

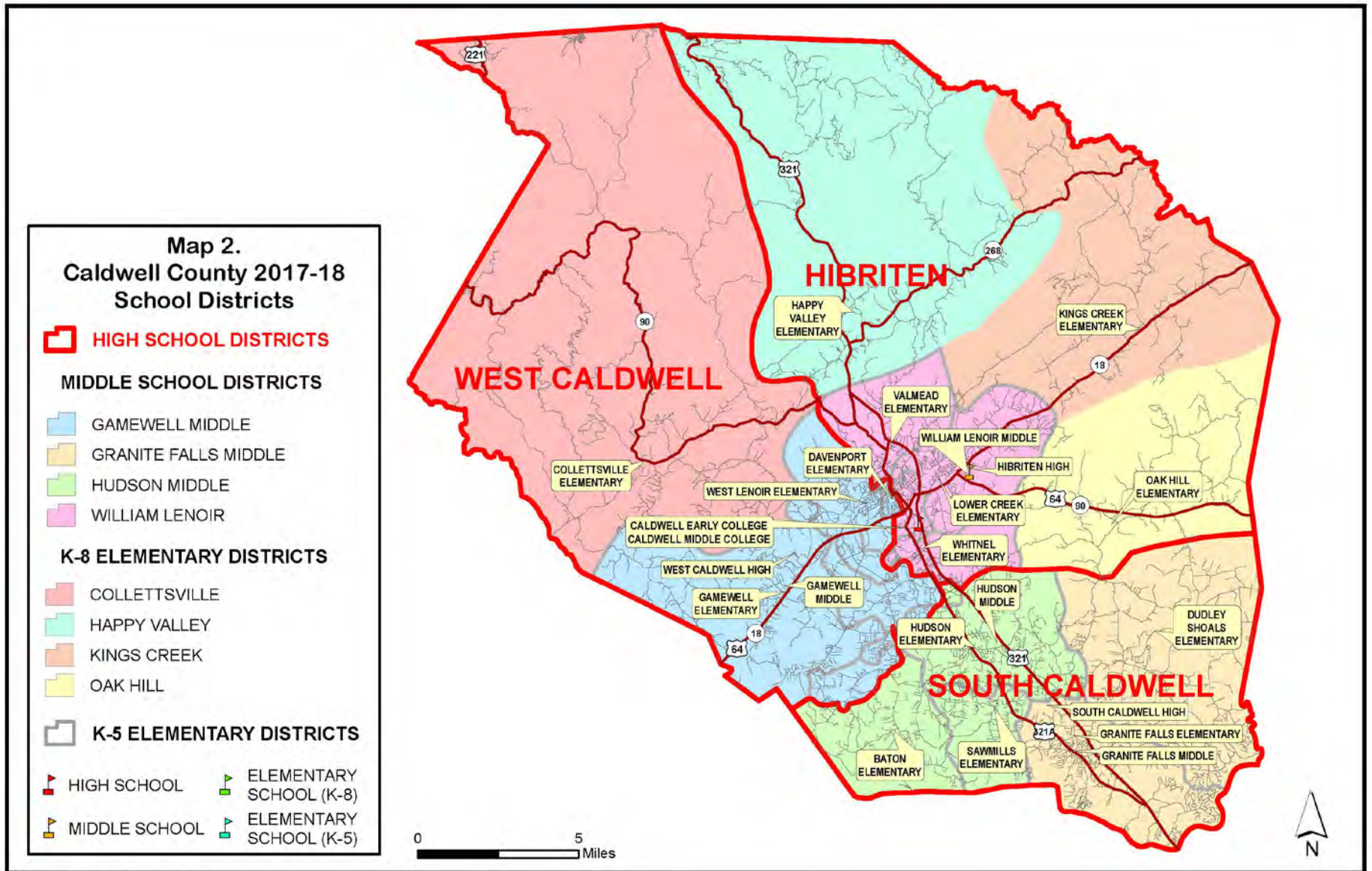
Caldwell County Growth Estimation Model: Study of the Caldwell County School System



Presented to the Caldwell County Schools

December 2017

Caldwell County School Districts



Caldwell County Demographic Trends

- ◆ Caldwell County's resident population increased 6.8% from 77,415 in 2000 to 83,029 in 2010.
- ◆ The NC Office of Planning estimates that Caldwell's population has decreased by 236 persons since 2010.

Caldwell County Employment Trends

- ◆ Caldwell County lost about 10,600 jobs between 2000 and 2010, mostly in the manufacturing sector.
- ◆ Since 2010 Caldwell County has gained 400 jobs.
- ◆ Caldwell is working hard to bring new industry to the County such as the Google data warehousing facility in Lenoir.

CaldGEM Project Goal

- To develop a workable model using GIS technology that measures and estimates student population growth in the Caldwell County School System.

Why Analyze Student Growth?

- Understanding potential student population growth is essential before school officials and planners can determine the need for, location and size of future facilities within the County.

Caldwell School Growth Model Components

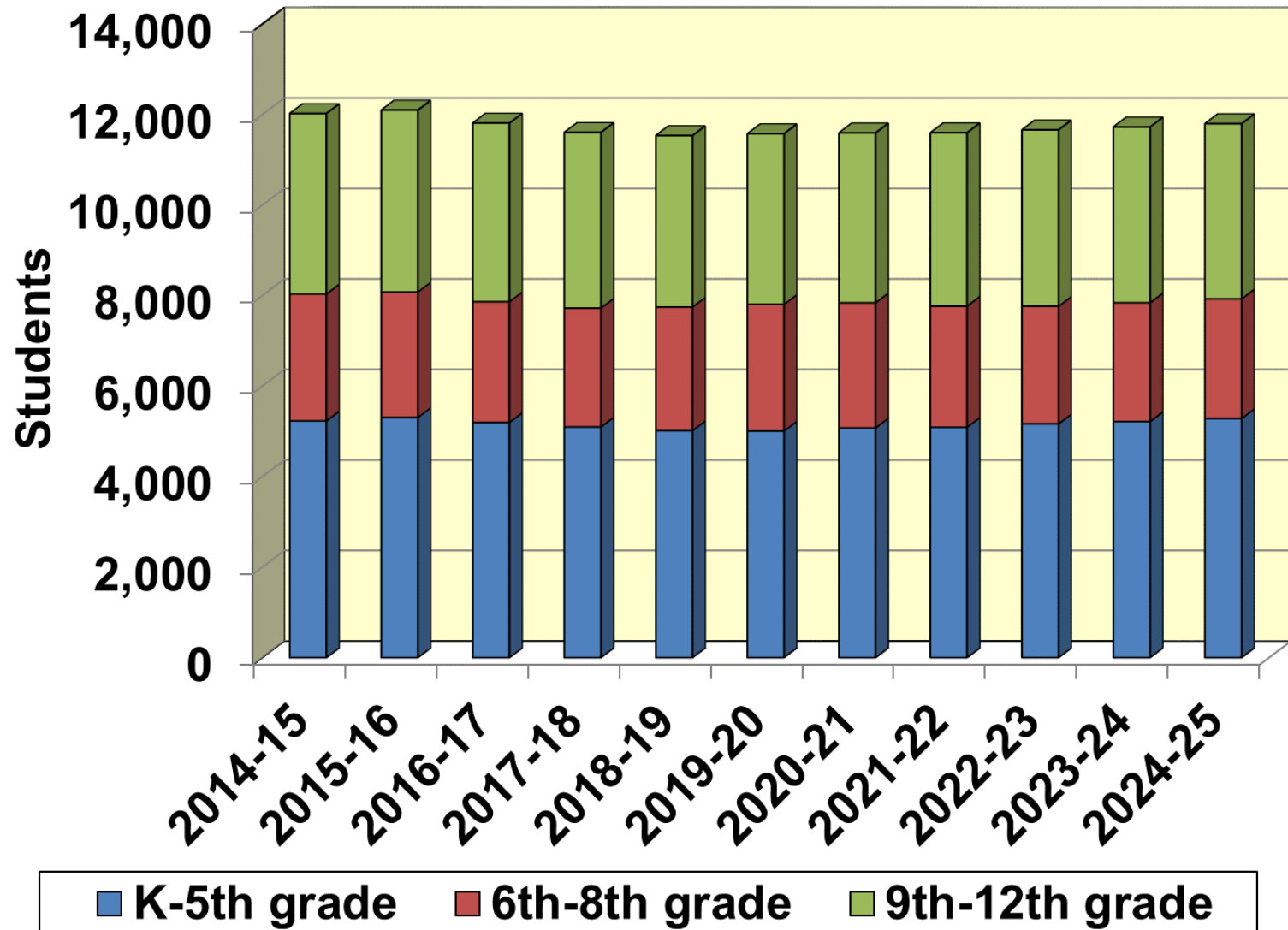
- **Projected Number of New Housing Units**
- **Current Student Enrollment**
- **Grade Retention Rates**
- **Birth Rates**
- **Dropout Rates**
- **Economic Conditions**

CaldGEM Methodology

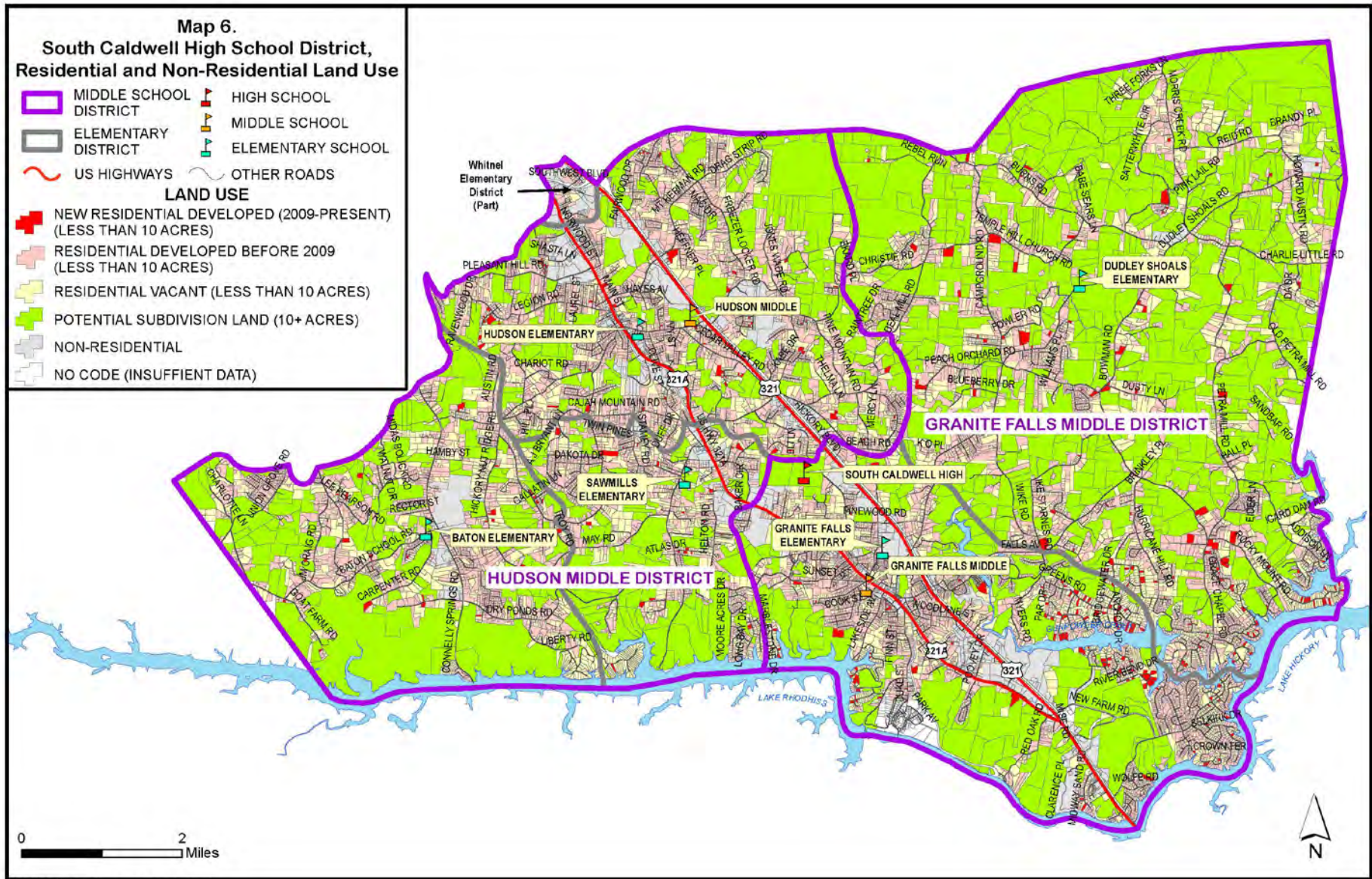
Please Note:

- **The estimates generated by the model are meant to give a picture of possible student growth and should be viewed with the caveats of changing economic conditions, migration patterns and/or governmental regulations over the next decade.**

Caldwell School Growth Model Results



Projected Growth: South Caldwell District



Demographic Trends in the South Caldwell High School District

- ◆ Between 2010 and 2017 the resident population of the South Caldwell District grew 0.2% (36,577 to 36,648).
- ◆ A total of 340 housing units have been added within the South Caldwell district since 2010.

CaldGEM Model Example: Dudley Shoals School District

Location:

- ◆ **Most of Dudley Shoals' is located in County Planning Jurisdiction areas.**
- ◆ **The majority of the district's land is zoned for residential uses.**
- ◆ **GIS Analysis indicates that several small subdivisions had been added in the Dudley Shoals district since 2000, but very few have been added since 2008.**

CaldGEM Model Example: Dudley Shoals School District

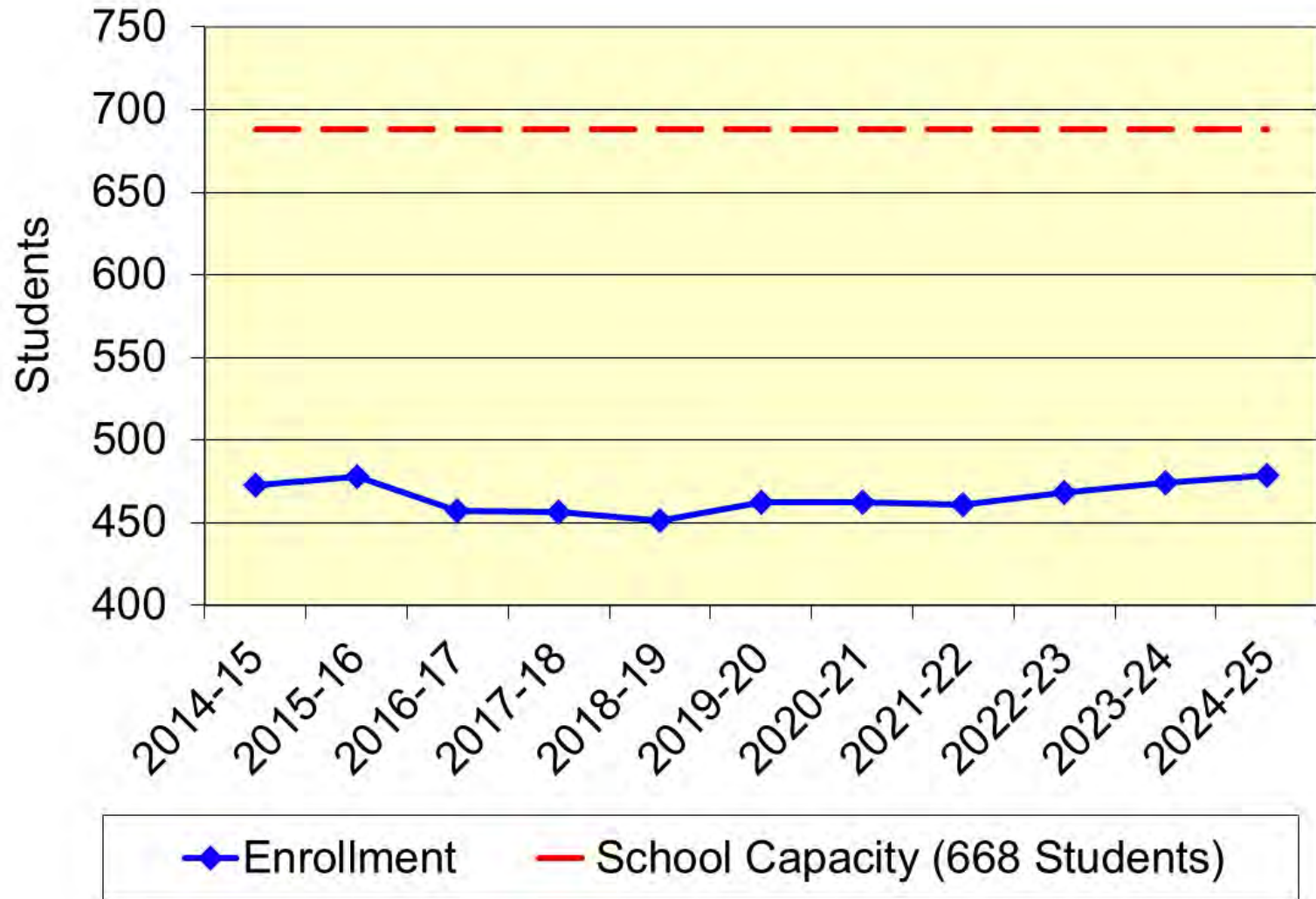
Household and Population Demographics

- ◆ The resident population inside the Dudley district increased from 8,046 in 2010 to 8,133 in 2017.
- ◆ More than 80 housing units have been added since 2010.
- ◆ Dudley's student enrollment declined from 473 in 2014 to 456 in 2017.

CaldGEM Model Example: Dudley Shoals School District Vacant Acreage and Housing Growth

- ◆ **Thousands of acres remain available for future development.**
- ◆ **Vacant land and adequate infrastructure has the potential to allow the construction of about 20 houses annually in the Dudley district by 2024.**

Projected Growth: Dudley Shoals School District



CaldGEM Model Example: Projected Student Growth

- **Dudley Shoals Elem. (Current Capacity: 668)**
Student enrollment may increase from 456 in 2017 to 479 students in 2024 or 30% under capacity
- **Conclusion:**
Dudley Shoals has enough capacity to handle the small enrollment increase predicted by the school growth model.

Projected Growth: Baton and Granite Falls Elementary

- **Baton Elementary (Current Capacity: 676)**
Student enrollment may increase from 397 in 2017 to 413 students in 2024 or 39% under capacity
- **Granite Falls Elem. (Current Capacity: 814)**
Student enrollment may increase from 601 in 2017 to 619 students in 2024 or 24% under capacity

Projected Growth: Hudson and Sawmills Elementary


- **Hudson Elementary (Current Capacity: 989)**
Student enrollment may increase from 714 in 2017 to 719 students in 2024 or 27% under capacity)
- **Sawmills Elementary (Current Capacity: 444)**
Student enrollment may increase from 311 in 2017 to 354 students in 2024 or 37% under capacity)

Projected Growth: Granite Falls and Hudson Middle, South Caldwell High




- Granite Falls Middle (Current Capacity: 806)
Student enrollment may decrease from 578 in 2017 to 565 students in 2024 or 30% under capacity
- Hudson Middle (Current Capacity: 968)
Student enrollment may increase from 633 in 2017 to 667 students in 2024 or 31% under capacity
- South Caldwell High (Current Capacity: 2,000)
Student enrollment may decrease from 1,546 in 2017 to 1,506 students in 2024 or 25% under capacity

Projected Growth: Hibriten District



Map 4.
Hibriten High School District,
Residential & Non-Residential Land Use
SCHOOLS

-  HIGH SCHOOL
-  MIDDLE SCHOOL
-  ELEMENTARY SCHOOL (K-8)
-  ELEMENTARY SCHOOL (K-5)








SCHOOL DISTRICTS

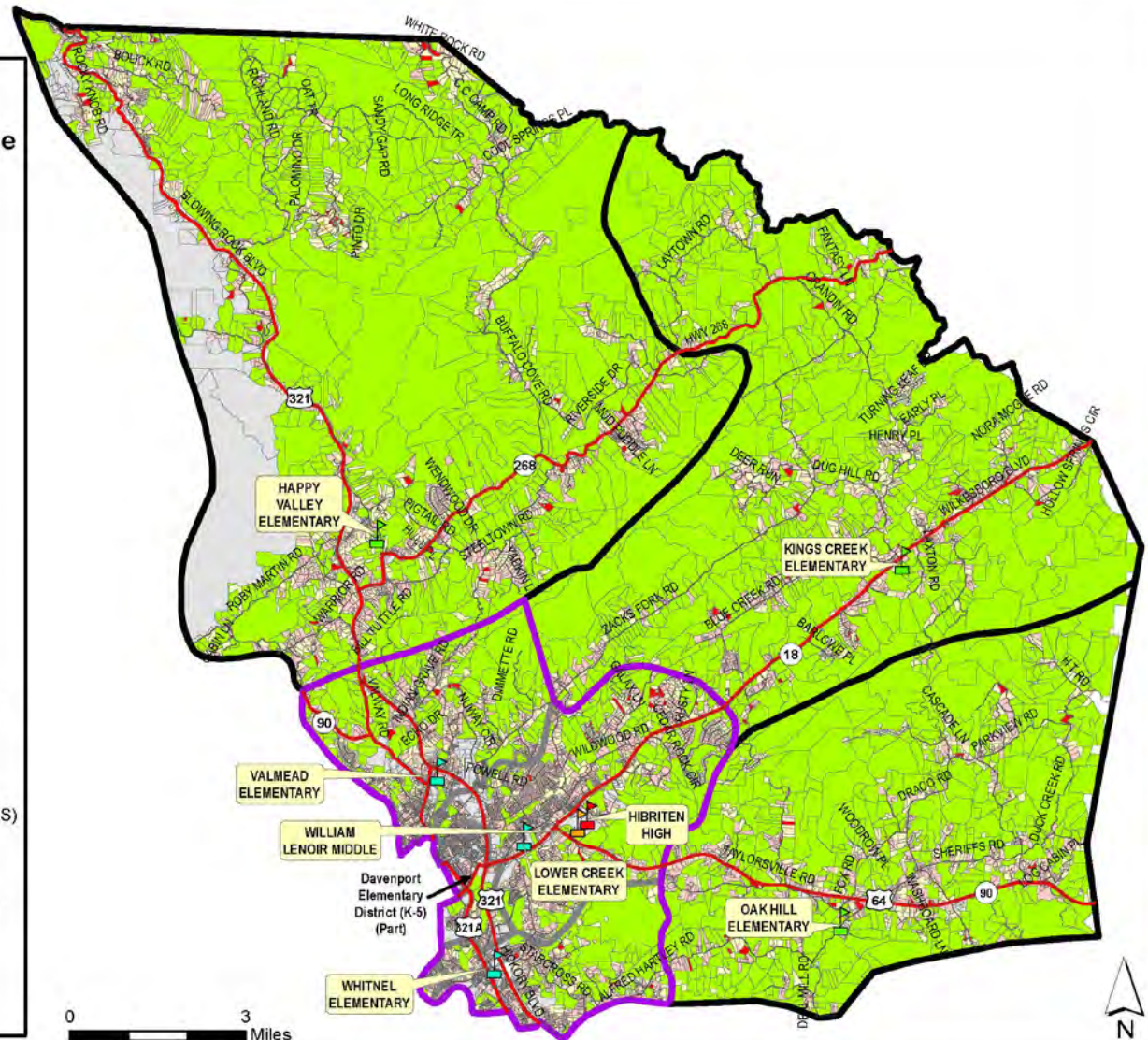
-  ELEMENTARY DISTRICT (K-5)
-  ELEMENTARY DISTRICT (K-8)
-  WILLIAM LENOIR MIDDLE DISTRICT (6-8)

ROADS

-  US AND NC HIGHWAYS
-  OTHER ROADS

LAND USE

-  NEW RESIDENTIAL DEVELOPED (2009-PRESENT)
(LESS THAN 10 ACRES)
-  RESIDENTIAL DEVELOPED BEFORE 2009
(LESS THAN 10 ACRES)
-  VACANT RESIDENTIAL LAND (LESS THAN 10 ACRES)
-  POTENTIAL SUBDIVISION LAND (10+ ACRES)
-  NON-RESIDENTIAL or PISGAH NATIONAL FOREST
-  SPECIAL USE DISTRICTS
-  NO CODE (INSUFFICIENT DATA)



Demographic Trends in the Hibriten High School District

- ◆ Between 2010 and 2017, the resident population of the Hibriten district declined 0.6% (22,283 to 23,159).
- ◆ The number of housing units inside the district rose from 10,935 to 11,204.

Projected Growth: Davenport and Lower Creek Elementary

- **Davenport Elementary (Current Capacity: 550)**
Student enrollment may increase from 510 in 2017 to 549 students in 2024 or 0% under capacity)
- **Lower Creek Elem. (Current Capacity: 432)**
Student enrollment may increase from 406 in 2017 to 420 students in 2024 or 3% under capacity)

Projected Growth: Valmead and Whitnel Elementary

- **Valmead Elementary (Current Capacity: 347)**
Student enrollment may decrease from 151 in 2017 to 138 students in 2024 or 60% under capacity)
- **Whitnel Elementary (Current Capacity: 573)**
Student enrollment may decrease from 318 in 2017 to 315 students in 2024 or 45% under capacity)

Projected Growth: Happy Valley, Kings Creek, and Oak Hill Elementary (K-8)

- **Happy Valley (Current Capacity: 510)**
Student enrollment may decrease from 235 in 2017 to 226 students in 2024 or 56% under capacity
- **Kings Creek (Current Capacity: 324)**
Student enrollment may decrease from 164 in 2017 to 154 students in 2024 or 52% under capacity
- **Oak Hill (Current Capacity: 353)**
Student enrollment may increase from 142 in 2017 to 173 students in 2024 or 51% under capacity

Projected Growth: William Lenoir Middle and Hibriten High

- William Lenoir Middle (Current Capacity: 600)
Student enrollment may increase from 557 in 2017 to 577 students in 2024 or 4% under capacity)
- Hibriten High (Current Capacity: 1,150)
Student enrollment may increase from 846 in 2017 to 916 students in 2024 or 20% under capacity)




Projected Growth: West Caldwell District

Map 8.
West Caldwell High School District:
Residential and Non-Residential Land Use



SCHOOLS

-  HIGH SCHOOL
-  MIDDLE SCHOOL
-  ELEMENTARY SCHOOL (K-8)
-  ELEMENTARY SCHOOL (K-5)








SCHOOL DISTRICTS

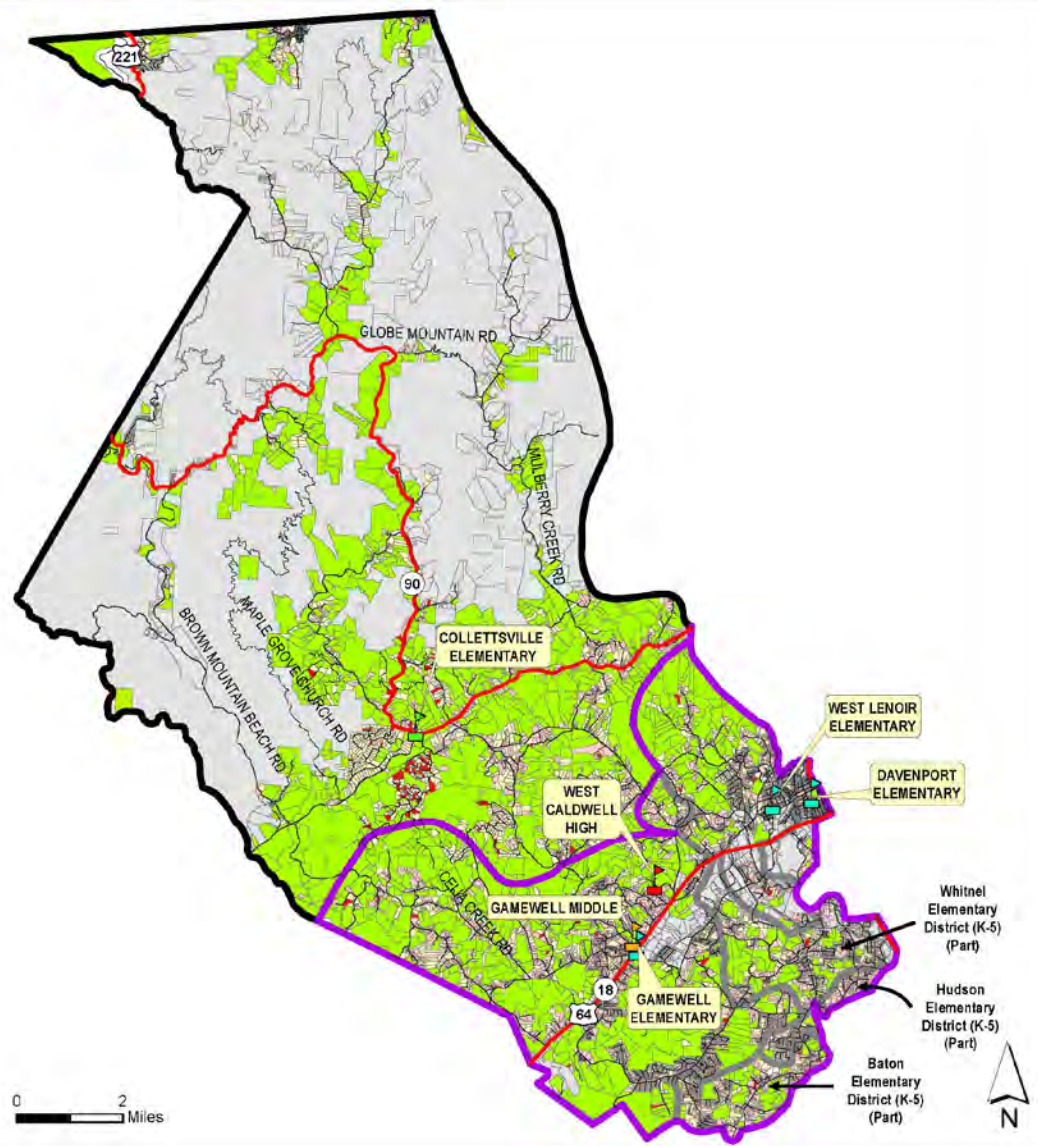
-  ELEMENTARY DISTRICT (K-5)
-  ELEMENTARY DISTRICT (K-8)
-  GAMEWELL MIDDLE DISTRICT

ROADS

-  US AND NC HIGHWAYS
-  OTHER ROADS

LAND USE

-  NEW RESIDENTIAL DEVELOPED (2009-PRESENT) (LESS THAN 10 ACRES)
-  RESIDENTIAL DEVELOPED BEFORE 2009 (LESS THAN 10 ACRES)
-  RESIDENTIAL VACANT (LESS THAN 10 ACRES)
-  POTENTIAL SUBDIVISION LAND (10+ ACRES)
-  NON-RESIDENTIAL or PISGAH NATIONAL FOREST
-  SPECIAL USE DISTRICTS
-  NO CODE (INSUFFICIENT DATA)



Demographic Trends in the West Caldwell High School District

- ◆ **Between 2010 and 2017 the resident population of the West Caldwell district fell 0.7% (24,169 to 24,008).**
- ◆ **The West Caldwell district has gained about 200 housing units over the past 7 years.**

Projected Growth: Gamewell Elementary and West Lenoir

- **Gamewell Elementary (Current Capacity: 744)**
Student enrollment may increase from 483 in 2017 to 500 students in 2024 or 33% under capacity
- **West Lenoir (Current Capacity: 302)**
Student enrollment may increase from 137 in 2017 to 146 students in 2024 or 51% under capacity

Projected Growth: Collettsville Elementary, Gamewell Middle and West Caldwell High

- Collettsville (K-8) (Current Capacity: 502)
Student enrollment may increase from 338 in 2017 to 347 students in 2024 or 31% under capacity)
- Gamewell Middle (Current Capacity: 712)
Student enrollment may decrease from 535 in 2017 to 506 students in 2024 or 29% under capacity)
- West Caldwell High (Current Capacity: 1,248)
Student enrollment may decrease from 830 in 2017 to 767 students in 2024 or 39% under capacity)

Caldwell County Growth Estimation Model Study Conclusions

- **The new William Lenoir Middle is helping to alleviate overcrowding concerns.**
- **West Caldwell and South Caldwell High is expected to lose student population through 2024 while Hibriten may gain students.**
- **Most schools in the Caldwell System should remain below capacity through 2024.**



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