

## 2024 - 2034 School Growth Estimates

Based on 2023/2024 Student Enrollment Data and 2022/2023 RPC Growth Data

# A 10 Year Facility Construction Plan

Prepared By: CMCSS Facilities Management



### Overview:

Clarksville and surrounding Montgomery County remain one of the fastest growing areas in the state of Tennessee. This high rate of growth presents certain challenges to our local education institutions. This study is intended to provide a snapshot of some of the challenges and offer solutions that can be developed to meet the diverse needs of our increasing population. This planning document is updated each year as a way of anticipating, estimating, and developing timelines for capital investments. This is a planning document and serves as a basis for financial discussions as well as for anticipating rezoning efforts.

The Zoning Region Map found in this report depicts Montgomery County divided into 5 zoning regions. These zoning regions are a combination of 21 civil districts of Montgomery County and 8 school feeder systems. The purpose of this subdivision is to focus capital investments on capacity where the capacity is needed now and in the next ten years. By reflecting existing school feeder systems, it is possible to minimize mass rezoning and maintain the continuity of school communities. CMCSS believes that strong communities are the foundation of high academic achievement. By closely matching county civil districts it is possible to extract information from planning commission and other agency files and analyze other relevant data as it relates to county growth rates independent of previous school rezoning efforts that would invalidate analysis done within existing school boundaries. The essence of the study is a comparison of zoning region capacity and enrollment over time within each zoning region of the county.

This zoning region capacity and enrollment analysis for each zoning region is found on the pages following the zoning region map. Each page shows a separate capacity break even projection for elementary schools, middle schools, and high schools in the region. Each sheet also summarizes the analysis and the capital construction impact in terms of land acquisition and construction timing. The capacity break even analysis is developed using three pieces of information. First it plots the historic 40<sup>th</sup> day enrollment at each school in the region (blue dots) from 1998-99 to the present. The second piece of information indicated is the current established BEP capacity for buildings in the region (pink). The final piece of information is a projection model based on a linear regression of the appropriate enrollment data sets. In some cases, multiple regressions are performed on multiple data sets (such as projected roll-up) to provided additional projections using multiple variables.

The final sheet in the report is a timeline indicating the construction sequence over the next ten years generated by the break-even models. This chart is used for intergovernmental discussions regarding academic needs, land acquisition, zoning, and school funding resolutions. This report is the basis for CMCSS building programs.



### Residential Growth - North Clarksville Between 1997 - 2023





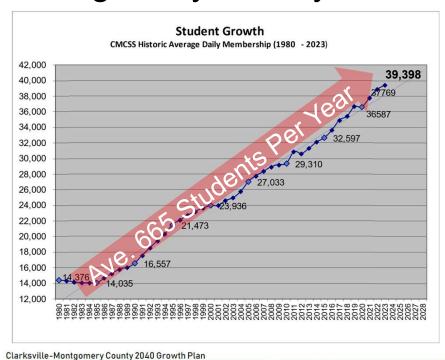


### Growth in Region 1 Between 1998 – 2023

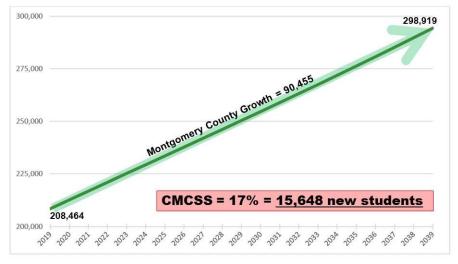


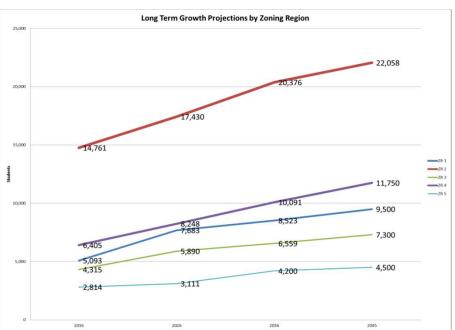


### Montgomery County Student Growth Statistics









### **Growth Data Analysis:**

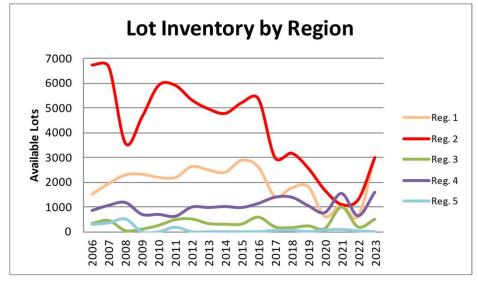
Enrollment growth in the district continues to rise at a 30 year average of approximately 665 students per year. Construction of new school capacity has kept up with this growth rate with one new school constructed every 1.4 years until the opening of Oakland Elementary.

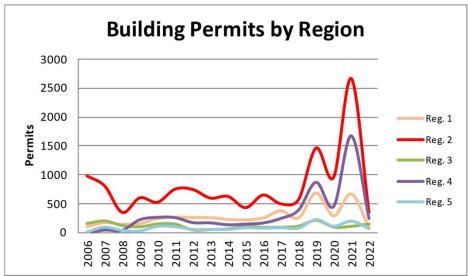
Growth projections from the state of Tennessee and the Regional Planning Commission indicate continued increases. The Clarksville Montgomery County 2040 Growth plan figures show 43% growth in the community through 2040. Growth in Montgomery County is historically impacted by variables associated with general community employment and the Fort Campbell Army Base. The data suggests that Montgomery County will continue on this trend, increasing by approximately 90.455 new residents over the next 20 years. This will result in CMCSS growth of approximately 15,648 new students over that period and reaching 52,275 new students by 2040. This growth would mirror growth in CMCSS since 1995. That growth resulted in 11 elementary schools, 3 middle schools, 3 high schools, and over 20 building additions.

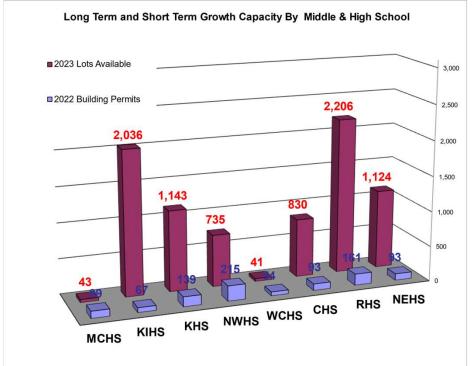
Third party modelling by home builders also indicates continued growth in Montgomery County through 2045; as high as 60%. CMCSS would have a projected total enrollment in 2045 of over 55,000 students. This growth is more aggregated and anticipated to occur regionally throughout the County with the highest growth expected in the Northern and Eastern regions.

### Montgomery County Demographics

### Residential Growth Statistics







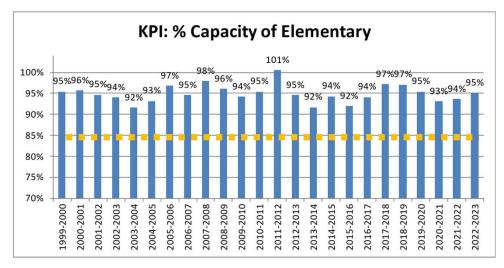
### **Growth Data Analysis:**

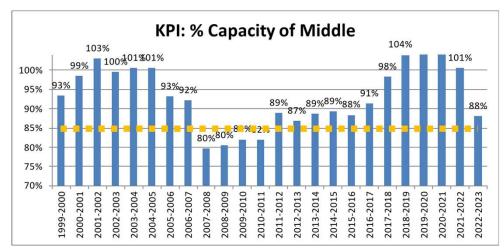
Residential growth in Montgomery County has historically been a good indicator of regional student growth trends in CMCSS. Current Regional Planning Commission (RPC) data indicates that the northeastern and southeastern portion of Montgomery County (Regions 2 and 4) continue to develop at the fastest rate and hold the most capacity (approved lots) for future residential development. Local realtors support this theory and also suggest that the highest potential for residential sales probability remains in the north and eastern regions as well.

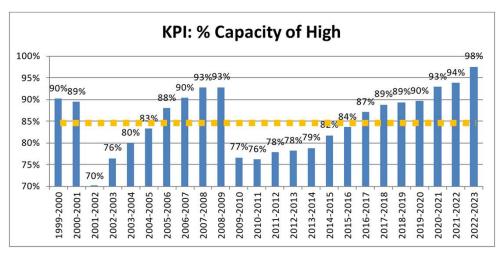
Although residential growth in Montgomery County had been slowed in 2008 due to national economic conditions, current RPC building permit data indicates continued building at, or at near, historic annual levels with the highest activity in the north and southeastern sections of the county. Growth seems to be shifting east (from region 1 towards region 4) as inventories and counts for those regions converge.

CMCSS continues to focus school building programs in these highly impacted areas (Regions 1, 2 and 4), Kirkwood Middle opened in August 2022 helping to balance the middle schools. Kirkwood High opened in August 2023. School capacity continues to be strained in these areas due to build-out of approved existing lots and portable classroom inventory has doubled over the last five years as a result. Helping to balance the High Schools. In July 2023 Kirkwood Elementary was approved for construction with an opening date of August 2024

### Montgomery County Capacity Statistics







### **Capacity Data Analysis:**

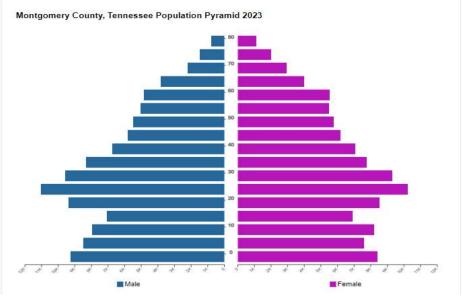
A key performance indicator for district space allocation requirements is the overall percent of capacity for all buildings across the district. As student populations and grade levels are not consistent and highly variable it is important to provide adequate space for special populations and programs. A KPI percent capacity of 85% has been established as the KPI target. At 85% capacity, the district can absorb approximately 6.5 years of growth at the average 30 year annual growth rate of 665 additional students per year even if no action is taken regarding additional capacity.

Capacity at the Elementary school level continues to be strained throughout the district. The Northern areas of the county that have been most impacted by residential growth exhibit the majority of capacity issues. With Kirkwood Elementary scheduled to open in August 2024 and Elementary School #26 being planned to open in 2026. This should provide additional capacity as the District moves towards the target capacity of 85%

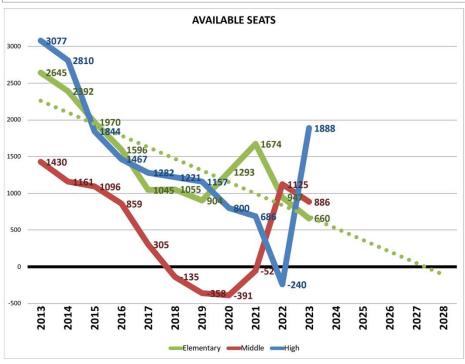
Capacity at the Middle schools is now close to the District target of 85%. The Opening of Kirkwood Middle in August 2022 has balanced the middle schools to 91% overall.

The Opening of Kirkwood High in August 2023 has balanced the High Schools to the District Target of 85% overall.

### Montgomery County Capacity Statistics







## **Demographic Capacity Analysis:**

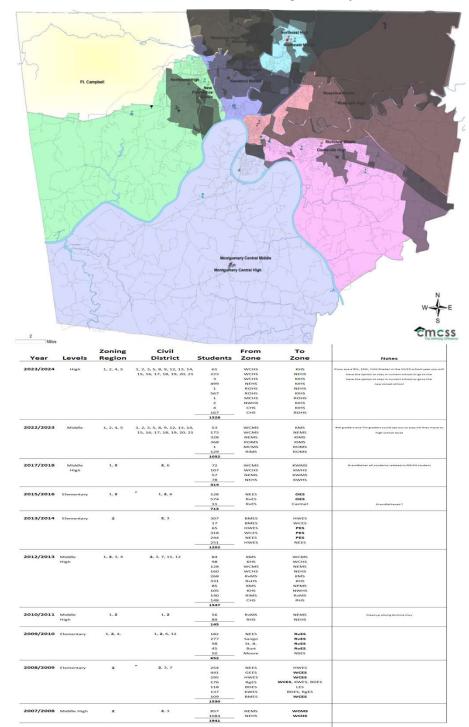
Montgomery County population data continues to indicate that the largest current demographic (commonly referred to as millennials) is now of child bearing age (25-40). An echo boom is building quickly behind them at the Elementary level. 0 to 5 year olds are now the third highest demographic in the Montgomery County population pyramid and the highest of the school aged population. This is likely to drive additional growth at Pre-K, Kindergarten, and elementary levels in the near future.

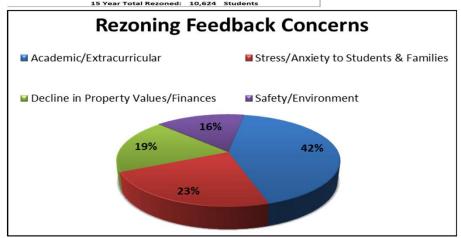
This is supported by current CMCSS grade level enrollment data which suggests that growth is not consistent between highest and lowest grade levels. A wave exists between 9th grade and 10th grade and continues through all grades of middle and elementary. As these students roll forward, capacities will continue to be stretched thin at middle schools. Kindergarten enrollment is 14% higher than 12th grade enrollment.

With the opening of Kirkwood Middle and High, the Middle and High Schools are balanced throughout the District. With Kirkwood Elementary opening for the 24-25 school year the District should see the same effect on the seating as the Middle and High School saw with the opening of Kirkwood Middle and High.

### Montgomery County Student Growth Statistics

CMCSS 10 Year Zoning History





### **Zoning Analysis:**

Analysis of past school rezoning indicates that, by far, the majority of rezoning has occurred in the North and Northeastern regions of the county. A comprehensive Rezoning typically occurs with the opening of new capacity to balance enrollment between buildings. Spot rezoning also occurs where capacity imbalances can be corrected effectively in small local pockets within the regions. The executive limitations of CMCSS policy state that school rezoning should do the following:

- •Ensure equitable distribution of resources according to the learning needs of all students
- Consider proximity of students to existing schools
- Move as few students as possible
- •Transport students the least distance possible
- •Consider the BEP capacity and percent utilization of existing facilities
- •Allow for future growth where possible (based on Planning Commission lot and permit data)

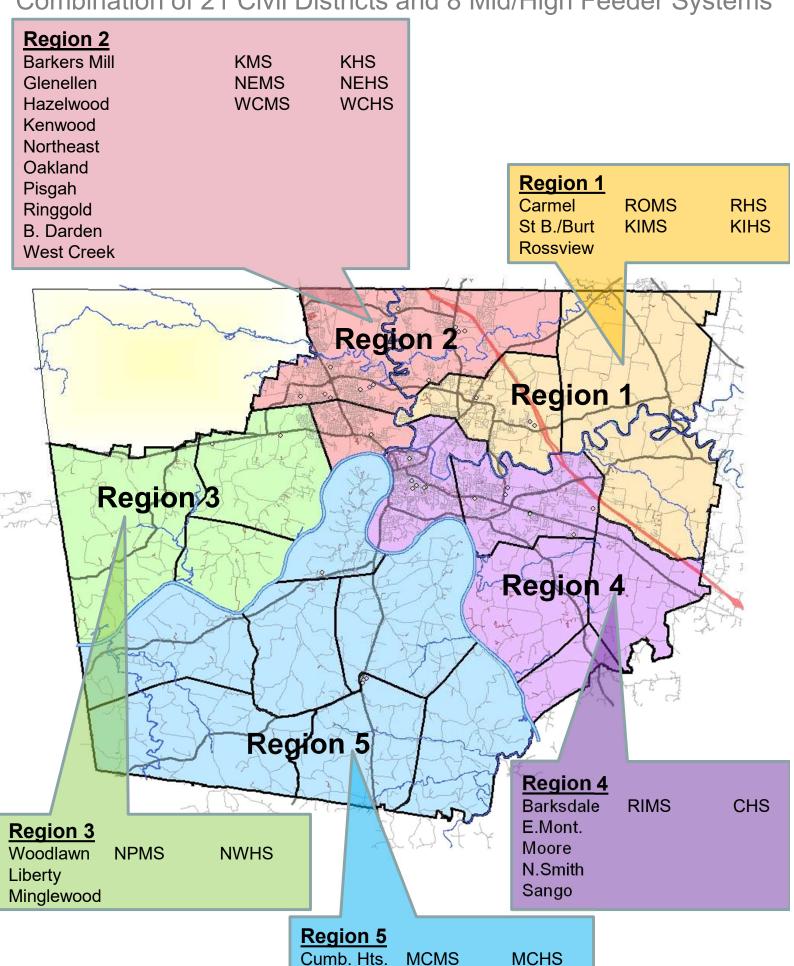
The Board of Education believes that it is critical to student achievement to build strong communities and therefore, while appropriate to rezone students within their communities, it is inappropriate to disrupt families by placing students outside of their zoning regions.

Rezoning over the past 15 years has resulted in over 10,000 students being relocated from their communities. Feedback from families indicate overwhelmingly that rezoning is not acceptable. The reasons families prefer to not be disrupted include; academic or extracurricular activities, stress and anxiety to students and families, decline in property values, and safety concerns.

Schools in the south of the county have been relatively untouched by school rezoning.

### **Zoning Regions**

Combination of 21 Civil Districts and 8 Mid/High Feeder Systems



**MCES** 

### Region 1 Capacity

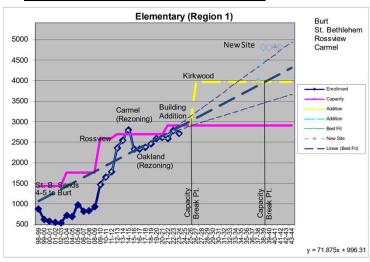
Zoning Region Capacity and Enrollment Analysis 2022 to 2032

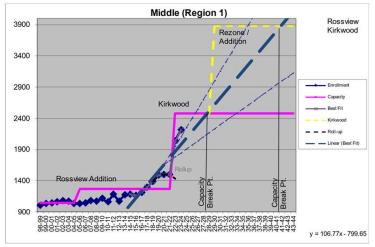
### **Community Growth Data:**

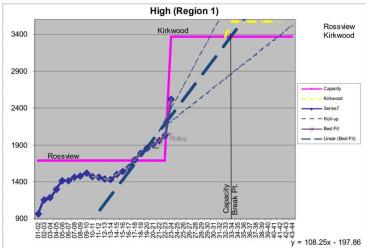
2022 Permits: 92 2023 Approved Lots: 3,015



### **Student Growth Data:**







### **Analysis:**

Zoning Region **One** encompasses 81 square miles in the most northeastern portion of Montgomery County. This area lies East of the industrial park, South of the Kentucky state line, West of the Robertson County line, and north of downtown and Highway 41-A.

This region continues to experience the County's second highest long term student growth trend at elementary, middle, and high schools. There is high residential growth in this region and high potential for growth. This is leading to localized capacity constraints that will worsen in the future.

The opening of Oakland Elementary school in 2015 alleviated overcrowding at Rossview Elementary as over 600 students were moved to region 2, but this only provided temporary relief and Rossview is at 118% capacity. Likewise, Oakland is now over 113% capacity and has seven portable classrooms. Due to physical boundaries such as the Red River and current transportation limitations, capacity at Carmel (at 80%) cannot easily be utilized to reduce growth in the Rossview zone and Oakland zones.

The opening of Kirkwood Middle has balanced out the schools back towards the District target of 85%.

Current growth trends indicate high school capacity is reaching a break even point. The opening of Kirkwood High School has balanced out the schools back towards the District target of 85% that have impacted both Regions 1 and 2.

- Elementary Addition: 2020 (RvES)
- Rezone Middle School: 2022 (Kirkwood)
- Rezone High School: 2022/2023 (Kirkwood)
- Open Elementary: 2024 (Kirkwood)

### Region 2 Capacity

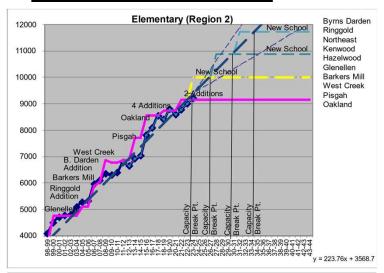
Zoning Region Capacity and Enrollment Analysis 2022 to 2032

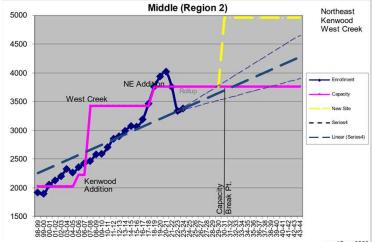
### Community Growth Data:

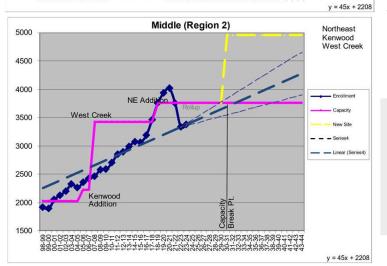
2022 Permits: 358

2023 Approved Lots: 2,988

### **Student Growth Data:**







### **Analysis:**

Zoning Region **Two** encompasses the most northernmost portion of Montgomery County. Covering approximately 55 square miles, this region is the smallest of the five regions. It falls between the Industrial Park and the Ft. Campbell Army Base which is located to its west.

This region continues to experience the County's highest long term growth trends at all three levels. Residential growth in this region continues to grow quickly with the potential for significant future growth. Middle and high school growth outpaces the other four regions.

Elementary School capacity has reached its break even point. Over the last few years, the District has added twelve classroom additions to both West Creek and Oakland Elementary Schools which provided short term relief. The opening of Kirkwood Elementary in the fall of 2024 will provide relief on the eastern most section of Region 2. The opening of the 26<sup>th</sup> Elementary School in 2026 will help balance the Region out.

The opening of Kirkwood Middle set the middle school capacity at 91% which is within 5% of District goal of 85%.

With the opening of Kirkwood High, the building capacity for Region 2 is sitting at the District goal of 85%.

- · Elementary Add: 2021 (W Creek)
- · Elementary Add: 2021 (Oakland)
- · Open Elementary: 2026 (New)

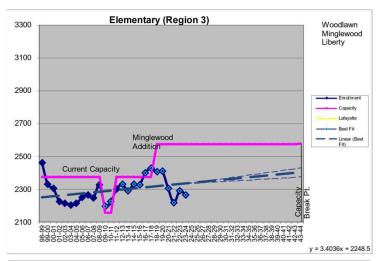
### Region 3 Capacity

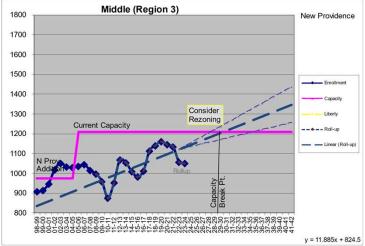
Zoning Region Capacity and Enrollment Analysis 2022 to 2032

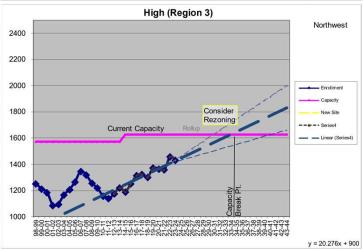
### Community Growth Data:

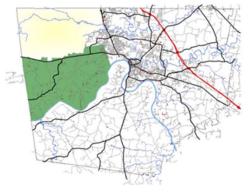
2022 Permits: 153 2023 Approved Lots: 524

### **Student Growth Data:**









### **Analysis:**

Zoning Region **Three** encompasses 77 square miles of the western most portion of Montgomery County. This area is directly south of the Ft. Campbell Army installation, and borders Stewart County to the west.

Zoning Region Three continues to experience the county's second slowest growth rate.

While this region contains a more transient population, small pockets of residential growth remain along Dover Road. While not high; it warrants watching because remaining capacities are limited. A twelve-classroom addition project was completed and opened at Minglewood Elementary School providing capacity for future growth.

Due to the lower residential growth rate, enrollment is difficult to predict beyond five years. With the comprehensive rezoning completed for the opening of Kirkwood Middle, it balanced the District.

Construction in this region will likely focus mainly on renovating existing facilities with the addition of new capacity where possible.

### Construction Summary:

•Rezone Mid/High: 2022/2023

### Region 4 Capacity

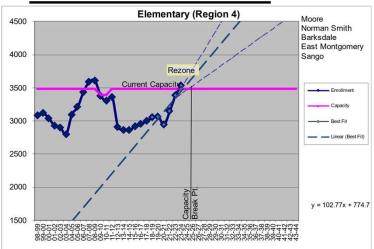
Zoning Region Capacity and Enrollment Analysis 2022 to 2032

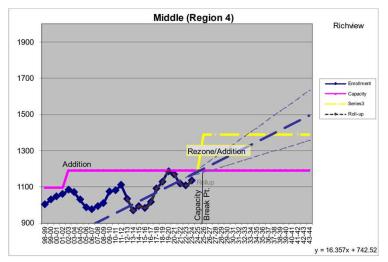


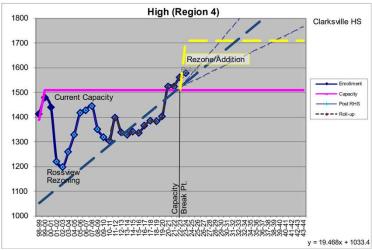
2022 Permits: 250 2023 Approved Lots: 1,608



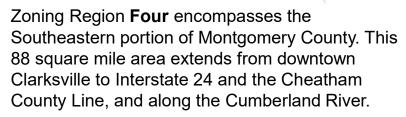
### **Student Growth Data:**







### **Analysis:**



Student growth in this region is relatively flat but seems to be picking up. Potential for residential growth is third smallest of the five.

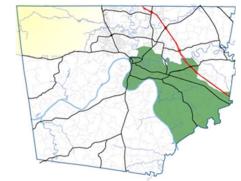
While residential growth in this region skyrocketed in the mid 2000's, it has stabilized at a much lower pace of late. This may be due to several factors such as availability of utilities, age of population, and higher real estate prices in the area.

Elementary school capacity in this region is currently above enrollment and the model suggests that this should be the case for the foreseeable future.

Middle and high school enrollment is nearing capacity, but with fewer students feeding from the elementary schools this should be manageable.

Spot rezoning or the use of temporary classrooms may be necessary at the middle and high school level depending on regional variations in development or to better utilize existing capacity in facilities across the district.

- Rezone Middle School: 2022/2023 (New)
- Rezone High School: 2022/23 (New)
- New Elementary: 2030

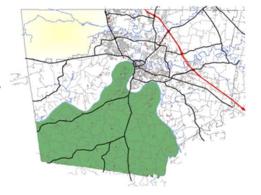


### Region 5 Capacity

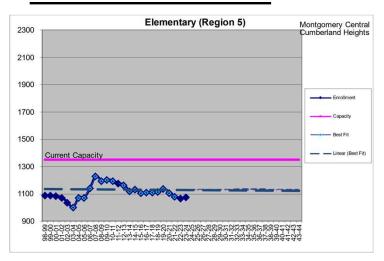
Zoning Region Capacity and Enrollment Analysis 2022 to 2032

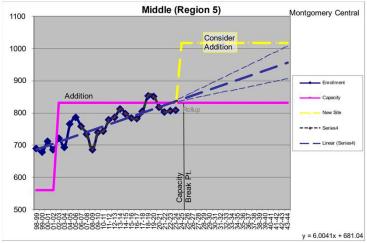


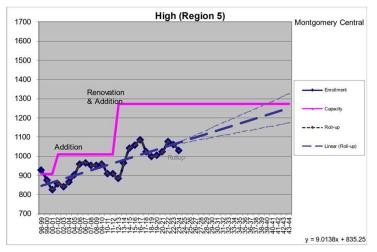
2022 Permits: 68 2023 Approved Lots: 23



### **Student Growth Data:**







### **Analysis:**

Zoning Region **Five** encompasses the Southernmost portion of Montgomery County. This area encompasses 174 square miles from downtown Clarksville, south of the Cumberland River to the Houston and Dickson County Lines.

Residential growth in this region remains slow but steady. There is a low student growth trend in elementary, middle, and high schools.

The probability of residential development remains low in the long term with little potential for growth in the short-term future.

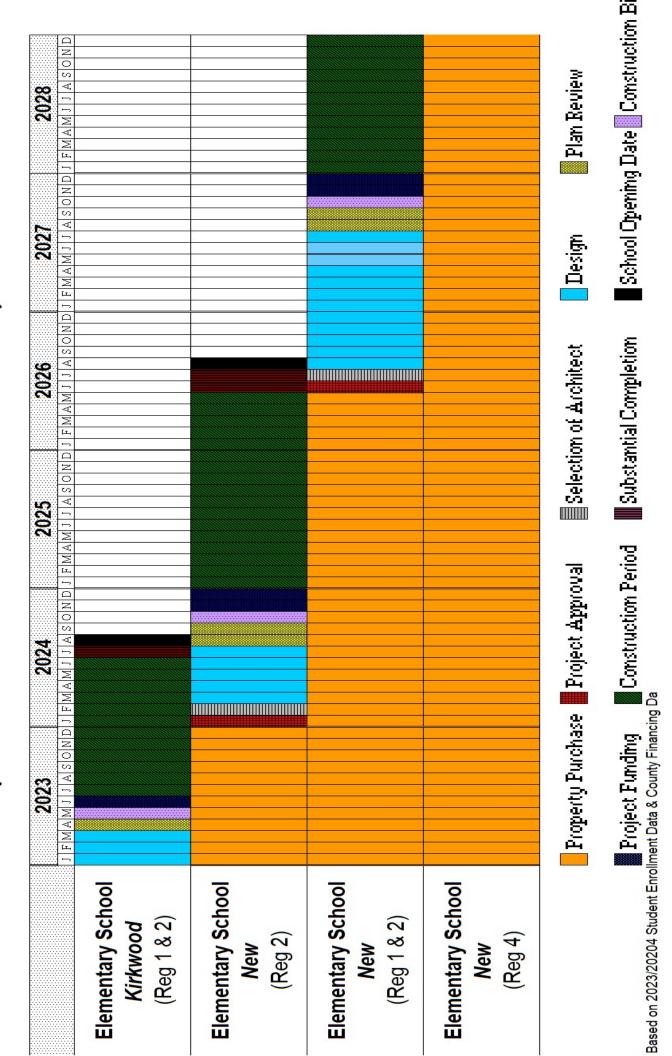
Elementary school capacity in this region is currently above enrollment and the model suggests that this should be the case beyond 2030.

Middle school enrollment is nearing capacity but should be manageable for the near future. There is sufficient high school capacity as well.

The construction of Kirkwood High will help relieve capacity issues thru out the District for the High Schools. With the low student growth in region 5 capacity at the high school is manageable.

# 5 Year Facility Construction Plan

# (Construction Timeline 2023 - 2028)



# 20 Year Facility Construction Plan

