Planning for the Future

District OR-1: Bennet & Palmyra, Nebraska

2021/22 Enrollment Analysis

Presented December 2021

Discussion Points – *What to expect*

Part 1
Enrollment

- ► Things to consider
- ► Maps & Data
- ► Sophisticated Forecast Model
- ► Demographics
- ► Past Enrollment & Change

Part 2
Development
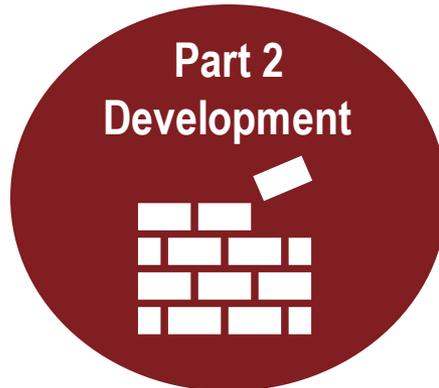
- ► Population, Development, & Enrollment Trends
- ► Yield Rate
- ► Maps & Data

Part 3
Projections

- ► Projection Accuracy
- ► Past, Current, & Future Enrollment
- ► Building Projections

Part 4
Next Steps

- ► Next Steps
- ► Key Considerations
- ► Appendix & Supplementary Materials

RSP & Associates

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

We have served over 130 client in 11 states – Arkansas, Iowa, Illinois, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, and Wisconsin

Expectations

► 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 finding 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 influences 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.

Part One: Enrollment
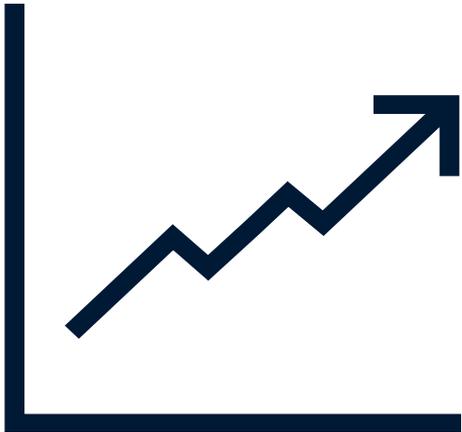
100,000 Foot Perspective

Enrollment

District Enrollment
- Current enrollment saw increase of 26 students from previous year
- Has seen steady increases in last 10 years
- Live birth rate declining, consistent with national trends

Class Sizes
- Larger elementary (specifically kindergarten and Pre-K) class sized that secondary classes
- District-wide increases at grade levels
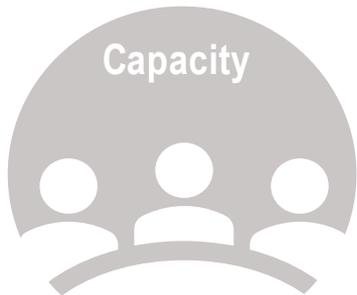
Capacity

Capacity
- Provided by district administration
- Elementary Capacity is inadequate for both Reside and Attend enrollment currently and through the projection time frame
- Secondary Capacity is inadequate for Reside in 2026/27 and Attend from 2022/23 going forward

Development

Growth
- Three areas of current growth
- Growth centered around City of Bennet

Current Housing Inventory
- Majority of inventory built before 1980
- Saw only 5 units built last year
- 2021 building data is unavailable currently

District Boundary

District Boundary – Bennet & Palmyra
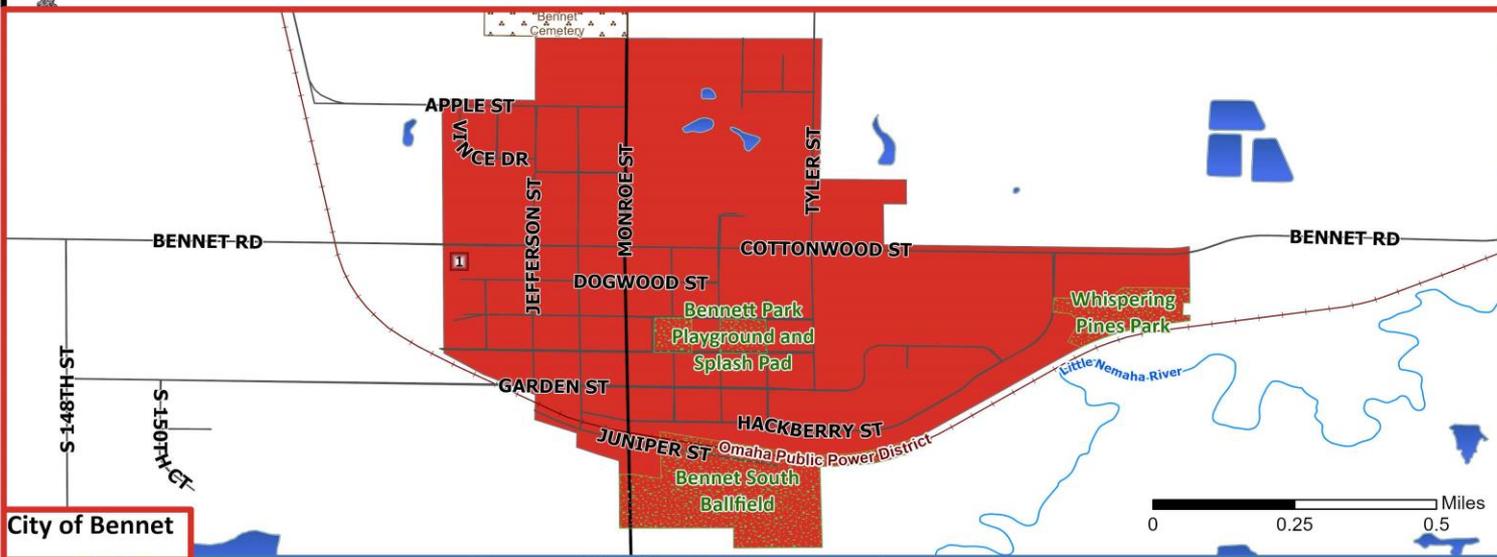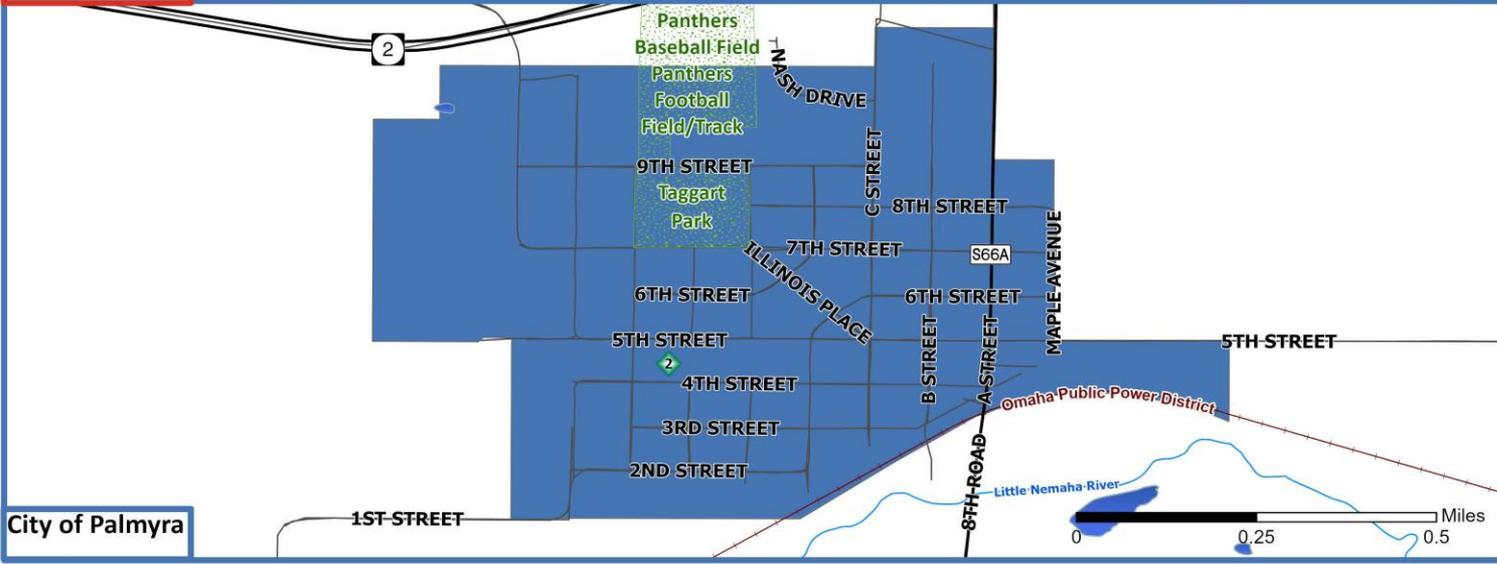
Planning Areas

District OR-1 Public Schools: Planning Areas
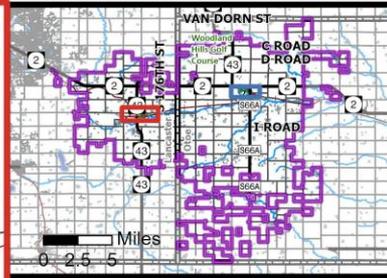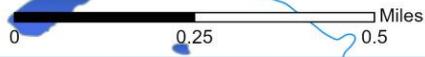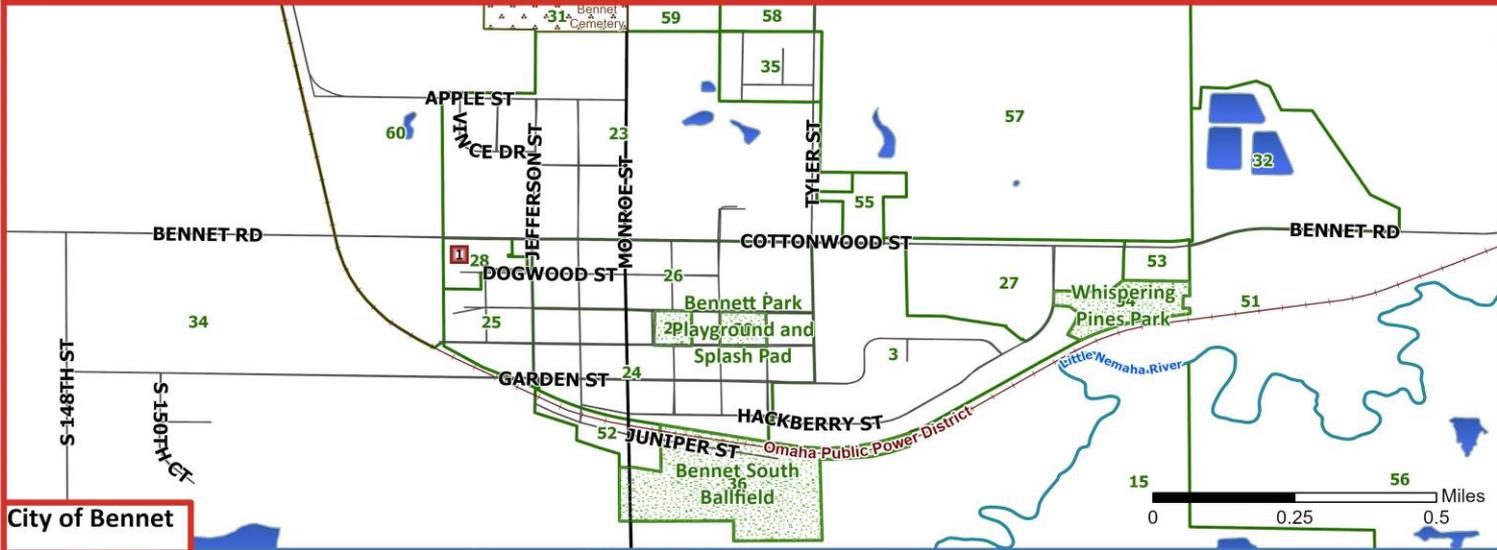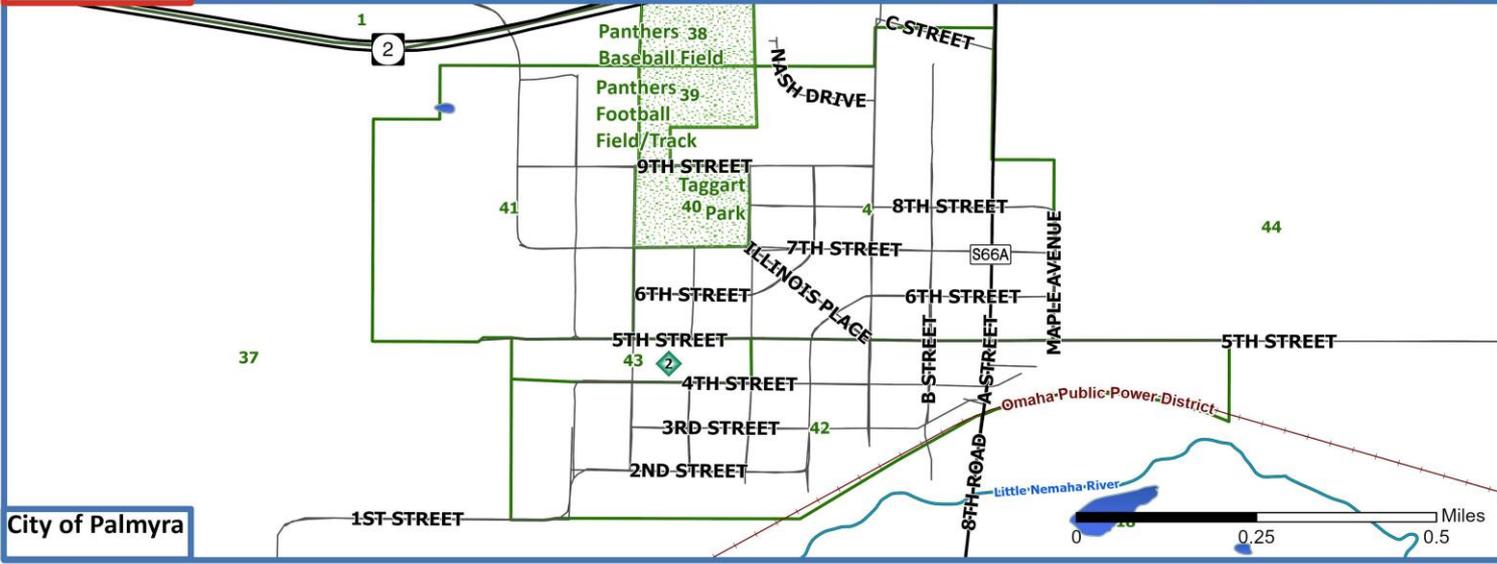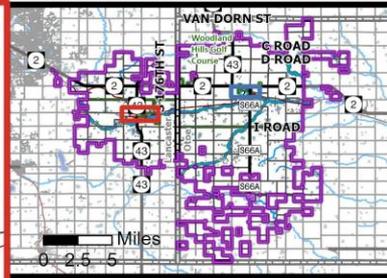
List of Schools
1. Bennet Elementary
2. Palmyra Jr-Sr High School

District Boundary
Bennet Elementary School
Palmyra Jr-Sr High School
Counties
Cemetery
Golf Course
Park and Recreation
Planning Area

Map Data provided by District OR-1 Public Schools, Lancaster County, Otoe County, Cities of Bennet, Palmyra, and Douglas, State of Nebraska, USGS, and ESRI. Map created October 2021.

Planning Areas Detail

District OR-1 Public Schools: Planning Areas-Detail

Sophisticated Forecast Model (SFM)

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

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

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

Over 60 planning areas analyzed in this study
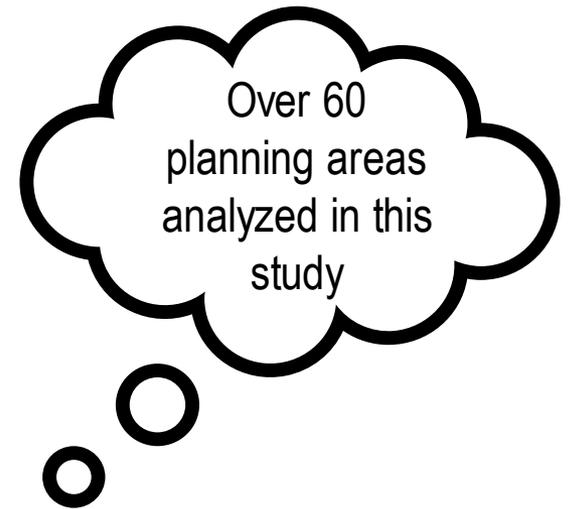
This is the **central focus** of everything RSP does.

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.

RSP Sophisticated Forecast Model Details

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)

Birth Information (Lancaster)

Lancaster County Nebraska Live Births and District OR-1 Kindergarten 5-Years Later

Calendar Year	# Live Births	Birth Change	% Birth Change	School Year	# Kdg	%Kdg of Live Births
2005	4,067			2010/11	13	0.3%
2006	4,095	28	0.7%	2011/12	14	0.3%
2007	4,170	75	1.8%	2012/13	16	0.4%
2008	4,226	56	1.3%	2013/14	30	0.7%
2009	4,160	-66	-1.6%	2014/15	23	0.6%
2010	4,153	-7	-0.2%	2015/16	15	0.4%
2011	3,951	-202	-4.9%	2016/17	26	0.7%
2012	4,115	164	4.2%	2017/18	32	0.8%
2013	4,030	-85	-2.1%	2018/19	29	0.7%
2014	4,115	85	2.1%	2019/20	33	0.8%
2015	4,067	-48	-1.2%	2020/21	34	0.8%
2016	4,020	-47	-1.2%	2021/22	28	0.7%
2017	3,925	-95	-2.4%	2022/23	30	
2018	3,893	-32	-0.8%	2022/24	30	
2019	3,671	-222	-5.7%	2022/25	28	
3-Year Average	3,829.7	-116.3				
3-Year Weighted Average	3,787.3	-137.5				

Source: Nebraska Department of Health & Human Services and District OR-1

Projections based on 3-year weighted average of % kdg of live births(0.8%)

- ► Live birth data decreased in the last five years
- ► Consistent with national trends
- ► District OR-1 saw relatively stable kindergartener percentage of live births, despite lower live births
- ► 2019 saw 222 less births than 2018 (Largest decrease year to year)
- ► Last increase in live births was 2014 with 85 more than 2013
- ► District OR-1 has a range of 0.3% to 0.8% of Lancaster County live births five years later
- ► # of Kdg are District OR-1 students who live in the district boundary and in Lancaster County

Birth Information (Otoe)

Otoe County Nebraska Live Births and District OR-1 Kindergarten 5-Years Later

Calendar Year	# Live Births	Birth Change	% Birth Change	School Year	# Kdg	%Kdg of Live Births
2005	195			2010/11	17	8.7%
2006	189	-6	-3.1%	2011/12	18	9.5%
2007	209	20	10.6%	2012/13	6	2.9%
2008	200	-9	-4.3%	2013/14	15	7.5%
2009	220	20	10.0%	2014/15	14	6.4%
2010	181	-39	-17.7%	2015/16	15	8.3%
2011	212	31	17.1%	2016/17	19	9.0%
2012	180	-32	-15.1%	2017/18	8	4.4%
2013	189	9	5.0%	2018/19	19	10.1%
2014	200	11	5.8%	2019/20	25	12.5%
2015	219	19	9.5%	2020/21	20	9.1%
2016	202	-17	-7.8%	2021/22	16	7.9%
2017	197	-5	-2.5%	2022/23	18	
2018	189	-8	-4.1%	2022/24	17	
2019	179	-10	-5.3%	2022/25	16	
3-Year Average	188.3	-7.7				
3-Year Weighted Average	185.3	-8.5				

Source: Nebraska Department of Health & Human Services and District OR-1

Projections based on 3-year weighted average of % kdg of live births (9.1%)

► Live birth data decreased in the last four years

► Consistent with national trends

► District OR-1 saw lower kindergartener percentage of live births in the last two years

► 2019 saw 10 less births than 2018 (Largest decrease year to year since 2016)

► Last increase in live births was 2015 with 19 more than 2014

► District OR-1 has a range of 2.9% to 12.5% of Otoe County live births five years later

► # of Kdg are District OR-1 students who live in the district boundary and in Otoe County

Enrollment by Grade

Enrollment By Grade

Year	PK	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	PK-12 Total	PK-12 Change	PK-12 % Change	K-12 Total	K-12 Change	K-12 % Change
2010/11	23	39	30	29	27	35	28	35	32	25	35	26	39	34	437	437		414	414	
2011/12	24	36	42	30	32	25	37	29	38	29	23	40	26	31	442	5	1.1%	418	4	1.0%
2012/13	26	31	34	38	32	30	25	39	27	38	24	29	36	26	435	*-7*	-1.6%	409	*-9*	-2.2%
2013/14	27	48	29	38	38	31	32	24	34	24	39	22	26	37	449	14	3.2%	422	13	3.2%
2014/15	28	43	49	35	33	42	30	35	28	35	28	39	24	31	480	31	6.9%	452	30	7.1%
2015/16	36	34	41	45	34	34	40	26	30	26	32	26	37	28	469	*-11*	-2.3%	433	*-19*	-4.2%
2016/17	31	49	33	45	42	32	37	39	28	36	25	37	29	39	502	33	7.0%	471	38	8.8%
2017/18	55	44	52	38	49	45	33	38	38	28	33	27	35	30	545	43	8.6%	490	19	4.0%
2018/19	64	59	39	52	42	47	49	35	38	38	31	33	26	34	587	42	7.7%	523	33	6.7%
2019/20	66	66	60	38	49	43	47	47	41	42	35	29	34	29	626	39	6.6%	560	37	7.1%
2020/21	58	64	56	56	43	49	41	49	46	40	38	35	30	33	638	12	1.9%	580	20	3.6%
2021/22	60	55	59	61	58	45	49	44	50	44	34	39	37	29	664	26	4.1%	604	24	4.1%

Source: District OR-1 Public Schools

Observations

▶ Largest 2021/22 class: 2nd grade with 61 students

▶ Smallest 2021/22 class: 12th grade with 29 students

▶ Pre-Kindergarten enrollment: saw an increase from 2010/11 of over 150% students, creating a solid inflow of kindergarten students

▶ District-Wide Enrollment: saw an increase from 2020/21 of 26 students

Cohort Student Observation

Enrollment Grade Change

| From	To	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	PK-12 Change	PK-12 % Change
2010/11	2011/12	-3	3	0	3	-2	2	1	3	-3	-2	5	0	-8	5	1.1%
2011/12	2012/13	-5	-2	-4	2	-2	0	2	-2	0	-5	6	-4	0	-7	-1.6%
2012/13	2013/14	17	-2	4	0	-1	2	-1	-5	-3	1	-2	-3	1	14	3.2%
2013/14	2014/15	-5	1	6	-5	4	-1	3	4	1	4	0	2	5	31	6.9%
2014/15	2015/16	-9	-2	-4	-1	1	-2	-4	-5	-2	-3	-2	-2	4	-11	-2.3%
2015/16	2016/17	15	-1	4	-3	-2	3	-1	2	6	-1	5	3	2	33	7.0%
2016/17	2017/18	-5	3	5	4	3	1	1	-1	0	-3	2	-2	1	43	8.6%
2017/18	2018/19	15	-5	0	4	-2	4	2	0	0	3	0	-1	-1	42	7.7%
2018/19	2019/20	7	1	-1	-3	1	0	-2	6	4	-3	-2	1	3	39	6.6%
2019/20	2020/21	-2	-10	-4	5	0	-2	2	-1	-1	-4	0	1	-1	12	1.9%
2020/21	2021/22	-9	-5	5	2	2	0	3	1	-2	-6	1	2	-1	26	4.1%
3-Yr Avg		-1.3	-4.7	0.0	1.3	1.0	-0.7	1.0	2.0	0.3	-4.3	-0.3	1.3	0.3	25.7	4.2%
3-Yr Weighted Avg		-4.0	-5.7	1.0	2.2	1.2	-0.7	1.8	1.2	-0.7	-4.8	0.2	1.5	-0.3	23.5	3.8%

Source: District OR-1 Public Schools

Observation

▸ The largest average K-12 class increase on 3-yr average was 6th to 7th grade with 2 students

▸ The largest average K-12 class decrease on 3-yr average was 8th to 9th grade with 4.3 students

In-Migration Map

District OR-1 Public Schools: Student In-Migration
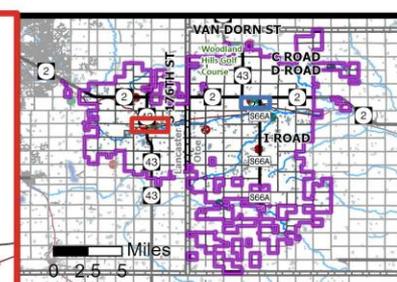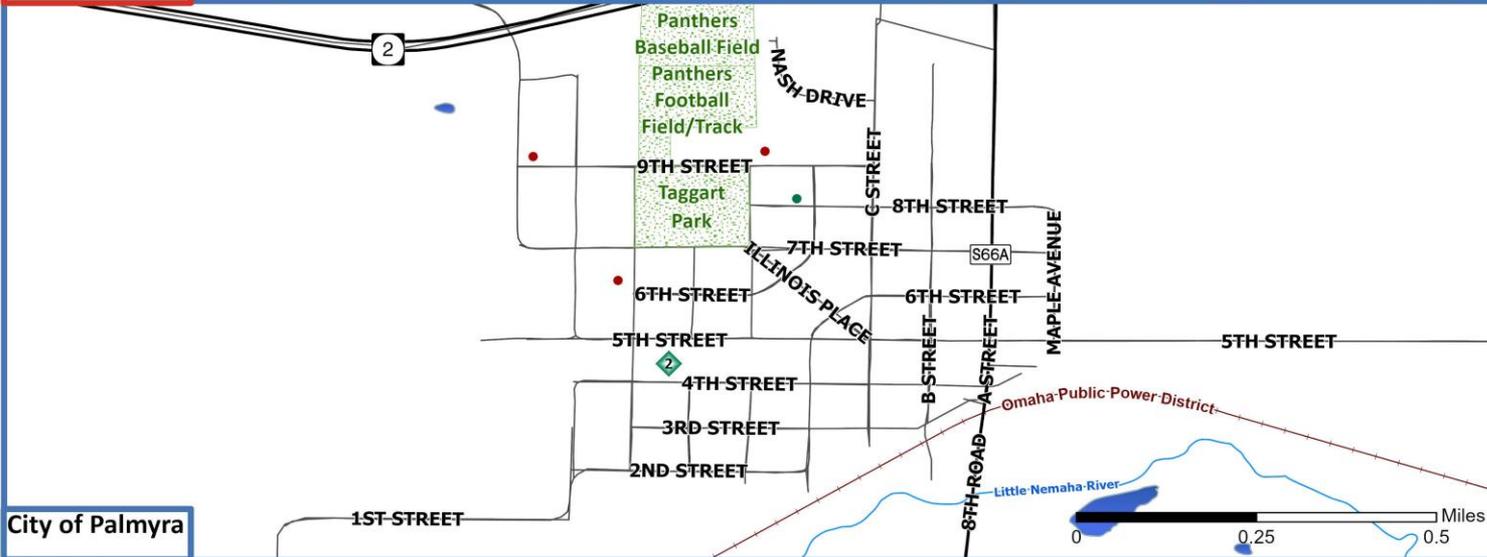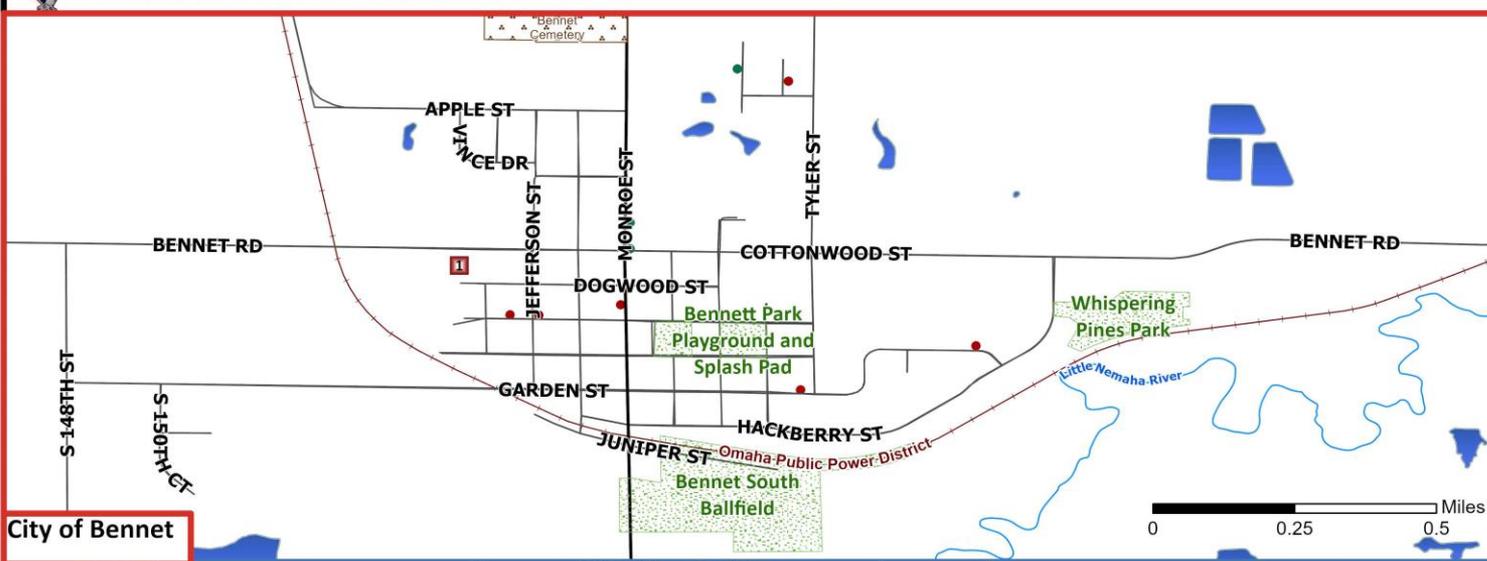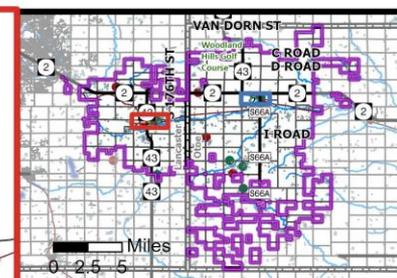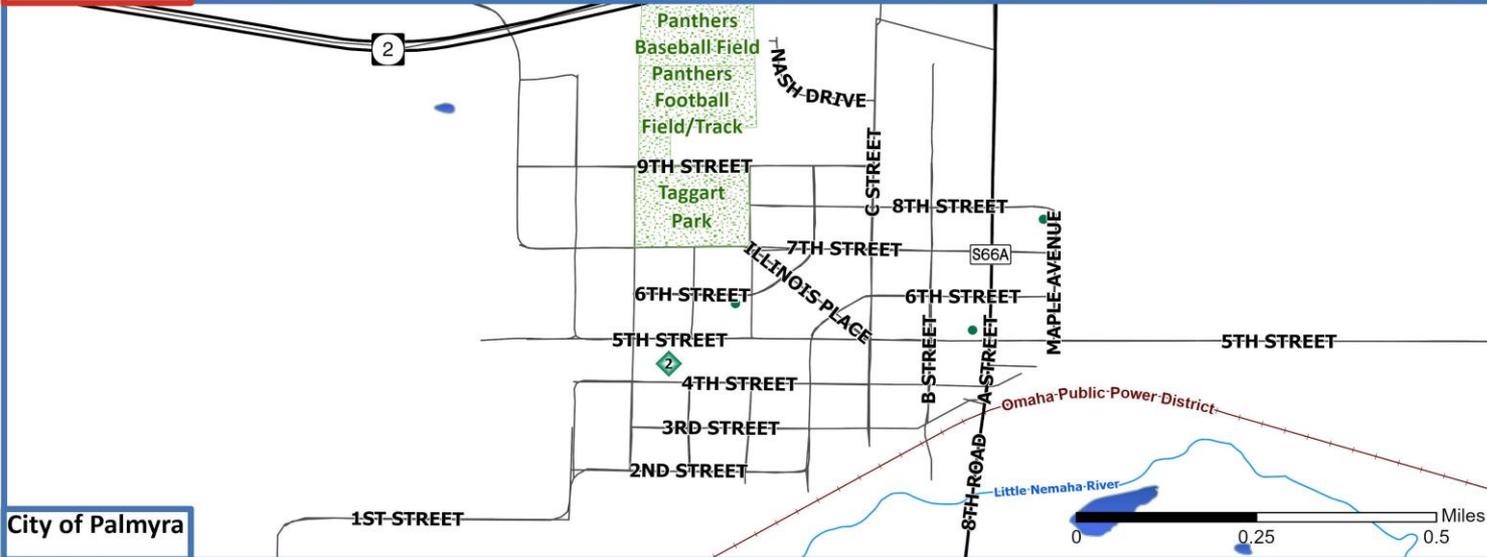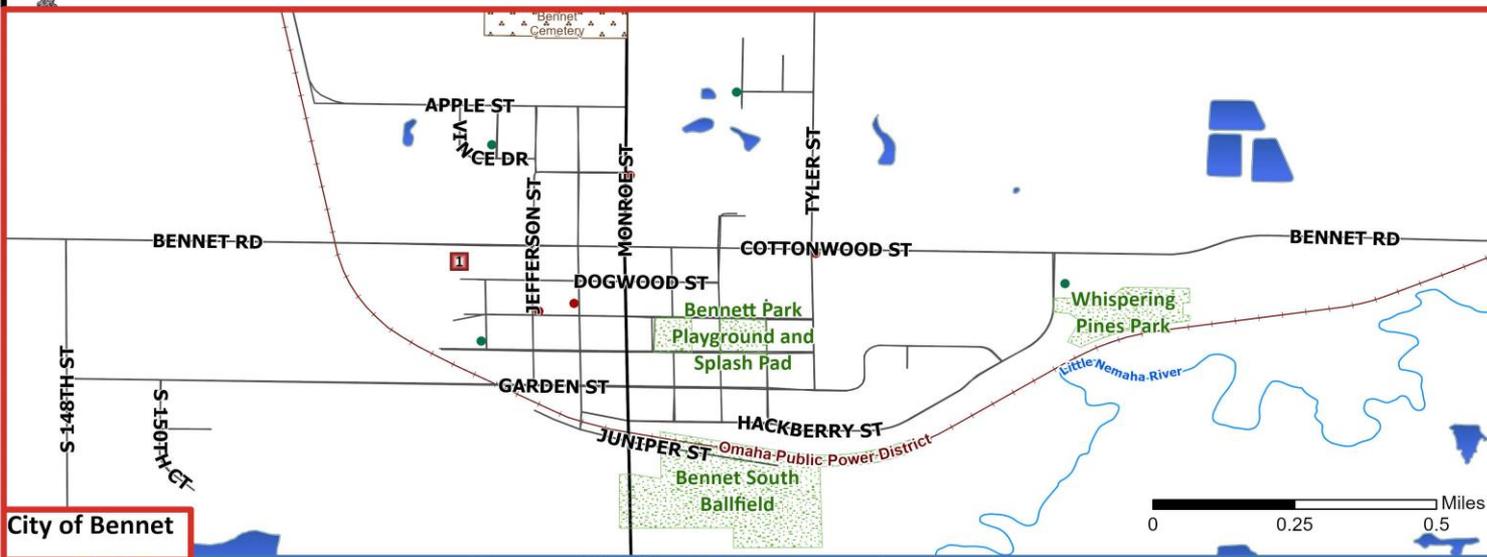
In-Migration is defined as Students in Grades 1-12 that are attending the District in 2021/22 but were not attending the District in 2020/21.

List of Schools
1. Bennet Elementary
2. Palmyra Jr-Sr High School

- District Boundary
- Bennet Elementary School
- Palmyra Jr-Sr High School
- Counties
- Cemetery
- Golf Course
- Park and Recreation

Student In-Migration
- **Elementary (1-6): +22**
- **Jr-Sr High (7-12): +13**

District Total: +35

Map Data provided by District OR-1 Public Schools, Lancaster County, Otoe County, Cities of Bennet, Palmyra, and Douglas, State of Nebraska, USGS, and ESRI. Map created October 2021.

Out-Migration Map

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Out – Migration In – Migration

2021/22

Elementary School

-16 Net +8 +22

Jr/Sr High School

-17 Net -4 +13

-50 -40 -30 -20 -10 0 10 20 30 40 50

■ Students leaving the district   ■ Students entering the district
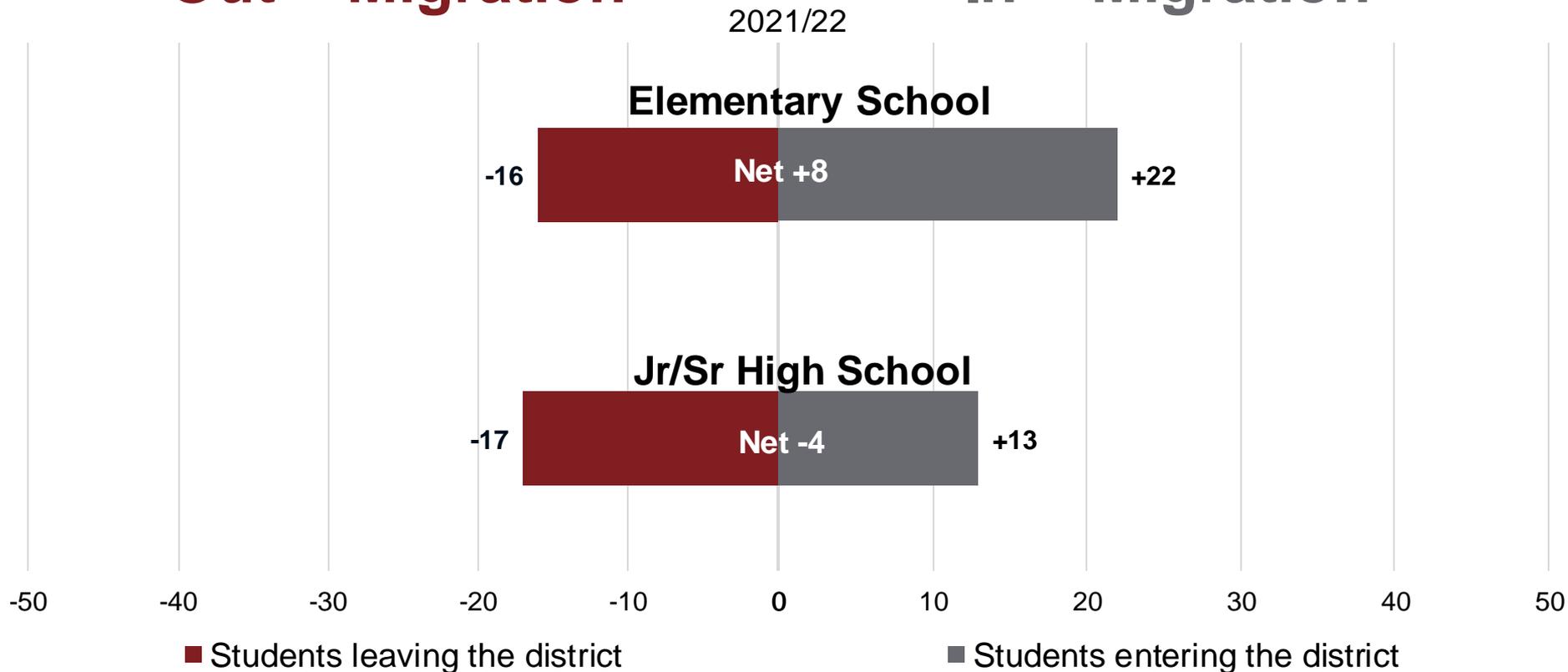
Overview
► In-Migration shows the number of students who attending 21/22 school year that did not attend last year; Out-Migration shows the number of students who attended school in the district last year, but in 21/22 school year they do not.

Observations
► OR-1 Public School saw 16 elementary students transfer out and 22 transfer in; net gain of 8 elementary students
► OR-1 Public School saw 17 Jr/Sr students transfer out and 13 transfer in; net loss of 4 students

Student Heat Map
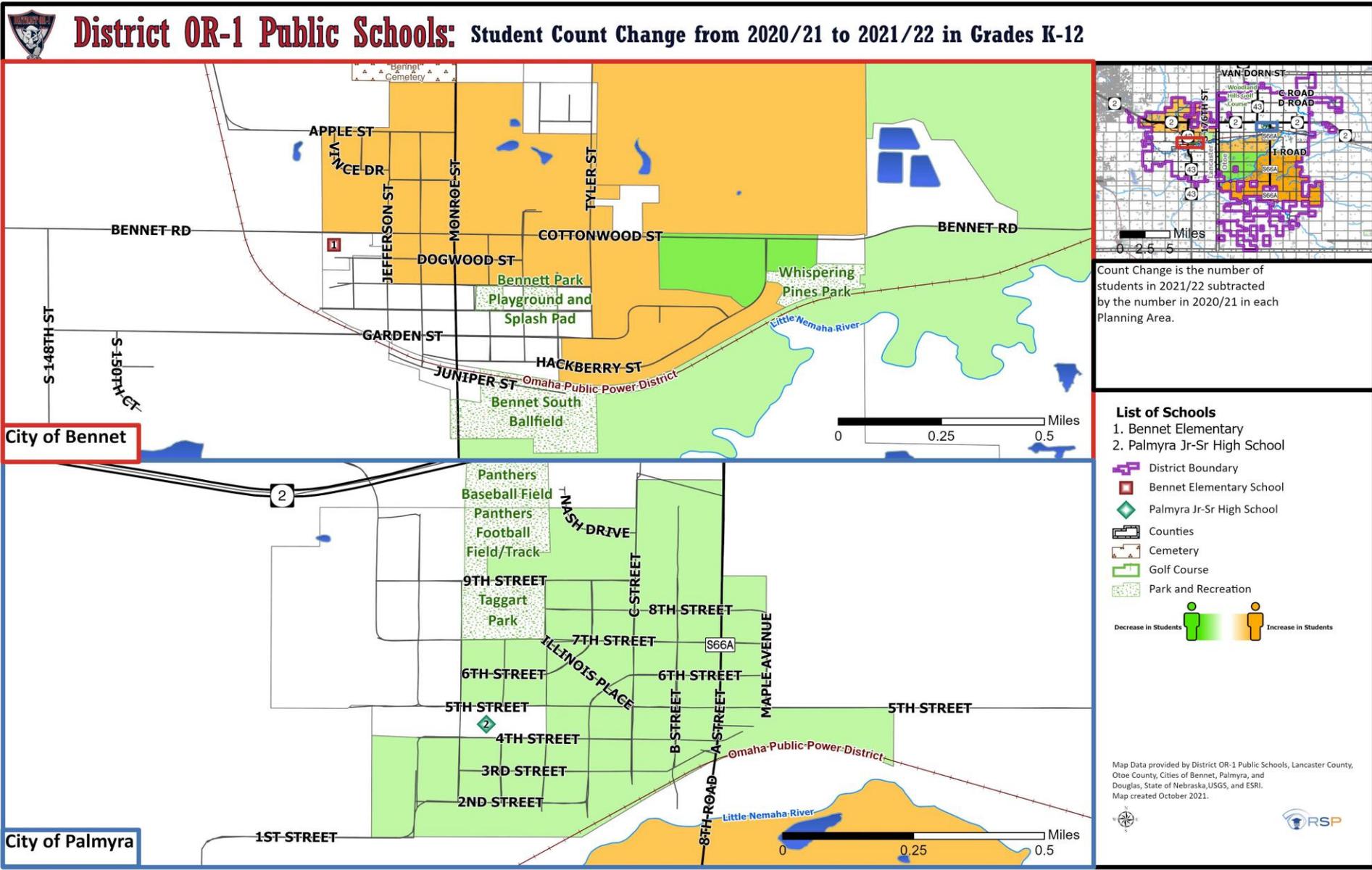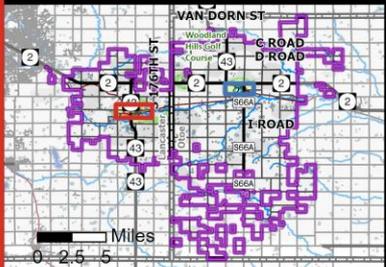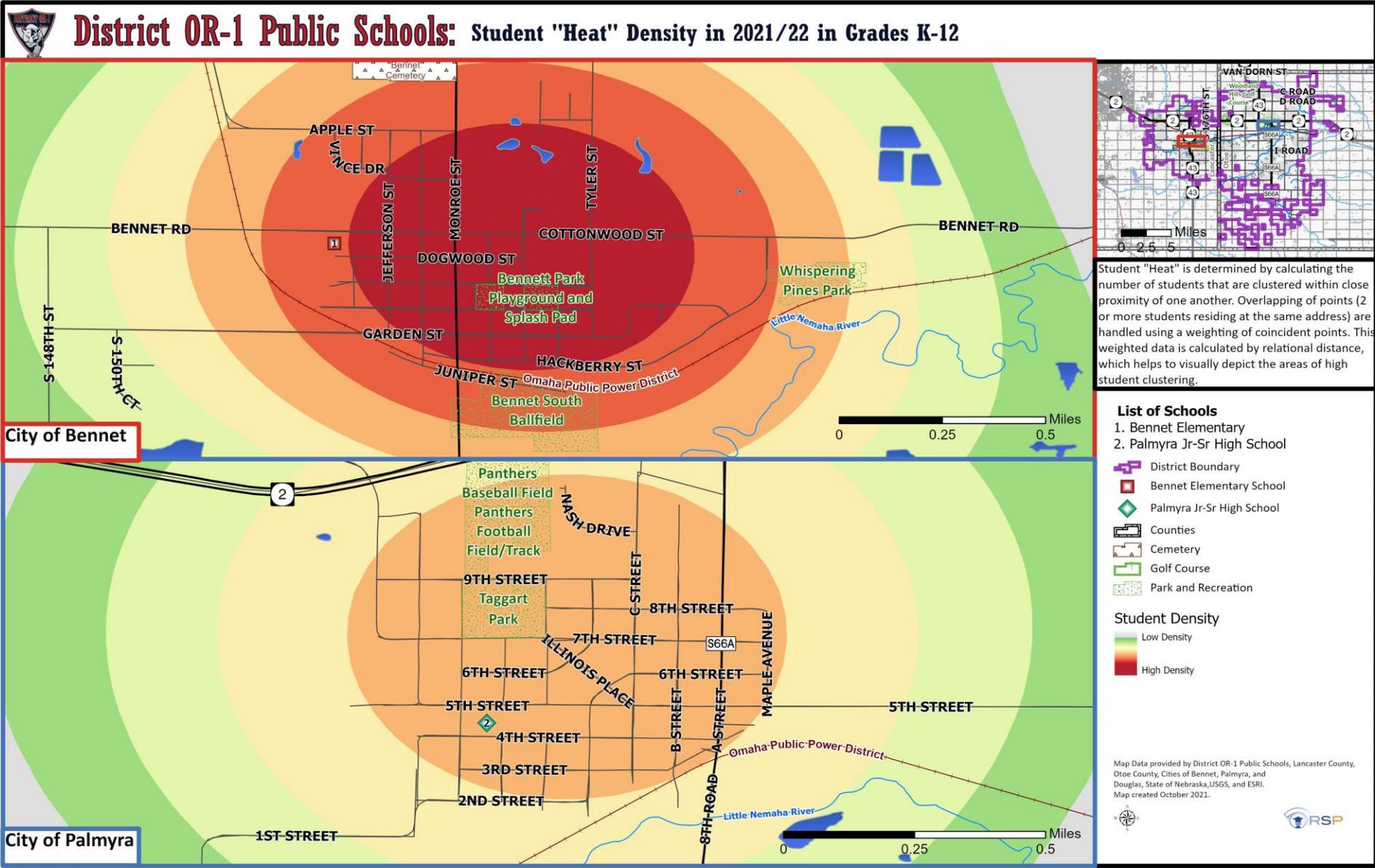
District OR-1 Public Schools: Student "Heat" Density in 2021/22 in Grades K-12

Total of Out of District Students

Out of District Students by Year and School District
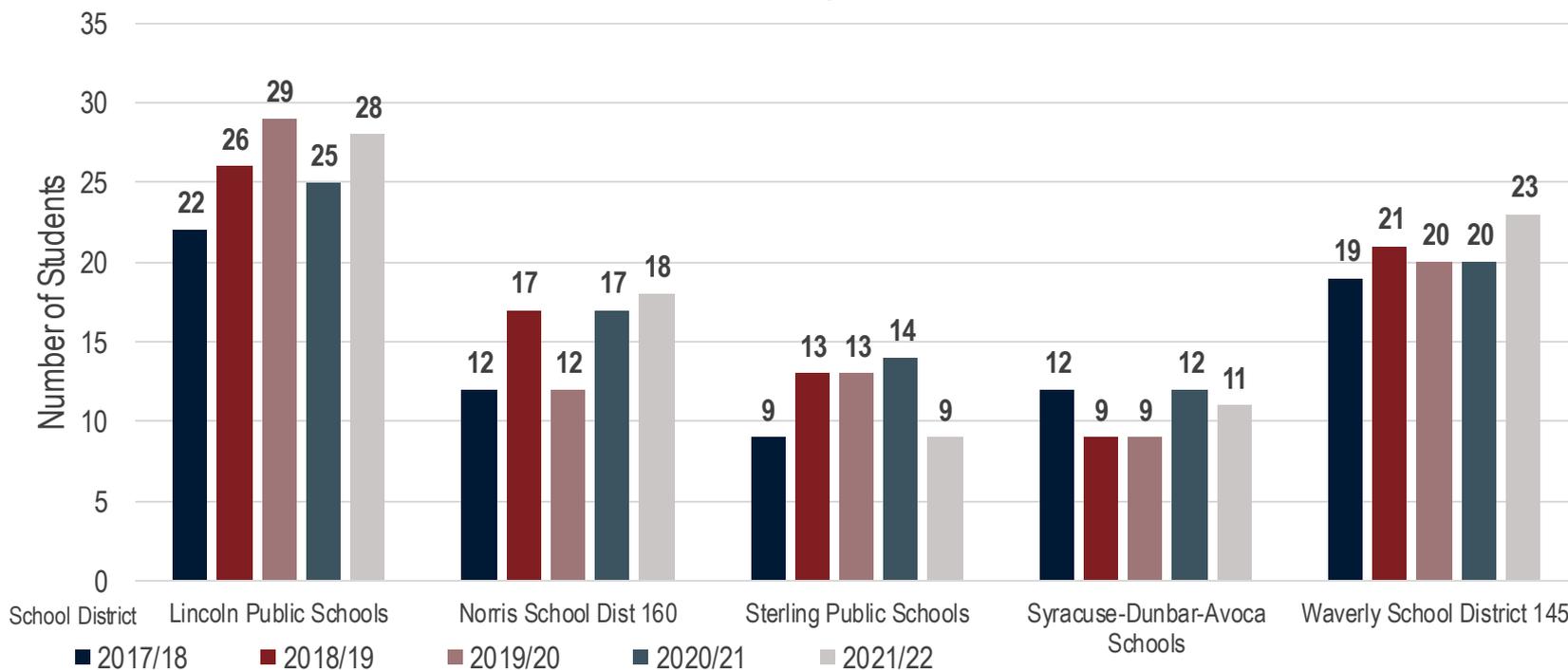
Source: District OR-1 Public Schools, RSP & Associates LLC, and Nebraska Department of Education

Overview
► This shows the number of students who attend the district but live outside of the district boundary
► This analysis used school districts that had at least 10 students for one of the years from grades K-12

Observation
► The number of students in these five years has ranged from 74 to 89. The years 20/21 and 21/22 had the most out of district students
► Norris School District 160 has the largest increase in out of district students from 17/18 to 21/22 (50.0%)
► Overall, Out of District Students has increased by 20.3% from 17/18 to 21/22

Percentage of Out of District Students by School District

2017/18
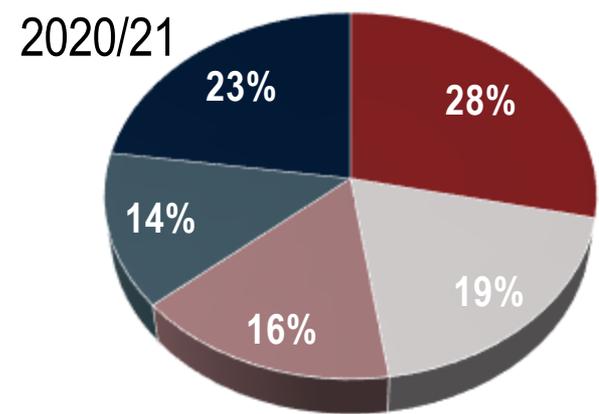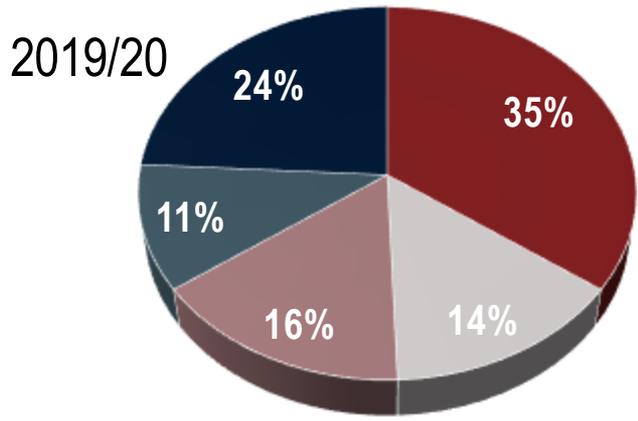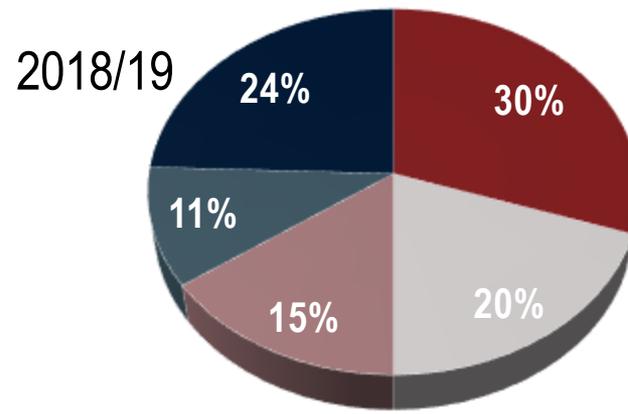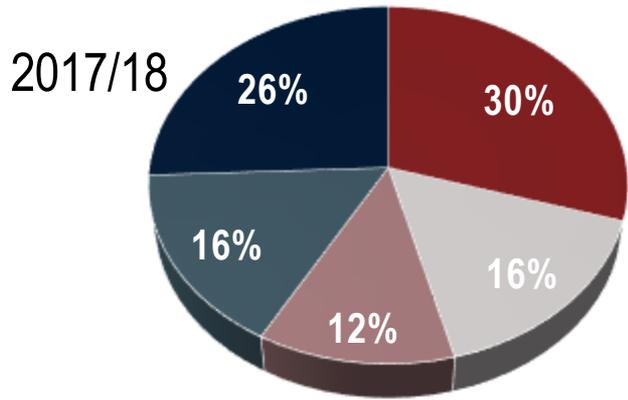
- Lincoln Public Schools
- Norris School Dist 160
- Sterling Public Schools
- Syracuse-Dunbar-Avoca Schools
- Waverly School District 145

2018/19

2019/20

2020/21

Source: District OR-1 Public Schools, RSP & Associates LLC, and Nebraska Department of Education

- ► This shows the percentage of out of district students by school district
- ► On average, most out of district students have come from Lincoln Public schools (31%) and Waverly School District (24%).

Percentage of Out of District

	Out of District Enrollment			Total Enrollment			Out of District Percentage		
	2019/20	2020/21	2021/22	2019/20	2020/21	2021/22	2019/20	2020/21	2021/22
Bennet Elementary	52	53	49	416	416	431	12.50%	12.74%	11.37%
Palmyra Secondary	43	43	42	210	222	233	20.48%	19.37%	18.03%
District Total	95	96	91	626	638	664	15.18%	15.05%	13.70%

► OR-1 sees around 15% of total enrollment from Out of District transfers

► Around 12% of Bennet Elementary enrollment comes from out of district transfers

► Around 18-20% of Palmyra Secondary enrollment comes from out of district transfers

► Open Enrollment policy consistency plays a role in this number – if this policy changes the number of out of district enrollment and total enrollment will change as well

► This could be factor when considering projected accuracy

Enrollment Observations – *conclusion*

Student Population:

► Live birth data for Lancaster and Otoe county has decreased in the last four years, consistent with national trends

► OR-1 district transfers had an elementary net gain of 8 students and secondary net loss of 4 students

► Majority of students live within the City of Bennet or City of Palmyra

 – City of Bennet has the highest concentration of students in the district

► OR-1 out of district students has increased by 20.3%

 – Most out of district students are transferring out of Lincoln Public Schools and Waverly School District

Historic Enrollment Observations:

► Total Enrollment has been steadily increasing

► The largest increase was from 2018/19 to 2019/20 of 39 students

► Pre-K enrollment saw a large increase from 2010/11 creating a solid inflow of kindergarten students

Current School Year Observations:

► Largest 2021/22 class: 2nd grade with 61 students

► Smallest 2021/22 class: 12th grade with 29 students

► District-Wide Enrollment: saw an increase from 2020/21 of 26 students

Part Two: Development

Population, Development, & Enrollment

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Certificate Occupancy	14	11	8	8	78	9	35	11	20	9	7
Enrollment Change	5	-7	14	31	-11	33	43	42	39	12	26
Population Change	34	35	35	36	36	37	37	38	38	39	50
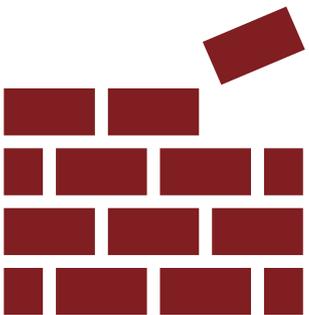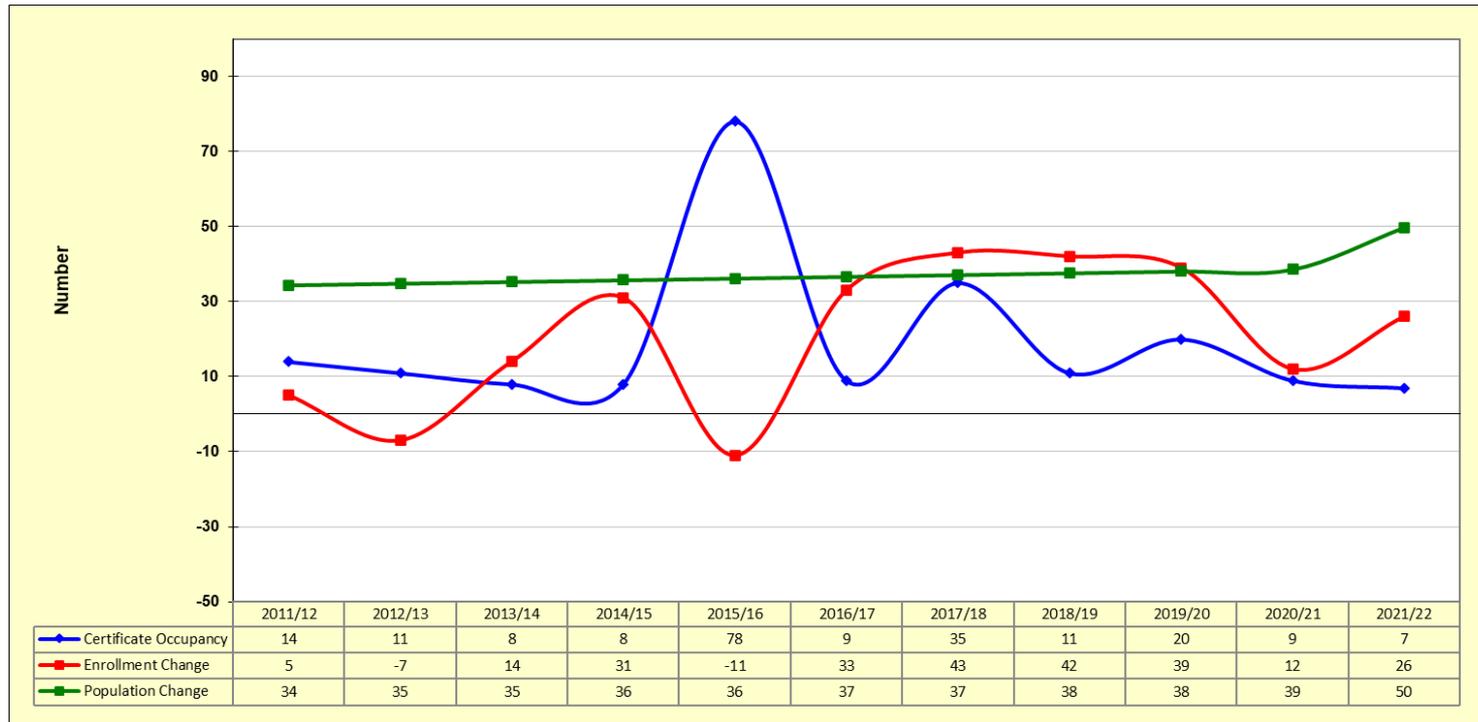
Source: ESRI, Otoe County, Lancaster County, Palmyra School District, and RSP

► Occupancy: Varied year to year has been less than 20 units a year

► Enrollment: Increasing the last six consecutive years

► Population: Steadily increased the past 11 years

Student Yield Rate Analysis

| Schools	Year												
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Avg
District Single Family (K-12):	0.31	0.32	0.3	0.31	0.33	0.3	0.32	0.32	0.34	0.36	0.37	0.39	0.33
District Multi-Family (K-12):	0.19	0.18	0.18	0.19	0.23	0.17	0.23	0.29	0.21	0.21	0.25	0.26	0.22

Sources: District OR-1, Lancaster County, ESRI (Otoe County), RSP & Associates

► On average, single-family development see 33 students per 100 households

► On average, multi-family development see 22 students per 100 households

► Multi-Family developments consist of mixed used, townhomes, etc.

► Single Family
  – 2021: 39 students per 100 households
  – 2020: 37 students per 100 households
  – 2019: 36 students per 100 households
  – 25.8% increase in yield rate from 2010 to 2021

► Multi-Family
  – 2021: 26 students per 100 households
  – 2020: 25 students per 100 households
  – 2019: 21 students per 100 households
  – 36.8% increase in yield rate from 2010 to 2021

► Single-Family yield rate has stayed relatively stable.

► Multi-Family yield rate has varied throughout the years.

  ► Mostly likely due to a small subset of the district having multi-family housing.

District OR-1 Public Schools: Median Home Value
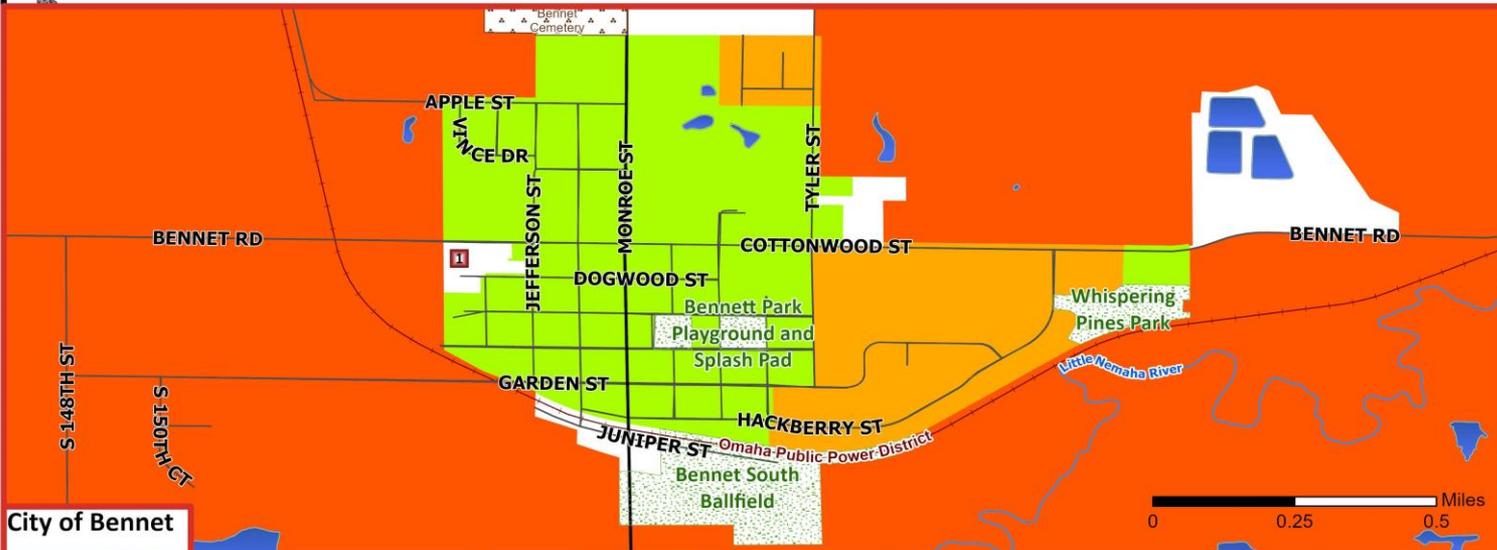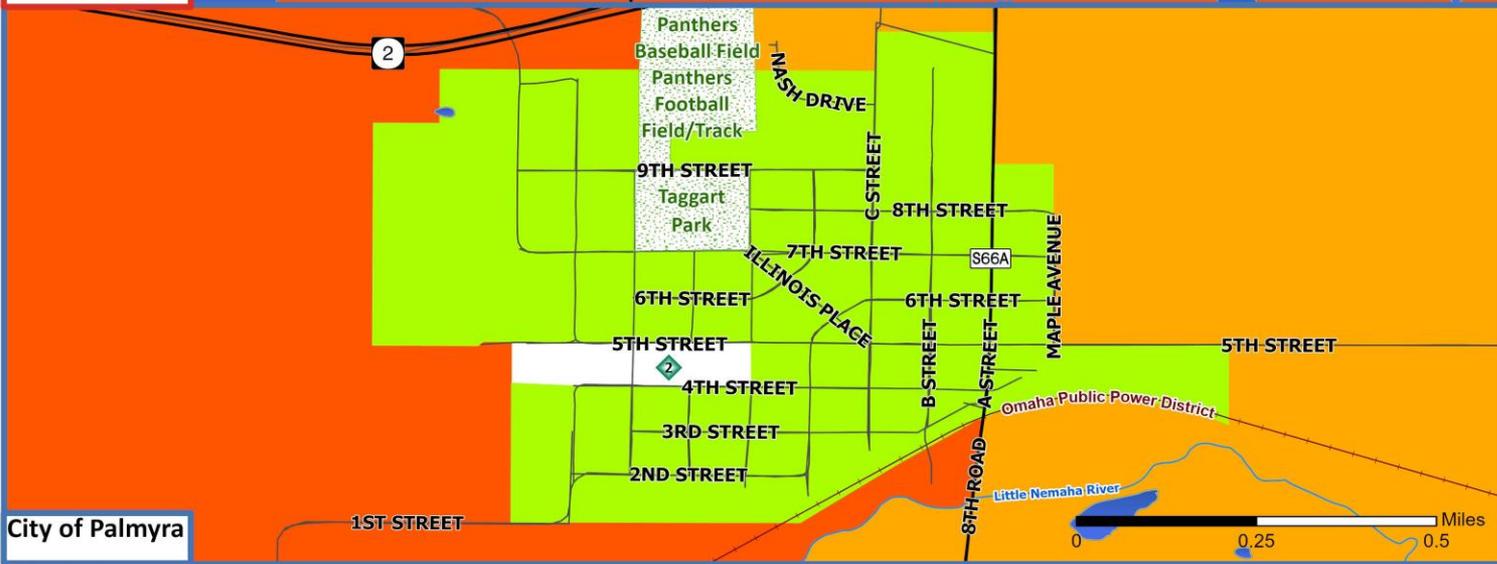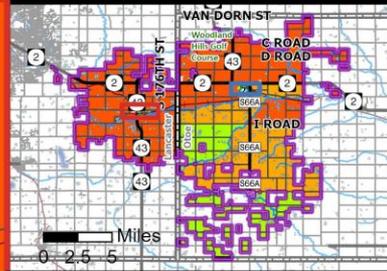
Property values provided by Lancaster County & ESRI BAO (Otoe County).
Median Values displayed by planning area.

List of Schools
1. Bennet Elementary
2. Palmyra Jr-Sr High School

District Boundary
Bennet Elementary School
Palmyra Jr-Sr High School
Counties
Cemetery
Golf Course
Park and Recreation

Median Home Value

No Residential Value
< $50,000
$50,001 to $100,000
$100,001 to $200,000
$200,001 to $250,000
> $250,000

Map Data provided by District OR-1 Public Schools, Lancaster County, Otoe County, Cities of Bennet, Palmyra, and Douglas, State of Nebraska, USGS, and ESRI.
Map created October 2021.

District OR-1 Public Schools: Average Year Built

City of Bennet

APPLE ST
VINCE DR
JEFFERSON ST
MONROE ST
TYLER ST
BENNET RD
COTTONWOOD ST
DOGWOOD ST
Bennett Park Playground and Splash Pad
Whispering Pines Park
Little Nemaha River
BENNET RD
GARDEN ST
HACKBERRY ST
S-148TH ST
S-150TH CT
JUNIPER ST
Omaha Public Power District
Bennet South Ballfield
Bennet Cemetery

Miles
0   0.25   0.5

City of Palmyra

Panthers Baseball Field
Panthers Football Field/Track
NASH DRIVE
9TH STREET
Taggart Park
C-STREET
8TH STREET
7TH STREET
S66A
6TH STREET
6TH STREET
MAPLE AVENUE
5TH STREET
ILLINOIS PLACE
5TH STREET
4TH STREET
B-STREET
A-STREET
3RD STREET
2ND STREET
8TH-ROAD
Omaha Public Power District
Little Nemaha River
1ST STREET

Miles
0   0.25   0.5

VAN DORN ST
Woodland Hills Golf Course
C-ROAD
D-ROAD
I-ROAD
S66A
S66A

Miles
0 2.5 5

Year Built provided by Lancaster County & ESRI BAO (Otoe County).
Average Year Built displayed by planning area.

List of Schools
1. Bennet Elementary
2. Palmyra Jr-Sr High School

- District Boundary
- Bennet Elementary School
- Palmyra Jr-Sr High School
- Counties
- Cemetery
- Golf Course
- Park and Recreation

Average Year Built

- **No Data**
- **Before 1960**
- **1960 to 1980**
- **1980 to 2000**
- **After 2000**

Map Data provided by District OR-1 Public Schools, Lancaster County, Otoe County, Cities of Bennet, Palmyra, and Douglas, State of Nebraska, USGS, and ESRI.
Map created October 2021.

RSP

District OR-1 Public Schools: Residential Year Built

Year built data is provided by Lancaster County & ESRI BAO (Otoe County). Assessor's Office.

List of Schools
1. Bennet Elementary
2. Palmyra Jr-Sr High School

- District Boundary
- Bennet Elementary School
- Palmyra Jr-Sr High School
- Counties
- Cemetery
- Golf Course
- Park and Recreation

Year Built
- 2000-2015: 210 Units
- 2016: 9 Units
- 2017: 35 Units
- 2018: 11 Units
- 2019: 20 Units
- 2020: 9 Units
- 2021: 7 Units

Map Data provided by District OR-1 Public Schools, Lancaster County, Otoe County, Cities of Bennet, Palmyra, and Douglas, State of Nebraska, USGS, and ESRI. Map created October 2021.

City of Bennet

City of Palmyra

Distribution of Units by Year Built

Overview

- ► Chart has been created to illustrate the Distribution of units by year built
- ► Year built based on Lancaster County Data and ESRI (Otoe County)

Observation

- ► Majority of the units were built before 1989 (50%)

Pie chart: Distribution of Units by Year Built

- 2020-2021: 1%
- 1939 or Earlier: 23%
- 1940-1949: 3%
- 1950-1959: 3%
- 1960-1969: 5%
- 1970-1979: 11%
- 1980-1989: 5%
- 1990-1999: 11%
- 2000-2009: 20%
- 2010-2019: 18%
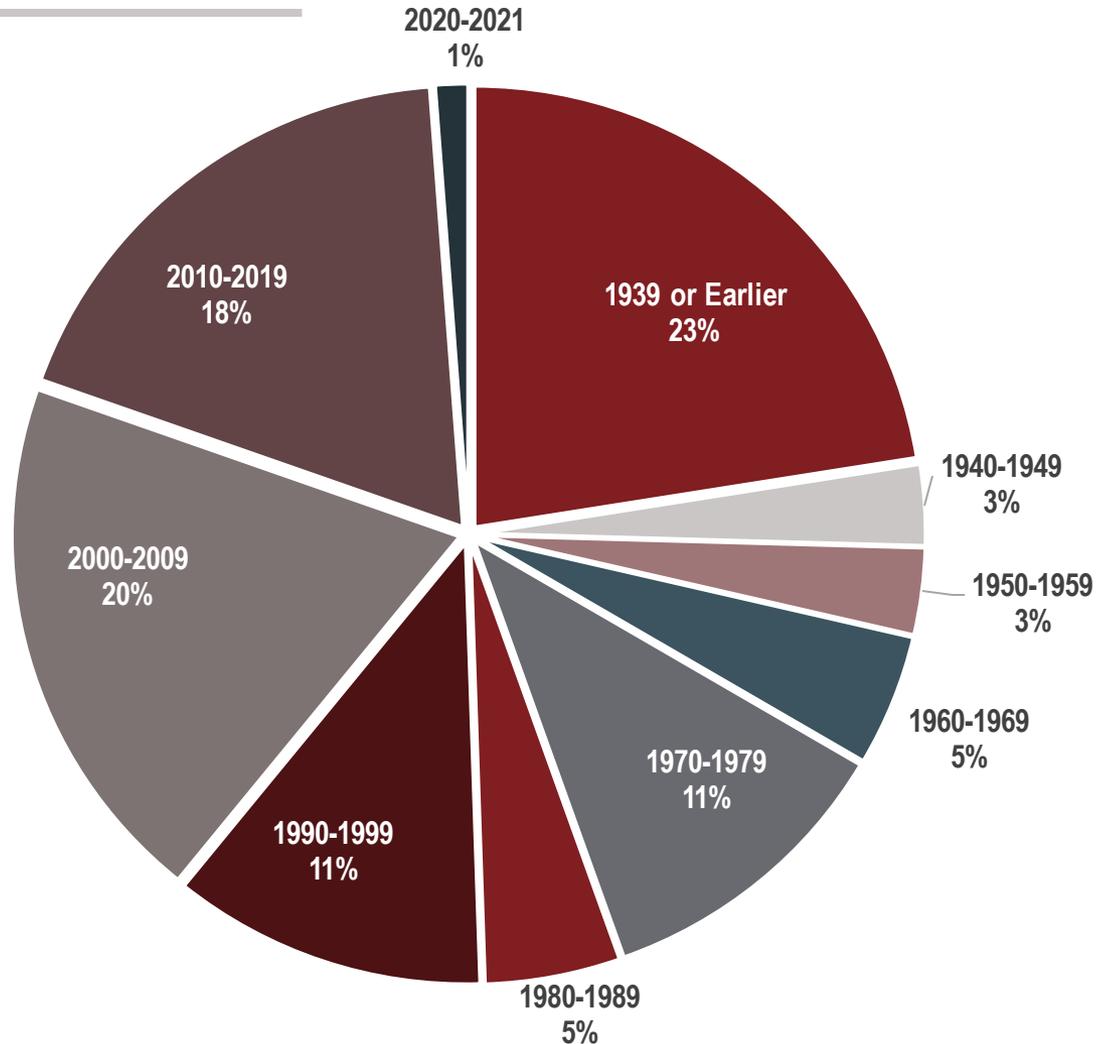
Units Added to Inventory by Year Built

Number of Units by Time Period
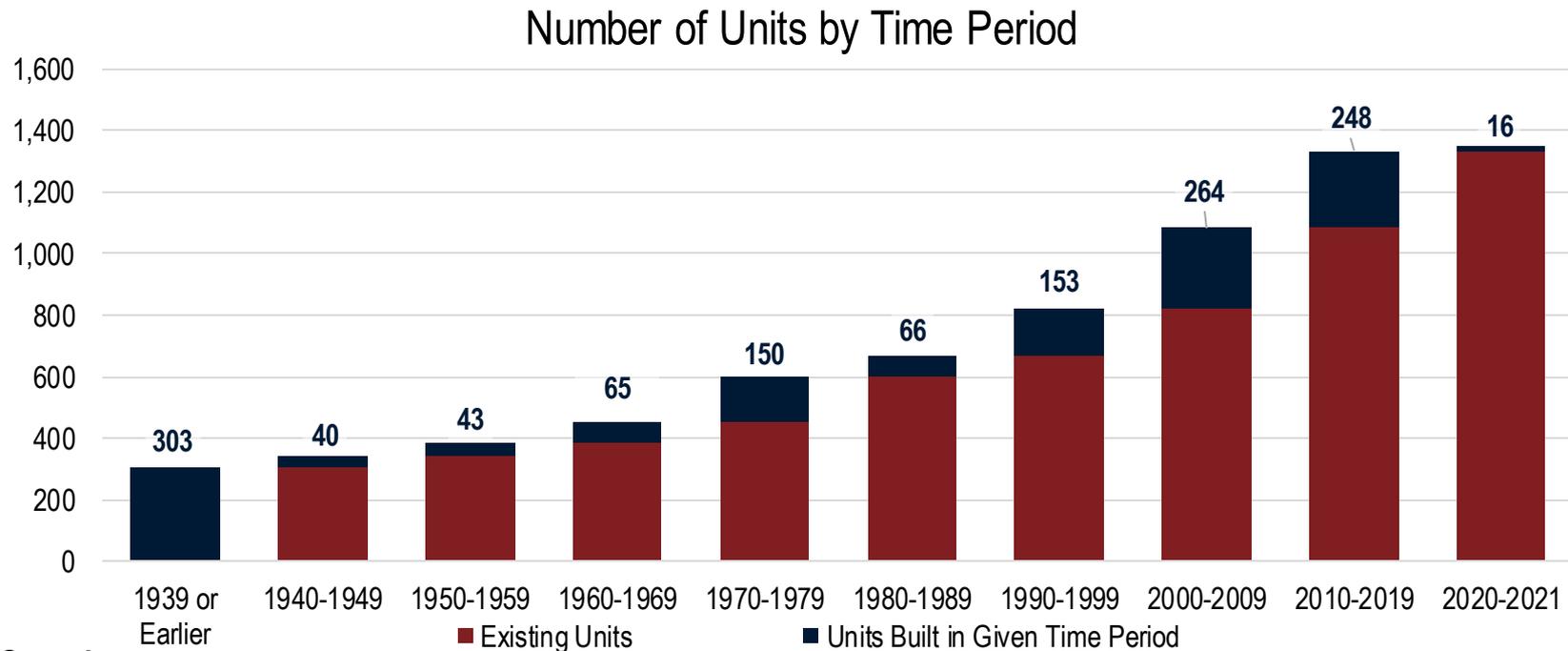
Overview

▶ Table has been created to illustrate the number of units by year built

▶ Year built based on Lancaster County Data and ESRI (Otoe County)

▶ Bold numbers located in each column is the number of units that were built in this period.

Observation

▶ The average number of units built per year from 2010 to 2019 (24.8 per year) is slightly lower than from 2000 to 2009 (26.4 per year)

▶ The average year for all units built was 1978

Growth Areas
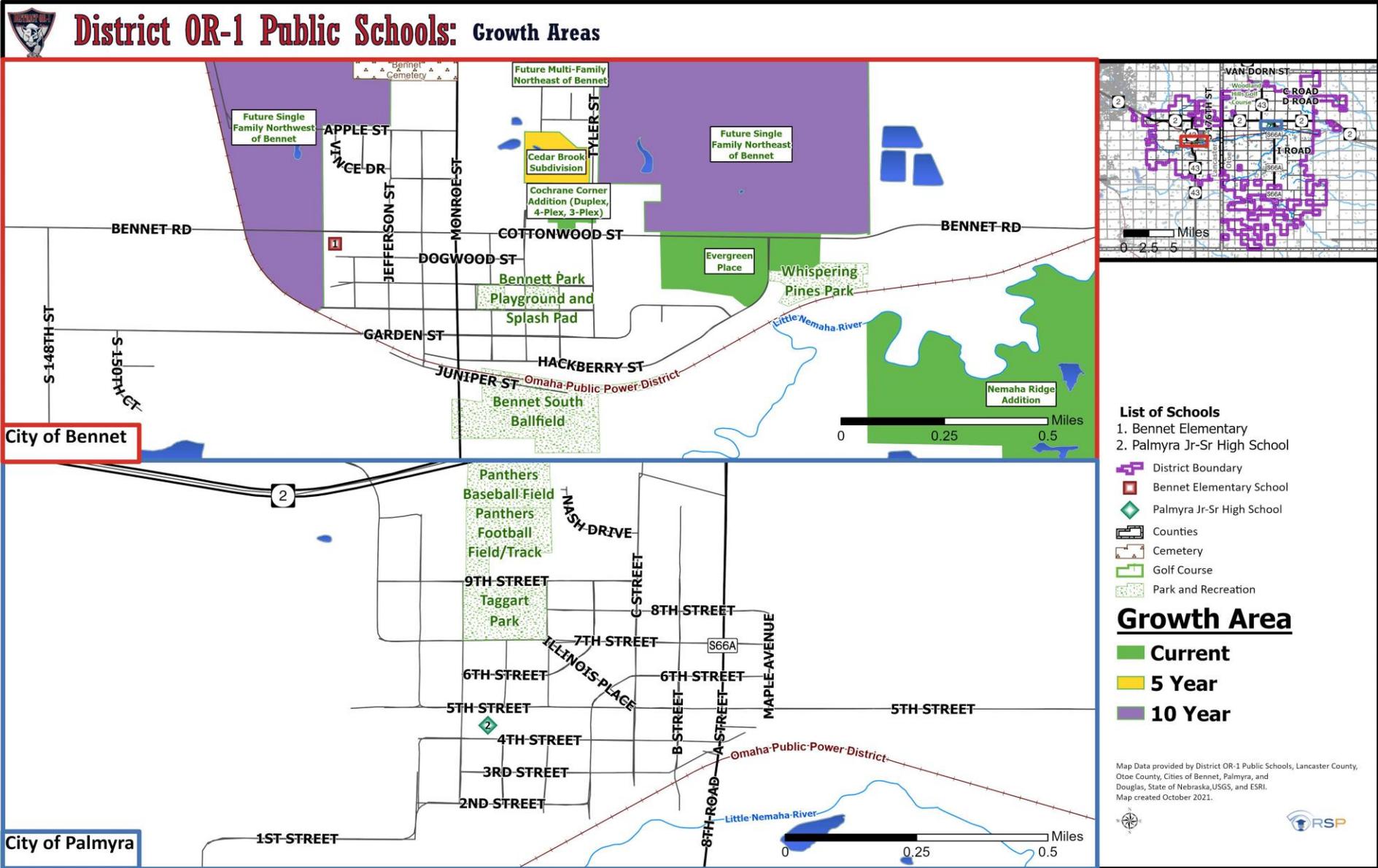
Development Activity

RSP Plan Area Name	Type	Growth Area	Existing Units	Potential Units	Acres
Cochrane Corner Addition (Duplex, 4-Plex, 3-Plex)	MF	Current	0	29	5.71
Evergreen Place	SF	Current	10	46	24.29
Nemaha Ridge Addition	SF	Current	12	8	138.50
Cedar Brook Subdivision	SF	5 Year	1	14	8.61
Future Single Family Northeast of Bennet	Rural	10 Year	22	20	432.17
Future Multi-Family Northeast of Bennet	Rural	10 Year	0	70	29.68
Future Single Family Northwest of Bennet	Rural	10 Year	4	20	85.99
Future Multi-Family Northwest of Bennet	Rural	10 Year	0	50	19.91
Current Total			22	83	
5 Year Total			1	14	
10 Year Total			26	160	
All Total			49	257	

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

Source: Lancaster County, Otoe County, Cities of Bennet and Palmyra, District OR-1

Overview
▸ Table has been created to illustrate the type and amount of potential development
▸ Type is the potential residential units that will be built

Observations
▸ The growth area shows how the developable areas have a timing variable associated with which assists in forecasting future student enrollment
▸ There are **83** units that are current potential units
▸ There are **14** units that could be built in the next 5 years
▸ There are **160** units that could be built in the next 10 years
▸ The speed in which any developments are built are influenced by who owns the property, access to infrastructure, and economic indicators
▸ 5 Year and 10 Year are based on acreage and/or plats

City & District Comparison Analysis

Table 1

Bennet Total Student Analysis

Table 2

Palmyra Total Student Analysis
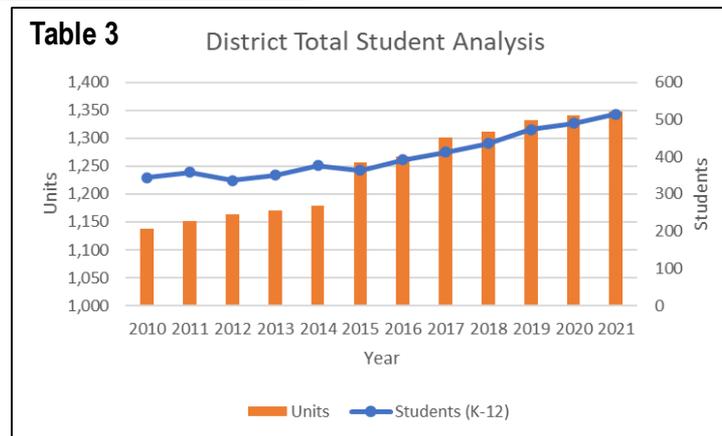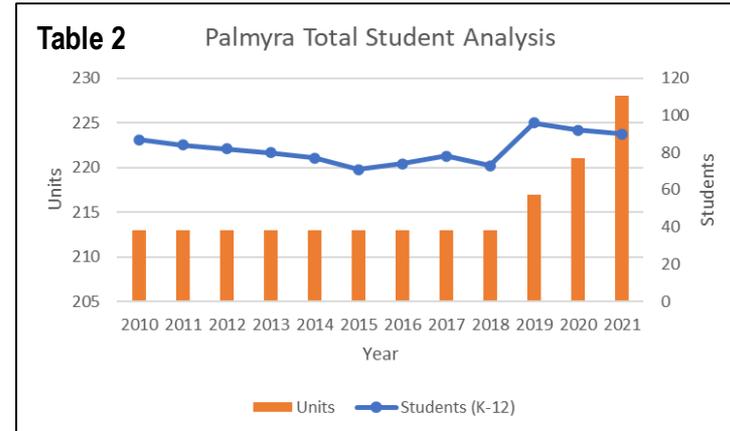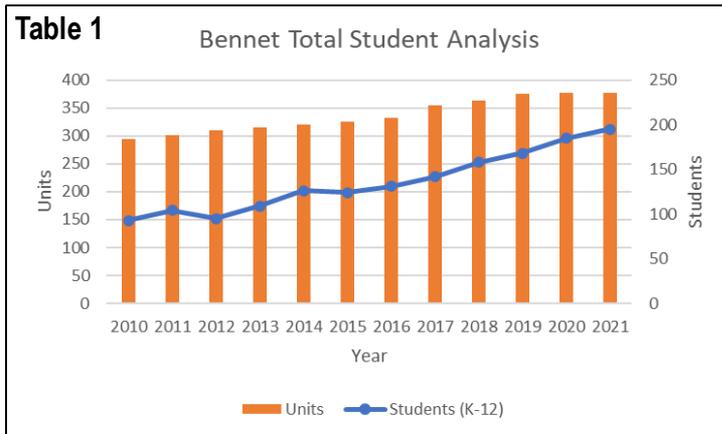
Overall, Development increased by 18.45%

Table 3

District Total Student Analysis

Overall, students Increased by 49.42%

Table 1 – City of Bennet
- ► Graphs shows the number of units available by year and the number of K-12 students attending
- ► Bennet has had a 28.2% increase in housing and a 109.7% increase in student population

Table 2 – City of Palmyra
- ► Graph shows the number of units available by year and the number of K-12 students attending
- ► Palmyra has had a 7.04% increase in housing and a 3.45% increase in student population

Table 3 – OR-1 District
- ► Graph shows the number of units available by year in the District Boundary and the number of K-12 students attending
- ► OR-1 has had an increase of 18.45% increase in housing and a 49.42% in student population

Development & Housing Inventory – *Conclusion*

► OR-1 district sees a largest yield rate from single family homes (39 as of 2021) than multi-family homes (26 as of 2021)

   – Single-family yield rates have been stable while multi-family yield rate and fluctuated throughout the years (likely due to small subset of multi-family housing)

► Most affordable housing stock is within city limits of City of Bennet

   – This housing stock is also the oldest with majority of units built before 1960

   – The average year built of all units was 1978

► The average number of units built per year form 2010-2019 was 24.4 which is lower than 2000 to 2009

► The growth areas are on within the City of Bennet

   – There are three areas of current development, one are of 5-year development, and two areas of 10-year development

   – There are 83 potential units to be built currently, 14 potential units in 5-years, and 50 potential units to be built in 10-years

Part Three: Projections

Past, Current, and Future Enrollment
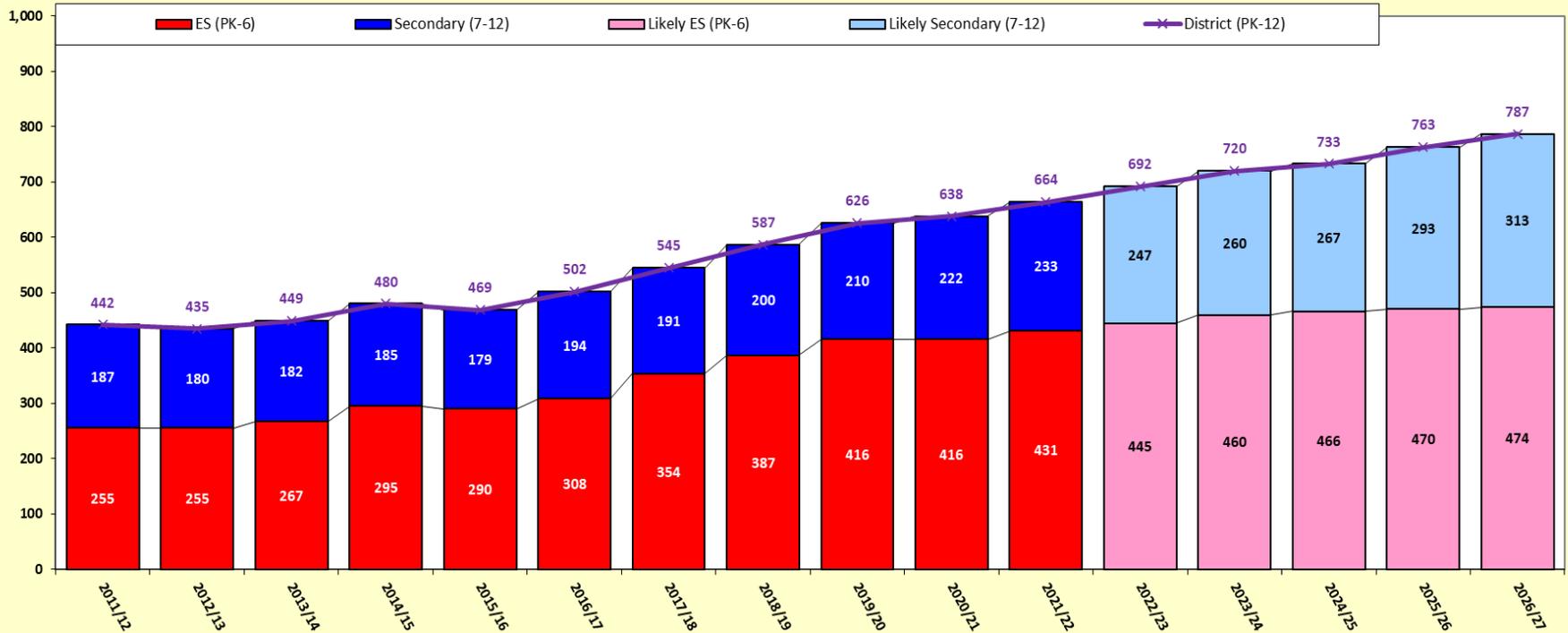
Source: OR-1 School District and RSP SFM & Demographics Models

Overall Enrollment
- District projected to increase by over 120 students;
- (+18.5%) (+1.8% to +4.2% a year)

Elementary (PK-6)
- increases by over 40 students
- (+10.0%) (+0.9% to +3.4% a year)

Secondary (7-12)
- increases by nearly 80 students
- (+34.3%) (+2.7% to +9.7% a year)

Note: Enrollment provided by the district – Figures are not Certified Enrollment Count; Does not include Home School, Private School, or Parochial School

Projection Notes

- ► Past Enrollment shown three different ways:
    1. Reside (Based on where a student Resides in relation to the district boundary)
    2. Attend (Based on both a student residing in the district and attending and students not residing in the district attending)
    3. Out of District (Students who do not reside in the district boundary but attend)

- ► Capacity

    - Provided by district administration
    - Elementary Capacity is inadequate for both Reside and Attend enrolment currently and through the projection time frame
    - Secondary Capacity is inadequate for Reside in 2026/27 and Attend from 2022/23 going forward

- ► Other Items

    - Enrollment Grade Configuration in Student Forecast Model (PK-6 and 7-12)
    - Open enrollment trends are assumed to follow district policy and will continue like those trends during the projection time frame
    - Out of District enrollment could be impacted by capacity limitations

Note: Enrollment provided by the district – Figures are not Certified Enrollment Count; Does not include Home School, Private School, or Parochial School

Enrollment by Building

District OR-1 Public Schools Enrollment Projections By School (Based on Student Reside and Out of District Attend)

School	Preferred Capacity	Student Location	Past School Enrollment			Projections Based on Attend				
			2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Bennet Elementary		Out of District	52	53	49	52	59	58	59	60
PK to 6th	380	Reside	364	363	382	393	401	408	411	414
		Attend	416	416	431	445	460	466	470	474
Palmyra Secondary		Out of District	43	43	42	38	32	32	33	38
7th to 12th	300	In District	167	179	191	209	228	235	260	275
		Attend	210	222	233	247	260	267	293	313
DISTRICT TOTALS		Out of District	95	96	91	90	91	90	92	98
PK to 12th	680	In District	531	542	573	602	629	643	671	689
		Attend	626	638	664	692	720	733	763	787
Elementary Change (PK-6)				0	15	14	15	6	4	4
Secondary School Change (7-12)				12	11	14	13	7	26	20
District Change (Pk-12)				12	26	28	28	13	30	24
Elementary % Change (PK-6)				0.0%	3.6%	3.2%	3.4%	1.3%	0.9%	0.9%
Secondary School % Change (7-12)				5.7%	5.0%	6.0%	5.3%	2.7%	9.7%	6.8%
District % Change (PK-12)				1.9%	4.1%	4.2%	4.0%	1.8%	4.1%	3.1%

Source: RSP & Associates, LLC - November 2021 (Capacity Updated December 2021)

NOTES

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

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

Note 3: Open enrollment could be impacted by capacity limitations

Note 4: The Enrollment Model assumes ES (PK-6) and Secondary (7-12)

Note 5: Each planning area is assigned the attendance area based on known boundary (In and Out District)

Note 6: School capacity provided by the District

Note 7: Reside is based on the student home address and live in the school district boundary

Note 8: Attend are the students who attend the school no matter if they reside in the school district boundary

Note 9: Out of District are based on the student home address who do not reside in the school district boundary

CAPACITY INFORMATION

Over Preferred Capacity

Note: Enrollment provided by the district – Figures are not Certified Enrollment Count; Does not include Home School, Private School, or Parochial School

Projection Main Takeaway – *conclusion*

Total enrollment for OR-1 School District is projected to increase by over 120 students

Elementary (PK to 6th grade)

► Increase by over 40 students

► 431 current students to 474 students in 2026/27

  – The preferred capacity at this building is 380. Capacity challenges are expected in the upcoming years.

Secondary (7th to 12th grade)

► Increase by nearly 80 students

► 247 current students to 313 students in 2026/27

  – The preferred capacity at this building is 300. Capacity challenges are expected by 2026/27 school year.

Factors influencing this growth:

► New housing development

  – Three areas of current development and 3 areas of 5-10 year growth located around City of Bennet
  – Will influence size of future younger grades

► Larger kindergarten classes entering district than senior classes leaving the district

► Consistent open enrollment policy created an influx of around 30 out of district students

  – This policy remains unchanged in our projections

Part Four: Next Steps
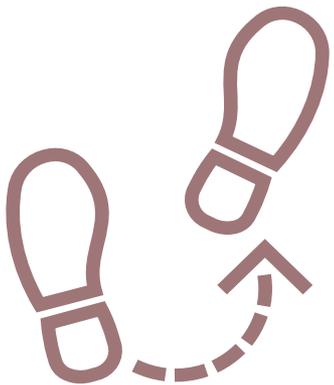
Key Considerations

In order to examine projection model accuracy, RSP recommends continually monitoring:

- Economic Development – *spill over affects*
  - Lincoln, NE is continually growing outwards. If future growth starts to spur towards the City of Bennet, the student enrollment may increase.

- Development Activity
  - Review number of building permits per year to gauge development activity from the City of Bennet, City of Palmyra, and other municipalities in the district.

- Class Sizes
  - Analyze annually the size of incoming Kindergarten class versus size of outgoing senior class
  - If larger Kindergarten class than seniors, signals growth
  - If smaller Kindergarten classes than seniors, signals enrollment decline

- Live Birth Reports
  - Monitor year to year
  - Analyze whether live birth data is consistent with recent trends or if a change is happening to this trend

- Out of District Students
  - Currently, out of district students make up 15% of total enrollment.
  - Percentage stays consistent in the projection model, as the policy for open enrollment stays consistent.
  - If this number decreases or increases significantly, this can be a signal the projection for that year may be lower or higher than expected.
  - If open enrollment policy is modified this will cause a decrease in out of district students and overall district enrollment

Board of Education Discussion Points

► Lincoln South Beltway Project

- The road improvement project will provide an enhanced network to get to and from this area. This may increase exposure and interest in the area.
- This project was factored into the analysis utilizing the Building Permit Allocation Attractiveness Variable that is in the RSP Sophisticated Forecast Model.

► Standing Bear High School – Lincoln Public Schools

- The new high school in Lincoln Public Schools was examined due to its proximity to District OR-1. Initial findings do not forecast a substantial affect from this school on Palmyra Secondary.
- RSP recommends to continually monitor the open enrollment policy.

► Timberlake Development

- Timberlake development was built out when RSP began this study. The new units are reflected in the Year Built Analysis and Sophisticated Forecast Model.
- There are no known plans to expand this development. RSP recommends monitoring future plats in this area.

Next Steps

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

▶ District administration and the Board of Education further study the enrollment, demographic, and development information presented.

▶ The type of residential development and how affordable it is will determine likely location and number of students (tracking of type of development important to knowing the impact of those trends).

RSP Enrollment forecasting is based on the best-known information at the time of the study

▶ RSP has integrated into its analysis the instructional modality (In-Person, Hybrid, Virtual/Online) options a district may choose based on the analysis of all the school districts RSP has worked with in the 2020/21 school year.

▶ The analysis is presented as neutral toward how the district determined the student learning experience and does not seek to influence decisions that would minimize creating and maintaining healthy environments for all who come to each school but does provide information to plan for the potential impact of that decision in areas such as staffing or building need.

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 – Supplementary Materials

Discussion Item: Grade Configuration Change

2021/22 Enrollment

	Capacity of School	PK to 5	6 to 12	Capacity Percentage
Bennet Elementary	380	387		102.84%
Palmyra Secondary	300		277	92.33%

Making a grade configuration change to Bennet Elementary from serving grades K to 6th to K to 5th grade would relieve some capacity challenges at the elementary school.

Palmyra Secondary would increase from 233 students to 277 students. An increase from 77.7% utilization to 92.3%.

Note: This is an estimate utilizing current enrollment data to begin the discussion of grade configuration changes.

Year	PK to 5th	6th to 12th	Total
2010/11	211	226	437
2011/12	226	216	442
2012/13	216	219	435
2013/14	243	206	449
2014/15	260	220	480
2015/16	264	205	469
2016/17	269	233	502
2017/18	316	229	545
2018/19	352	235	587
2019/20	369	257	626
2020/21	367	271	638
2021/22	387	277	664
2022/23	396	296	692
2023/24	414	306	720
2024/25	407	326	733
2025/26	407	356	763
2026/27	414	373	787

Source: RSP SFM & District OR-1

Note:

1) Areas in red are above preferred capacity for Bennet Elementary

2) Areas in blue are above preferred capacity for Palmyra Secondary

Demographics

Population
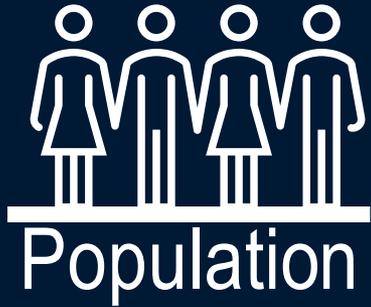
Percent Change of Annual Rate

2000-2010: 1.41%
2010-2021: 1.28%
2021-2026: 1.25%

Housing

Percent Change of Annual Rate of Housing Inventory

2000-2010: 2.00%
2010-2021: 1.36%
2021-2026: 1.28%

Income

Percent Change of Income per Capita

2021: $39,626
2026: $44,760
2021-2026: 2.47%

Workforce

Unemployment Rate

2021: 1.9%

Notes

- Overall, the District is experiencing an **increase** in population and housing at a lower rate than the previous ten years
- Overall, the District will experience an **increase** in population and housing but at a lower rate than currently
- In a growing community housing and population should have a correlation and, on the surface, indicate a general housing supply/demand
  - The type of residential unit is not known in these numbers or how affordable the units are so more analysis is required
- Income is projected to **increase** over 2.47 percent each year by 2026
- Unemployment is **lower** than the State of Nebraska (Estimate are from July 2021 from the US Census)

Demographic Table

	District OR-1 Public Schools	Syracuse-Dunbar-Avoca Public Schools	Lancaster County	Otoe County	City of Bennet	City of Palmyra	City of Lincoln	State of Nebraska
Unemployment Rate	1.9%	1.7%	3.5%	2.4%	1.7%	2.0%	3.7%	3.1%
Average Household Size	2.53	2.34	2.4	2.41	2.50	2.60	2.37	2.46
Median Age	42.8	46.5	35.0	44.8	37.8	45.1	34.4	37.8
Total Population	3,100	4,632	325,405	16,379	904	596	292,988	1,975,306
Median Household Income	$79,943	$70,820	$59,820	$60,531	$75,503	$81,947	$57,437	$62,568
Total Housing Units	1,321	2,149	137,280	7,433	385	248	124,834	864,644
Owner Occupied Housing	1,063	1,470	80,732	4,753	318	191	70,433	522,425
Renter Occupied Housing	165	486	48,360	1,948	43	37	46,796	261,012
Vacancy Rate	7.1%	8.9%	6.0%	9.8%	6.0%	7.7%	6.1%	9.4%

	District OR-1 Public Schools	Syracuse-Dunbar-Avoca Public Schools	Lancaster County	Otoe County	City of Bennet	City of Palmyra	City of Lincoln	State of Nebraska
White	94.5%	95.4%	79.4%	87.5%	97.6%	92.8%	77.8%	77.2%
Black	0.9%	0.7%	4.1%	0.8%	0.0%	1.3%	4.5%	4.8%
American Indian/Alaskan	0.1%	0.4%	0.6%	0.4%	0.0%	0.2%	0.6%	0.8%
Asian	0.8%	0.3%	5.1%	0.7%	0.3%	0.7%	5.6%	2.9%
Pacific Islander	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%
Other Race	0.3%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%
Two or More Races	1.6%	1.0%	2.8%	1.5%	1.2%	2.7%	3.0%	2.1%
Hispanic	1.8%	2.2%	7.8%	8.8%	0.7%	2.2%	8.3%	11.9%

Source: U.S. Census, ESRI BAO

Demographics Information

► District OR-1 Public Schools has the highest Median Household Income when compared to the other geographies except for the City of Palmyra

► The Median Age is higher than state of Nebraska (13.2% higher) but lower than the district compared in the table

► District OR-1 Public Schools has similar demographics when compared to the City of Palmyra

► Estimates are from July 2021 from the US Census

Employment

Employment	District OR-1 Public Schools	Syracuse-Dunbar-Avoca Public Schools	Lancaster County	Otoe County	City of Bennet	City of Palmyra	City of Lincoln	State of Nebraska
2021 Agriculture/Mining (SIC01-14) Employees	7.9%	2.6%	0.8%	2.2%	0.0%	10.8%	0.7%	1.7%
2021 Construction (SIC15-17) Employees	7.2%	3.9%	4.8%	3.9%	0.0%	0.0%	4.4%	4.1%
2021 Manufacturing (SIC20-39) Employees	1.8%	0.8%	6.7%	8.1%	0.0%	0.0%	6.4%	8.5%
2021 Transportation (SIC40-47) Employees	8.1%	2.9%	2.6%	1.8%	16.7%	2.7%	2.6%	3.8%
2021 Communication (SIC48) Employees	0.0%	0.0%	1.4%	0.2%	0.0%	0.0%	1.4%	1.2%
2021 Utility (SIC49) Employees	1.1%	1.2%	0.4%	1.6%	2.3%	0.0%	0.3%	1.0%
2021 Wholesale Trade (SIC50-51) Employees	3.8%	9.5%	3.1%	14.6%	2.8%	0.0%	2.9%	4.6%
2021 Home Improvement (SIC52) Employees	4.1%	1.7%	1.1%	1.4%	6.0%	0.0%	1.1%	1.6%
2021 General Merchandise (SIC53) Employees	0.0%	0.7%	1.9%	3.3%	0.0%	0.0%	2.0%	1.9%
2021 Food Stores (SIC54) Employees	3.2%	2.3%	2.7%	2.1%	0.0%	12.6%	2.8%	3.0%
2021 Auto Dealer/Gas Station (SIC55) Employees	0.7%	2.1%	2.2%	2.2%	0.5%	0.0%	2.1%	2.2%
2021 Apparel/Accessory (SIC56) Employees	0.0%	0.1%	0.6%	0.9%	0.0%	0.0%	0.6%	0.5%
2021 Furniture/Home Furnishings (SIC57) Employees	0.4%	0.2%	0.6%	0.2%	0.0%	0.0%	0.7%	0.7%
2021 Eating & Drinking (SIC58) Employees	0.9%	7.8%	7.0%	6.5%	0.0%	0.0%	7.0%	6.3%
2021 Miscellaneous Retail (SIC59) Employees	1.1%	1.6%	3.0%	2.6%	1.4%	0.0%	3.1%	2.6%
2021 Banks (SIC60-61) Employees	2.5%	2.6%	2.6%	1.8%	2.8%	2.7%	2.7%	2.5%
2021 Securities Broker (SIC62) Employees	0.4%	1.3%	0.6%	0.5%	0.0%	0.0%	0.6%	0.8%
2021 Insurance (SIC63-64) Employees	6.8%	2.7%	3.8%	2.0%	1.4%	0.0%	4.0%	3.0%
2021 Real Estate/Holding (SIC65-67) Employees	0.7%	0.7%	2.2%	1.2%	0.0%	2.7%	2.2%	2.0%
2021 Hotel/Lodging (SIC70) Employees	0.0%	0.4%	1.0%	1.3%	0.0%	0.0%	1.0%	1.0%
2021 Auto Services (SIC75) Employees	0.9%	0.7%	0.9%	0.9%	0.5%	0.9%	0.9%	1.0%
2021 Movie/Amusement (SIC78-79) Employees	4.3%	3.3%	1.7%	2.3%	0.5%	0.0%	1.6%	1.8%
2021 Health Services (SIC80) Employees	0.7%	21.2%	14.5%	10.5%	1.4%	0.0%	15.1%	12.7%
2021 Legal Services (SIC81) Employees	0.0%	3.0%	0.8%	0.9%	0.0%	0.0%	0.8%	0.7%
2021 Education/Library (SIC82) Employees	23.7%	10.2%	6.9%	9.7%	46.5%	55.0%	6.6%	7.7%
2021 Other Service (SIC72-89SEL) Employees	14.0%	10.0%	16.0%	11.8%	6.5%	7.2%	16.1%	15.9%
2021 Government (SIC91-97) Employees	5.2%	6.0%	9.6%	5.0%	10.7%	5.4%	9.9%	6.6%
2021 Unclassified Establishments (SIC99) Employees	0.7%	0.6%	0.4%	0.2%	0.0%	0.0%	0.4%	0.6%

Source; U.S. Census and Esri BAO

Employment Information

▸ This table provides the type of employment a person has based on the geography of each column
▸ Highest percentage of employees are in Education/Library (23.7%)
▸ When compared to all neighboring geographies, District OR-1 Public Schools has a greater percentage of employees working in Insurance (6.8%) and a lower percentage of employees working in General Merchandise (0%)
▸ Estimates are from July 2021 from the US Census

Student Hot Spot Analysis

Questions?

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