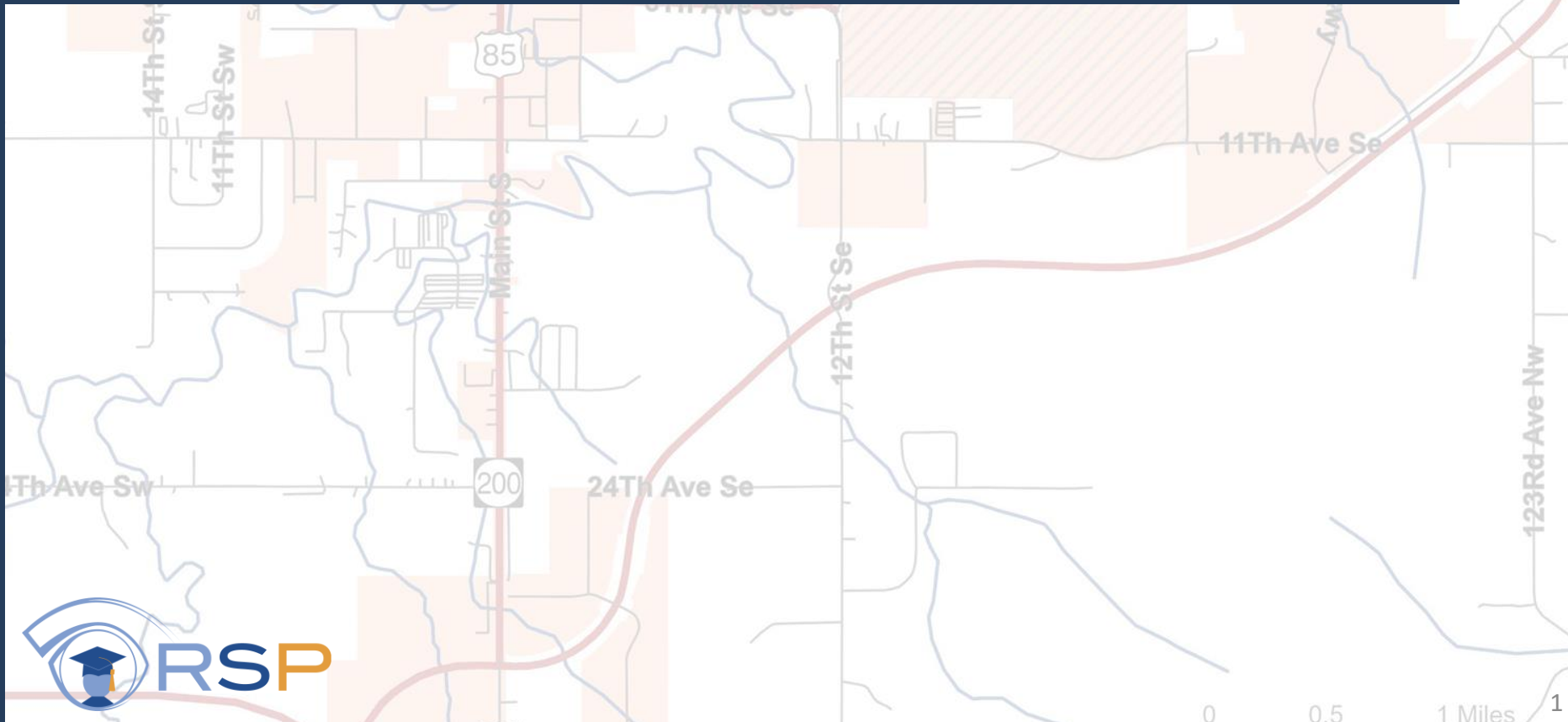# PLANNING FOR THE FUTURE

Enrollment Analysis
January 18, 2021

# DISCUSSION POINTS

**①** Introduction

🗺️ Enrollment and Demographics (Part One)
- Key Considerations
- Maps: Planning Areas and Attendance Areas
- Sophisticated Forecast Model (SFM)
- Past Enrollment and Change
- Baseline Maps and Data

🧱 Development (Part Two)
- Population, Development, and Enrollment Trends
- Yield Rate of Students
- Maps and Data

📈 Enrollment Projections (Part Three)
- Past, Current, Future Enrollment
- Building Projections

📅 Moving Forward
- Next Steps
- Demographics

# WHO IS RSP

- Founded in 2003

- Professional educational planning firm

- Expertise in multiple disciplines

- Over 20 Years of planning experience

- Over 80 years of education experience

- Over 20 years of GIS experience

- Projection accuracy of 97% or greater



Over **130** clients in Arkansas, Iowa, Illinois, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, and Wisconsin

# EXPECTATIONS

**Below are some key points to think about as you examine how the analysis looked at creating a planning tool for making decisions:**

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

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

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

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

- 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

# MAKING IT HAPPEN

## School District

- McKenzie County School District

## County, City & Others

- McKenzie County

- City of Watford

- ND GIS Hub

- United States Geological Survey
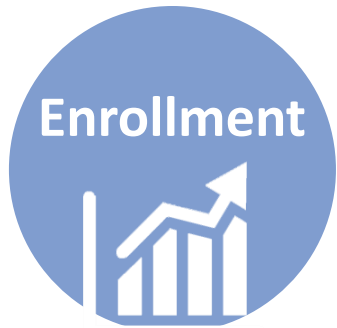
- Census Bureau/ Esri

**Thank you!**

*\*Accurate projections are a result of the local entities providing quality data.*
*\*The data utilized in the analysis is the best available information each of the entities could provide at the time of the study.*

# PART ONE: ENROLLMENT AND DEVELOPMENT

# 100,000 FOOT PERSPECTIVE

**Enrollment**

- Overall enrollment decreased but is forecasted to increase to over 2,300 students by 2025/26 and about 3,000 students by 2030/31
- Kindergarten enrollment will range from 180 to 250 students over next 5-years
- District increases by just nearly 670 students (+34.6%) (Annual Range: +4.7% to +8.2%)
- Elementary increases by about 430 students (+43.3%) (Annual Range: +5.5% to +11.0%)
- Middle School increases by about 70 students (+16.0%) (Annual Range: +0.1% to +6.1%)
- High School increases by about 170 students (+33.2%) (Annual Range: +3.9% to 11.4%)

**Capacity**

- Elementary School
  - Badlands and Fox Hills ES are projected to exceed capacity by 2025/26
  - Capacity will be relieved if 3rd ES opens in 2022/23
- Middle School
  - Watford City Middle School capacity was relieved in 2020/21 with new 6-8 grade configuration
  - Projected to exceed capacity by 2028/29
- High School
  - Not expected to exceed capacity for the next 10 years
- Capacity calculations may need change to address what was learned from COVID-19

**Development**

- Development is based on availability to infrastructure
- Major residential development will occur near High School in Stepping Hills and Fox Ridge
- The impact COVID-19 may have on the economy and housing starts must be monitored

# DISTRICT BOUNDARY
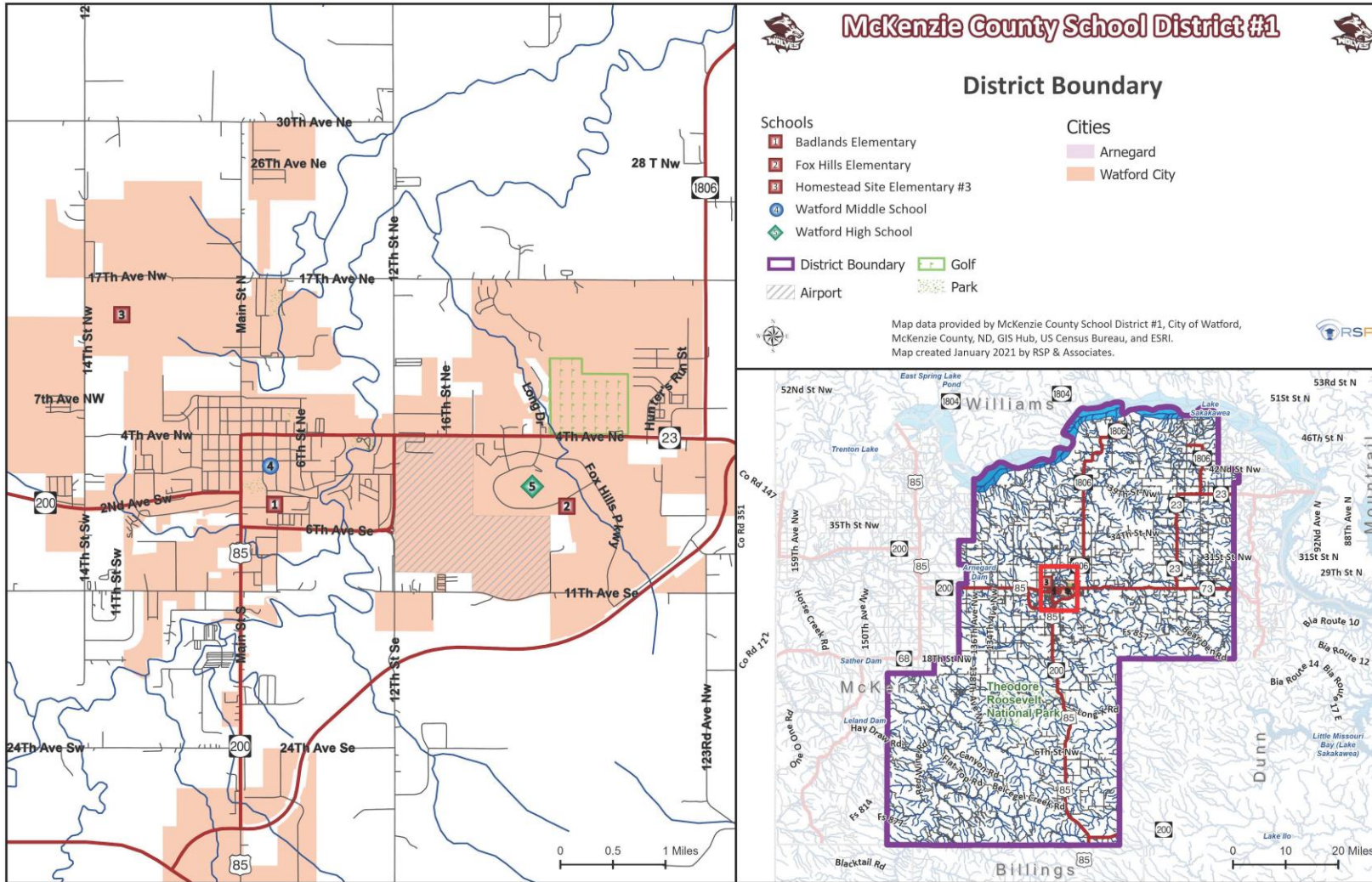


- District Boundary **(Purple Line)**
- Major Streets
- Major water features & cultural features

- Municipality Limits
  - Arnegard **(Pink)**
  - Watford City **(Orange)**

# Elementary Attendance Areas
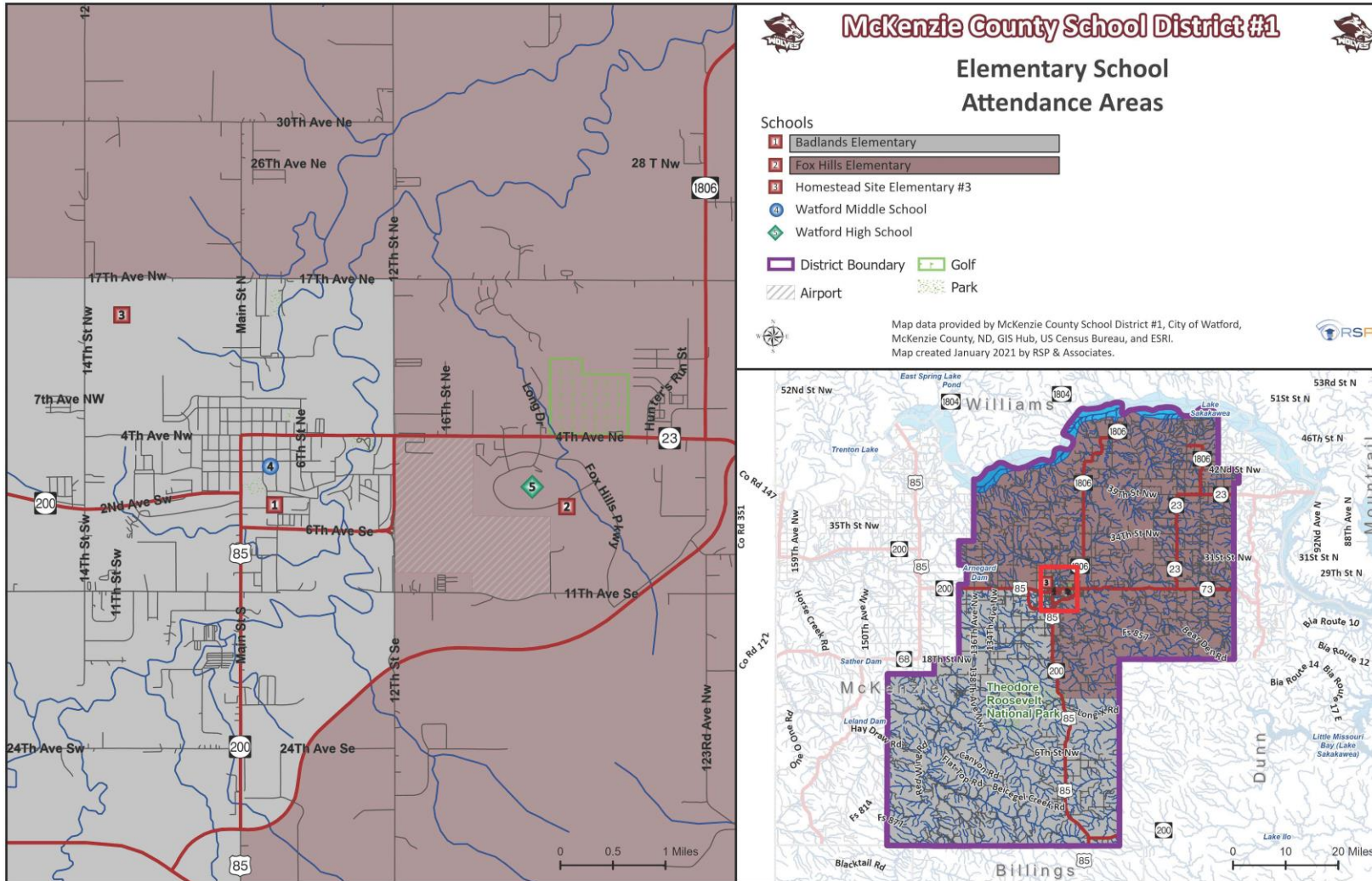


- District Boundary **(Purple Line)**
- Major Streets
- Major water features & cultural features
- Attendance Areas **(Solid Colors)**

- Badlands **(Gray)**
- Fox Hills **(Red)**
- ES configuration changed to K-5, 6-8, 9-12 in 2020/21
- ES #3 is expected to open in 2022/23

9
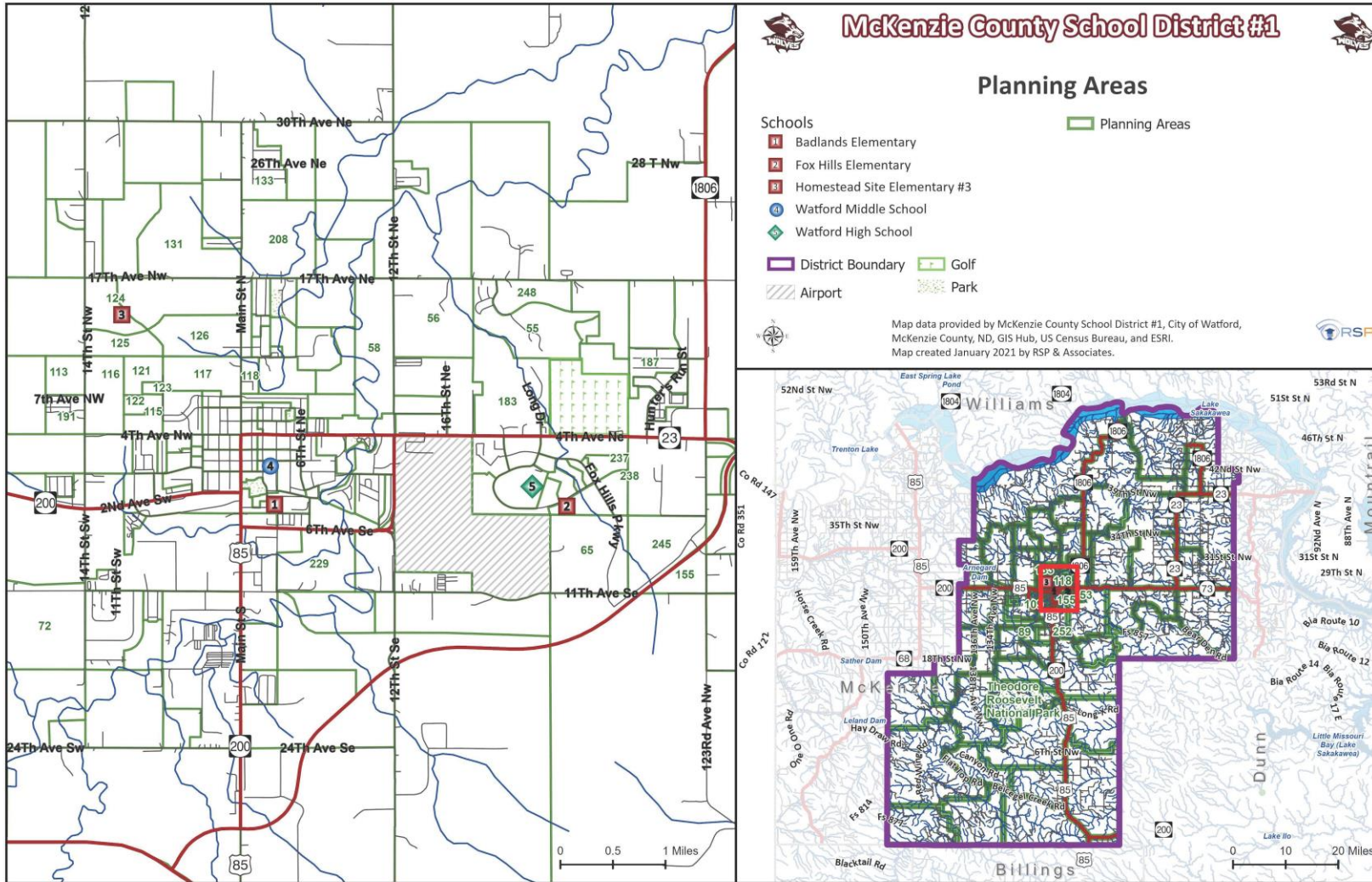
# PLANNING AREAS



- There are over 250 planning areas RSP monitors for demographic, development, and enrollment data sets
  - Land Use (Residential, Commercial, Industrial)
  - Residential Density (Single-Family, Mobile Home, Duplex, Apartment)
- Natural Features (Rivers and Creeks)
- Manmade Features (Railroad and Streets)
- Attendance Areas

# DETAILED PLANNING AREAS
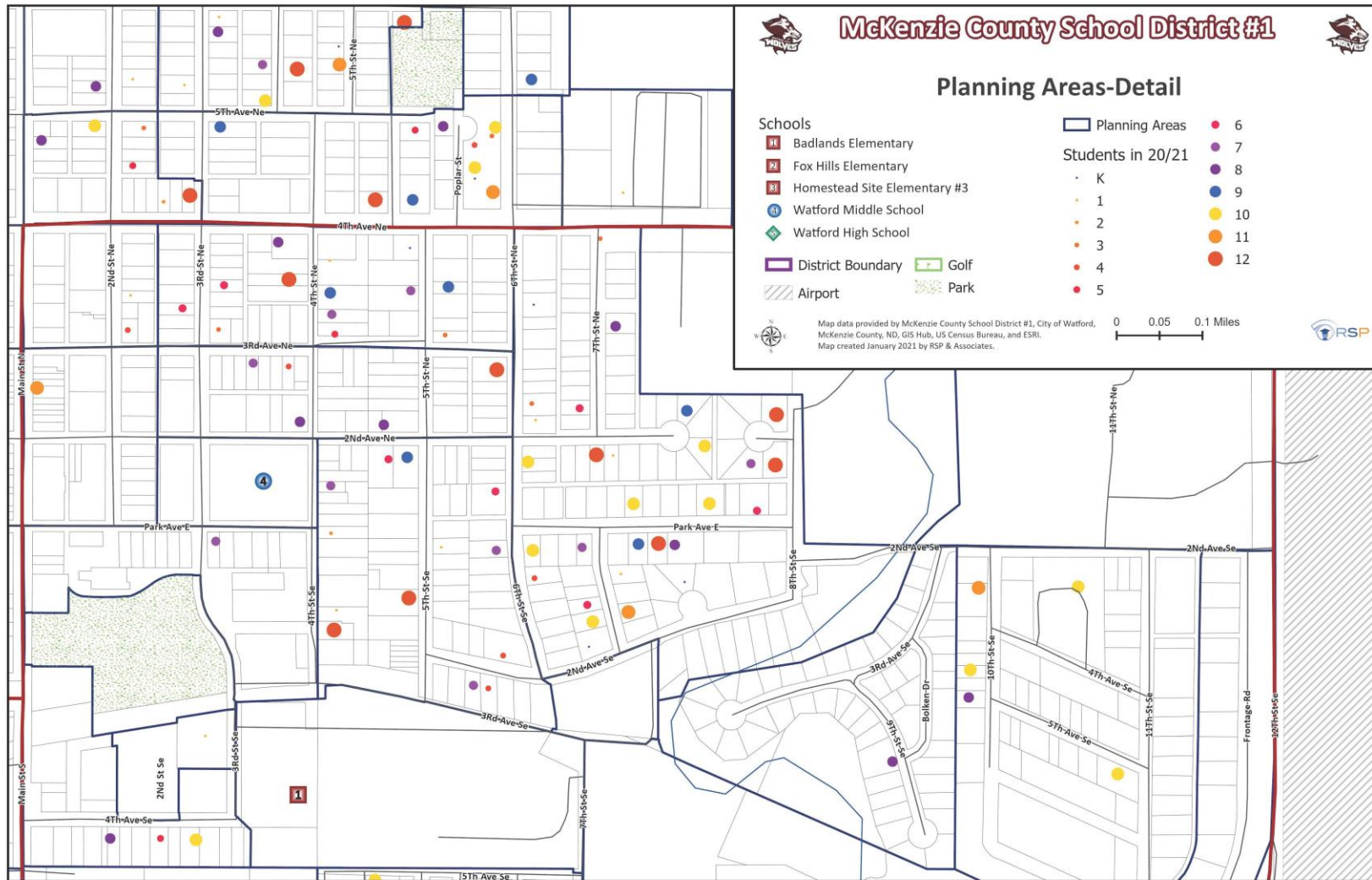


- Zoomed in view of Planning Areas **(Green)**
- Displays the power of GIS data & Information
- See where students are located by grade in relation to streets, subdivisions, and parcels
- Illustrates how the planning areas are tied to development types at the parcel level
- This example shows Planning Areas near Badlands Elementary

# SOPHISTICATED FORECAST MODEL

**Built-Out**

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

Let:

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

**Developing**

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

**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 250 Planning Areas are statistically analyzed in the district

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 SFM DETAILS

▪ The important factor concerning the RSP SFM is that it is a Social Science not an exact science; it identifies behavior trends to determine the propensity of them to be recreated:

▪ The value of the RSP SFM is how our team creates and analyzes the geography at a planning area level for any commonality which will help produce an accurate forecast

▪ Some of the variables examined for each planning area (but not limited to):

  ▪ Natural Cohort (District data)
  ▪ Planning Area Subdivision Lifecycle (RSP variable)
  ▪ Value of Homes (County assessor data)
  ▪ Type of Residential unit (SF, MF, DUP, TH, Resort, etc.) (County assessor data)
  ▪ Year units were built (County assessor data)
  ▪ 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 (CIP) (County and City data)
  ▪ Future Developments (County and City data)
  ▪ In-Migration of students (District data)
  ▪ Out-Migration of students (District data)

# BIRTH INFORMATION

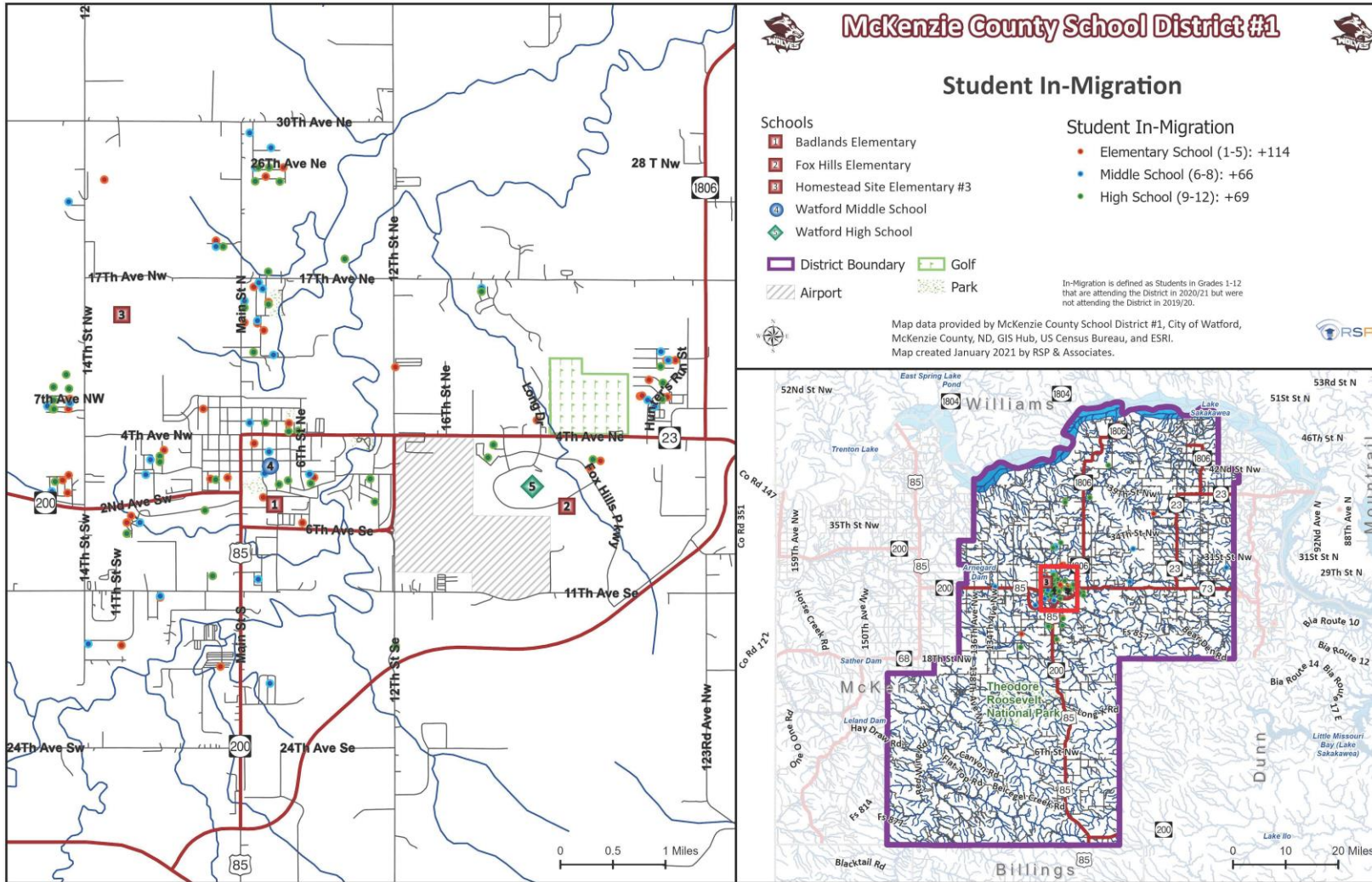**McKenzie County Live Births and McKenzie County School District Kindergarten 5-Years Later**

| Calendar Year | # Live Births | Birth Change | % Birth Change | School Year | # Kdg | %Kdg of Live Births |
|---|---|---|---|---|---|---|
| 2005 | 60 | | | 2015/16 | 128 | 241.5% |
| 2006 | 64 | 4 | 6.7% | 2016/17 | 123 | 112.8% |
| 2007 | 60 | -4 | -6.3% | 2017/18 | 145 | 127.2% |
| 2008 | 80 | 20 | 33.3% | 2018/19 | 194 | 110.2% |
| 2009 | 91 | 11 | 13.8% | 2019/20 | 186 | 81.6% |
| 2010 | 53 | -38 | -41.8% | 2020/21 | 164 | 71.9% |
| 2011 | 109 | 56 | 105.7% | | | |
| 2012 | 114 | 5 | 4.6% | | | |
| 2013 | 176 | 62 | 54.4% | | | |
| 2014 | 228 | 52 | 29.5% | | | |
| 2015 | 228 | 0 | 0.0% | | | |
| 2016 | 245 | 17 | 7.5% | | | |
| 2017 | 253 | 8 | 3.3% | | | |
| 2018 | 237 | -16 | -6.3% | | | |
| 2019 | 278 | 41 | 17.3% | | | |
| 3-Year Average | 256.0 | 11.00 | | | | |
| 3-Year Weighted Average | 260.2 | 16.50 | | | | |

**NOTES:**
- The number of Kindergarten students five years later is one variable to understand the transiency of a community
- % of Kindergarten students higher than 100% indicates that there are some Kindergarten students in the district who were not born in the county
- The last two years shows Kindergarten students below 100% of the total live births 5 years later

Source: North Dakota Department of Health Division of Vital Records and McKenzie County School District

## Live Birth Observations
- Tracks the number of live births and the corresponding number of kindergarten students in McKenzie County five years later
- The number of live births in McKenzie County is 363.3% more in 2019 than it was in 2005
- McKenzie County School District has a range of 71.9% to 241.5% of County live births five years later
- With larger number of live births, it is likely there will be more kindergarten students five years later

# STUDENT IN-MIGRATION



McKenzie County School District #1

## Student In-Migration

**Schools**
- Badlands Elementary
- Fox Hills Elementary
- Homestead Site Elementary #3
- Watford Middle School
- Watford High School
- District Boundary
- Airport
- Golf
- Park

**Student In-Migration**
- Elementary School (1-5): +114
- Middle School (6-8): +66
- High School (9-12): +69

In-Migration is defined as Students in Grades 1-12 that are attending the District in 2020/21 but were not attending the District in 2019/20.

Map data provided by McKenzie County School District #1, City of Watford, McKenzie County, ND, GIS Hub, US Census Bureau, and ESRI. Map created January 2021 by RSP & Associates.
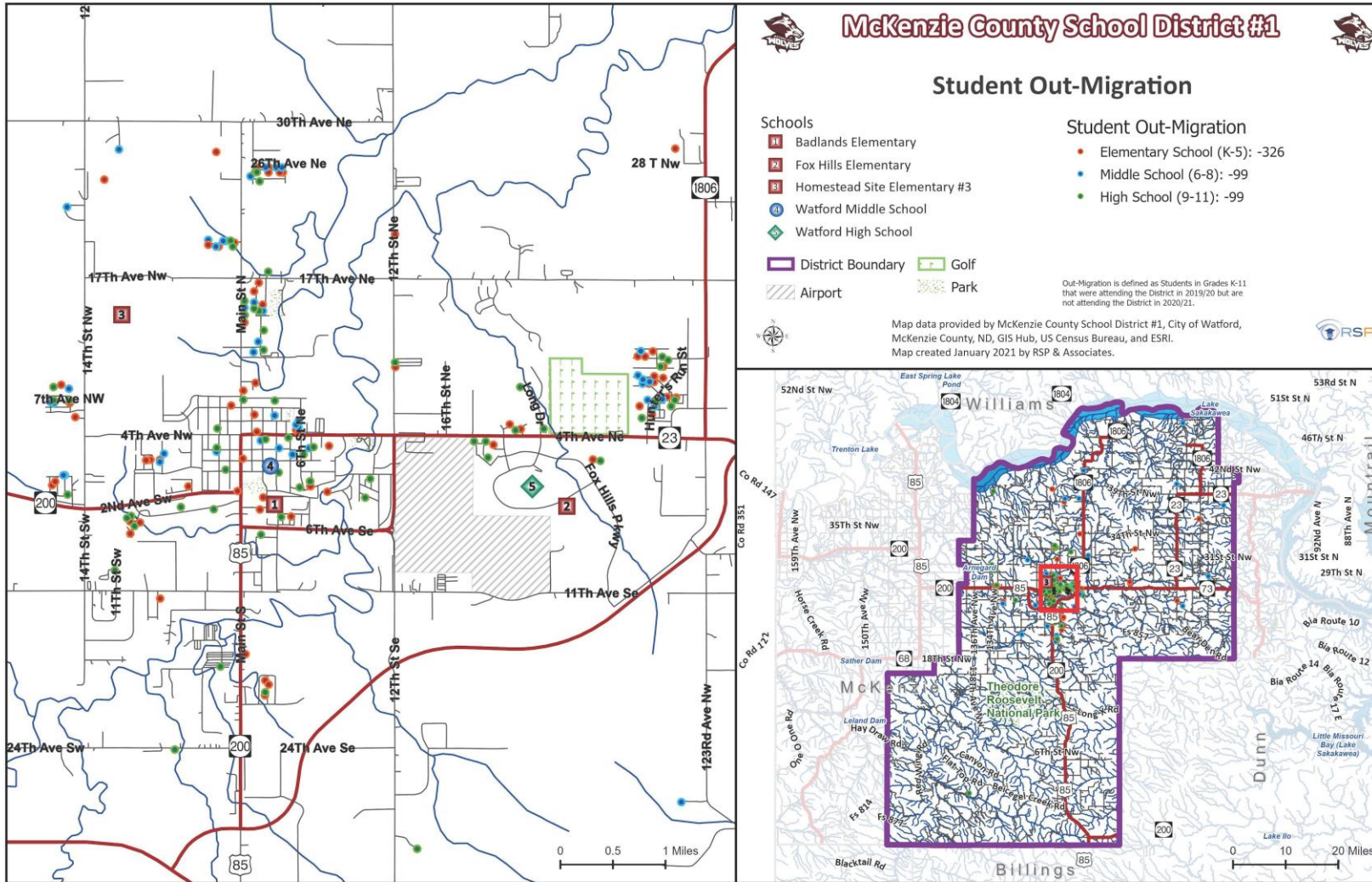
- 2020/21 students who are in 1st through 12th grade that were not attending the District in 2019/20 as Kindergarten through 11th grade.
- **323** new students in **2017/18**
- **469** new students in **2018/19**
- **368** new students in **2019/20**
- **249** new students in **2020/21**
- **Significantly fewer new students came to the district in 2020/21**

# STUDENT OUT-MIGRATION



- 2019/20 students who were in Kindergarten through 11th grades that are not attending the District in 2020/21 as 1st through 12th grade.
- **264** students left the district in **2017/18**, **Total Migration +59**
- **282** students left the district in **2018/19**, **Total Migration +187**
- **378** students left the district in **2019/20**, **Total Migration -10**
- **524** students left the district in **2020/21**, **Total Migration -275**
- **The number of students leaving the district has been increasing over the past few years.**

# ENROLLMENT BY GRADE

**Enrollment By Grade**

| Year | K | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th | Total |
|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-------|
| 2005/06 | 26 | 33 | 26 | 43 | 34 | 43 | 30 | 62 | 44 | 52 | 43 | 57 | 49 | 542 |
| 2006/07 | 37 | 28 | 30 | 28 | 44 | 29 | 45 | 32 | 63 | 47 | 54 | 43 | 55 | 535 |
| 2007/08 | 38 | 39 | 30 | 33 | 32 | 41 | 34 | 48 | 34 | 60 | 43 | 55 | 44 | 531 |
| 2008/09 | 38 | 40 | 35 | 30 | 29 | 36 | 41 | 36 | 50 | 36 | 63 | 39 | 48 | 521 |
| 2009/10 | 40 | 40 | 41 | 39 | 34 | 34 | 39 | 43 | 37 | 49 | 42 | 59 | 40 | 537 |
| 2010/11 | 44 | 48 | 41 | 39 | 45 | 37 | 32 | 43 | 47 | 45 | 55 | 43 | 62 | 581 |
| 2011/12 | 65 | 51 | 65 | 54 | 50 | 59 | 49 | 45 | 57 | 45 | 51 | 63 | 44 | 698 |
| 2012/13 | 78 | 79 | 67 | 72 | 69 | 67 | 65 | 67 | 53 | 73 | 61 | 57 | 59 | 867 |
| 2013/14 | 125 | 109 | 91 | 91 | 84 | 94 | 74 | 84 | 87 | 66 | 81 | 64 | 55 | 1,105 |
| 2014/15 | 132 | 135 | 128 | 101 | 104 | 102 | 105 | 89 | 90 | 96 | 68 | 81 | 71 | 1,302 |
| 2015/16 | 128 | 145 | 133 | 121 | 102 | 99 | 99 | 105 | 85 | 82 | 84 | 65 | 68 | 1,316 |
| 2016/17 | 123 | 127 | 121 | 133 | 123 | 106 | 107 | 103 | 111 | 85 | 96 | 82 | 62 | 1,379 |
| 2017/18 | 145 | 127 | 146 | 129 | 141 | 123 | 98 | 113 | 109 | 119 | 94 | 96 | 75 | 1,515 |
| 2018/19 | 194 | 164 | 155 | 171 | 140 | 161 | 146 | 121 | 123 | 136 | 113 | 98 | 92 | 1,814 |
| 2019/20 | 186 | 179 | 165 | 159 | 172 | 154 | 148 | 145 | 117 | 153 | 118 | 112 | 84 | 1,892 |
| 2020/21 | 164 | 141 | 147 | 124 | 128 | 147 | 134 | 140 | 127 | 124 | 124 | 96 | 96 | 1,692 |

Source: McKenzie County School District #1

## Enrollment Table Explanation:
- Largest class in 2020/21 – **Kindergarten (164)**
- Smallest class in 2020/21 – **11th & 12th grade (96)**
- Graduating senior class smaller than the incoming Kindergarten class
- Largest grades since 2005/06
  - **Elementary: None, Middle School: 8th grade, High School: 10th & 12th grade**

# COHORT STUDENT OBSERVATION

**Change By Grade from the Previous Year**

| 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 | Total Change | Total Percent |
|------|------|-----|-------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|-----------|--------------|---------------|
| 2005/06 | 2006/07 | 11 | 2 | -3 | 2 | 1 | -5 | 2 | 2 | 1 | 3 | 2 | 0 | -2 | -7 | -1.3% |
| 2006/07 | 2007/08 | 1 | 2 | 2 | 3 | 4 | -3 | 5 | 3 | 2 | -3 | -4 | 1 | 1 | -4 | -0.7% |
| 2007/08 | 2008/09 | 0 | 2 | -4 | 0 | -4 | 4 | 0 | 2 | 2 | 2 | 3 | -4 | -7 | -10 | -1.9% |
| 2008/09 | 2009/10 | 2 | 2 | 1 | 4 | 4 | 5 | 3 | 2 | 1 | -1 | 6 | -4 | 1 | 16 | 3.1% |
| 2009/10 | 2010/11 | 4 | 8 | 1 | -2 | 6 | 3 | -2 | 4 | 4 | 8 | 6 | 1 | 3 | 44 | 8.2% |
| 2010/11 | 2011/12 | 21 | 7 | 17 | 13 | 11 | 14 | 12 | 13 | 14 | -2 | 6 | 8 | 1 | 117 | 20.1% |
| 2011/12 | 2012/13 | 13 | 14 | 16 | 7 | 15 | 17 | 6 | 18 | 8 | 16 | 16 | 6 | -4 | 169 | 24.2% |
| 2012/13 | 2013/14 | 47 | 31 | 12 | 24 | 12 | 25 | 7 | 19 | 20 | 13 | 8 | 3 | -2 | 238 | 27.5% |
| 2013/14 | 2014/15 | 7 | 10 | 19 | 10 | 13 | 18 | 11 | 15 | 6 | 9 | 2 | 0 | 7 | 197 | 17.8% |
| 2014/15 | 2015/16 | -4 | 13 | -2 | -7 | 1 | -5 | -3 | 0 | -4 | -8 | -12 | -3 | -13 | 14 | 1.1% |
| 2015/16 | 2016/17 | -5 | -1 | -24 | 0 | 2 | 4 | 8 | 4 | 6 | 0 | 14 | -2 | -3 | 63 | 4.8% |
| 2016/17 | 2017/18 | 22 | 4 | 19 | 8 | 8 | 0 | -8 | 6 | 6 | 8 | 9 | 0 | -7 | 136 | 9.9% |
| 2017/18 | 2018/19 | 49 | 19 | 28 | 25 | 11 | 20 | 23 | 23 | 10 | 27 | -6 | 4 | -4 | 299 | 19.7% |
| 2018/19 | 2019/20 | -8 | -15 | 1 | 4 | 1 | 14 | -13 | -1 | -4 | 30 | -18 | -1 | -14 | 78 | 4.3% |
| 2019/20 | 2020/21 | -22 | -45 | -32 | -41 | -31 | -25 | -20 | -8 | -18 | 7 | -29 | -22 | -16 | -200 | -10.6% |
| 3-Yr Avg | | 6.3 | -13.7 | -1.0 | -4.0 | -6.3 | 3.0 | -3.3 | 4.7 | -4.0 | 21.3 | -17.7 | -6.3 | -11.3 | 59.0 | 4.5% |
| 3-Yr Wavg | | -5.5 | -24.3 | -11.0 | -15.0 | -13.3 | -4.5 | -10.5 | -0.5 | -8.7 | 18.0 | -21.5 | -10.7 | -13.3 | -24.2 | -0.6% |

Source: McKenzie County School District #1

## Cohort Change Table:

- Largest 3-year average K-12 class increase is **8th** to **9th grade (+21)**
- Largest 3-year average K-12 class decrease is **9th to 10th grade (-18)**
- Largest increase in 2020/21 was 8th to 9th grade (+7)
- Largest decrease in 2020/21 was Kindergarten to 1st grade (-45)
- **All cohort decreased in 2020/21 besides 8th to 9th grade**
- *District has not seen a negative decrease in enrollment since the 2007/08 to 2008/09 school years*

# STUDENT COUNT CHANGE
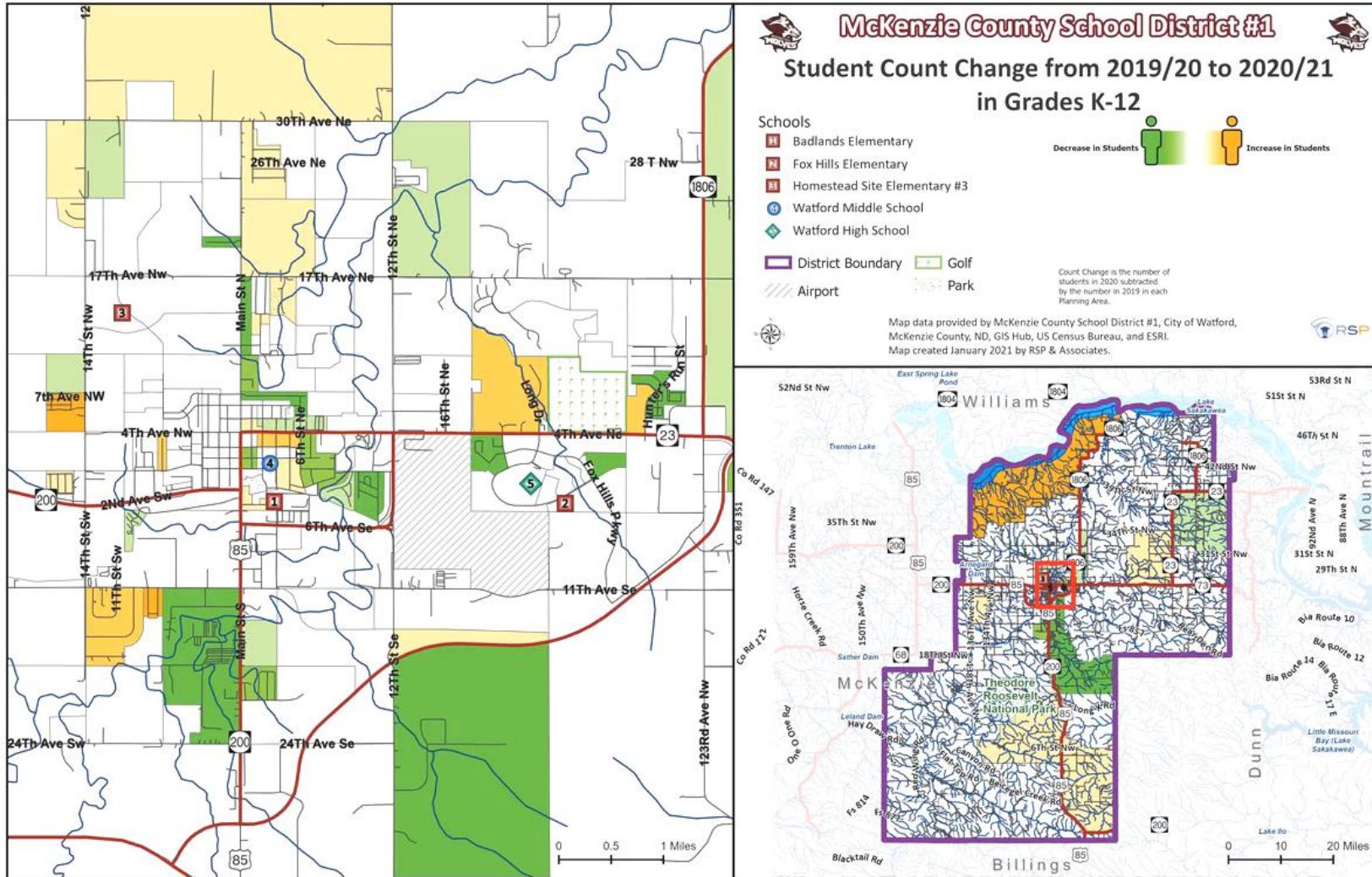


- Depicts student movement each year at each Planning Area from **2004/05** to **2020/21**
- **Orange** areas experienced an increase year to year, **Green** areas experienced a decrease, **White** areas had no net change of students between **year to year**
- New developments have a greater propensity to have more students in future years
- Current colors do not indicate area will continue to increase or decrease

# STUDENT "HEAT" DENSITY
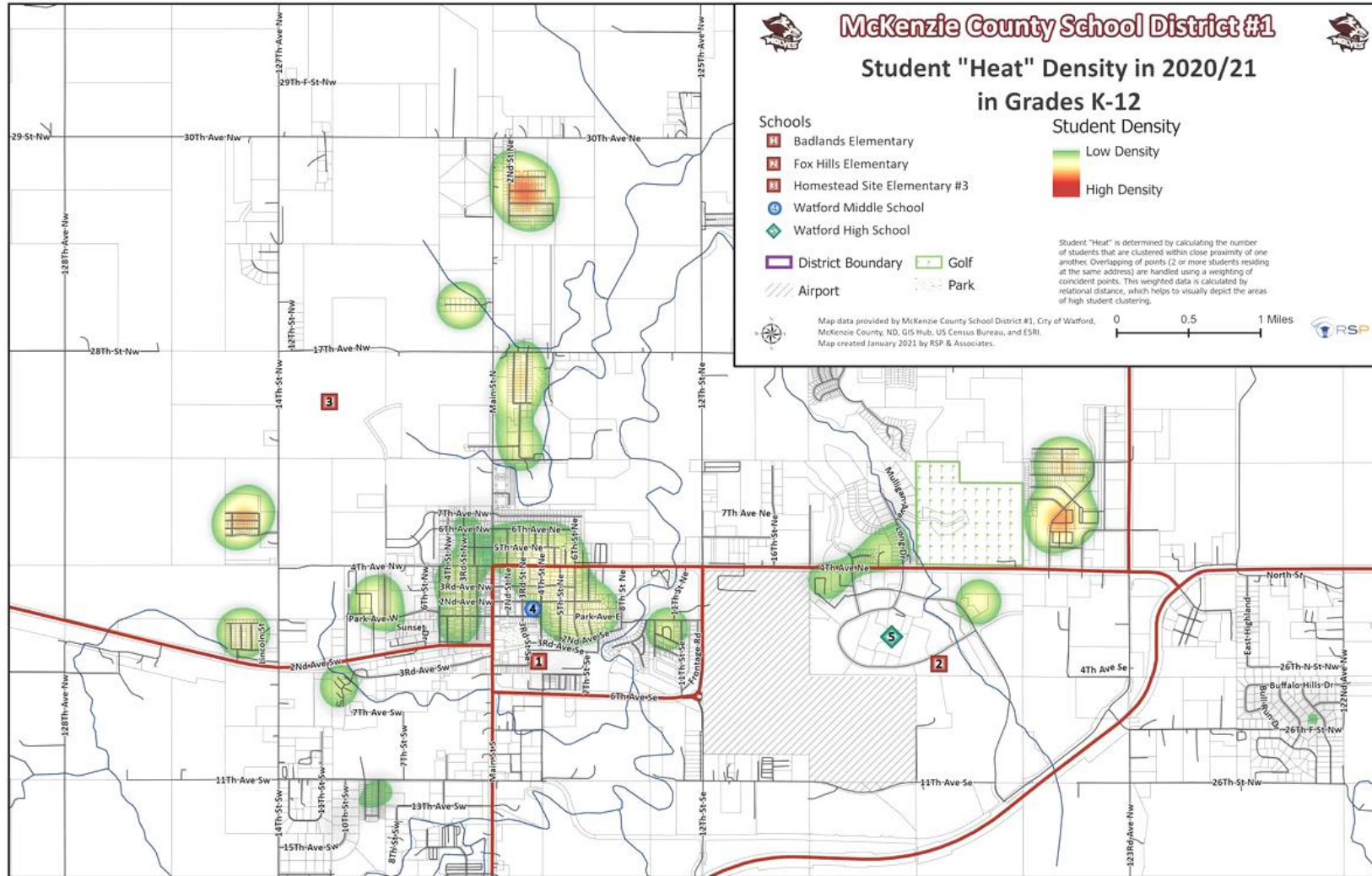


- **Red** areas depict highest density of students, **Gray** as lowest student density
  - Overlapping points (2 or more students) are handled using a weighting of coincident points
  - This analysis helps with understanding student population and geographic proximity to schools
  - Some new areas do not necessarily lead to similar yield rates of like developments
  - Student density continues to increase in newer multi-family developments
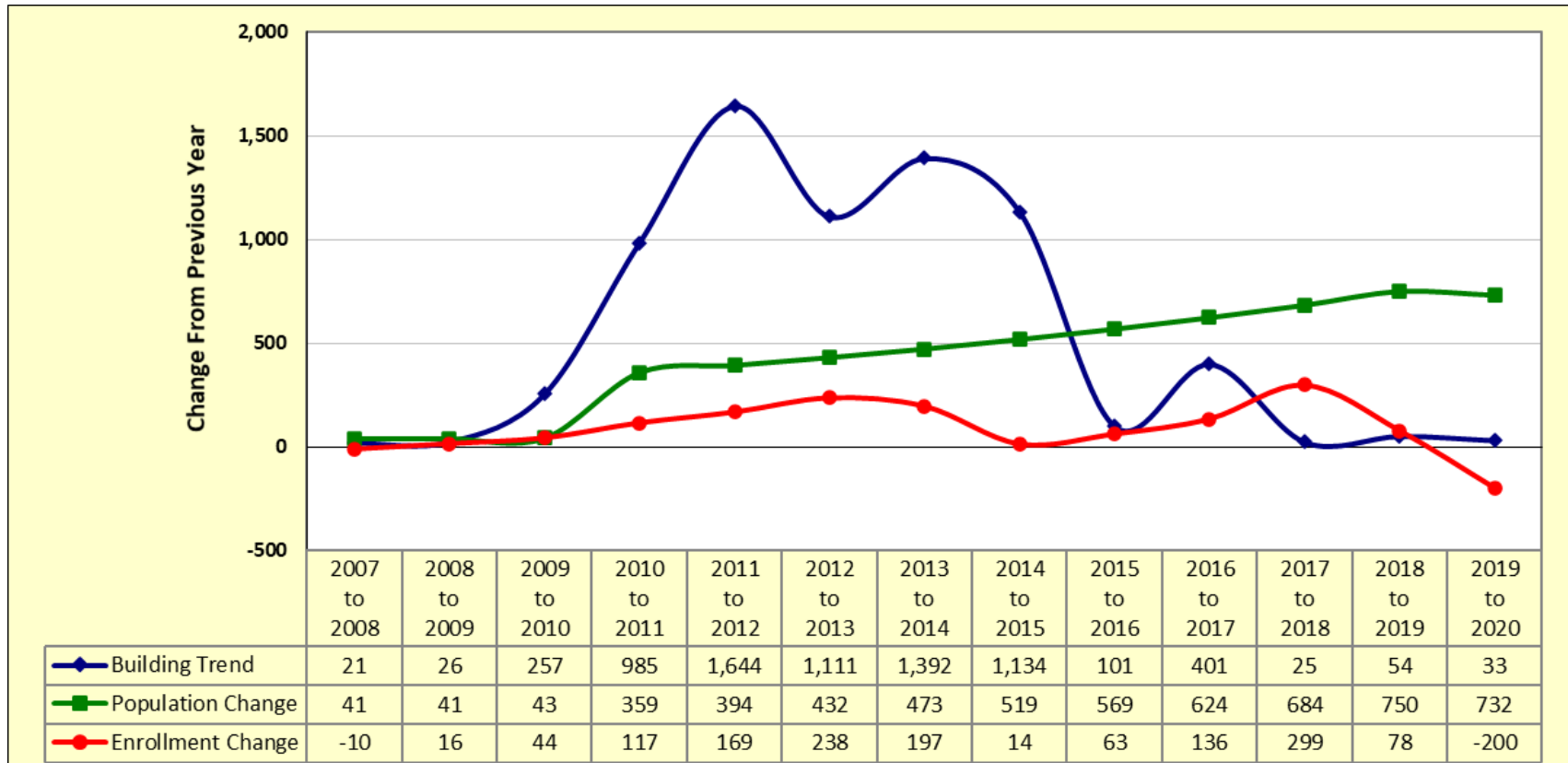
# ENROLLMENT OBSERVATIONS

**The following are some general enrollment observations;**

- COVIC-19 had an impact on the 2020/21 enrollment
    - Started the school year off with face-to-face learning and gave families the option of all online learning
    - District is following the guidance of the governor and health department to determine learning model

- **First decrease in enrollment the district has seen since the 2008/09 school year**
    - This could be an impact of COVID-19 and need to be monitored to determine if this enrollment will be a new trend

- The district has maintained contiguous boundaries for elementary schools

- RSP & Associates monitors over **250** planning areas for demographic, development, and enrollment data sets

- Direct correlation between women in childbearing ages (15-49) and where children (0-4) reside (monitoring demographic impact of millennials)

- Enrollment tends to change from grade to grade each year at each level
    - Large increase happened from 8th to 9th grade (+7 students)
    - Large decrease happened from Kindergarten to 1st grade (-45 students)
    - **All grades, but 8th to 9th, had a cohort decrease (similar to last year) in 2020/21**

- Greatest student density is increasing in newer developments like Hunters Run, Emerald Ridge, and Bison Blue

- Least student density in rural areas of the district

- The slowdown in housing makes it a challenge for new households to find affordable homes or the type of housing they would like to ultimately reside in

# PART TWO: DEVELOPMENT

| | 2007 to 2008 | 2008 to 2009 | 2009 to 2010 | 2010 to 2011 | 2011 to 2012 | 2012 to 2013 | 2013 to 2014 | 2014 to 2015 | 2015 to 2016 | 2016 to 2017 | 2017 to 2018 | 2018 to 2019 | 2019 to 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Building Trend | 21 | 26 | 257 | 985 | 1,644 | 1,111 | 1,392 | 1,134 | 101 | 401 | 25 | 54 | 33 |
| Population Change | 41 | 41 | 43 | 359 | 394 | 432 | 473 | 519 | 569 | 624 | 684 | 750 | 732 |
| Enrollment Change | -10 | 16 | 44 | 117 | 169 | 238 | 197 | 14 | 63 | 136 | 299 | 78 | -200 |

Source: Census Estimates, Watford City, McKenzie County School District #1 Enrollment and RSP SFM & Demographic Models

## Graphic Explanation

- Census data indicates an increasing population (Forecasted to increase annually 3.94%)
  - Households moving into the district appear to have more children which are school aged
  - Families making choices to live where jobs are, meaning living in multi-family housing
- Building trend indicates there has been steady new residential activity (Anticipated to increase)
  - Census data indicates in 2020 there was a 17.4% vacancy (Estimate from July 2020)
  - Increase from 2012 to 2015 were the multi-family residential units that came online
  - Anticipating more single-family development to be completed within the next couple of years
- Student Enrollment growth decreased negatively
  - Smaller elementary grades will likely mean less enrollment at the middle and high school grades

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# STUDENT YIELD RATE

## Single-Family (SF)

| Schools | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Badlands Elementary | 0.13 | 0.12 | 0.12 | 0.12 | 0.13 | 0.12 | 0.12 | 0.14 | 0.11 | 0.12 | 0.12 | 0.13 | 0.12 | 0.12 | 0.13 | 0.13 | 0.12 | 0.12 |
| Fox Hills Elementary | 0.28 | 0.27 | 0.27 | 0.25 | 0.19 | 0.21 | 0.17 | 0.15 | 0.11 | 0.17 | 0.17 | 0.18 | 0.16 | 0.17 | 0.19 | 0.19 | 0.19 | 0.2 |
| District (K-5): | 0.17 | 0.16 | 0.15 | 0.16 | 0.15 | 0.14 | 0.14 | 0.14 | 0.11 | 0.14 | 0.14 | 0.15 | 0.14 | 0.14 | 0.16 | 0.16 | 0.15 | 0.15 |

Source: McKenzie County School District, McKenzie County, & Watford City

## Multi-Family (MF)

| Schools | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Badlands Elementary | 0.09 | 0.07 | 0.06 | 0.07 | 0.06 | 0.08 | 0.08 | 0.05 | 0.05 | 0.08 | 0.08 | 0.07 | 0.06 | 0.07 | 0.09 | 0.09 | 0.07 | 0.07 |
| Fox Hills Elementary | 0.47 | 0.28 | 0.23 | 0.25 | 0.22 | 0.24 | 0.19 | 0.08 | 0.06 | 0.08 | 0.06 | 0.05 | 0.07 | 0.08 | 0.11 | 0.1 | 0.08 | 0.16 |
| District (K-5): | 0.13 | 0.1 | 0.08 | 0.1 | 0.08 | 0.11 | 0.09 | 0.06 | 0.05 | 0.08 | 0.07 | 0.06 | 0.06 | 0.07 | 0.1 | 0.1 | 0.07 | 0.08 |

Source: McKenzie County School District, McKenzie County, & Watford City

## Single-Family Table Explanation

- Depicts elementary (K-5) enrollment and the corresponding yield rate for the last fifteen years
- Single-Family residential yield rate average has slightly decreased over the past decade
- Adding newer housing inventory typically can increase the yield rate – type of housing must be monitored
- From 2004 to 2020 there were approximately **1,963** single family units added to the building inventory

## Multi-Family Table Explanation

- Multi-family consists of any residential unit that would be classified as Townhome, Duplex, Apartment, and mobile home – basically everything other than single-family
- Multi-Family has decreased near half over the past decade
- Multi-Family residential average (.08) has a lower student yield rate when compared to Single-Family residential (.15) within the district
- From 2004 to 2020 there were approximately **5,270** multi-family units added to the building inventory
- Adding newer housing inventory typically can increase the yield rate
  - The Heat map assists in understanding how that has changed over time (Page 20)
  - Residential unit activity provides the basis for timeline and where units likely are built (Page 27)

# Other Enrollment Trends

## 2017

| DevType | InMigration | OutMigration | NetMigration |
|---|---|---|---|
| Single Family | 79 | -97 | -18 |
| Multi-Family | 228 | -151 | 77 |
| Unmatched | 4 | -6 | -2 |
| Out of District | 12 | -10 | 2 |
| All | 323 | -264 | 59 |

## 2018

| DevType | InMigration | OutMigration | NetMigration |
|---|---|---|---|
| Single Family | 129 | -85 | 44 |
| Multi-Family | 334 | -186 | 148 |
| Unmatched | 0 | -1 | -1 |
| Out of District | 6 | -10 | -4 |
| All | 469 | -282 | 187 |

## 2019

| DevType | InMigration | OutMigration | NetMigration |
|---|---|---|---|
| Single Family | 102 | -129 | -27 |
| Multi-Family | 248 | -241 | 7 |
| Unmatched | 10 | -1 | 9 |
| Out of District | 8 | -7 | 1 |
| All | 368 | -378 | -10 |

## 2020

| DevType | InMigration | OutMigration | NetMigration |
|---|---|---|---|
| Single Family | 86 | -177 | -91 |
| Multi-Family | 153 | -334 | -181 |
| Unmatched | 5 | -7 | -2 |
| Out of District | 5 | -6 | -1 |
| All | 249 | -524 | -275 |

## Migration Trends

- Tables show the migration patterns of students for the last 4 years by development type
- Highest migration is from students living in multi-family households, likely due to the transiency of the oil industry
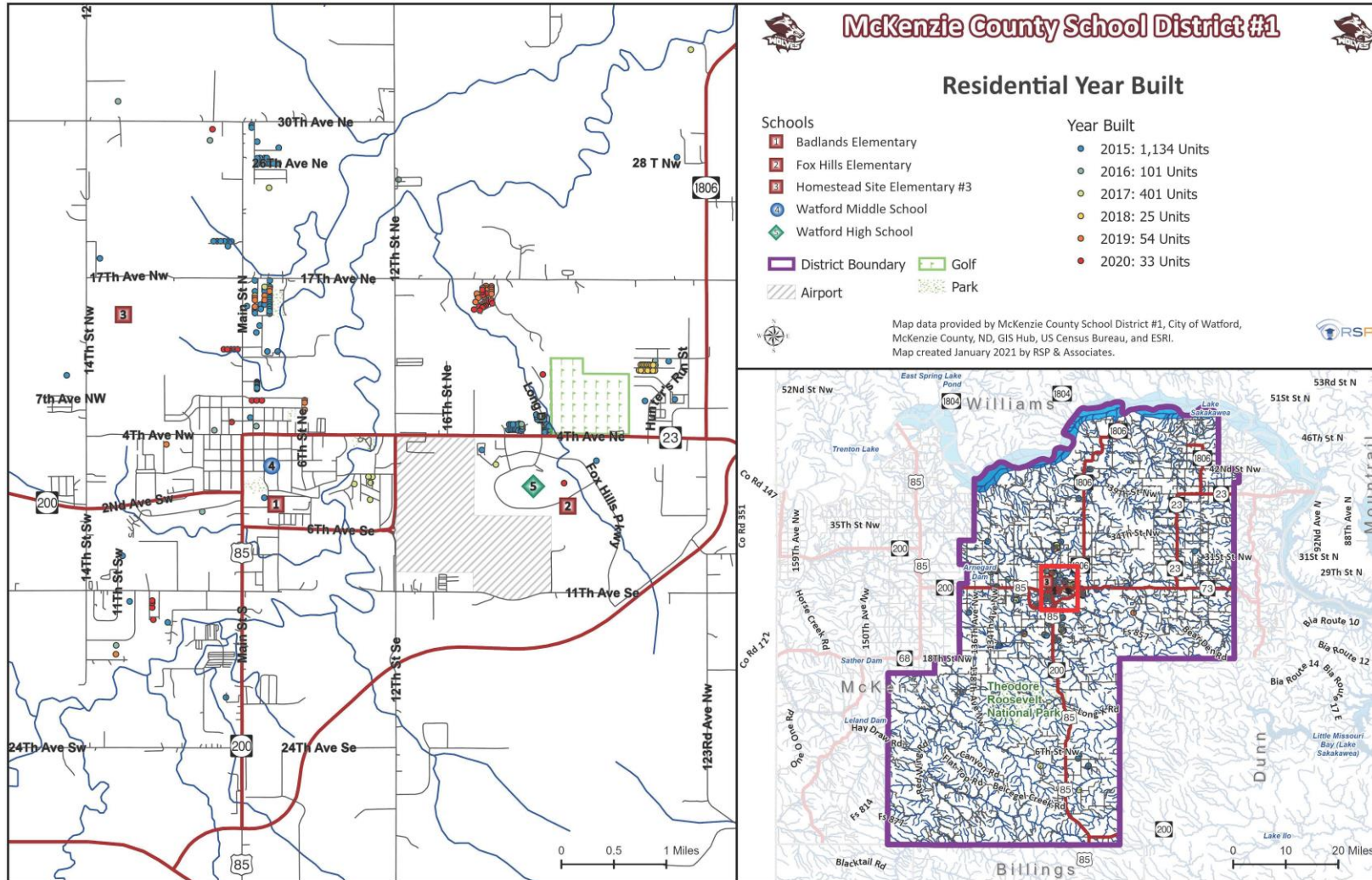- 2020 had an overall net decrease in all development types

## NOTES:

- Does not include incoming Kindergarten (always new) or outgoing 12th grade students (always leave)
- Does not include Kindergarten or 12th grade students who are retained in that same grade the following school year
- Number of kids by type from previous year to the following year
- Significant change in people remaining in the district
- Greater number of student decrease in multi-family development

# MEDIAN HOME VALUE
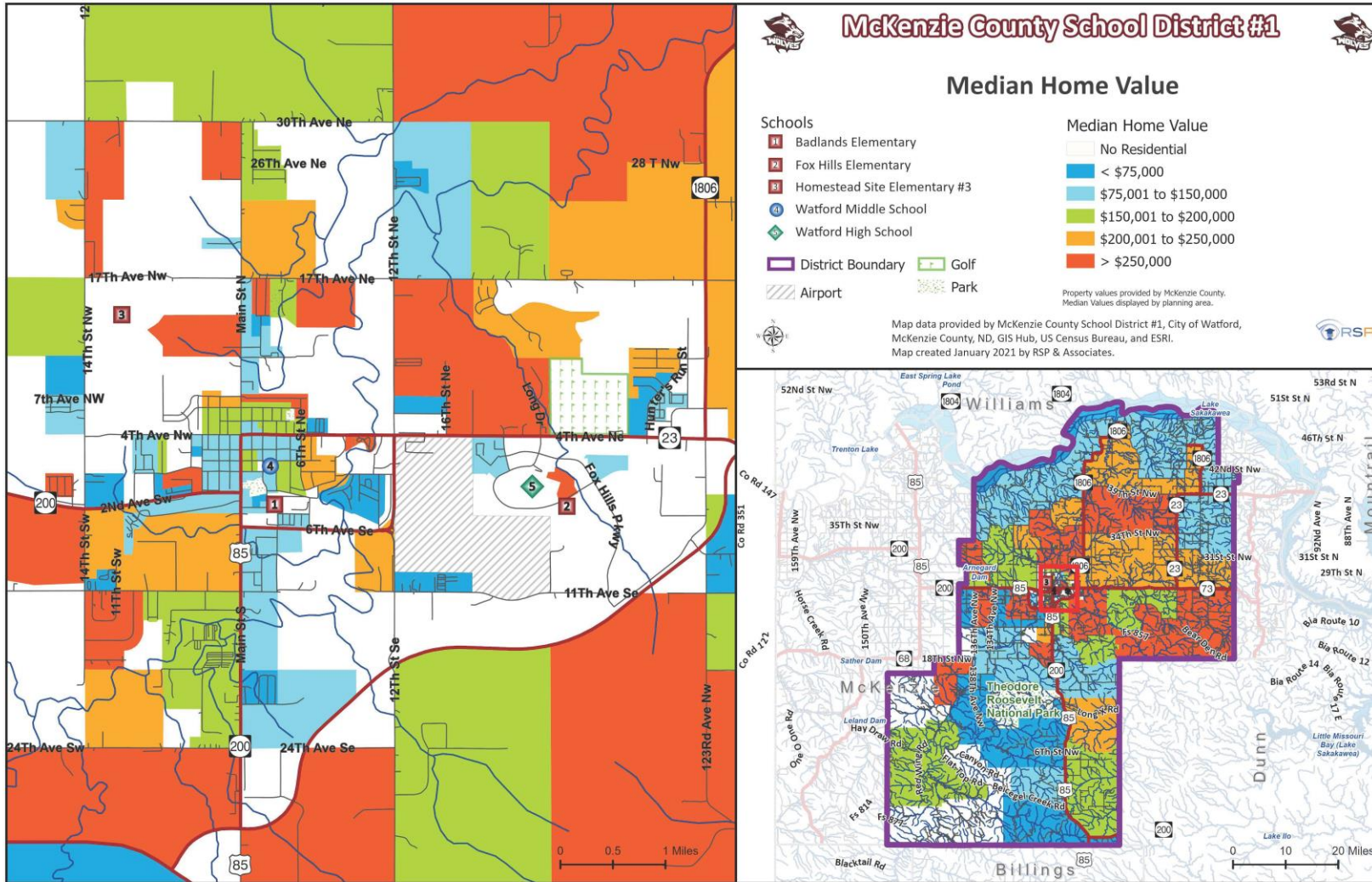


- Based on assessed Home Value as provided and maintained by the county assessor's office
- Home values correlated to socio-economic status – new areas tend to be the least affordable

- Areas shaded in **Orange** and **Red** have the greatest Median Home Value, **Blue** represents the greatest affordability

# RESIDENTIAL YEAR BUILT



**McKenzie County School District #1**

## Residential Year Built

**Schools**
- Badlands Elementary
- Fox Hills Elementary
- Homestead Site Elementary #3
- Watford Middle School
- Watford High School
- District Boundary
- Airport
- Golf
- Park

**Year Built**
- 2015: 1,134 Units
- 2016: 101 Units
- 2017: 401 Units
- 2018: 25 Units
- 2019: 54 Units
- 2020: 33 Units

Map data provided by McKenzie County School District #1, City of Watford, McKenzie County, ND, GIS Hub, US Census Bureau, and ESRI. Map created January 2021 by RSP & Associates.

- Reveals the build out and timing of residential development within the district
- Some new areas do not necessarily lead to similar yield rates of like developments
- While areas may be platted for residential it may take several years for houses to be built and new student residents to move in

- Colors of dots represent a specific year according to the county assessor's office
- 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
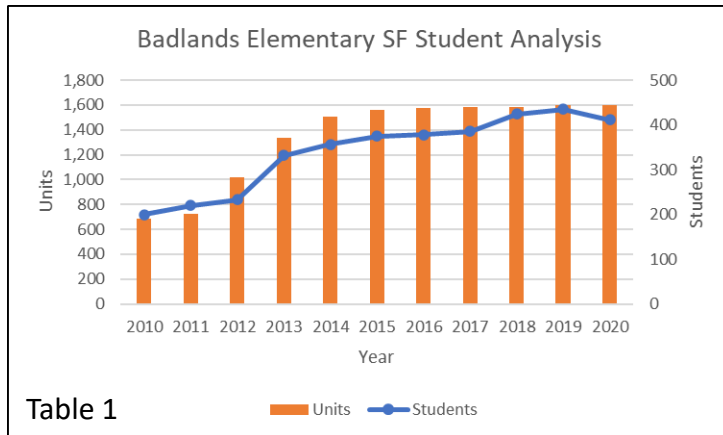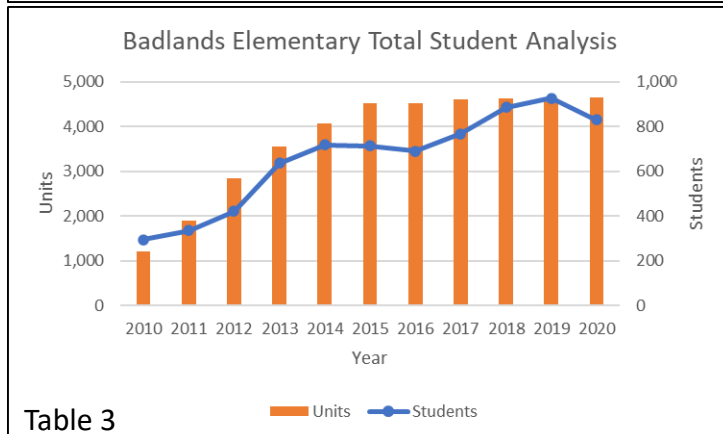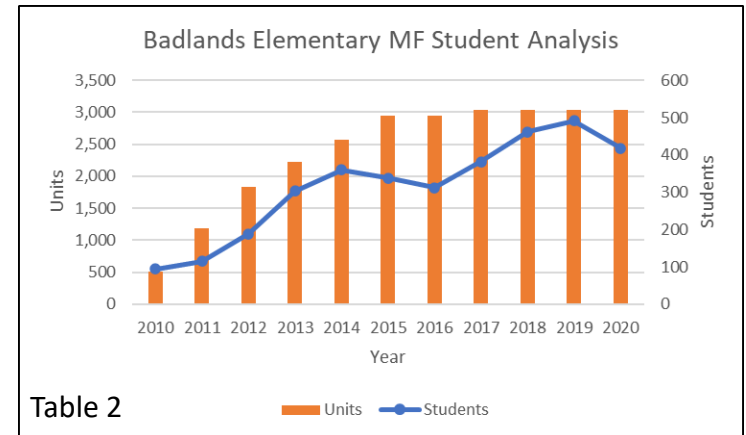
# GROWTH AREAS



McKenzie County School District #1

**Growth Areas**
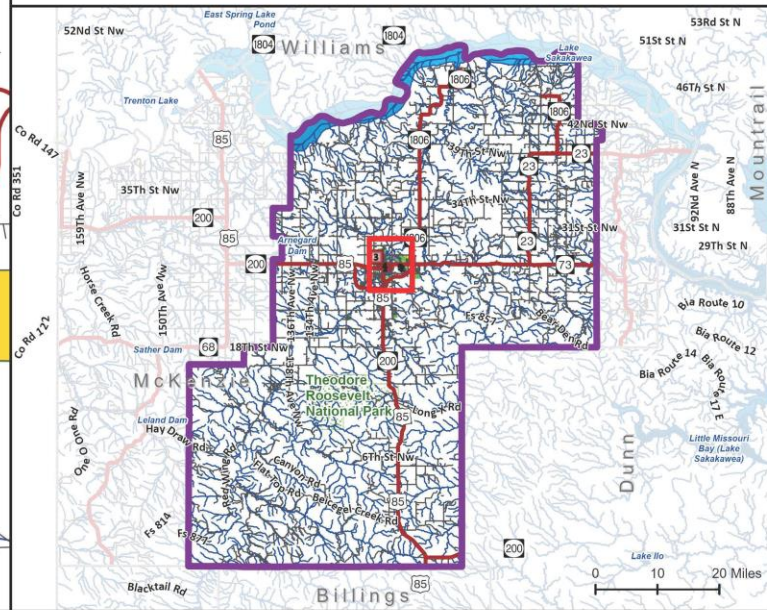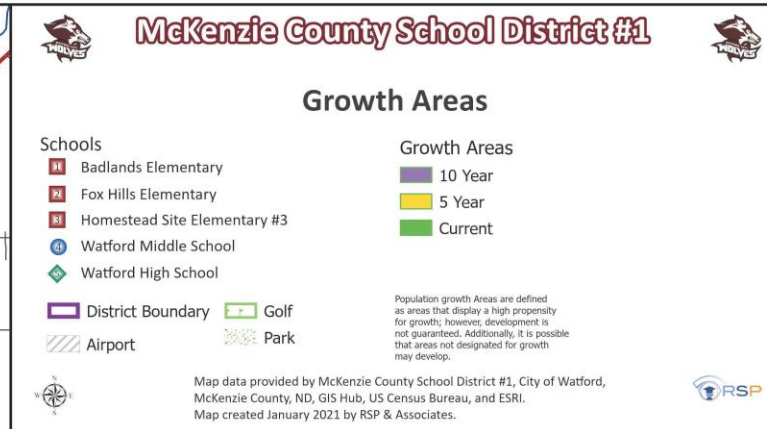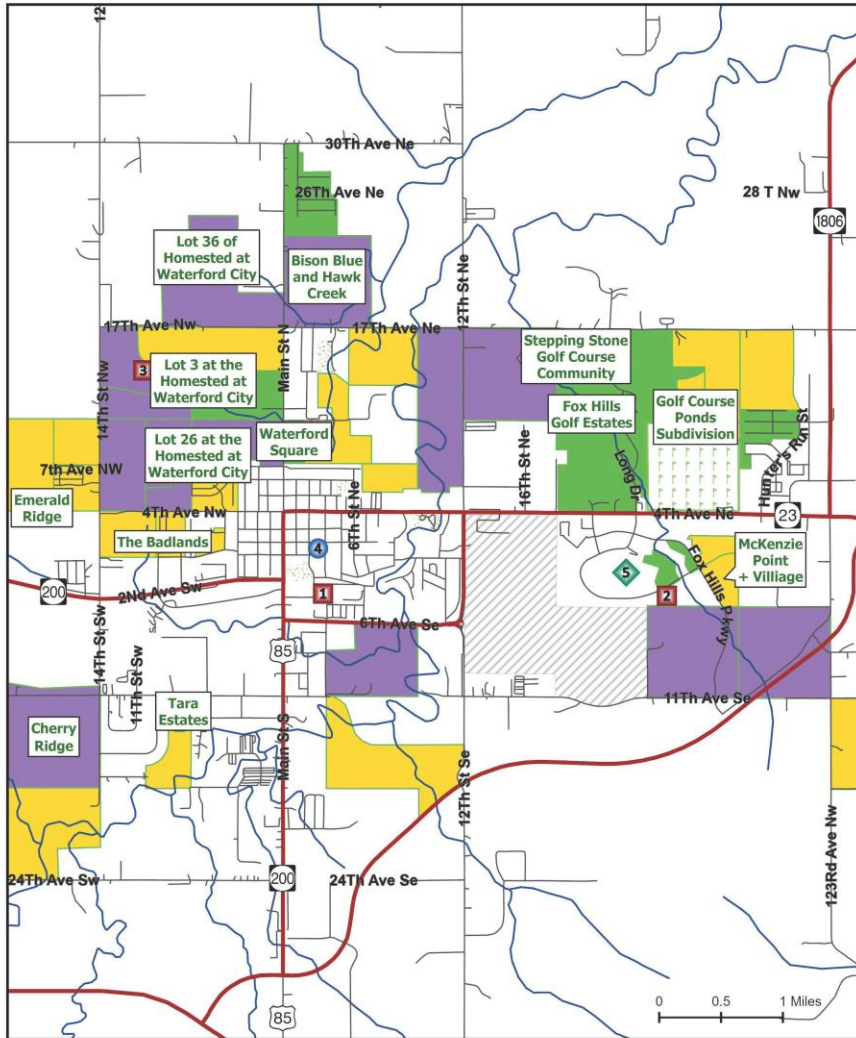
- Identifies where development activity is happening **(Green)**
- Identifies possible areas that could develop
  - **Yellow:** 1-5 years
  - **Purple:** likely 6-10 years
- The market and property owners desire to build guides the

timing of development. Other properties not shown might develop while some shown might not develop
- Majority of residential development will happen in Stepping Stone and Fox Hill
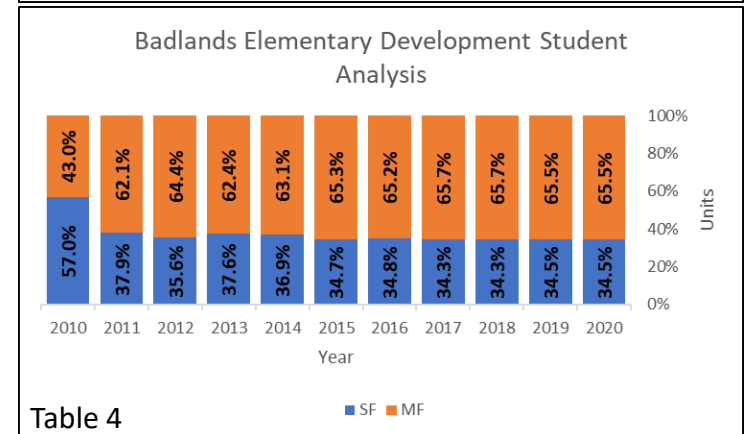
# Badlands ES Boundary Analysis



Table 1 — Badlands Elementary SF Student Analysis



Table 2 — Badlands Elementary MF Student Analysis

Overall, students increased by 181.0%



Table 3 — Badlands Elementary Total Student Analysis

Overall, Development increased by 287.5%



Table 4 — Badlands Elementary Development Student Analysis

- **Notes:**
- Table 1: The number of Single-Family (SF) units available by year in Badlands ES boundary and the number of K-12 students attending
- Table 2: The number of Multi-Family (MF) units available by year in Badlands ES boundary and the number of K-12 students attending
- Table 3: : The number of total units available by year in Badlands ES boundary and the number of K-12 students attending
- Table 4: The percentage of units by development type (Blue is SF and Orange is MF)
- Multi-family development continues to increase in the Badlands ES boundary

# Fox Hills ES Boundary Analysis


Table 1 — Fox Hills Elementary SF Student Analysis


Table 2 — Fox Hills Elementary MF Student Analysis


Table 3 — Fox Hills Elementary Total Student Analysis


Table 4 — Fox Hills Elementary Development Student Analysis
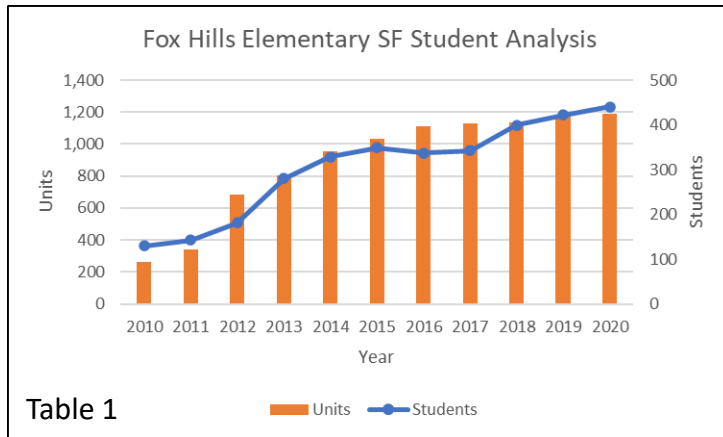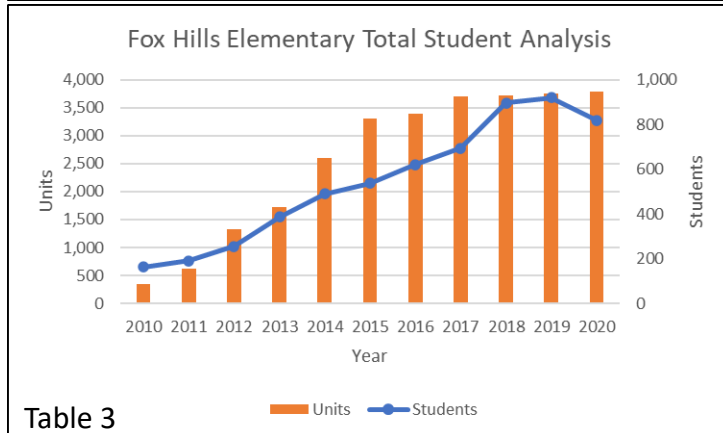
Overall, students increased by 399.4%
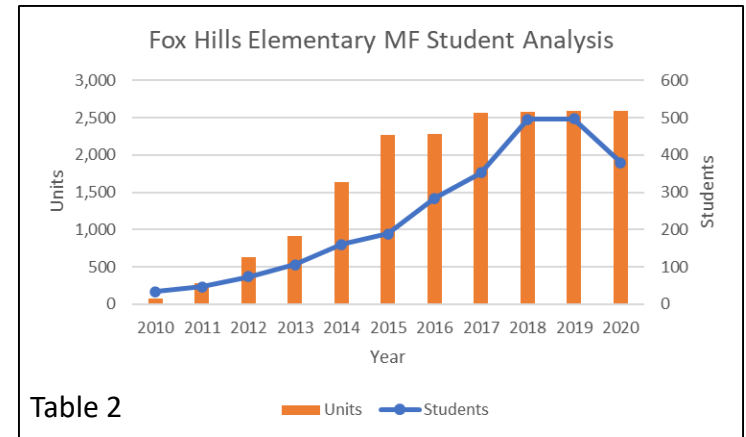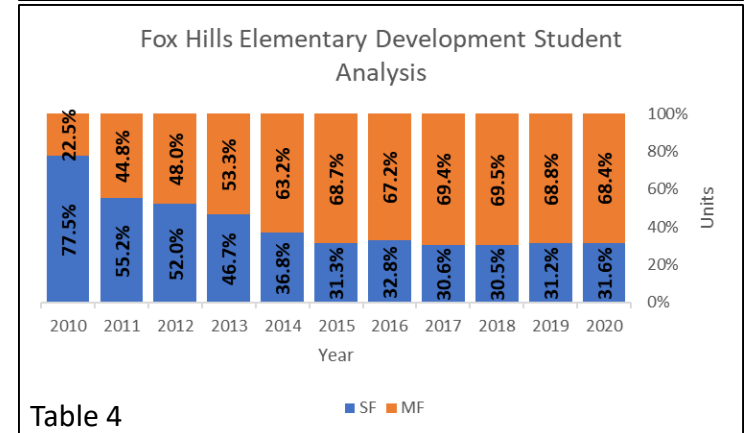
Overall, Development increased by 1,004.7%

- **Notes:**
- Table 1: The number of Single-Family (SF) units available by year in Badlands ES boundary and the number of K-12 students attending
- Table 2: The number of Multi-Family (MF) units available by year in Badlands ES boundary and the number of K-12 students attending
- Table 3: : The number of total units available by year in Badlands ES boundary and the number of K-12 students attending
- Table 4: The percentage of units by development type (Blue is SF and Orange is MF)
- Multi-family development continues to increase in the Fox Hills ES boundary

# Development Activity

| Planning Area Name | Growth Area | Existing Units | Potential Units | Acres | Planning Area Name | Growth Area | Existing Units | Potential Units | Acres |
|---|---|---|---|---|---|---|---|---|---|
| Bison Blue and Hawk Creek | Current | 225 | 60 | 70.16 | North of Future Halm Drive, Homested at Waterford City | 5 Year | 0 | 73 | 124.86 |
| Buffalo Hills Drive | Current | 0 | 27 | 139.81 | North of water treatment | 5 Year | 1 | 160 | 74.98 |
| Countryside Estates | Current | 8 | 65 | 161.63 | Pheasant Ridge Sub | 5 Year | 0 | 128 | 22.44 |
| Fox Hills Golf Estates | Current | 38 | 105 | 171.59 | South of Tara Estates | 5 Year | 0 | 122 | 36.78 |
| Fox Hills Village Stenehjem Development (North) | Current | 0 | 25 | 6.58 | South of Waterford City Limits | 5 Year | 0 | 336 | 143.39 |
| Fox Hills Village Stenehjem Development (South) | Current | 4 | 58 | 13.61 | Stepping Stone Golf Course Community | 5 Year | 0 | 100 | 10.73 |
| Longview Subdivision | Current | 61 | 62 | 159.91 | The Badlands | 5 Year | 168 | 84 | 25.43 |
| Lot 3 at the Homested at Waterford City | Current | 5 | 171 | 89.44 | The Highlands | 5 Year | 0 | 105 | 45.00 |
| Prairie Woodlands Subdivision | Current | 25 | 86 | 140.28 | West of Hunter's Run | 5 Year | 0 | 388 | 80.78 |
| Silver Springs | Current | 90 | 39 | 39.20 | Bison Blue and Hawk Creek | 10 Year | 7 | 300 | 151.18 |
| Stepping Stone Golf Course Community | Current | 34 | 283 | 191.33 | Cherry Ridge | 10 Year | 0 | 500 | 370.32 |
| Tara Estates | Current | 33 | 50 | 14.99 | Inbetween Emerald Ridge and the Highlands | 10 Year | 0 | 195 | 79.67 |
| The Crossings (Phase 1B, 182 Efficiency Apartments) | Current | 0 | 28 | 9.27 | Lot 20 at the Homested at Waterford City | 10 Year | 0 | 118 | 58.07 |
| Waterford Square | Current | 14 | 134 | 16.91 | Lot 22 at the Homested at Waterford City | 10 Year | 0 | 114 | 47.31 |
| Badlands Development LLC (North of Park Ave W) | 5 Year | 0 | 22 | 12.31 | Lot 24 at the Homestead at Waterford City | 10 Year | 0 | 47 | 32.89 |
| Cherry Ridge | 5 Year | 0 | 500 | 293.91 | Lot 25 at the Homested at Waterford City | 10 Year | 0 | 17 | 6.52 |
| East of Pheasant Ridge Sub | 5 Year | 0 | 120 | 48.56 | Lot 26 at the Homested at Waterford City | 10 Year | 0 | 44 | 18.26 |
| Emerald Ridge | 5 Year | 277 | 381 | 160.08 | Lot 36 of Homested at Waterford City | 10 Year | 0 | 210 | 166.44 |
| Future Development West of Buffalo Hills Drive | 5 Year | 1 | 415 | 177.08 | North of new Watford City Police Department | 10 Year | 0 | 263 | 112.14 |
| Future growth near The Badlands | 5 Year | 0 | 0 | 49.18 | North of the Highlands and West of Watford Square | 10 Year | 0 | 166 | 73.18 |
| Golf Course Ponds Subdivision | 5 Year | 0 | 96 | 32.09 | Northwest of 11th Ave SE at 123rd Ave NW | 10 Year | 0 | 106 | 45.23 |
| Hospitality Assoc LLC | 5 Year | 0 | 65 | 28.80 | South of 17th Ave NE | 10 Year | 2 | 110 | 164.70 |
| McKenzie Park | 5 Year | 60 | 0 | 19.03 | South of Fox Hills Village | 10 Year | 0 | 400 | 272.76 |
| McKenzie Point + Villiage | 5 Year | 0 | 0 | 27.41 | West of 12th St NE | 10 Year | 0 | 100 | 139.60 |
| NE of Watford City Golf Course | 5 Year | 0 | 191 | 81.60 | West of the Highlands | 10 Year | 0 | 50 | 22.25 |

Source: City of Watford, McKenzie County, and RSP

## Notes:

- Table has been created to illustrate the type and amount of potential development
- The growth area shows how the areas that can be developed have a timing variable associated which assists in forecasting future student enrollment
- There are **7,219 units** that could be built
- The speed in which any developments are built are influenced by who owns the property, access to infrastructure, and economic indicators
- About **1,193 units** in **current** growth areas
- About **3,286 units** are proposed to be developed within the next 5 years

# Development
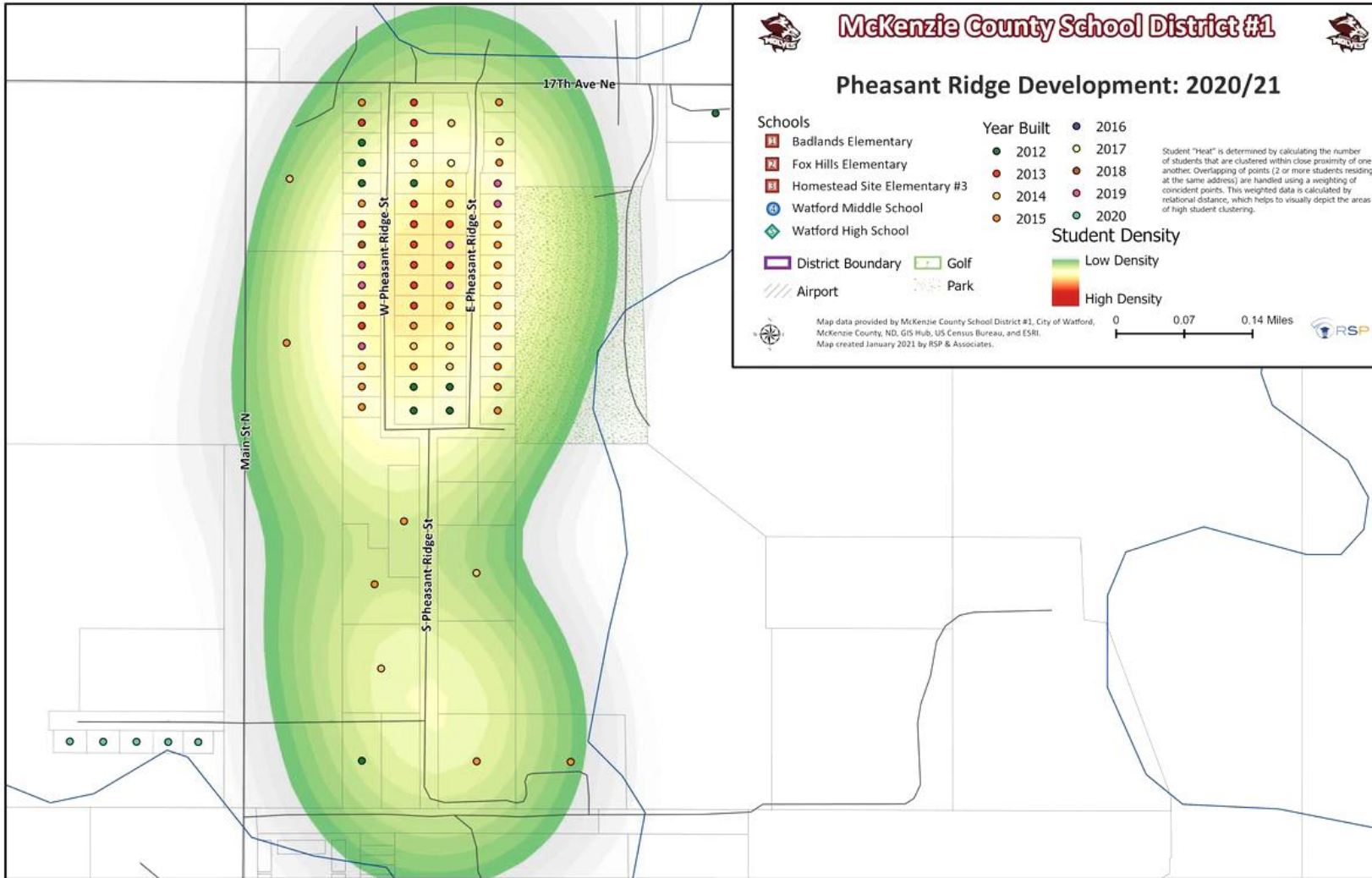


- This displays the growth of students in the Pheasant Ridge Development from 2008 to 2020
- **Red** areas depict highest density of students, **Gray** as lowest student density
- Overlapping points (2 or more students) are handled using a weighting of coincident points
- Student growth is slightly behind development
- Student density has decreased in the Pheasant Ridge Community in the 2020/21 school year

# DEVELOPMENT OBSERVATIONS

**<u>The following are some general development observations;</u>**

- Population has continued to increase, where residential development has drastically slowed, housing product must remain affordable for the district to continue growth

- Single-Family residential has the highest propensity to have school aged students, yield rates of this development type are typically greater than Multi-Family (Building Permit production in 2020 was higher than previous years)
  - There have been significant patterns shifts related to how long a household with students chooses to reside, with the greatest change being the multi-family developments

- Development near the High School and Rough Rider Center is thriving
  - Lots in the Stepping Stone and Fox Hill development were selected for the JDA Shovel Ready Lot Program and expect to have over 120 lots ready by the Summer of 2021
    - The JDA Shovel Ready Lot Programs offers aid for infrastructure and require a strict completion date

- New Fair Grounds and softball complex are to be established to the west of Watford city limits
  - City plans to expand city water & sewer access to the west

- Development near the new elementary school will need to be affordable for families with students

- New policies in government may have an impact on the oil industry and can impact future development and enrollment trends

- Vacancy rates in multi-family developments have increased within the last year
  - Brookledge Apartments occupancy rate decreased from 80% in December 2019 to 62% in December 2020 (McKenzie County Job Development Authority)
  - Development in Emerald Ridge seems to be at a pause
  - 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

# PART THREE: ENROLLMENT PROJECTIONS

# PROJECTION VIEW
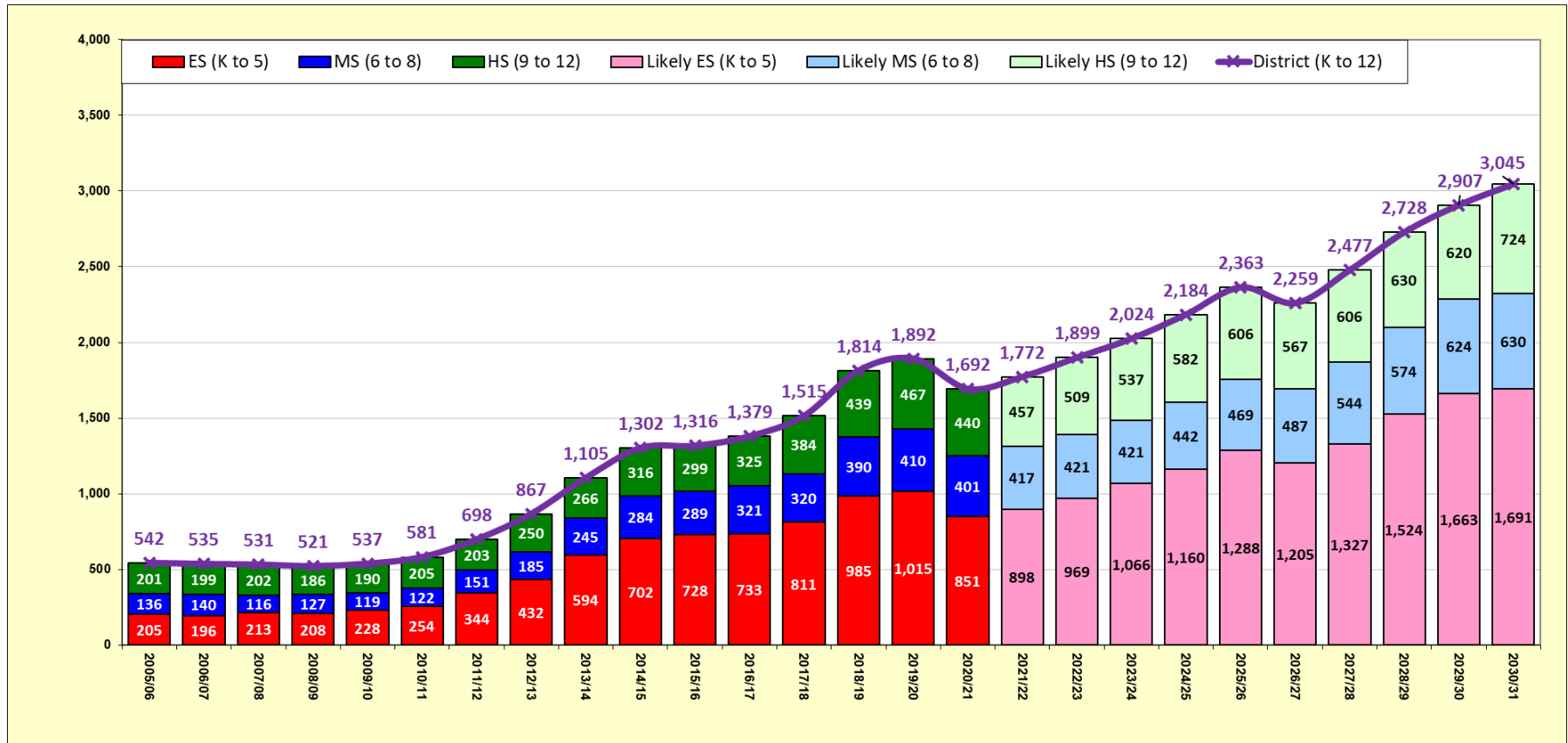


## Enrollment Change:

- Enrollment Change – Overall enrollment increase anticipated (Elementary, Middle, and High) by 2025/26
  - A cycle is projected for enrollment to drop after about 5 years and then continue to increase
- Increases based on continued development opportunities within the district – if housing does happen at county and city assumptions, the ability to meet this forecast will be limited
- District increases by just nearly 670 students (+34.6%) (Annual Range: +4.7% to +8.2%)
- Elementary increases by about 430 students (+43.3%) (Annual Range: +5.5% to +11.0%)
- Middle School increases by about 70 students (+16.0%) (Annual Range: +0.1% to +6.1%)
- High School increases by about 170 students (+33.2%) (Annual Range: +3.9% to 11.4%)

# PROJECTION NOTES

**Projections Clarification:**

- Past Enrollment is shown two 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)

**Projections are shown one way:**

1. Reside (Based on where a student Resides in relation to the attendance area: Includes Open Enrollment)

- **<u>Capacity</u>**
    □ Provided by district administration
    □ Light orange shading is where the capacity exceeds the building Capacity
    □ Should be annually examined to ensure appropriate education space is available

- **<u>Other Items</u>**
    □ Enrollment Grade Configuration in Student Forecast Model (K-5, 6-8, 9-12)
    □ Open enrollment trends are assumed to follow district policy and will continue like those trends during the projection time frame
    □ Fox Hills Elementary opened in 2020/21 school year
    □ Integrated potential outcomes as a result of COVID-19 that relate to a slowdown in new housing starts and challenges with the economy as it adapts to the "New Normal"
    □ There are challenges looking into the future impact National Elections may have on the economic drivers that the McKenzie County Region has benefited from over the last decade

# BUILDING PROJECTIONS

**GRADE CONFIGURATION:  K-5, 6-8, 9-12**

| School | Capacity Existing | Student Location | Past School Enrollment | | | | | Future Enrollment Reside & Attend Students | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 |
| Badlands Elementary | 600 | Reside | 493 | 536 | 507 | 525 | 408 | 430 | 463 | 534 | 595 | 674 | 642 | 713 | 828 | 914 | 930 |
| Capacity 600  Grades K to 5 (19/20: K to 3) | | Attend | 504 | 547 | 513 | 530 | 427 | | | | | | | | | | |
| Fox Hills Elementary | 600 | Res/Att | | | | | | 468 | 506 | 532 | 565 | 614 | 563 | 614 | 696 | 749 | 761 |
| | | Reside | 0 | 0 | 0 | 0 | 443 | | | | | | | | | | |
| Grades K-5 | | Attend | 0 | 0 | 0 | 0 | 424 | | | | | | | | | | |
| Watford City Middle School | 550 | Reside | 329 | 357 | 610 | 624 | 401 | 417 | 421 | 421 | 442 | 469 | 487 | 544 | 574 | 624 | 630 |
| Capacity 550  Grades 6-8 (18/19: 3 to 6) | | Attend | 336 | 362 | 618 | 633 | 401 | | | | | | | | | | |
| Watford City High | 800 | Reside | 519 | 582 | 669 | 714 | 440 | 457 | 509 | 537 | 582 | 606 | 567 | 606 | 630 | 620 | 724 |
| Capacity 800  Grades 9-12 (19/20: 7-12) | | Attend | 539 | 606 | 683 | 729 | 440 | | | | | | | | | | |
| DISTRICT K -12 TOTALS | 2,550 | Reside | 1,341 | 1,475 | 1,786 | 1,863 | 1,692 | 1,776 | 1,897 | 2,025 | 2,183 | 2,361 | 2,259 | 2,477 | 2,728 | 2,907 | 3,045 |
| Capacity 2,550  Kdg to 12th | | Attend | 1,379 | 1,515 | 1,814 | 1,892 | 1,692 | | | | | | | | | | |

| By Grade | Capacity Existing | Past School Enrollment | | | | | | | Future Enrollment Reside & Attend Students | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2013/14 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 |
| Kind | | 128 | 123 | 145 | 194 | 186 | 164 | 181 | 182 | 201 | 220 | 250 | 207 | 300 | 342 | 344 | 317 |
| 1st | | 145 | 127 | 127 | 164 | 179 | 141 | 163 | 182 | 184 | 204 | 225 | 211 | 212 | 305 | 308 | 244 |
| 2nd | | 133 | 121 | 146 | 155 | 165 | 147 | 146 | 171 | 193 | 196 | 216 | 201 | 221 | 222 | 316 | 318 |
| 3rd | | 121 | 133 | 129 | 171 | 159 | 124 | 149 | 150 | 175 | 199 | 202 | 189 | 208 | 229 | 229 | 324 |
| 4th | | 102 | 123 | 141 | 140 | 172 | 128 | 124 | 152 | 152 | 180 | 206 | 176 | 196 | 216 | 237 | 236 |
| 5th | | 99 | 106 | 123 | 161 | 154 | 147 | 135 | 132 | 161 | 161 | 189 | 221 | 190 | 210 | 229 | 252 |
| 6th | | 99 | 107 | 98 | 146 | 148 | 134 | 146 | 137 | 128 | 165 | 163 | 146 | 223 | 191 | 193 | 229 |
| 7th | | 105 | 103 | 113 | 121 | 145 | 140 | 132 | 149 | 141 | 132 | 170 | 167 | 150 | 229 | 197 | 199 |
| 8th | | 85 | 111 | 109 | 123 | 117 | 127 | 139 | 135 | 152 | 145 | 136 | 174 | 171 | 154 | 234 | 202 |
| 9th | | 82 | 85 | 119 | 136 | 153 | 124 | 133 | 149 | 144 | 162 | 156 | 108 | 185 | 183 | 144 | 219 |
| 10th | | 84 | 96 | 94 | 113 | 118 | 124 | 120 | 134 | 149 | 146 | 165 | 158 | 110 | 187 | 184 | 146 |
| 11th | | 65 | 82 | 96 | 98 | 112 | 96 | 114 | 116 | 131 | 146 | 143 | 161 | 154 | 109 | 183 | 180 |
| 12th | | 68 | 62 | 75 | 92 | 84 | 96 | 90 | 110 | 113 | 128 | 142 | 140 | 157 | 151 | 109 | 179 |
| K to 5th | 1,200 | 728 | 733 | 811 | 985 | 1,015 | 851 | 898 | 969 | 1,066 | 1,160 | 1,288 | 1,205 | 1,327 | 1,524 | 1,663 | 1,691 |
| 6th to 8th | 550 | 289 | 321 | 320 | 390 | 410 | 401 | 417 | 421 | 421 | 442 | 469 | 487 | 544 | 574 | 624 | 630 |
| 9th to 12th | 800 | 299 | 325 | 384 | 439 | 467 | 440 | 457 | 509 | 537 | 582 | 606 | 567 | 606 | 630 | 620 | 724 |
| District | 2,550 | 1,316 | 1,379 | 1,515 | 1,814 | 1,892 | 1,692 | 1,772 | 1,899 | 2,024 | 2,184 | 2,363 | 2,259 | 2,477 | 2,728 | 2,907 | 3,045 |
| K to 5th Grade Change | | | 5 | 78 | 174 | 30 | -164 | 47 | 71 | 97 | 94 | 128 | -83 | 122 | 197 | 139 | 28 |
| 6th to 8th Grade Change | | | 32 | -1 | 70 | 20 | -9 | 16 | 4 | 0 | 21 | 27 | 18 | 57 | 30 | 50 | 6 |
| 9th to 12th Grade Change | | | 26 | 59 | 55 | 28 | -27 | 17 | 52 | 28 | 45 | 24 | -39 | 39 | 24 | -10 | 104 |
| District K to 12th Grade Change | | | 63 | 136 | 299 | 78 | -200 | 80 | 127 | 125 | 160 | 179 | -104 | 218 | 251 | 179 | 138 |

Source: RSP & Associates, LLC - January 2021

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

Note 2: PreKindergarten are not in the enrollment projections

*Note 3: Capacity numbers for each school provided by the District*

*Note 5:  New High School opened in 2015/16 - Past Grade Configurations have changed to allow for best student expereince*

⬭ Exceed Existing Capacity

# MOVING FORWARD

# NEXT STEPS

**<u>The following items will assist the district advance its educational goals;</u>**

- Continue to utilize the enrollment projections to assist with planning for staff need for the following school year

- Annually review enrollment projections
  - There was an unexpected drop in enrollment in 2020/21, likely due to COVID-19
  - Need to be monitored to see if this is a new trend

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

- Monitor development and infrastructure activity on at least a monthly basis to understand how that may impact future enrollment
  - Development has dramatically slowed within the last 5 years and only 42 building permits were issued in 2020 in Watford City

- Monitor demographic shifts and type of development as this continues to influence where future households locate impacting the number of students that will attend each school
  - From 2019 to 2020, population only increase about half of what the Census forecasted last year

- Change in government policy can impact economy, development, and enrollment trends and should be monitored

- Determine the criteria to address capacity issues and timing for future school construction, remodeling, or new attendance areas
  - When will the 3rd ES open?
  - Create plan to alleviate MS capacity
  - Administration should continue to examine facility utilization opportunities to improve the student education experiences

- Continue to make decisions and communicate that information to the community so they can understand how educational opportunities will support College and Career ready students

- 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
  - Future planning requires seeking answers to questions outside of the determined COVID response

# NOTES

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# POPULATION OF KIDS 0-4, 2025
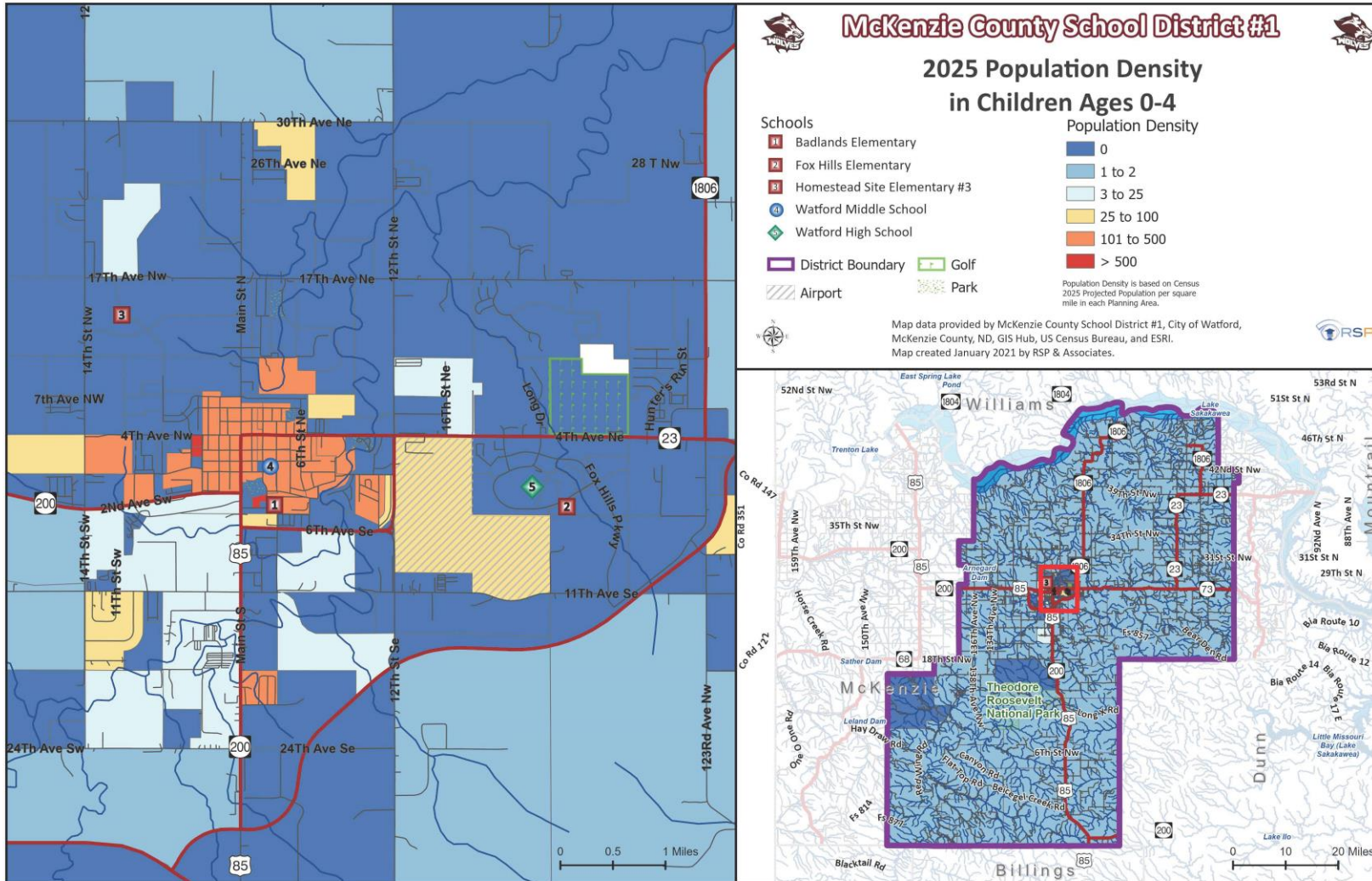


- Depicted by Census Block Group with 2025 estimates
- Density weighted by land area of each Block Group
- **Red** areas have greatest density, **Blue** have the least
- This data helps benchmark the projection model choices for future student enrollment

# POPULATION OF WOMEN 15-49, 2025
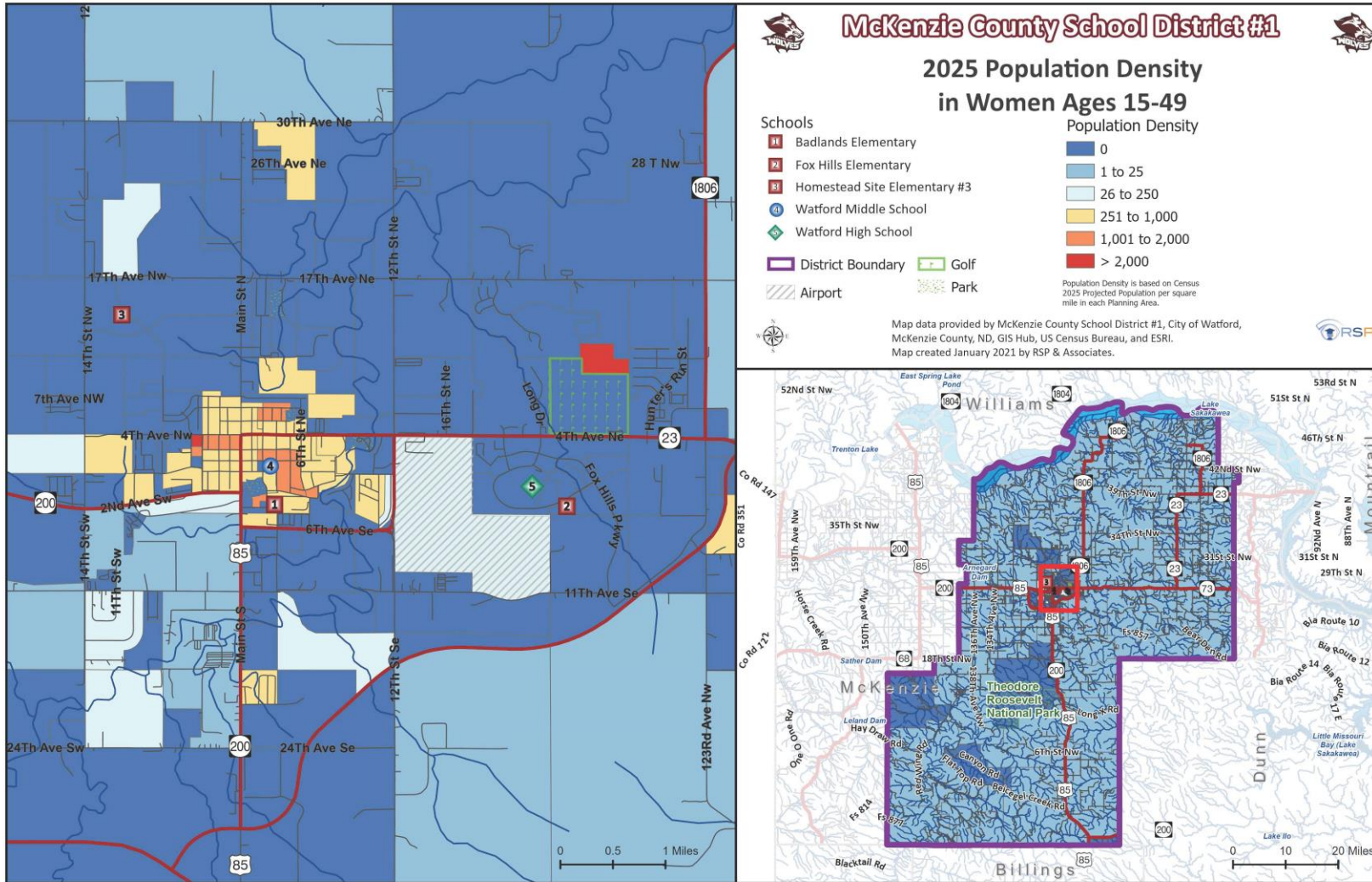


- Depicted by Census Block Group with 2024 estimates
- Density weighted by land area of each Block Group
- **Red** areas have greatest density, **Blue** have the least
- This data helps benchmark the projection model choices for future student enrollment

# DEMOGRAPHICS

**Population**

Annual Rate;
Percent Change

2000-2010: 1.13%
2010-2020: 9.64%
2020-2025: 3.94%

**Housing**

Annual Rate;
Percent Change

2000-2010: 0.80%
2010-2020: 9.57%
2020-2025: 3.12%

**Income**

Per Capita;
Percent Change

2020-2025: 1.02%

**Workforce**

Unemployment Rate

2020: 8.4%

**NOTES:**
- Overall, the District is experiencing an **Increase** in population and housing. However, the rate will be slower for the next five years.
- 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 required.
- Income is projected to **increase** over 1 percent annually through 2025
- Unemployment rate is lower than the State of North Dakota average

# DEMOGRAPHIC CONSIDERATION

| | McKenzie County School District | Williston Public School District #1 | Watford City ND | Dunn County | McKenzie County | State of North Dakota |
|---|---|---|---|---|---|---|
| Unemployment Rate | 8.4% | 9.0% | 8.5% | 9.4% | 11.0% | 10.1% |
| Average Household Size | 2.40 | 2.35 | 2.34 | 2.43 | 2.56 | 2.29 |
| Median Age | 44 | 37.3 | 43.2 | 46.2 | 40 | 38.2 |
| Total Population | 9,569 | 29,432 | 5,431 | 4,404 | 15,397 | 790,465 |
| Median Household Income | $84,396 | $79,086 | $76,617 | $73,948 | $75,469 | $62,746 |
| Total Housing Units | 4,775 | 14,607 | 2,599 | 2,558 | 7,385 | 380,795 |
| Owner Occupied Housing Units | 2,292 | 6,593 | 1,010 | 1,240 | 3,428 | 206,543 |
| Renter Occupied Housing Units | 1,654 | 5,785 | 1,284 | 522 | 2,533 | 127,071 |
| Vacancy Rate | 17.4% | 15.3% | 11.7% | 31.1% | 19.3% | 12.4% |

| Ethnicity | McKenzie County School District | Williston Public School District #1 | Watford City ND | Dunn County | McKenzie County | State of North Dakota |
|---|---|---|---|---|---|---|
| White | 92.5% | 85.7% | 91.0% | 87.9% | 77.4% | 84.4% |
| Black | 0.5% | 0.6% | 0.5% | 0.4% | 1.5% | 3.1% |
| American Indian/Alaskan | 0.2% | 5.2% | 0.2% | 8.0% | 8.7% | 4.9% |
| Asian | 1.0% | 0.3% | 1.4% | 0.2% | 0.8% | 1.7% |
| Pacific Islander | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.1% |
| Other Race | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| Two or More Races | 1.6% | 5.5% | 1.6% | 2.2% | 2.8% | 2.1% |
| Hispanic | 4.1% | 2.6% | 5.2% | 1.2% | 8.7% | 3.8% |

Source: U.S. Census, Esri BAO

## Demographics Information
- Demographic attribute information for McKenzie County School District is similar to the Watford City
- The Unemployment Rate is lower than the State of North Dakota (estimates from July 2020 from the US Census)
- The Median Household Income is higher than state of North Dakota but lower than some of the districts compared in the table
- Has the highest vacancy rate for all geographies

# EMPLOYMENT INFORMATION

| | McKenzie County School District | Williston Public School District #1 | Watford City ND | Dunn County | McKenzie County | State of North Dakota |
|---|---|---|---|---|---|---|
| 2019 Agriculture/Mining (SIC01-14) Employees | 10.6% | 11.8% | 5.2% | 23.2% | 10.2% | 4.0% |
| 2019 Construction (SIC15-17) Employees | 13.2% | 9.5% | 1.5% | 5.3% | 11.1% | 5.6% |
| 2019 Manufacturing (SIC20-39) Employees | 5.5% | 3.3% | 2.8% | 9.2% | 4.2% | 5.6% |
| 2019 Transportation (SIC40-47) Employees | 10.0% | 5.2% | 14.4% | 5.9% | 8.4% | 3.5% |
| 2019 Communication (SIC48) Employees | 0.4% | 1.0% | 0.2% | 0.0% | 0.4% | 1.0% |
| 2019 Utility (SIC49) Employees | 4.3% | 0.7% | 1.4% | 3.7% | 4.0% | 0.9% |
| 2019 Wholesale Trade (SIC50-51) Employees | 3.7% | 6.4% | 3.5% | 2.6% | 2.9% | 5.5% |
| 2019 Home Improvement (SIC52) Employees | 1.1% | 2.7% | 1.7% | 1.5% | 1.0% | 1.7% |
| 2019 General Merchandise (SIC53) Employees | 0.2% | 0.5% | 0.4% | 0.3% | 0.1% | 1.7% |
| 2019 Food Stores (SIC54) Employees | 1.4% | 2.8% | 1.7% | 1.8% | 1.2% | 2.0% |
| 2019 Auto Dealer/Gas Station (SIC55) Employees | 2.3% | 2.9% | 2.1% | 2.9% | 2.1% | 3.0% |
| 2019 Apparel/Accessory (SIC56) Employees | 0.3% | 0.7% | 0.5% | 0.2% | 0.2% | 0.6% |
| 2019 Furniture/Home Furnishings (SIC57) Employees | 0.1% | 0.5% | 0.0% | 0.2% | 0.1% | 1.3% |
| 2019 Eating & Drinking (SIC58) Employees | 5.6% | 7.8% | 8.8% | 4.6% | 4.1% | 6.3% |
| 2019 Miscellaneous Retail (SIC59) Employees | 0.9% | 1.9% | 1.9% | 1.9% | 0.8% | 2.7% |
| 2019 Banks (SIC60-61) Employees | 1.8% | 0.9% | 2.7% | 0.8% | 1.3% | 1.7% |
| 2019 Securities Broker (SIC62) Employees | 0.2% | 1.0% | 0.3% | 0.0% | 0.1% | 0.5% |
| 2019 Insurance (SIC63-64) Employees | 0.2% | 0.6% | 0.3% | 0.8% | 0.1% | 1.7% |
| 2019 Real Estate/Holding (SIC65-67) Employees | 2.3% | 1.3% | 4.1% | 0.6% | 2.0% | 2.0% |
| 2019 Hotel/Lodging (SIC70) Employees | 2.7% | 2.9% | 1.9% | 2.0% | 2.1% | 1.7% |
| 2019 Auto Services (SIC75) Employees | 1.6% | 1.9% | 0.9% | 1.5% | 1.3% | 1.3% |
| 2019 Movie/Amusement (SIC78-79) Employees | 1.6% | 1.0% | 0.2% | 1.1% | 10.5% | 2.7% |
| 2019 Health Services (SIC80) Employees | 7.9% | 10.7% | 16.0% | 6.7% | 6.9% | 13.0% |
| 2019 Legal Services (SIC81) Employees | 0.3% | 0.5% | 0.4% | 0.2% | 0.2% | 0.5% |
| 2019 Education/Library (SIC82) Employees | 2.2% | 3.3% | 2.1% | 6.2% | 4.6% | 8.2% |
| 2019 Other Service (SIC72-89SEL) Employees | 16.9% | 12.9% | 20.1% | 8.0% | 13.1% | 15.3% |
| 2019 Government (SIC91-97) Employees | 2.7% | 5.1% | 4.4% | 8.6% | 6.6% | 5.6% |
| 2019 Unclassified Establishments (SIC99) Employees | 0.3% | 0.1% | 0.5% | 0.3% | 0.4% | 0.5% |

Source: U.S. Census, 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 Other Service Employees (16.9%)
- When compared to all neighboring geographies, McKenzie County School District has a greater percentage of employees working in Construction and lower percentage of employees working in Government (estimates from July 2020 from the US Census)