# PLANNING FOR THE FUTURE

# 18/19 Enrollment Analysis

Presented on **December 17**, 2018

CLEAR CREEK AMANA™
COMMUNITY SCHOOL DISTRICT
BRINGING LEARNING TO LIFE

# Discussion Points

- Introduction
- Enrollment and Demographics (Part One)
  - Key Considerations
  - Maps: Planning Areas and Attendance Areas
  - Sophisticated Forecast Model (SFM)
  - Demographics
  - 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)
  - Projection Accuracy
  - Past, Current, Future Enrollment
  - Accuracy Trends
  - Building Projections
- Moving Forward (Part Four)
  - Next Steps

RSP

# About 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
- Clients in Arkansas, Iowa, Illinois, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, and Wisconsin
- Projection accuracy of 97% or greater

## Planning

**Robert Schwarz**
CEO, AICP, REFP, ALEP, CEFP

**Grant Lang**
Planning Coordinator

## Educators

**Clay Guthmiller**
Education Planner

**Craig Menozzi**
Education Planner

**David Stoakes**
Education Planner, EdD

**Dave Wilkerson**
Education Planner, PhD

## GIS Analyst

**Tyler Link**
GIS Analyst, GISP Candidate

**Brandon Sylvester**
GIS Analyst, GISP Candidate

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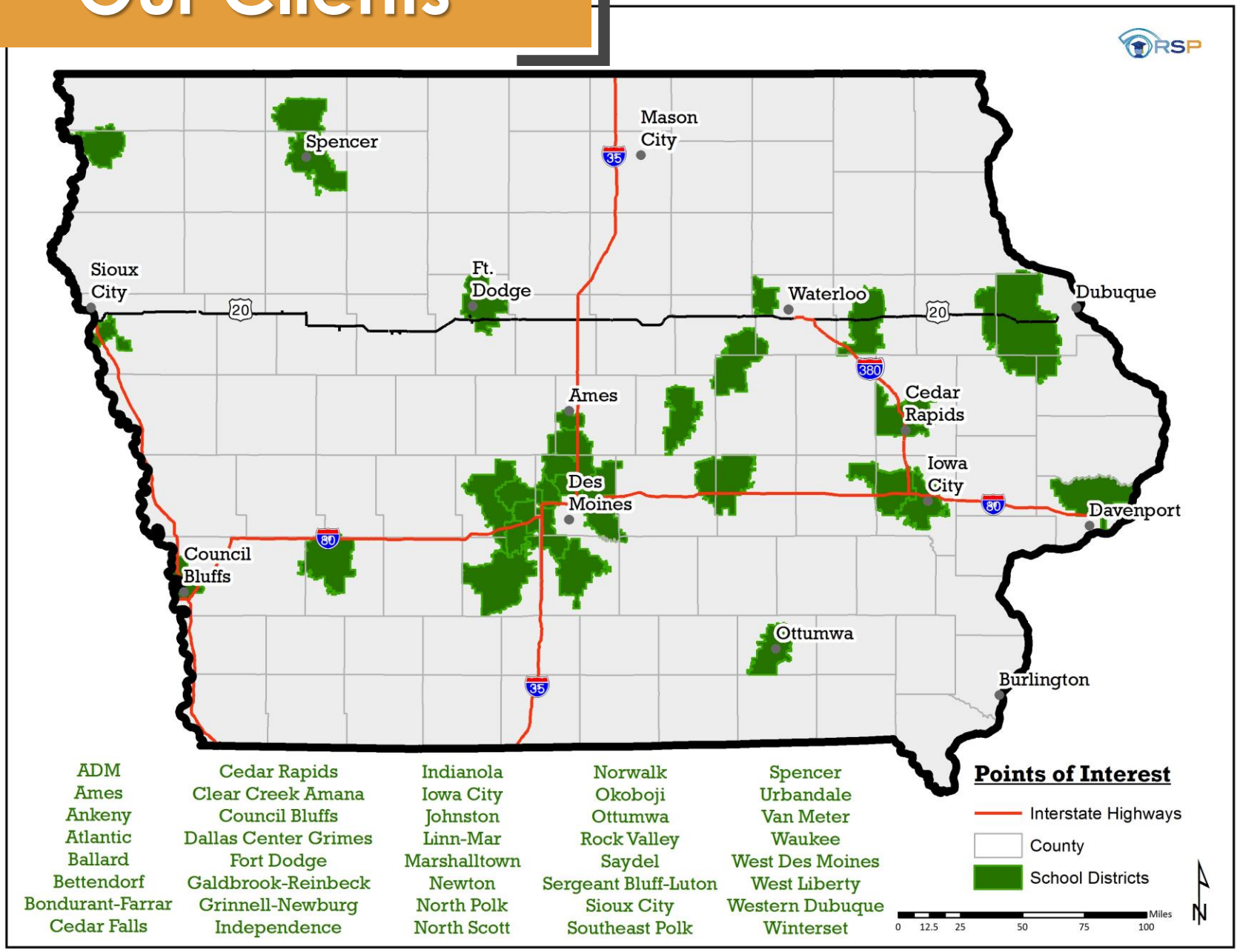
# Our Clients


RSP
Mason City
Spencer
Sioux City
Ft. Dodge
Waterloo
Dubuque
Ames
Cedar Rapids
Iowa City
Des Moines
Davenport
Council Bluffs
Ottumwa
Burlington
20
35
80
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ADM
Ames
Ankeny
Atlantic
Ballard
Bettendorf
Bondurant-Farrar
Cedar Falls
Cedar Rapids
Clear Creek Amana
Council Bluffs
Dallas Center Grimes
Fort Dodge
Galdbrook-Reinbeck
Grinnell-Newburg
Independence
Indianola
Iowa City
Johnston
Linn-Mar
Marshalltown
Newton
North Polk
North Scott
Norwalk
Okoboji
Ottumwa
Rock Valley
Saydel
Sergeant Bluff-Luton
Sioux City
Southeast Polk
Spencer
Urbandale
Van Meter
Waukee
West Des Moines
West Liberty
Western Dubuque
Winterset
Points of Interest
Interstate Highways
County
School Districts
Miles
0 12.5 25 50 75 100
N

# Making it Happen

**Clear Creek Amana Community School District**

- Administration

**County, City, & Others**

- Iowa County
- Johnson County
- DNR
- Iowa DOT
- United States Geological Survey
- Census Bureau/ Esri

Thank you!

# Part One:
## Enrollment & Demographics

# Key Considerations

## Enrollment Projections - Five Year Outlook:

- Enrollment Change – Overall enrollment increase anticipated (Elementary, Middle, and High)
- Increases based on continued development opportunities within the district
- Elementary **(PK-5):** +600 students **(+43.0%) (Annual range +80 to +146)**
- Middle School **(6-8)**: +243 students **(+44.1%) (Annual range +12 to +95)**
- High School **(9-12)**: **+300** students **(+46.7%) (Annual range +40 to +86)**
- District **(PK-12)**: +1,143 students **(+44.2%) (Annual range +170 to +296)**
- In 17/18: 65 students 18/19: 35 students in Little Clippers, Sprouts Academy, CPI (Homeschool/Duel Enrolled and Home School Assistant Program (HSAP)) that are not included

## Capacity over the next five years:

- Challenges become apparent at:
  - *North Bend Elementary in 2017/18(Instruction) 2019/20 (Structural)*
  - *Tiffin Elementary in 2018/19 (Instruction)) 2021/22 (Structural)*
  - *District-wide Elementary in 2021/22 (Instruction)*
  - *CCA High School in 2022/23 (Instruction)*

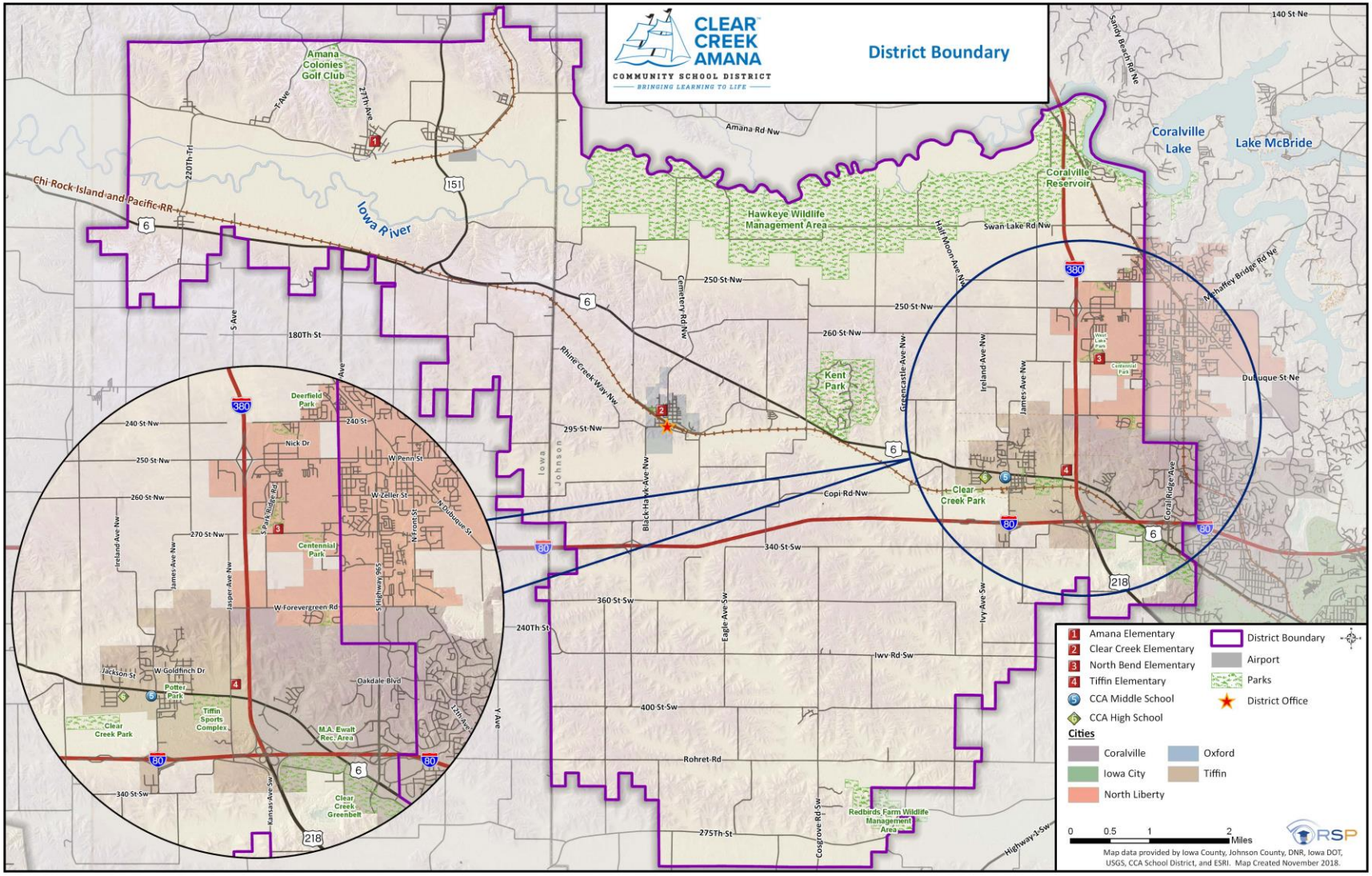
## Development Opportunities:

- There are significant areas of vacant land that when they are developed will have a drastic effect on future enrollment
  - *Several areas throughout the District are developing in Coralville, North Liberty, and Tiffin*
  - *The new residential activity must be monitored to ensure the best decisions are made for students (Single-family and Multi-family have different yield rate of students)*

# District Boundary

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

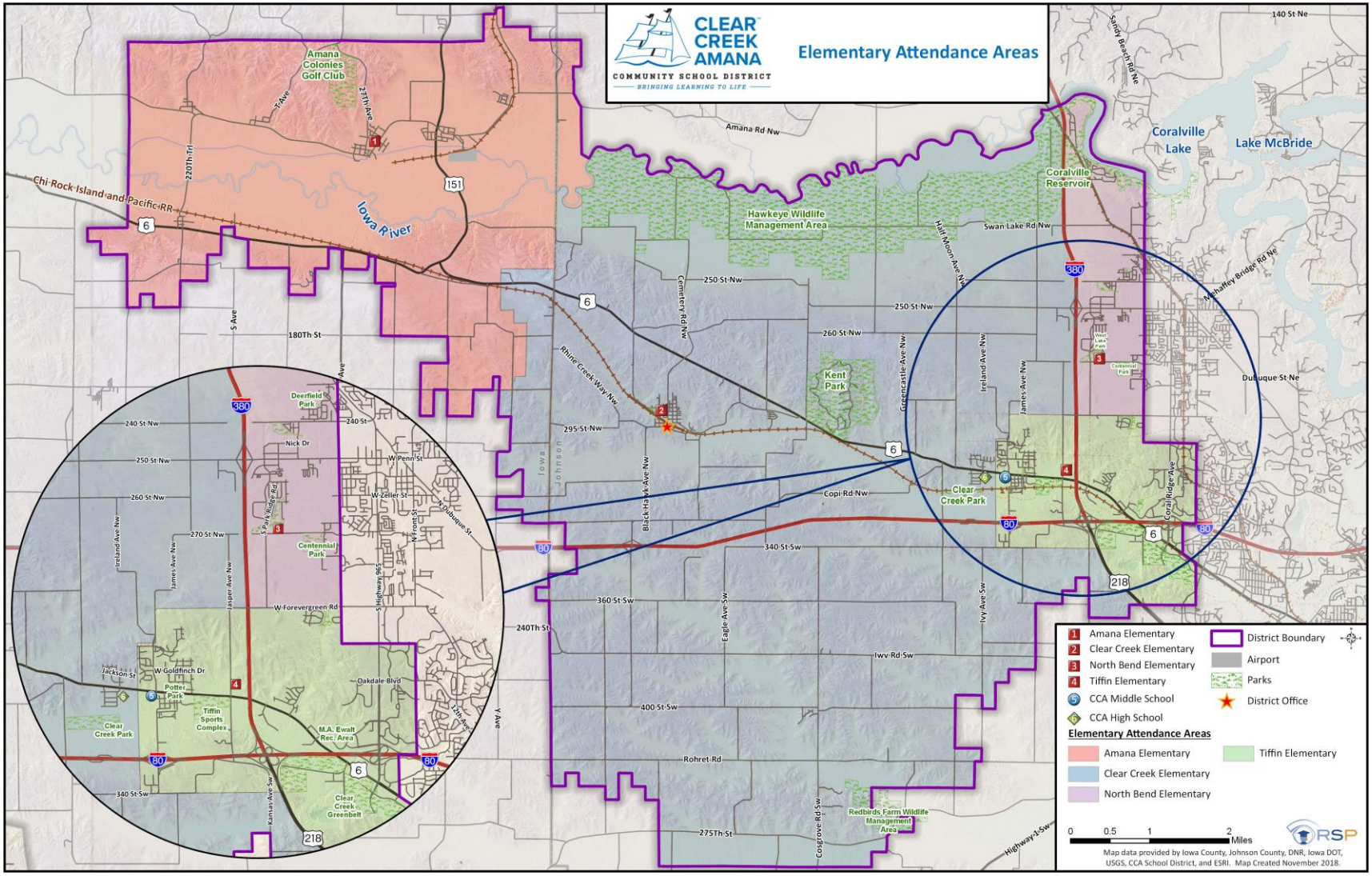
- Coralville **(Purple)**
- Iowa City **(Coral)**
- North Liberty **(Green)**
- Oxford **(Blue)**
- Tiffin **(Brown)**



# Elementary Attendance Areas

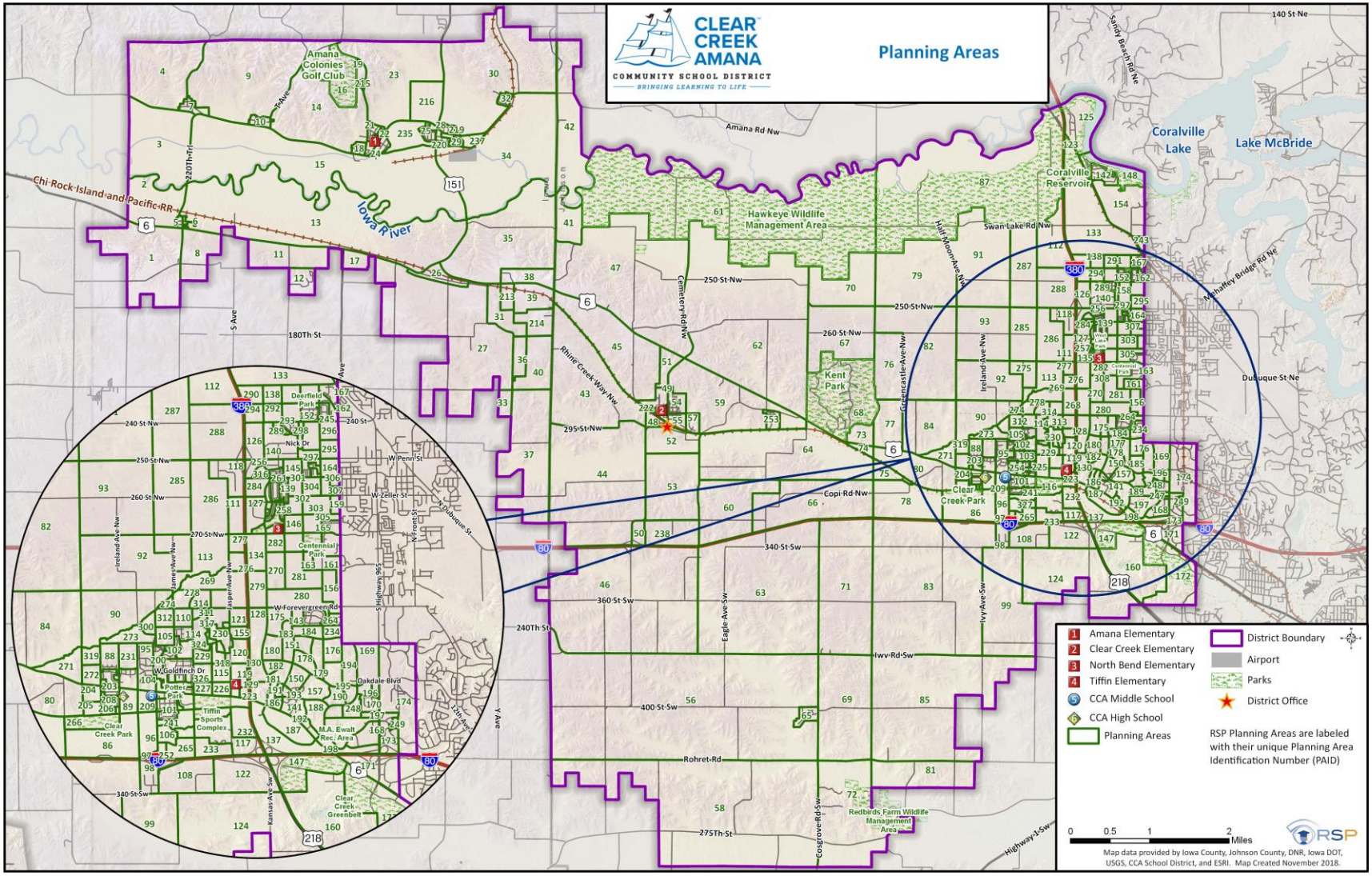
- ❑ District Boundary **(Purple Line)**
- ❑ Major Streets
- ❑ Major water features & cultural features
- ❑ Attendance Areas

- Amana **(Coral)**
- Clear Creek **(Blue)**
- North Bend **(Purple)**
- Tiffin **(Green)**



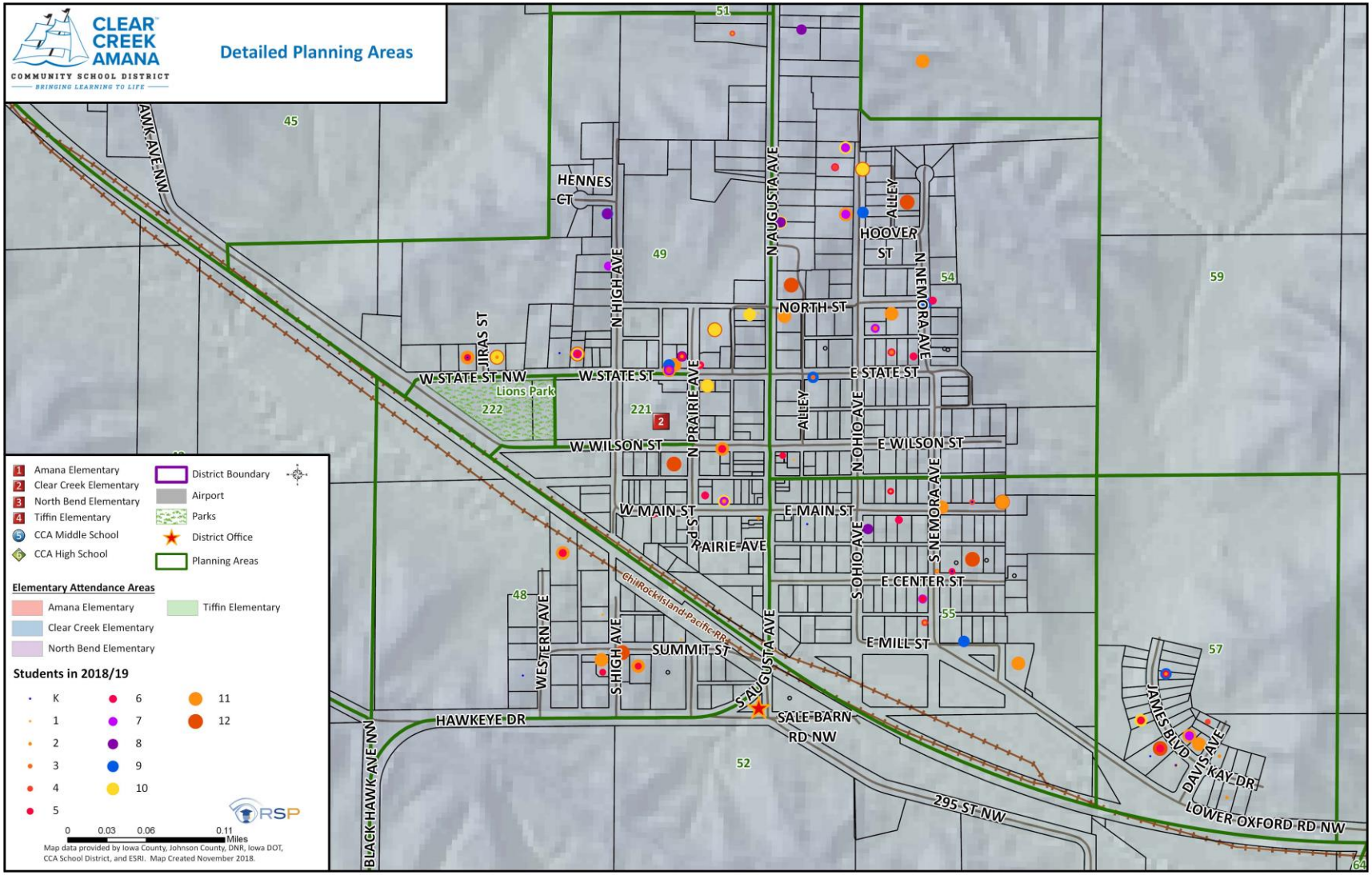
# Planning Areas

- Land Use (Residential, Commercial, Industrial)
- Residential Density (Single-Family, Mobile Home, Duplex, Apartment)
- Natural and Manmade Features (Rivers, Creeks, Railroads, Streets)
- Nearly **300** planning areas monitored for demographic, development, and enrollment data sets



# Detailed Planning Areas

- Zoomed in view of Planning Areas **(Green Line)** and Clear Creek Elementary
- 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



# Sophisticated Forecast Model

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.

**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:

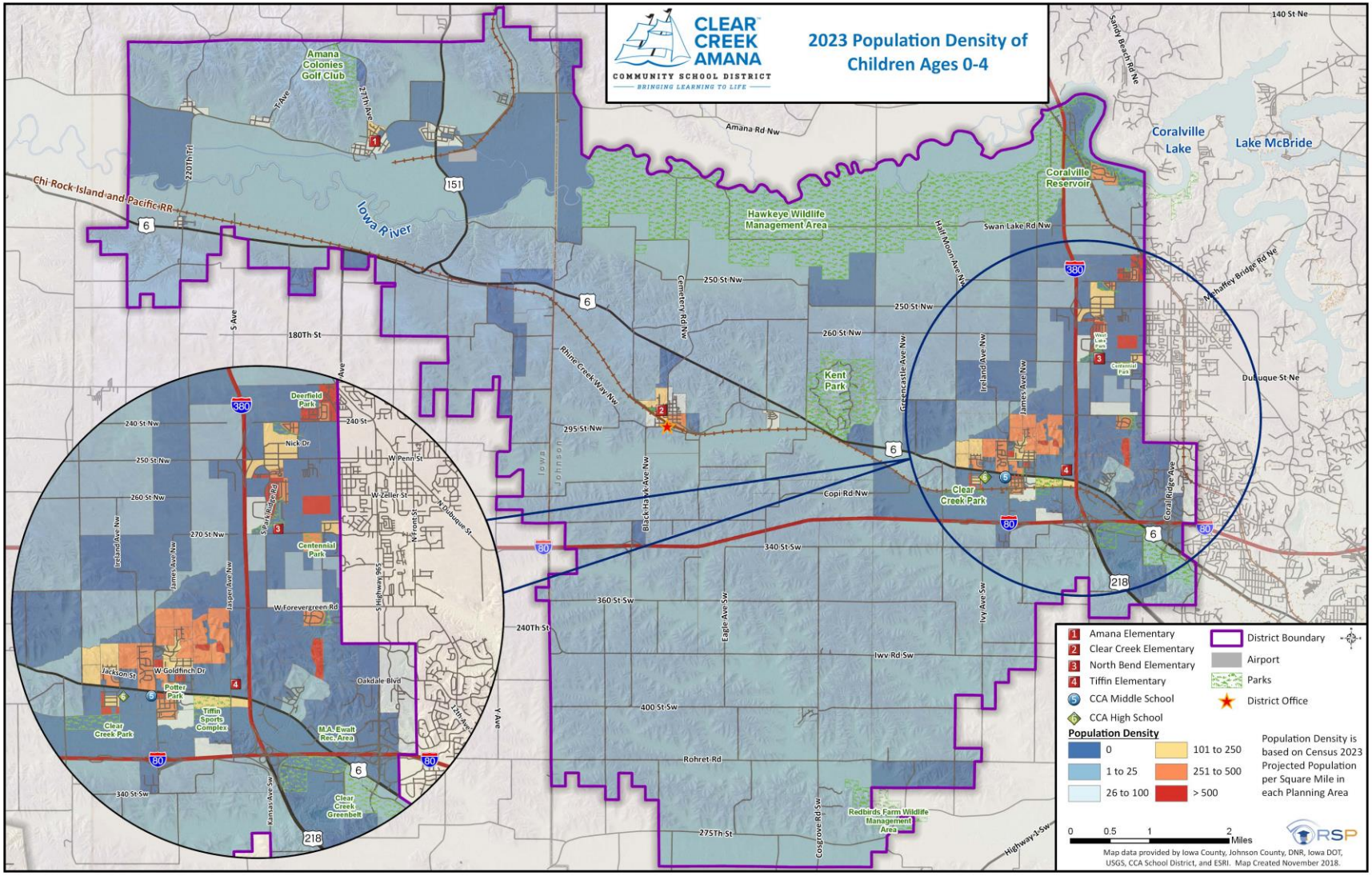
$$BP_{t, x} = \left( \frac{(CP_x)\,(BT_x)\,(A_x)}{\sum x\,(CP_x)\,(BT_x)\,(A_x)} \right) * CT$$

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 |
| Rc, x | = | Student enrollment ratio of cohort c in planning area x |
| CP | = | Capacity of a planning area as expressed by available housing units |
| BT | = | Building history trend of a planning area |
| A | = | An index which models the likelihood of development |
| CT | = | Building permit control total forecast |

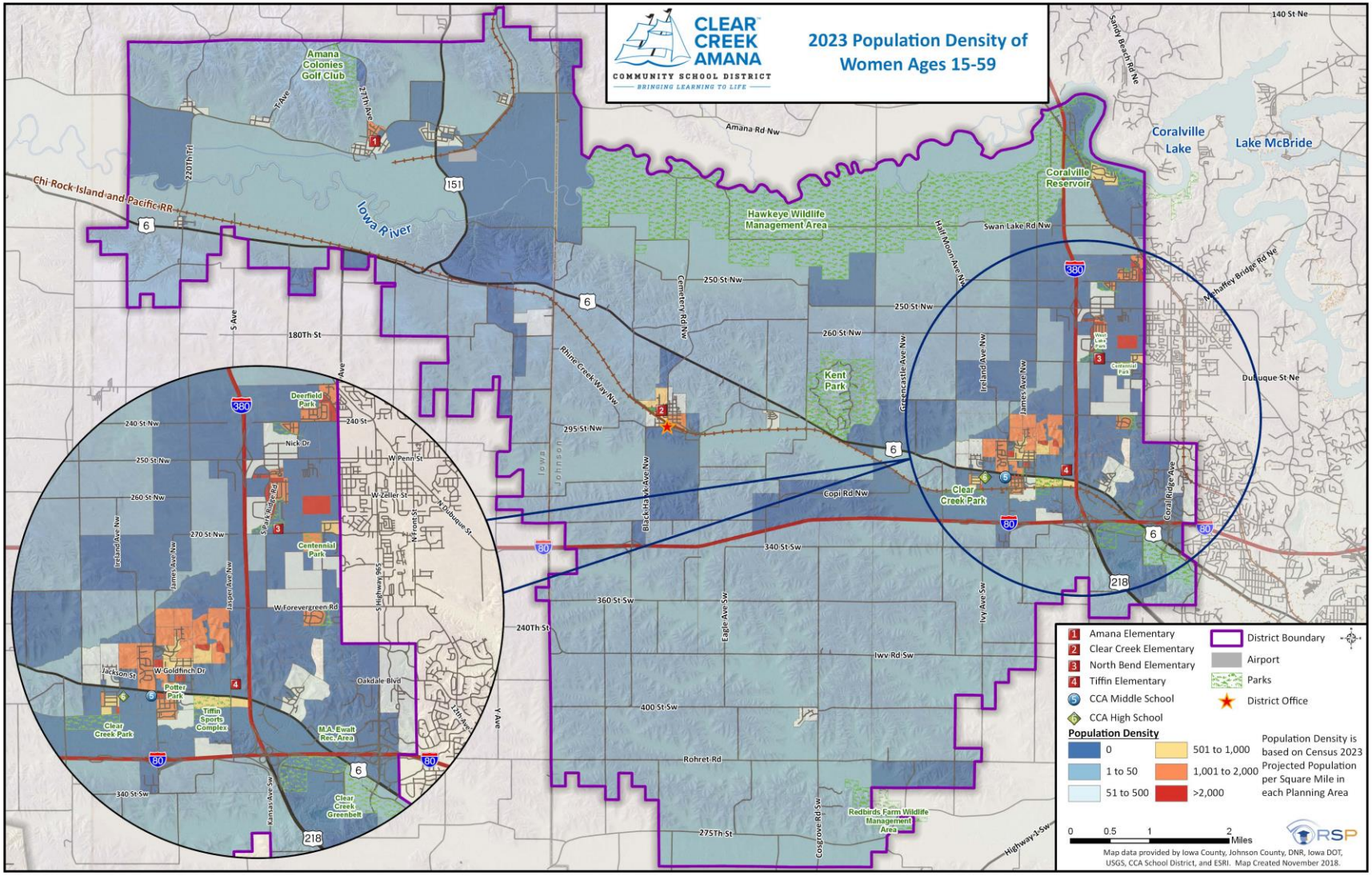
# Population: Ages 0-4

- Depicted by Census Block Group with 2023 estimates
- Density weighted by land area of each Block Group
- **Red** areas have greatest density, **Blue** have the least density
- This data helps benchmark the projection model choices for future student enrollment



# Population: Women 15-59

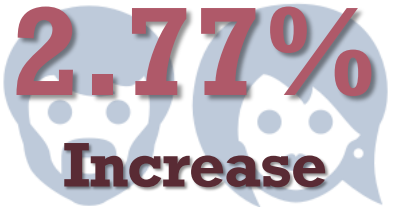
- Depicted by Census Block Group with 2023 estimates
- Density weighted by land area of each Block Group
- **Red** areas have greatest density, **Blue** have the least density
- This data helps benchmark the projection model choices for future student enrollment



# Demographics

## Population

2010-2018 Annual rate




## Housing Development

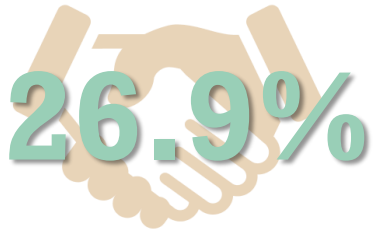
2010-2018 Annual Rate

## Income

Per Capita; 2018-2023 Annual Rate

## Workforce

Retail Trade






Source: US Census

# Demographic Comparison

| | CCA Community School District | Johnson County | Iowa County | State of Iowa |
|---|---|---|---|---|
| Unemployment Rate | 2.1% | 2.1% | 1.3% | 3.0% |
| Average Household Size | 2.38 | 2.36 | 2.39 | 2.43 |
| Median Age | 33.7 | 30.6 | 43.8 | 38.9 |
| Total Population | 15,008 | 151,506 | 16,584 | 3,219,046 |
| Median Household Income | $65,351 | $61,398 | $60,200 | $56,647 |
| Total Housing Units | 6,128 | 64,320 | 7,484 | 1,413,453 |
| Owner Occupied Housing Units | 4,339 | 35,832 | 5,411 | 908,398 |
| Renter Occupied Housing Units | 1,493 | 24,878 | 1,413 | 377,133 |
| Vacancy Rate | 4.8% | 5.6% | 8.8% | 9.1% |

| Ethnicity | CCA Community School District | Johnson County | Iowa County | State of Iowa |
|---|---|---|---|---|
| White | 83.5% | 74.4% | 93.6% | 81.2% |
| Black | 5.5% | 7.4% | 0.7% | 3.8% |
| American Indian/Alaskan | 0.3% | 0.2% | 0.2% | 1.4% |
| Asian | 3.1% | 7.3% | 0.6% | 2.7% |
| Pacific Islander | 0.0% | 0.0% | 0.0% | 0.1% |
| Other Race | 1.0% | 2.2% | 0.8% | 2.3% |
| Two or More Races | 2.5% | 2.7% | 1.1% | 2.3% |
| Hispanic | 4.1% | 5.8% | 3.0% | 6.2% |

Source; U.S. Census and Esri Business Analyst

## What does this mean?

- Demographic attribute information is mostly consistent between the geographies
- Unemployment within the local geographies is lower than the U.S. at 4.0
- The district has a decreasing vacancy rate, in 2010 the rate was 5.8% and in 2018 the rate is 4.8%
- Total Housing units is expected to increase from its current 4,339in 2018 to 6,795 by 2023

# Past School Enrollment

**Enrollment By Grade**

| Year | PreK | K | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2000/01 | 6 | 94 | 95 | 107 | 88 | 120 | 92 | 114 | 100 | 72 | 85 | 82 | 87 | 79 | 1,221 |
| 2001/02 | 8 | 99 | 92 | 99 | 109 | 85 | 114 | 94 | 112 | 98 | 81 | 93 | 80 | 85 | 1,249 |
| 2002/03 | 7 | 109 | 93 | 93 | 103 | 110 | 96 | 125 | 96 | 115 | 97 | 87 | 89 | 70 | 1,290 |
| 2003/04 | 8 | 91 | 108 | 89 | 102 | 101 | 112 | 91 | 127 | 96 | 122 | 103 | 85 | 85 | 1,320 |
| 2004/05 | 9 | 97 | 87 | 112 | 99 | 102 | 104 | 114 | 96 | 126 | 97 | 137 | 98 | 83 | 1,361 |
| 2005/06 | 6 | 98 | 94 | 91 | 114 | 108 | 99 | 109 | 124 | 95 | 130 | 105 | 127 | 93 | 1,393 |
| 2006/07 | 6 | 101 | 99 | 86 | 99 | 117 | 107 | 104 | 111 | 132 | 100 | 124 | 107 | 126 | 1,419 |
| 2007/08 | 10 | 99 | 99 | 102 | 91 | 100 | 122 | 105 | 105 | 108 | 160 | 112 | 126 | 99 | 1,438 |
| 2008/09 | 9 | 133 | 103 | 108 | 104 | 102 | 108 | 130 | 105 | 107 | 112 | 159 | 106 | 124 | 1,510 |
| 2009/10 | 12 | 146 | 142 | 108 | 117 | 108 | 104 | 102 | 134 | 104 | 127 | 115 | 148 | 105 | 1,572 |
| 2010/11 | 65 | 150 | 154 | 142 | 115 | 134 | 113 | 114 | 116 | 143 | 120 | 122 | 114 | 153 | 1,755 |
| 2011/12 | 51 | 166 | 150 | 157 | 142 | 118 | 132 | 110 | 127 | 122 | 151 | 114 | 121 | 118 | 1,779 |
| 2012/13 | 66 | 180 | 169 | 158 | 158 | 152 | 122 | 137 | 118 | 137 | 139 | 147 | 122 | 137 | 1,942 |
| 2013/14 | 83 | 189 | 179 | 172 | 158 | 157 | 156 | 129 | 139 | 115 | 151 | 138 | 145 | 130 | 2,041 |
| 2014/15 | 82 | 155 | 187 | 185 | 166 | 165 | 157 | 166 | 133 | 140 | 130 | 159 | 141 | 156 | 2,122 |
| 2015/16 | 122 | 172 | 150 | 186 | 181 | 177 | 162 | 160 | 173 | 141 | 156 | 130 | 161 | 155 | 2,226 |
| 2016/17 | 121 | 193 | 192 | 162 | 196 | 187 | 178 | 165 | 169 | 178 | 147 | 159 | 124 | 182 | 2,353 |
| 2017/18 | 129 | 222 | 208 | 200 | 178 | 193 | 190 | 175 | 163 | 161 | 199 | 136 | 151 | 149 | 2,454 |
| 2018/19 | 126 | 241 | 229 | 214 | 205 | 180 | 200 | 195 | 190 | 166 | 169 | 194 | 128 | 151 | 2,588 |

Source: Iowa Department of Education (2000/01 to 2011/12) Clear Creek Amana Community Schools (2012/13 to 2018/19)

## Table Explanation

- Largest class in 2018/19 – **Kindergarten (241)**
- Smallest class in 2018/19 – **11th** grade **(128)**
- Graduating senior class smaller than the incoming Kindergarten class
- It is anticipated that future PreK classes will be larger if the district has appropriate space that can be utilized for that educational programming

# Enrollment Change

**Change By Grade from the Previous Year**

| From | To | PreK 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2000/01 | 2001/02 | 93 | -2 | 4 | 2 | -3 | -6 | 2 | -2 | -2 | 9 | 8 | -2 | -2 | 28 |
| 2001/02 | 2002/03 | 101 | -6 | 1 | 4 | 1 | 11 | 11 | 2 | 3 | -1 | 6 | -4 | -10 | 41 |
| 2002/03 | 2003/04 | 84 | -1 | -4 | 9 | -2 | 2 | -5 | 2 | 0 | 7 | 6 | -2 | -4 | 30 |
| 2003/04 | 2004/05 | 89 | -4 | 4 | 10 | 0 | 3 | 2 | 5 | -1 | 1 | 15 | -5 | -2 | 41 |
| 2004/05 | 2005/06 | 89 | -3 | 4 | 2 | 9 | -3 | 5 | 10 | -1 | 4 | 8 | -10 | -5 | 32 |
| 2005/06 | 2006/07 | 95 | 1 | -8 | 8 | 3 | -1 | 5 | 2 | 8 | 5 | -6 | 2 | -1 | 26 |
| 2006/07 | 2007/08 | 93 | -2 | 3 | 5 | 1 | 5 | -2 | 1 | -3 | 28 | 12 | 2 | -8 | 19 |
| 2007/08 | 2008/09 | 123 | 4 | 9 | 2 | 11 | 8 | 8 | 0 | 2 | 4 | -1 | -6 | -2 | 72 |
| 2008/09 | 2009/10 | 137 | 9 | 5 | 9 | 4 | 2 | -6 | 4 | -1 | 20 | 3 | -11 | -1 | 62 |
| 2009/10 | 2010/11 | 138 | 8 | 0 | 7 | 17 | 5 | 10 | 14 | 9 | 16 | -5 | -1 | 5 | 183 |
| 2010/11 | 2011/12 | 101 | 0 | 3 | 0 | 3 | -2 | -3 | 13 | 6 | 8 | -6 | -1 | 4 | 24 |
| 2011/12 | 2012/13 | 129 | 3 | 8 | 1 | 10 | 4 | 5 | 8 | 10 | 17 | -4 | 8 | 16 | 163 |
| 2012/13 | 2013/14 | 123 | -1 | 3 | 0 | -1 | 4 | 7 | 2 | -3 | 14 | -1 | -2 | 8 | 99 |
| 2013/14 | 2014/15 | 72 | -2 | 6 | -6 | 7 | 0 | 10 | 4 | 1 | 15 | 8 | 3 | 11 | 81 |
| 2014/15 | 2015/16 | 90 | -5 | -1 | -4 | 11 | -3 | 3 | 7 | 8 | 16 | 0 | 2 | 14 | 104 |
| 2015/16 | 2016/17 | 71 | 20 | 12 | 10 | 6 | 1 | 3 | 9 | 5 | 6 | 3 | -6 | 21 | 127 |
| 2016/17 | 2017/18 | 101 | 15 | 8 | 16 | -3 | 3 | -3 | -2 | -8 | 21 | -11 | -8 | 25 | 101 |
| 2017/18 | 2018/19 | 112 | 7 | 6 | 5 | 2 | 7 | 5 | 15 | 3 | 8 | -5 | -8 | 0 | 134 |
| 3-Yr Avg | | 94.7 | 14.0 | 8.7 | 10.3 | 1.7 | 3.7 | 1.7 | 7.3 | 0.0 | 11.7 | -4.3 | -7.3 | 15.3 | 120.7 |
| 3-Yr Wavg | | 101.5 | 11.8 | 7.7 | 9.5 | 1.0 | 4.7 | 2.0 | 8.3 | -0.3 | 12.0 | -5.7 | -7.7 | 11.8 | 121.8 |

Source: Iowa Department of Education (2000/01 to 2011/12) Clear Creek Amana Community Schools (2012/13 to 2018/19)

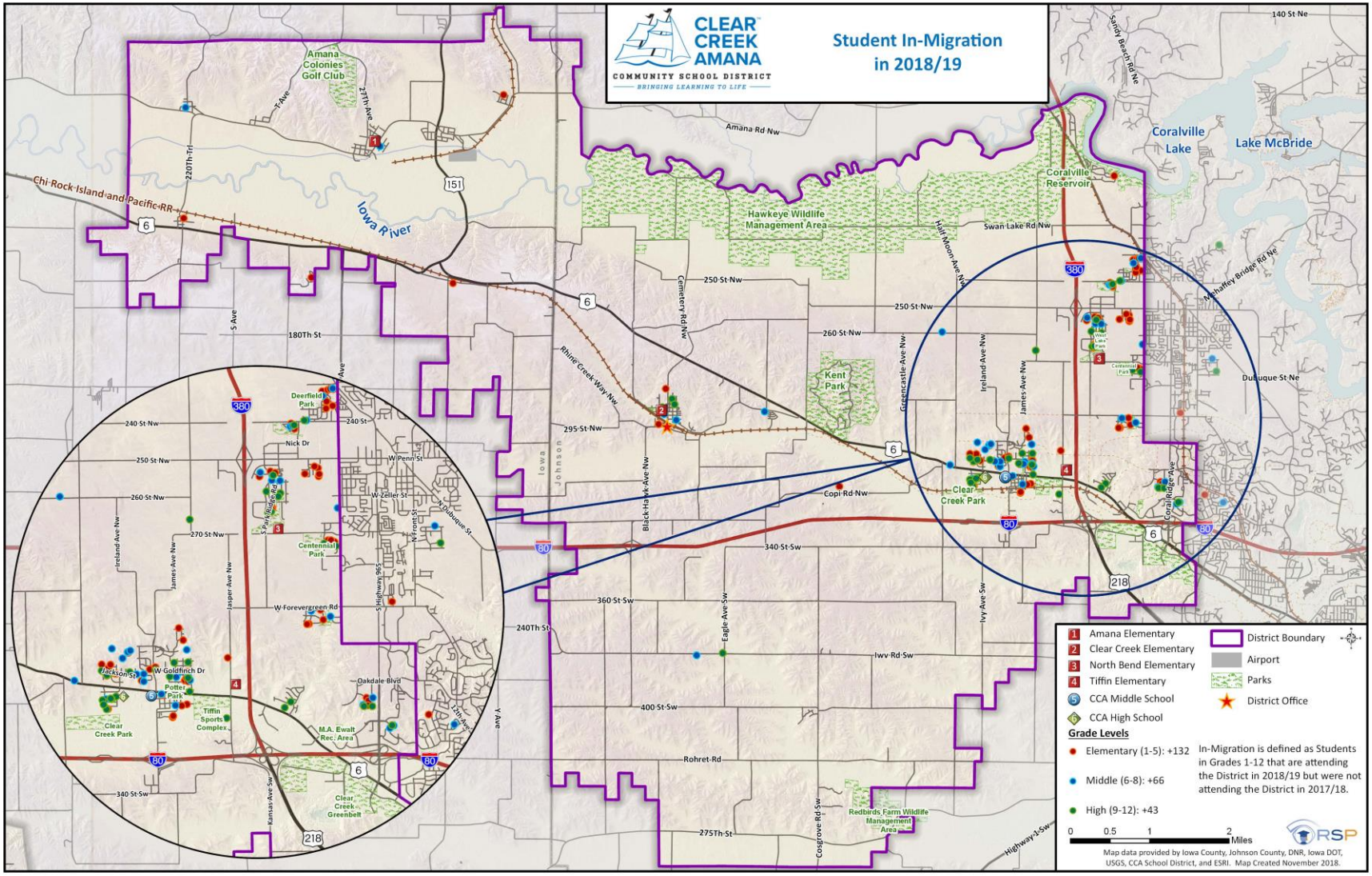
**What does this mean?**– *Change varies by grade*

- Largest average K-12 class increase – **11th** to **12th** grade **(+15)**
- Largest average K-12 class decrease – **10th** to **11th** grade **(-7)**
- Propensity to have varying cohort change in every grade, mostly positive
- The typical 11th to 12th grade double digit increase did not happen in 2018/19
- In general, most grades had a different cohort rate change from what happened in past years

# Student In-Migration

- 2018/19 students who are in 1st through 12th grade that were not attending the District in 2017/18 as Kindergarten through 11th grade
- Who is new to the district that was not attending in previous years?

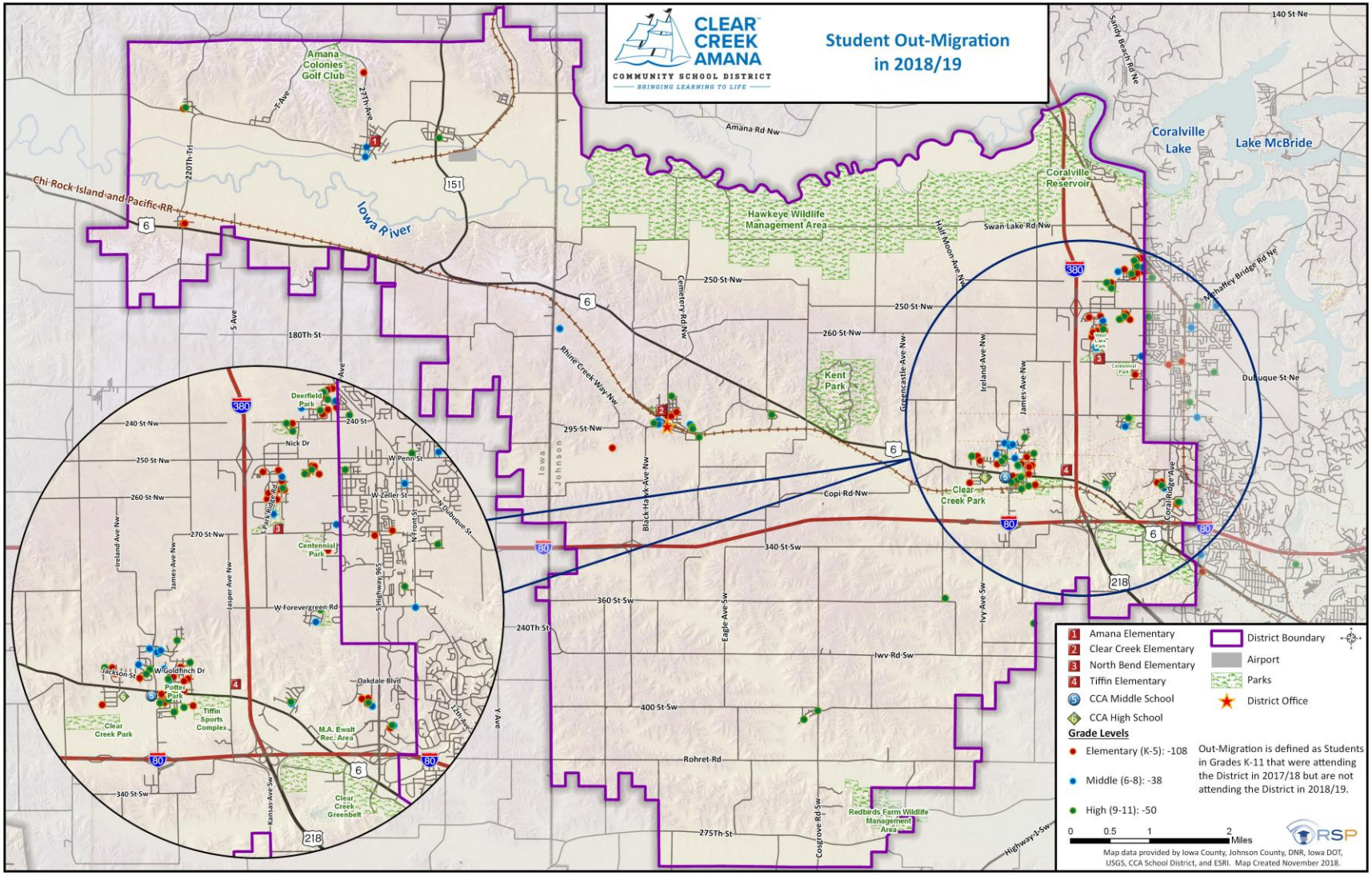
- **221** new students in **2017/18**
- **241** new students in **2018/19**



# Student Out-Migration

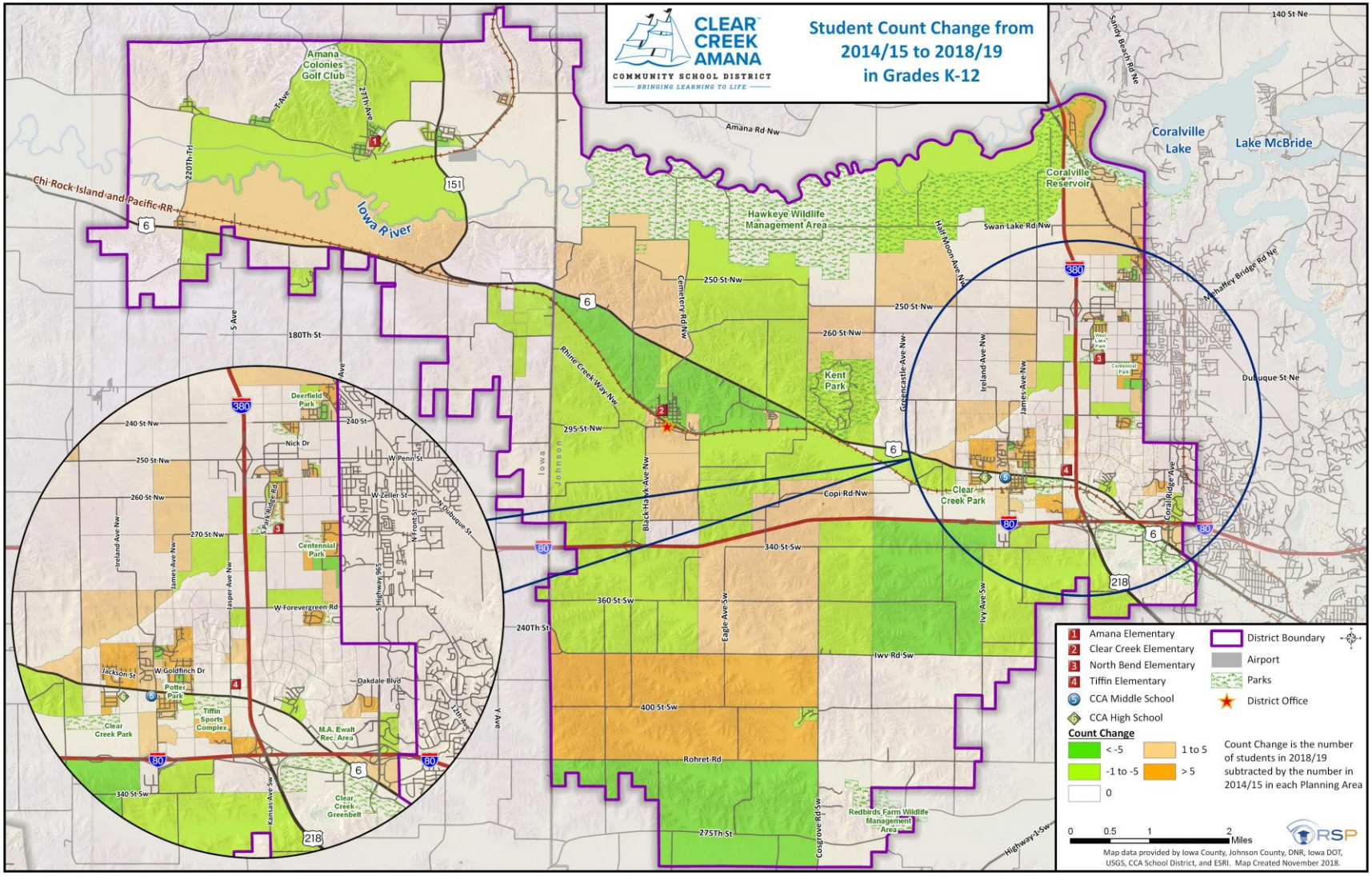
- Students attending the district in 2017/18 who were in Kindergarten through 11th grade that did not attend in 2018/19 as 1st through 12th graders

- **160** students left the district in **2017/18**, **Total Migration +61**
- **196** students left the district in **2018/19**, **Total Migration +45**



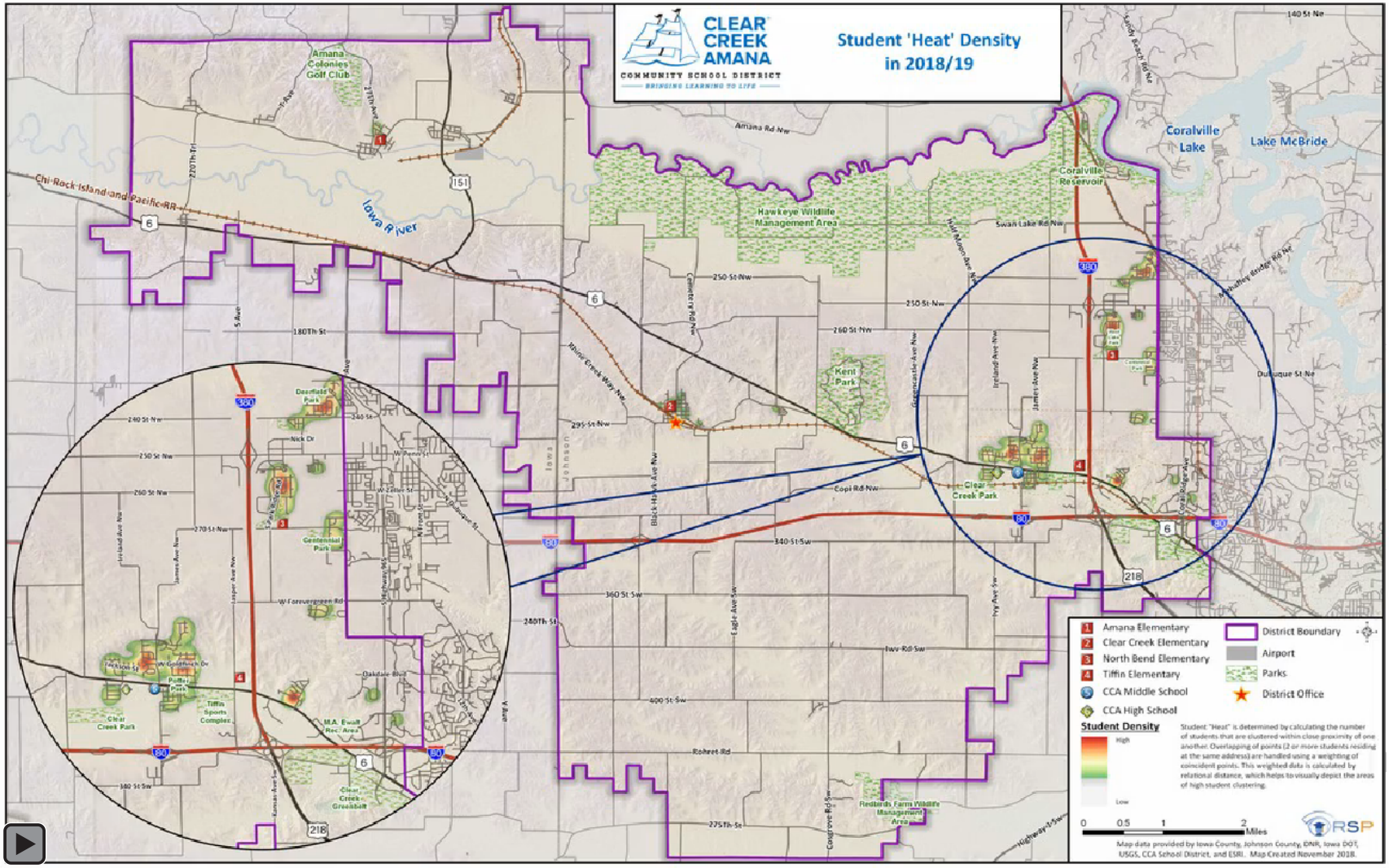
# Student Count Change

- Depicts student movement at each Planning Area from **2014/15** to **2018/19**
- **Orange** areas experienced an increase since **2014/15**, **Green** areas experienced a decrease, **White** areas had no net change of students between **2014/15** to **2018/19**
- New developments have a greater propensity to have more students in future years



# 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



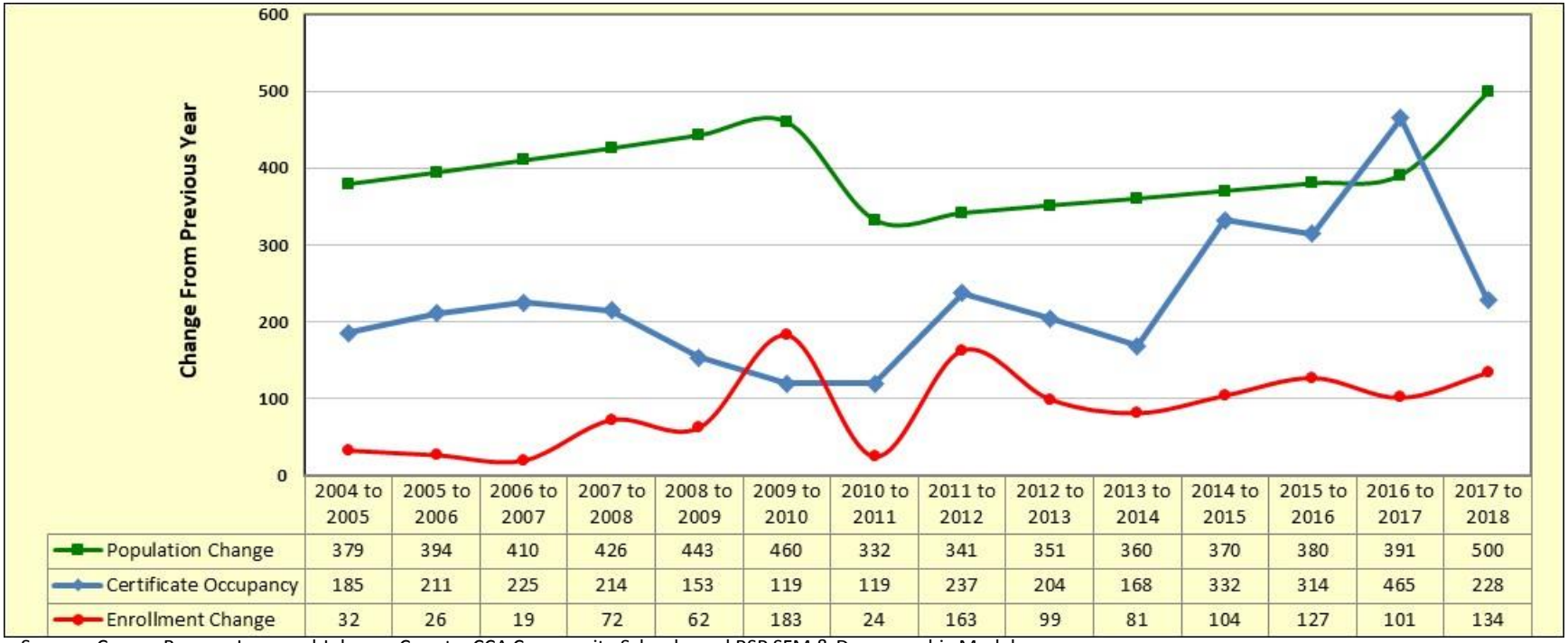
# Enrollment Conclusion

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

- The district has maintained contiguous boundaries for elementary schools
- RSP & Associates monitors over **300** planning areas for demographic, development, and enrollment data sets
- Direct correlation between women in child bearing ages (15-59) and where children (0-4) reside
- Enrollment tends to increase from grade to grade each year at each level
  - Large increases happen from 11th to 12th grade (did not happen this way in 18/19)
  - Large decreases happen from 10th to 11th grade
- Larger elementary school grades will result in future larger Middle and High school grades
- Greatest student density within city limits
- Least student density located in rural areas

# Part Two:
## Development

# Population, Development, Enrollment




| | 2004 to 2005 | 2005 to 2006 | 2006 to 2007 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Population Change | 379 | 394 | 410 | 426 | 443 | 460 | 332 | 341 | 351 | 360 | 370 | 380 | 391 | 500 |
| Certificate Occupancy | 185 | 211 | 225 | 214 | 153 | 119 | 119 | 237 | 204 | 168 | 332 | 314 | 465 | 228 |
| Enrollment Change | 32 | 26 | 19 | 72 | 62 | 183 | 24 | 163 | 99 | 81 | 104 | 127 | 101 | 134 |

Source: Census Bureau, Iowa and Johnson County, CCA Community Schools, and RSP SFM & Demographic Models

## Graphic Explanation

- Census data indicates an increasing population (spiking in 2018 because of new development)
- Building trend indicates there has been steady new residential activity (Delay in reporting)
- Student Enrollment growth has remained positive in all the years shown in the table (triple digit increases the last four years)

## What Does This Mean

- Households moving into the district may start having more children and/or school aged children
- With development similar over the next five years there are likely to be more new students
- Older areas of the community have the propensity of having more children than in the past

# Student Yield Rate

## Single Family (SF)

| Schools | Year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Avg |
| Amana Elementary | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.14 | 0.13 | 0.12 | 0.12 | 0.13 | 0.14 |
| Clear Creek Elementary | 0.20 | 0.20 | 0.19 | 0.22 | 0.23 | 0.25 | 0.22 | 0.23 | 0.20 | 0.20 | 0.21 |
| North Bend Elementary | 0.24 | 0.27 | 0.27 | 0.32 | 0.37 | 0.38 | 0.39 | 0.37 | 0.40 | 0.37 | 0.34 |
| Tiffin Elementary | 0.24 | 0.26 | 0.24 | 0.28 | 0.30 | 0.26 | 0.27 | 0.31 | 0.34 | 0.35 | 0.29 |
| District K-5 | 0.20 | 0.21 | 0.20 | 0.24 | 0.25 | 0.25 | 0.24 | 0.25 | 0.26 | 0.26 | 0.24 |

Source: CCA School District, Iowa County, and Johnson County

## Multi-Family (MF)

| Schools | Year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Avg |
| Amana Elementary | 0.14 | 0.17 | 0.17 | 0.15 | 0.21 | 0.23 | 0.23 | 0.15 | 0.11 | 0.11 | 0.17 |
| Clear Creek Elementary | 0.15 | 0.15 | 0.15 | 0.15 | 0.14 | 0.12 | 0.10 | 0.12 | 0.11 | 0.13 | 0.13 |
| North Bend Elementary | 0.07 | 0.09 | 0.09 | 0.10 | 0.09 | 0.10 | 0.12 | 0.11 | 0.13 | 0.16 | 0.11 |
| Tiffin Elementary | 0.08 | 0.09 | 0.09 | 0.10 | 0.11 | 0.12 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| District K-5 | 0.10 | 0.11 | 0.11 | 0.12 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.13 | 0.11 |

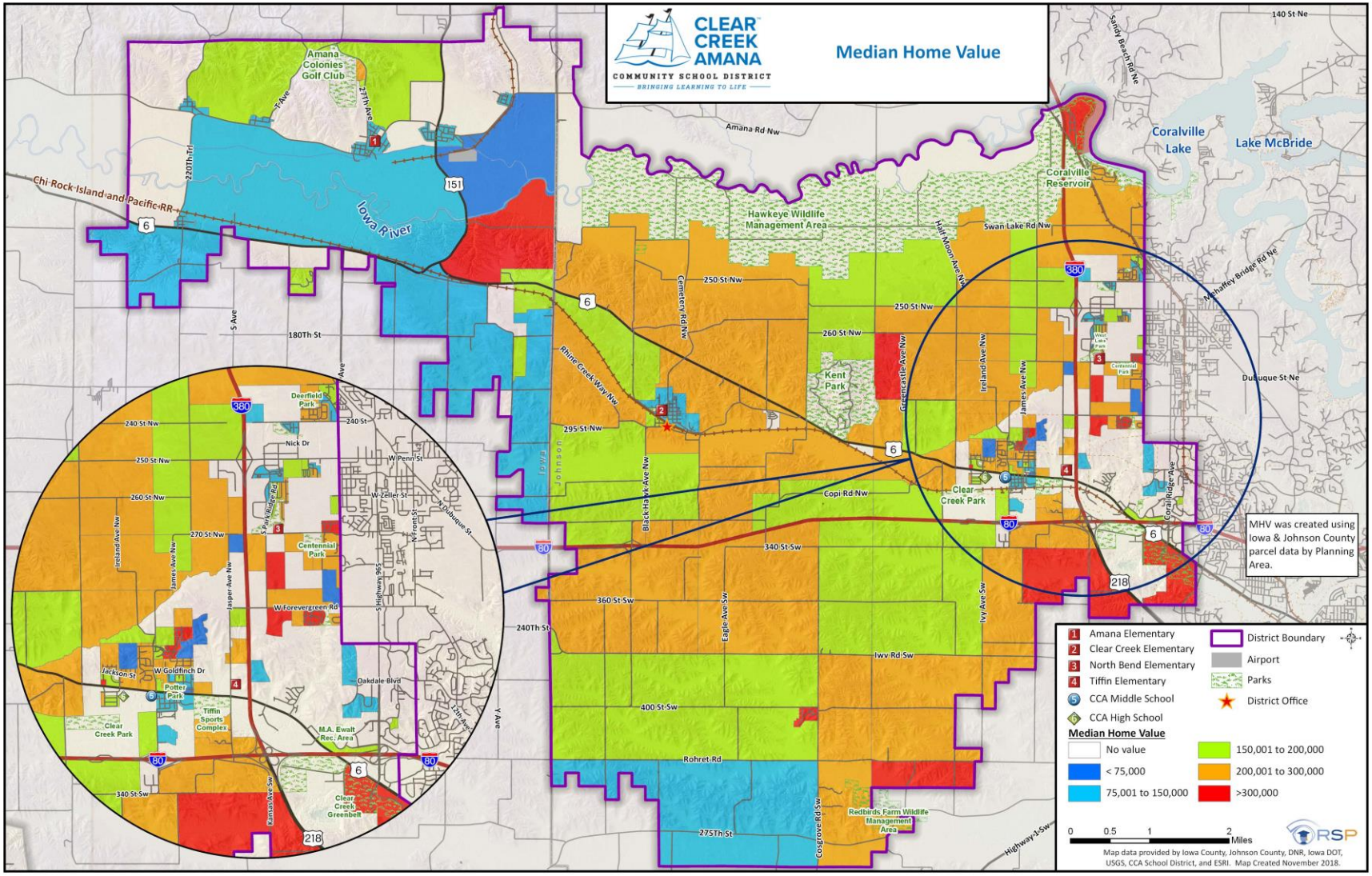
Source: CCA School District, Iowa County, and Johnson County

## Table Explanation

- Depicts elementary (K-5) enrollment and the corresponding yield rate
- Single-Family residential average (.24) has a higher student yield rate when compared to Multi-Family residential (.11) within the district
- Student yield rates for Single-Family and Multi-Family have remained consistent
- Adding newer housing inventory typically can increase the yield rate – type of housing must be monitored

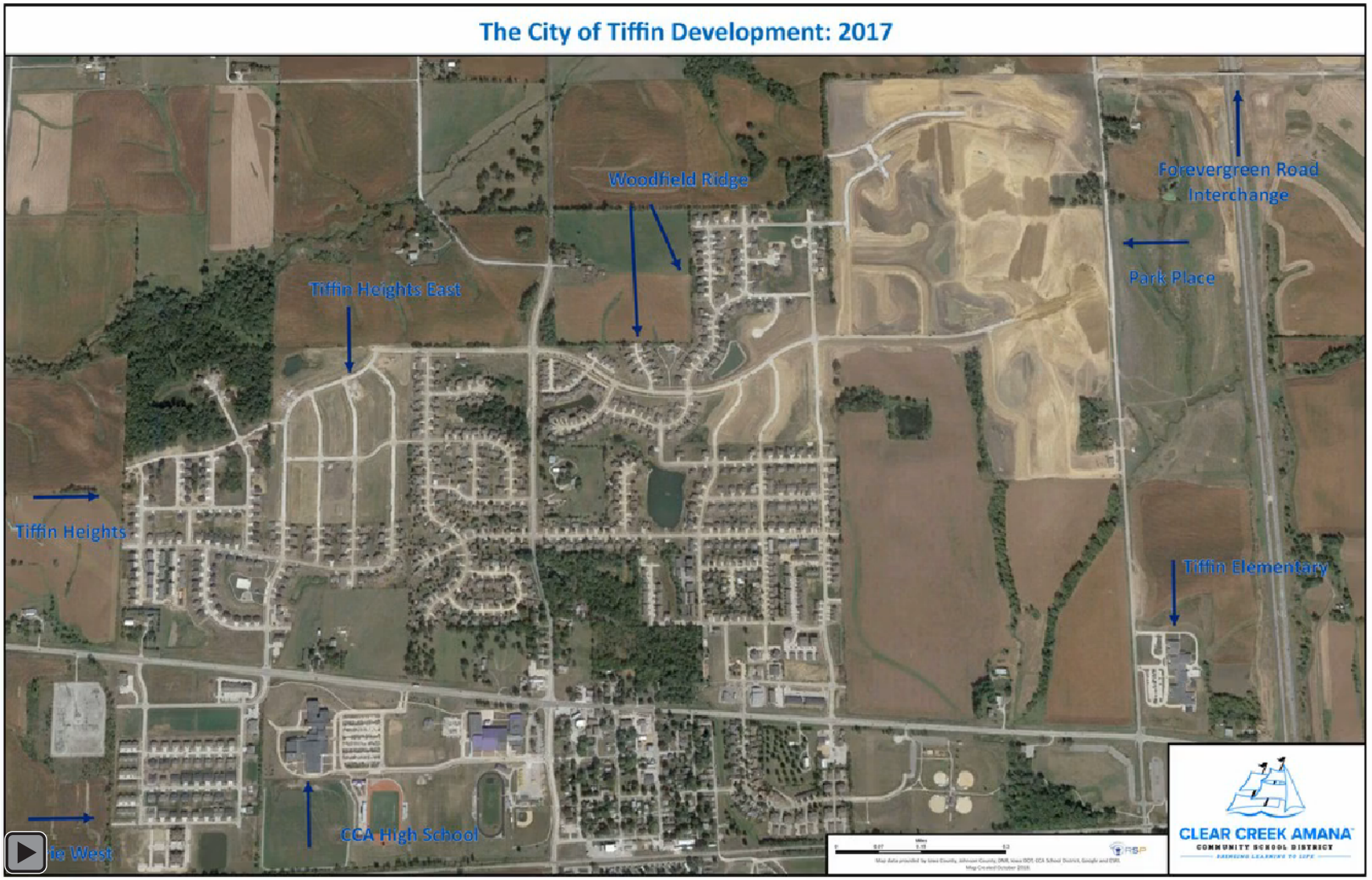
# Median Home Value

- 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



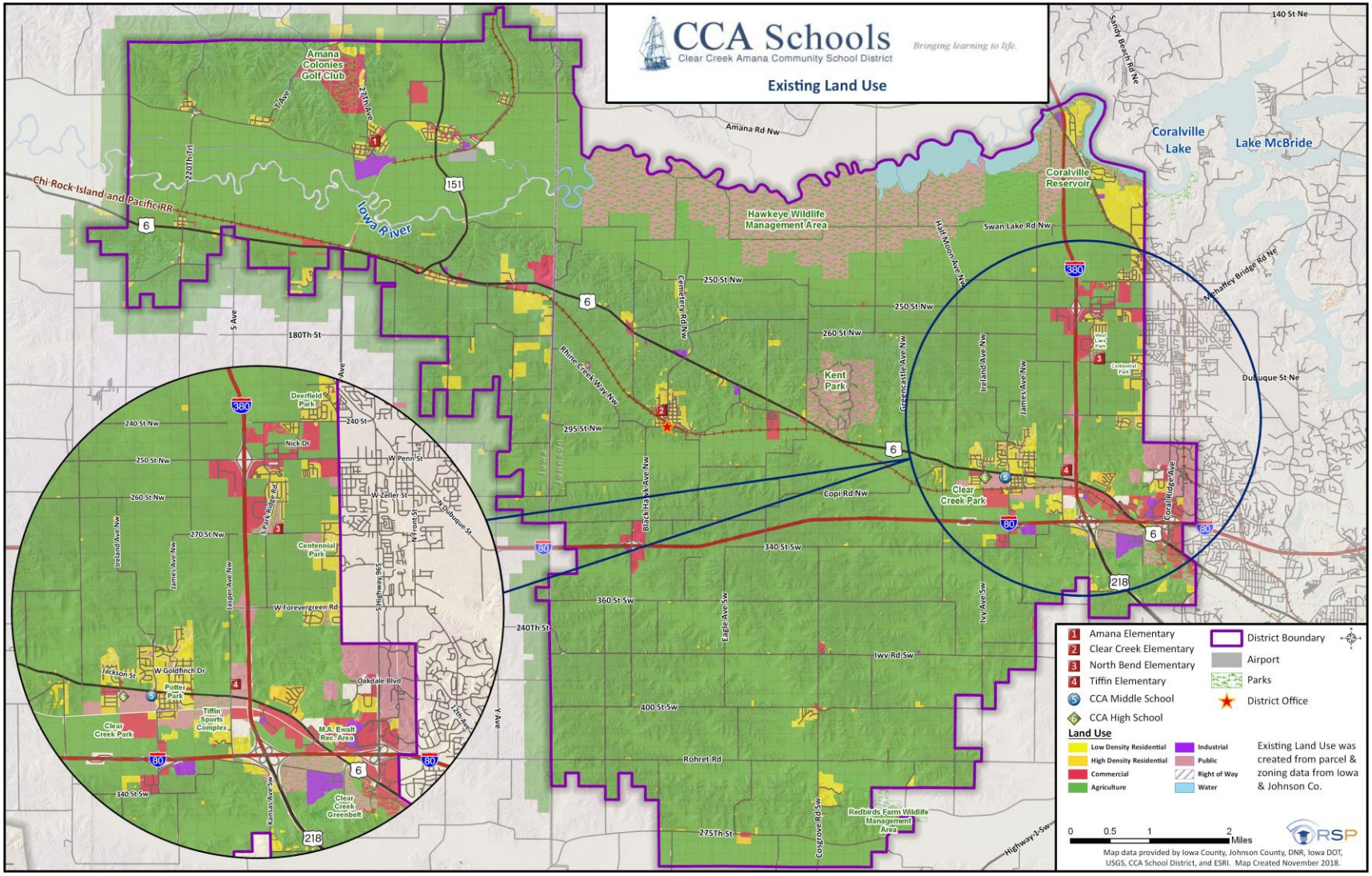
# Residential Development

- 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



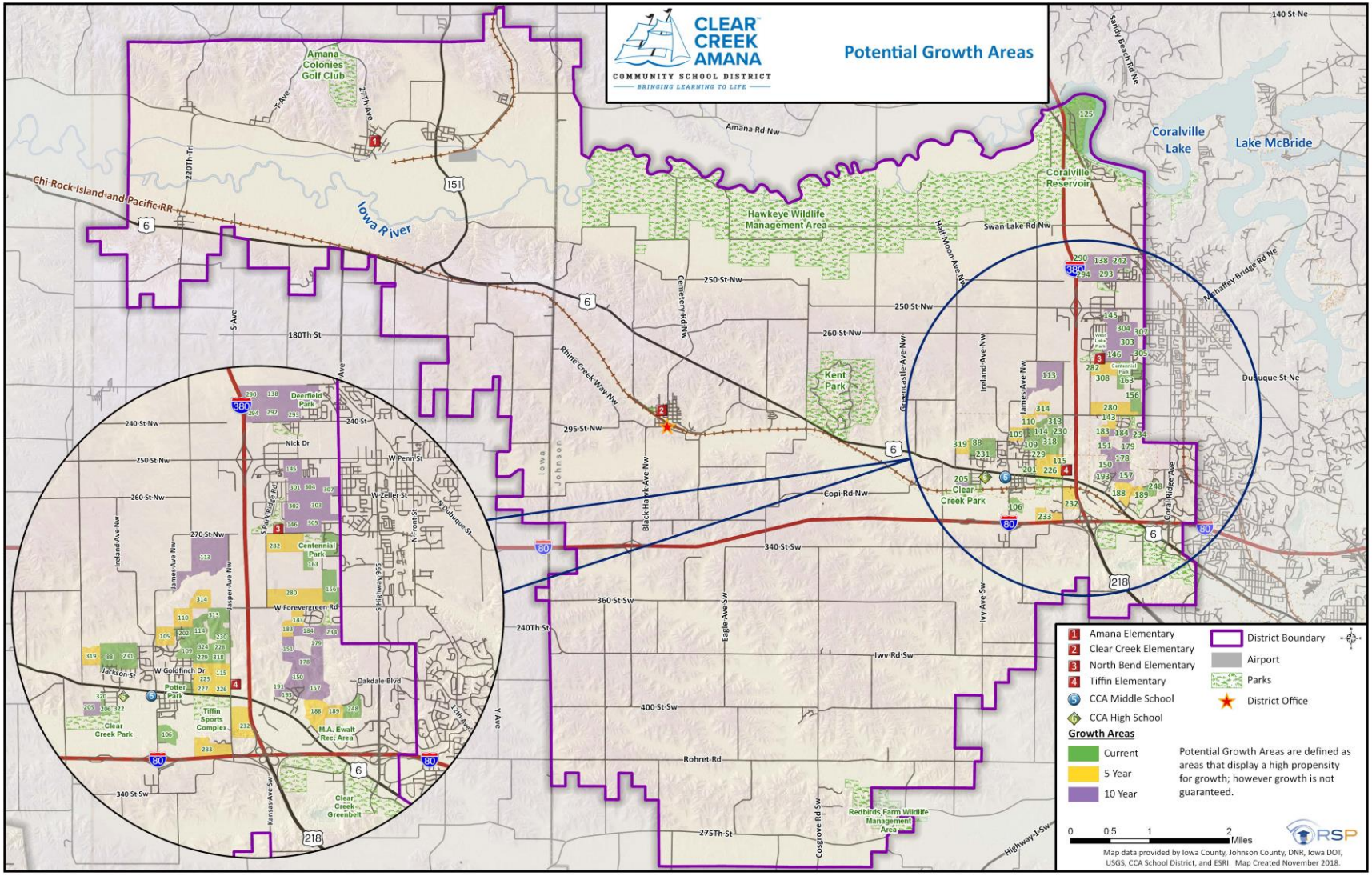
# Existing Land Use

- Identifies the current type of land use
- Illustrates where employment centers are located (**Purple** and **Red**)
- **Yellow** and **Orange** areas represent residential
- **Green** agricultural areas have the highest propensity to be rezoned into another use



# Growth Areas

- Identifies where development activity is happening **(Green)**
- Identifies possible areas that could develop **(Yellow** and **Purple)**
- 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



# Development Conclusion

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

- Population and Building activity continue to increase (steady)
- Single-Family residential has the highest propensity to have school aged students, yield rates of this development type are much higher than that of Multi-Family
- Majority of residential development will be concentrated in Coralville, North Liberty, and Tiffin
- Areas in North Liberty within the CCA district have been slower to develop than areas in Tiffin the last few years
- Zoning and Comprehensive Master Plans for each of the cities indicate there are plans for significant residential development
- Over the next three years building permit activity will be between 200 and 350 units - the larger years will be connected to more multi-family projects being constructed and other residential areas coming online
- Future residential development activity is dependent on the economy, specifically employment, interest rates, and home foreclosures
- 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 Accuracy

## Elementary

- Projected: 1,390
- Actual: 1,395
- Accuracy: **99.6%**

## Middle School

- Projected: 538
- Actual: 551
- Accuracy: **97.6%**

## High School

- Projected: 675
- Actual: 642
- Accuracy: **95.1%**

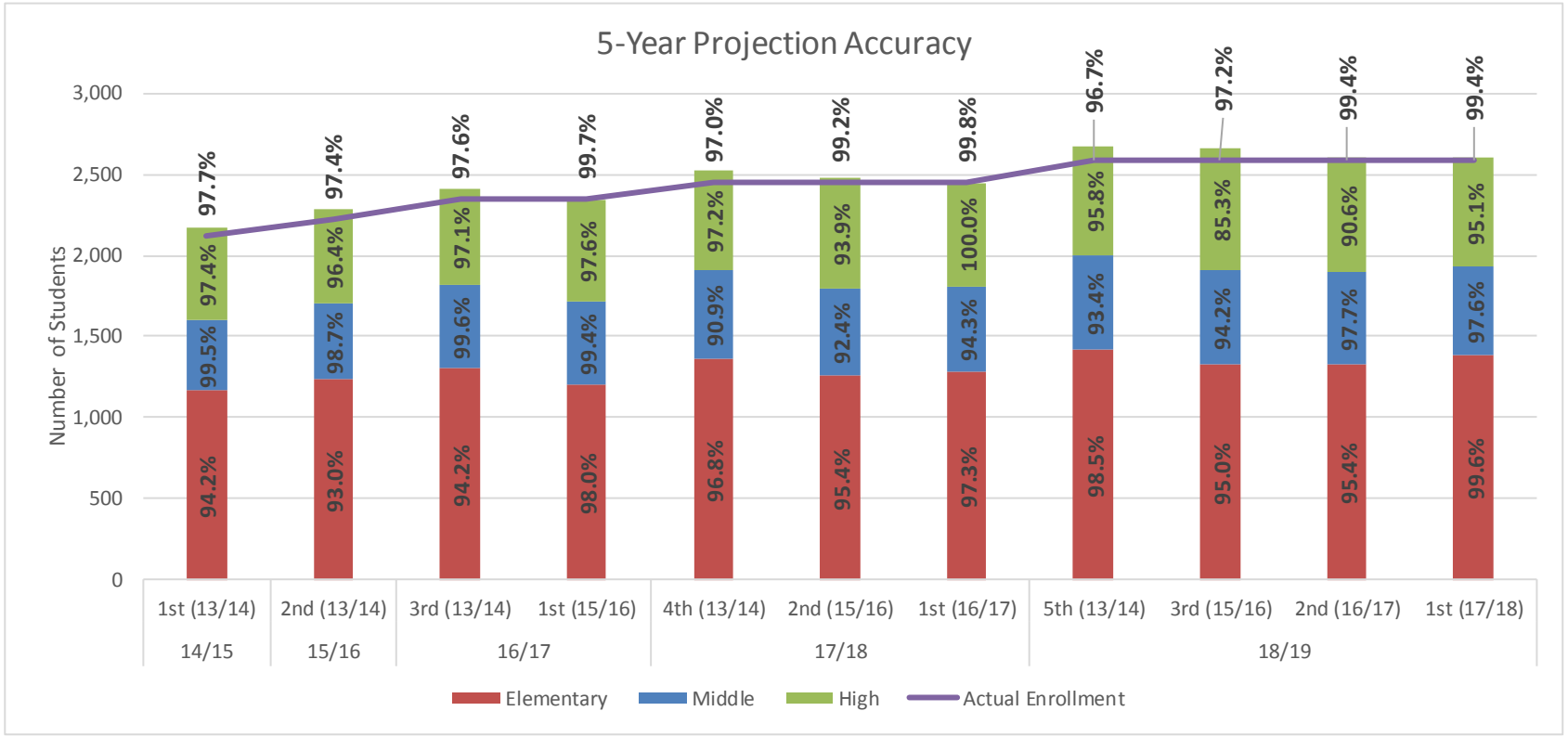
## District

- Projected: 2,603
- Actual: 2,588
- Accuracy: **99.4%**

**Notes:**

- This accuracy is the 1st year of the 2018/19 RSP Projections
- Demographic shifts with millennials impacting future enrollment (Jobs, Jobs, Jobs)
- Many areas of the community having significant demographic shifts influencing changes in enrollment (type of households not generating similar yield rates of students
- A good portion of analysis spent on what is happening at the Elementary school grades to determine if there are emerging trends

# Accuracy Trends

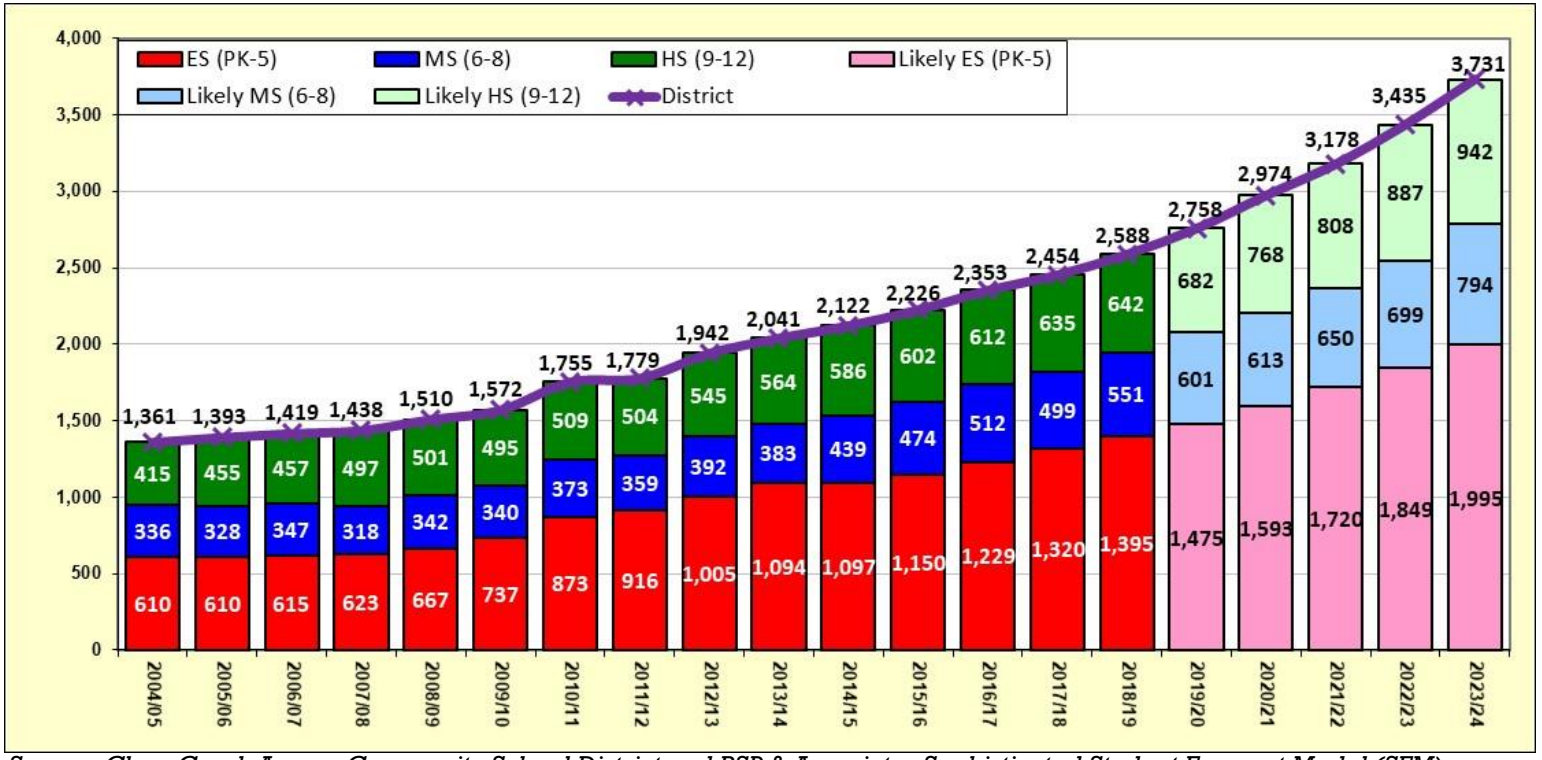



Actual enrollment provided by CCA Community School District, Projections provided by RSP Sophisticated Forecast Model (SFM)
RSP & Associates, LLC was not commissioned to provide an enrollment forecast for 2014/15

## What does this Mean?

- RSP has maintained an average of **98.3%** for district enrollment for **11** projections
- As the projection year gets closer the propensity for increased accuracy is the result
- **5th** year **18/19** projections conducted in **13/14** has the accuracy of **96.7%**, while **1st** year **18/19** projections conducted in **17/18** has the accuracy of **99.4%**
- The RSP projections should be integrated into all areas of district planning

# Past, Current, Future Enrollment




*Source: Clear Creek Amana Community School District and RSP & Associates Sophisticated Student Forecast Model (SFM)*

## What Does This Mean

- Enrollment Change – Overall enrollment increase anticipated (Elementary, Middle, and High)
- Increases based on continued development opportunities within the district
- In 17/18: 65 students 18/19: 35 students in Little Clippers, Sprouts Academy, CPI (Homeschool/Duel Enrolled and Home School Assistant Program (HSAP)) that are not in these numbers
- District increases by nearly 1,200 students **(44.2%)** **(+6.6% to +8.6% a year)**
- Elementary increases by about 600 students **(+43.0%)** **(+5.7% to +8.0% a year)**
- Middle School increases by nearly 250 students **(+44.1%)** **(+2.0% to +13.6% a year)**
- High School increases by about 300 students **(+46.7%)** **(+5.2% to +12.6% a year)**

# Enrollment Projections

| School | Capacity | | Student | Past School Enrollment | | | Future Enrollment By Student Residence | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Instruction | Structural | Location | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 |
| Amana Elementary | | | Reside/Attend | 133 | 138 | 132 | | | | | |
| | 340 | 425 | Reside | 142 | 144 | 139 | 142 | 143 | 142 | 138 | 146 |
| Grades PreK-5 | | | Attend | 139 | 145 | 139 | | | | | |
| Clear Creek Elementary | | | Reside/Attend | 257 | 255 | 279 | | | | | |
| | 425 | 500 | Reside | 286 | 281 | 307 | 316 | 353 | 369 | 381 | 397 |
| Grades PreK-5 | | | Attend | 271 | 269 | 291 | | | | | |
| North Bend Elementary | | | Reside/Attend | 405 | 450 | 473 | | | | | |
| | 425 | 525 | Reside | 423 | 471 | 495 | 386 | 401 | 399 | 413 | 436 |
| Grades PreK-5 (19/20: PK-3) | | | Attend | 415 | 458 | 484 | | | | | |
| Tiffin Elementary | | | Reside/Attend | 365 | 410 | 438 | | | | | |
| | 450 | 550 | Reside | 378 | 424 | 454 | 353 | 390 | 455 | 520 | 596 |
| Grades K-5 (19/10: K-3) | | | Attend | 404 | 448 | 481 | | | | | |
| Oak Hill | | | Reside/Attend | 0 | 0 | 0 | | | | | |
| Capacity 450 | 450 | 550 | Reside | 0 | 0 | 0 | 278 | 306 | 355 | 397 | 420 |
| Grades 4-5 (Opens 19/20) | | | Attend | 0 | 0 | 0 | | | | | |
| CCA Middle School | | | | | | | | | | | |
| | 750 | 900 | Reside | 512 | 499 | 551 | 601 | 613 | 650 | 699 | 794 |
| Grades 6-8 | | | Attend | 512 | 499 | 551 | | | | | |
| CCA High School | | | | | | | | | | | |
| Addition 2017/18 (Capacity 900-1,080) | 900 | 1,080 | Reside | 612 | 635 | 642 | 682 | 768 | 808 | 887 | 942 |
| Grades 9-12 | | | Attend | 612 | 635 | 642 | | | | | |
| ELEMENTARY TOTAL | | | | 1,160 | 1,253 | 1,322 | | | | | |
| | 2,090 | 2,550 | Reside | 1,229 | 1,320 | 1,395 | 1,475 | 1,593 | 1,720 | 1,849 | 1,995 |
| Grades PreK-5 | | | Attend | 1,229 | 1,320 | 1,395 | | | | | |
| DISTRICT K -12 TOTALS | | | | | | | | | | | |
| | 3,740 | 4,530 | Reside | 2,353 | 2,454 | 2,588 | 2,758 | 2,974 | 3,178 | 3,435 | 3,731 |
| Grades PreK-12 | | | Attend | 2,353 | 2,454 | 2,588 | | | | | |

Source: RSP & Associates, LLC - December 2018

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

*Note 2: By School Reside may not equal Attend because of student choice*

*Note 3: PreKindergarten students in the enrollment projections (Average over 120 students - likely more in future years)*

*Note 4: Capacity of each facility provided by CCA Community Schools*

*Note 5: Reside is based on the student address*

*Note 6: Attend is based on where the facility a student may attend*

*Note 7: Reside/Attend is are students who reside in the attendance area and attend that facility*

Exceed Instruction Capacity

Exceed Instruction & Structural Capacity

# Part Four:

## Moving Forward

# 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 transiency (In-Migration, Out-Migration) fluctuates considerably; this is a factor that should be monitored each year to determine projection accuracy
- Monitor development applications to determine the type of residential activity which will be constructed (Have different yield rates)
- Watch the PK enrollment each year to be sure that the forecast is on target
- Observe Kdg enrollment as it will be between 230 and 330 students; this is impacted by the previous year PK enrollment and development trends
- Use the March Kindergarten Round-up as a benchmark for projection accuracy
- Determine the criteria to address capacity issues and timing for future school construction, remodeling, or new attendance areas
- Administration continue to examine 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

# Notes