
- The Median Household Income in Platte County R-3 School District is higher than the State of Missouri

Employment Information

Employment	Platte County R-III School District	Park Hill School District	North Kansas City 74 School District	Platte City	Platte County	Clay County	Missouri
2022 Agriculture/Mining (SIC01-14) Employees	0.8%	1.2%	0.4%	0.4%	1.2%	0.6%	1.4%
2022 Construction (SIC15-17) Employees	3.8%	3.8%	2.5%	2.3%	3.9%	2.7%	3.7%
2022 Manufacturing (SIC20-39) Employees	4.2%	8.0%	16.3%	0.5%	7.5%	12.9%	8.7%
2022 Transportation (SIC40-47) Employees	11.0%	5.5%	3.1%	1.9%	6.5%	2.9%	3.0%
2022 Communication (SIC48) Employees	0.1%	0.9%	0.3%	0.1%	0.8%	0.4%	0.9%
2022 Utility (SIC49) Employees	1.0%	0.2%	0.1%	0.2%	0.3%	0.2%	0.6%
2022 Wholesale Trade (SIC50-51) Employees	2.7%	6.0%	5.3%	0.7%	5.4%	5.3%	3.8%
2022 Home Improvement (SIC52) Employees	2.1%	1.2%	1.0%	0.8%	1.4%	1.5%	1.3%
2022 General Merchandise (SIC53) Employees	5.7%	2.6%	1.4%	0.5%	2.1%	2.7%	2.3%
2022 Food Stores (SIC54) Employees	1.7%	3.0%	2.4%	3.2%	2.7%	3.0%	2.4%
2022 Auto Dealer/Gas Station (SIC55) Employees	2.2%	3.3%	3.2%	4.5%	3.0%	2.9%	2.2%
2022 Apparel/Accessory (SIC56) Employees	0.3%	3.1%	0.2%	0.0%	2.5%	0.2%	0.6%
2022 Furniture/Home Furnishings (SIC57) Employees	0.1%	0.7%	0.4%	0.1%	0.6%	0.6%	0.7%
2022 Eating & Drinking (SIC58) Employees	8.6%	10.5%	5.8%	16.0%	10.0%	7.5%	7.0%
2022 Miscellaneous Retail (SIC59) Employees	3.7%	2.9%	2.1%	3.1%	2.9%	2.4%	3.3%
2022 Banks (SIC60-61) Employees	1.4%	1.7%	1.0%	3.3%	1.7%	1.4%	1.9%
2022 Securities Broker (SIC62) Employees	0.1%	0.4%	0.5%	0.2%	0.4%	0.4%	0.7%
2022 Insurance (SIC63-64) Employees	0.9%	0.8%	0.6%	1.0%	0.7%	0.8%	1.4%
2022 Real Estate/Holding (SIC65-67) Employees	3.0%	1.9%	3.8%	1.9%	2.1%	3.3%	2.3%
2022 Hotel/Lodging (SIC70) Employees	3.8%	2.9%	0.9%	1.8%	3.6%	0.9%	1.3%
2022 Auto Services (SIC75) Employees	4.7%	1.9%	1.6%	1.7%	2.4%	1.9%	1.4%
2022 Movie/Amusement (SIC78-79) Employees	2.7%	8.6%	9.6%	0.9%	7.2%	7.0%	2.8%
2022 Health Services (SIC80) Employees	4.0%	7.7%	8.4%	5.1%	6.7%	9.5%	13.1%
2022 Legal Services (SIC81) Employees	0.5%	0.4%	0.7%	1.0%	0.5%	0.7%	1.0%
2022 Education/Library (SIC82) Employees	10.2%	6.1%	4.7%	19.5%	7.8%	6.3%	8.6%
2022 Other Service (SIC72-89SEL) Employees	12.8%	11.1%	21.0%	14.5%	11.6%	17.9%	16.3%
2022 Government (SIC91-97) Employees	7.3%	2.1%	2.2%	14.4%	3.4%	2.9%	6.3%
2022 Unclassified Establishments (SIC99) Employees	0.5%	1.4%	0.5%	0.4%	1.2%	0.8%	0.7%

Source; U.S. Census and Esri BAO

- Highest percentage of employess are in Other Services (12.8%)
- When compared to all neighboring geographies, Platte County R-3 School District has a greater percentage of employees working in Government and lower percentage of employees working in Transportation

Intra-District Transfer Table

		Atte	nd	
Reside	Compass	Pathfinder	Siegrist	Attend Total
Compass Elementary	0	1	29	30
Pathfinder Elementary	3	0	7	10
Siegrist Elementary	13	0	0	13
Grand Total	16	1	36	53

Source: RSP and Platte County R-3 School District

Observations:

- o Illustrates school choice that could be impacted by location of educational programming
- Reviewed on an annual basis and approved based on capacity availability
- Siegrist ES had the most transferring in (+36)
- Compass ES had the most transferring out (-30)
- \circ 53 elementary students chose to attend a school outside of where they reside

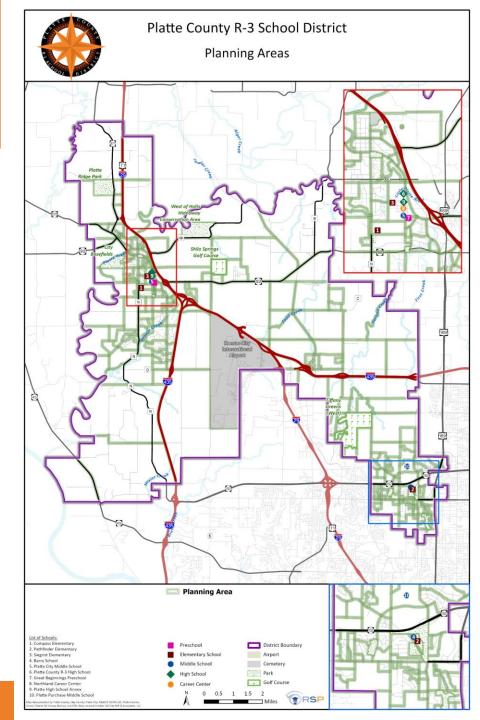
NOTE: The schools in the left column are associated with the current attendance area. Reading to the right indicates a school choice change from where they are assigned based on the Reside attendance area. For example: Compass has 30 students attending a different elementary school and 16 students from another elementary school choosing to attend Compass. This results in a 14 less students attending Compass than what reside in that attendance area.

Planning Areas Map

Map Details

- District Boundary: Purple Line
- o Planning Areas: Green Line
 - Planning Areas are created from: Land Use, Residential Density, Natural Features, Manmade Features, Attendance Areas

- 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

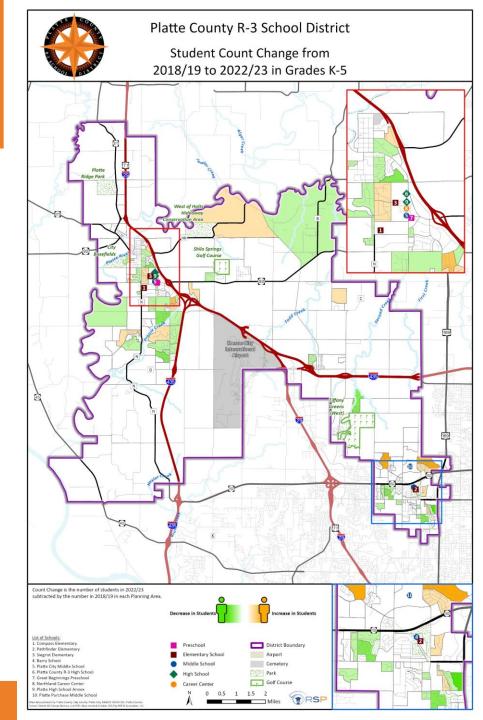


Elementary Student Count Change Map

Map Details

- Depicts student movement at each Planning Area from 2018/19 to 2022/23
- o Orange: student increase year to year
- o Green: student decrease year to year
- White: no net change of students

- New developments have a greater propensity to have more students in future years
- Current colors do not indicate area will continue to increase or decrease
- Each of these planning areas are fluid with respect to change – the visual shown is a snapshot: Areas shown as increasing will not always increase just like areas shown as decreasing will not always decrease

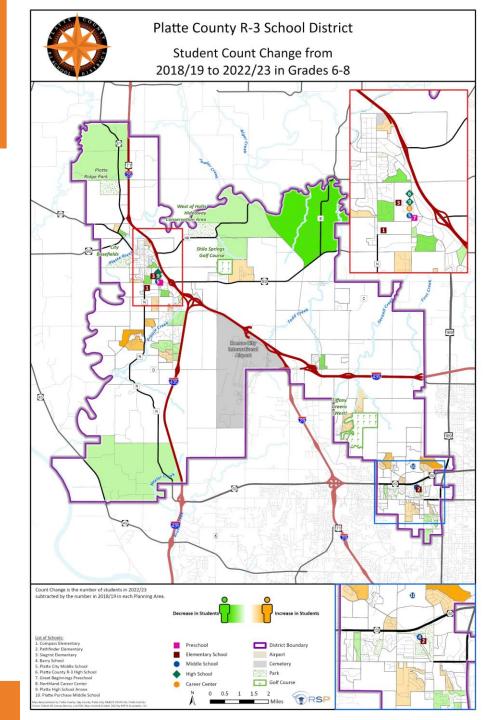


Middle School Student Count Change Map

Map Details

- Depicts student movement at each Planning Area from 2018/19 to 2022/23
- o Orange: student increase year to year
- o Green: student decrease year to year
- White: no net change of students

- New developments have a greater propensity to have more students in future years
- Current colors do not indicate area will continue to increase or decrease
- Each of these planning areas are fluid with respect to change – the visual shown is a snapshot: Areas shown as increasing will not always increase just like areas shown as decreasing will not always decrease

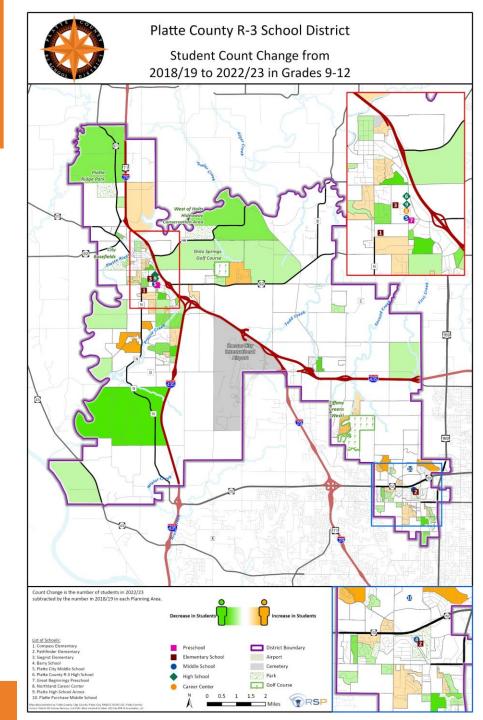


High School Student Count Change Map

Map Details

- Depicts student movement at each Planning Area from 2018/19 to 2022/23
- o Orange: student increase year to year
- o Green: student decrease year to year
- White: no net change of students

- New developments have a greater propensity to have more students in future years
- Current colors do not indicate area will continue to increase or decrease
- Each of these planning areas are fluid with respect to change – the visual shown is a snapshot: Areas shown as increasing will not always increase just like areas shown as decreasing will not always decrease



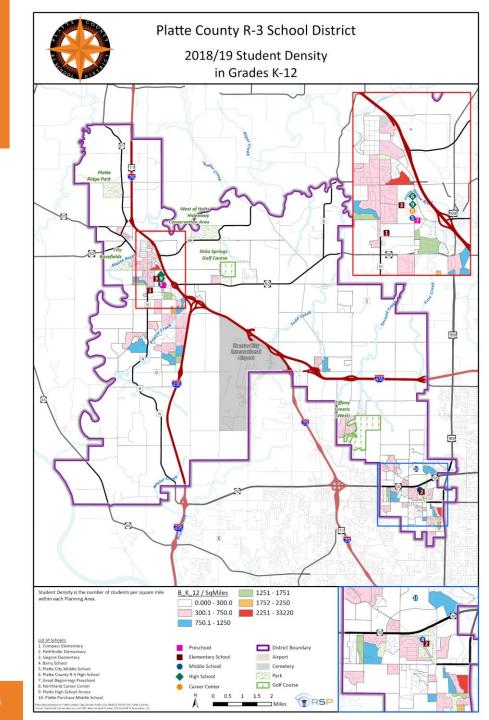
2018/19 Student Density Map

Map Details:

 Shows students density by planning area in 2018/19 school years

$\circ~\text{Legend}$

- White: Less than 300 students
- Pink: 300 to 750 students
- Blue: 751 to 1,250 students
- Green: 1,251 to 1,750 students
- Orange: 1,751 to 2,250 students
- Red: over 2,250 students



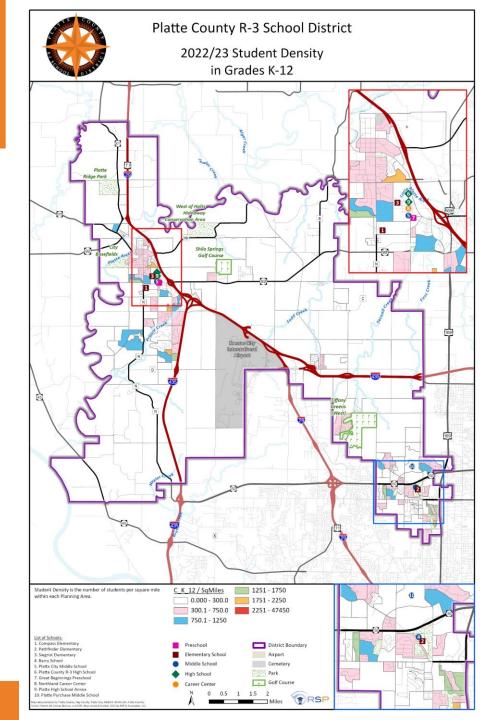
2022/23 Student Density Map

Map Details:

 Shows students density by planning area in 2022/23 school years

$\circ~\text{Legend}$

- White: Less than 300 students
- Pink: 300 to 750 students
- Blue: 751 to 1,250 students
- Green: 1,251 to 1,750 students
- Orange: 1,751 to 2,250 students
- Red: over 2,250 students

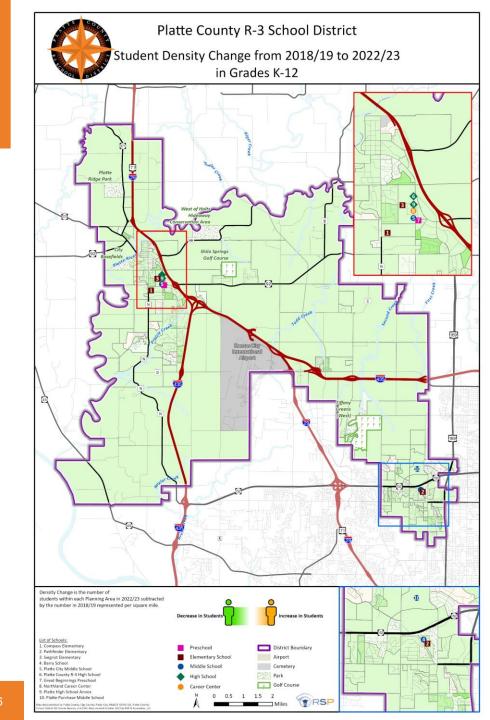


Student Density Change Map (18/19 to 22/23)

Map Details

- Depicts student movement at each Planning Area from 2018/19 to 2022/23
- o Orange: student increase year to year
- o Green: student decrease year to year
- White: no net change of students

- New developments have a greater propensity to have more students in future years
- Current colors do not indicate area will continue to increase or decrease
- Each of these planning areas are fluid with respect to change – the visual shown is a snapshot: Areas shown as increasing will not always increase just like areas shown as decreasing will not always decrease



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 11th 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 1st to 12th 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