

CARROLL COUNTY PUBLIC SCHOOLS

# EAST MIDDLE SCHOOL FEASIBILITY STUDY

Board of Education Work Session

May 15, 2019



# EAST MIDDLE SCHOOL

## AGENDA

**01 Program Review**

**02 Existing Sites**

**03 Options**

**04 Cost Estimate**



# EAST MIDDLE SCHOOL

## 01 PROGRAM REVIEW

**Middle School Program based on  
Mount Airy MS + BEST Program**



**Proposed School Size:  
123,088 Square Feet**

**Elementary School Program based  
on Ebb Valley ES + BEST Program**



**Proposed School Size:  
78,419 Square Feet**

### Site Amenities

- **Parking**
- **Bus Loop**
- **BEST Bus Parking**
- **Parent Drop-Off Loop**
- **Play Fields/ Playgrounds (Early Childhood, Elementary & BEST playgrounds)**

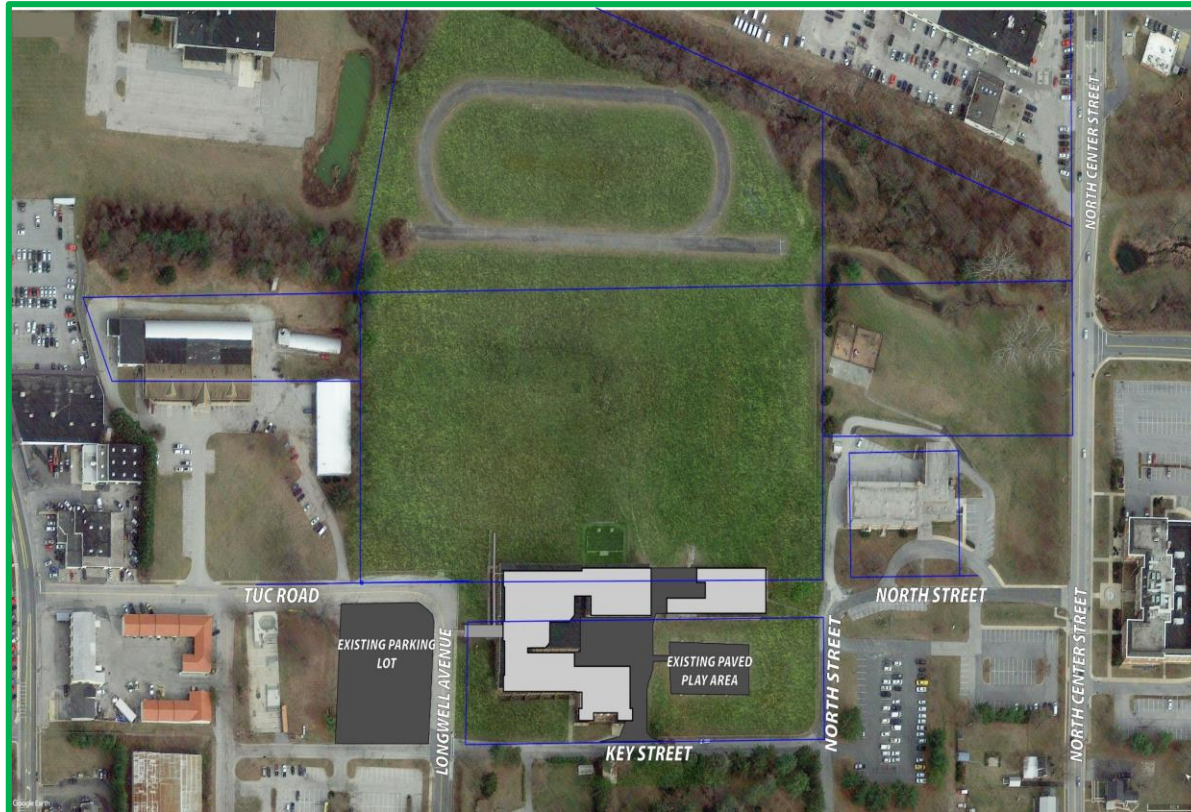


# EAST MIDDLE SCHOOL

## 02 EXISTING SITES

### 2 SCHOOL SITES

- Middle School Renovation/Addition
- 2-Story Middle School
- K-8 Campus (2-Story Middle School & 1-Story Elementary School)



**EAST MIDDLE SCHOOL SITE**



**FRIENDSHIP VALLEY ELEMENTARY SCHOOL SITE**



# EAST MIDDLE SCHOOL

## 03 OPTIONS

**5 Options were studied:**

**Option A: Renovation/Addition**

**Option B: Replacement Middle School on East Middle School Site**

**Option C: Replacement Middle School and New Elementary School (K-8) on East Middle School Site**

**Option D: Replacement Middle School on Friendship Valley Elementary School Site**

**Option E: Replacement Middle School and New Elementary School (K-8) on Friendship Valley Elementary School Site**





**EAST MIDDLE SCHOOL**

**03 OPTIONS**

**EAST MIDDLE SCHOOL SITE**

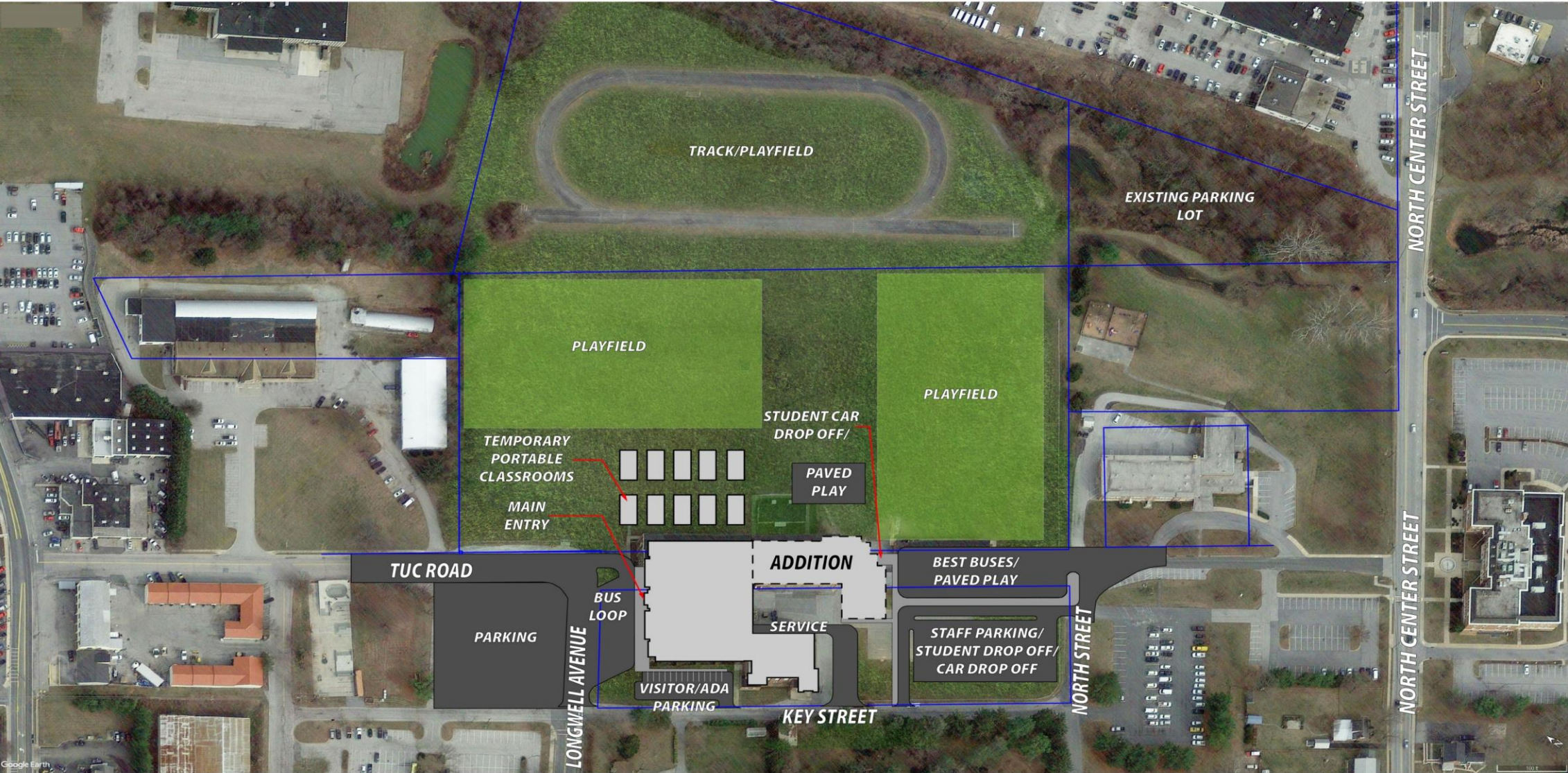




# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTION A: EAST MIDDLE SCHOOL SITE - MIDDLE SCHOOL ADDITION/RENOVATION





# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTION A: EAST MIDDLE SCHOOL SITE – MIDDLE SCHOOL ADDITION/RENOVATION

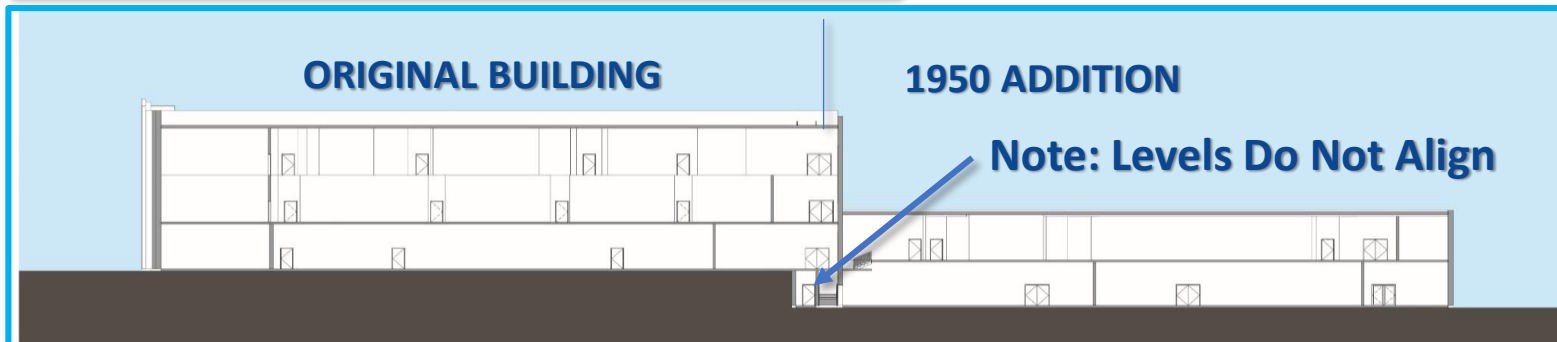


#### PROS

- Improved site circulation
- Least impact to existing site
- BEST program is connected to school

#### CONS

- Longest Construction Duration
- Most Expensive Middle School Option
- High phasing costs/ multiple relocatable classrooms for swing space
- Largest Impact to School Occupants
- Largest square footage- Inefficient plan fitting program into 80+ year old building
- Loss of play fields during construction
- Least Energy Efficient Option
- Existing Wood Roof Deck will be limiting for new roof top equipment and Code related fireproofing



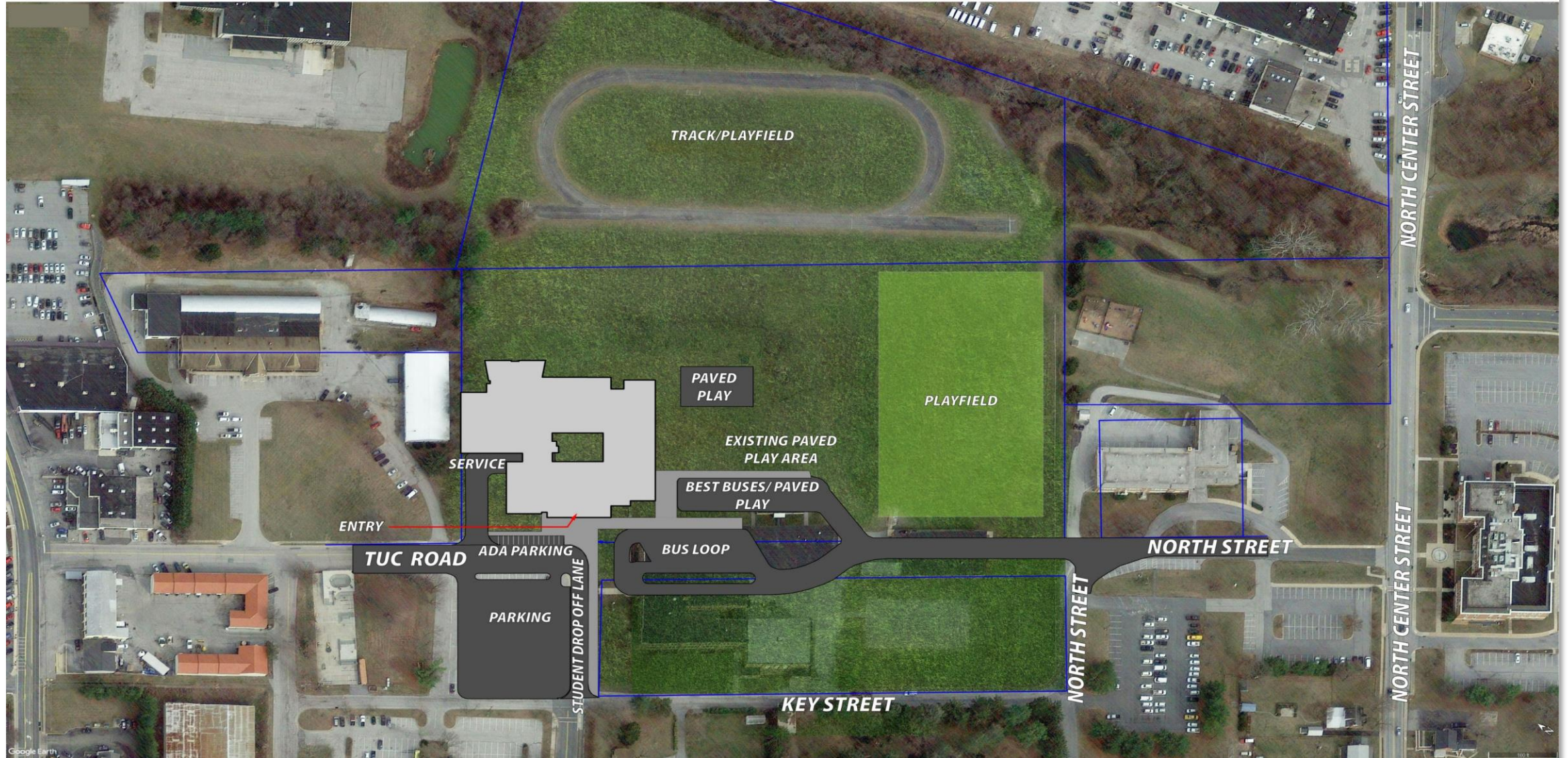
SECTION THROUGH ORIGINAL BUILDING & ADDITION



# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTION B: EAST MIDDLE SCHOOL SITE – NEW 2-STORY MIDDLE SCHOOL

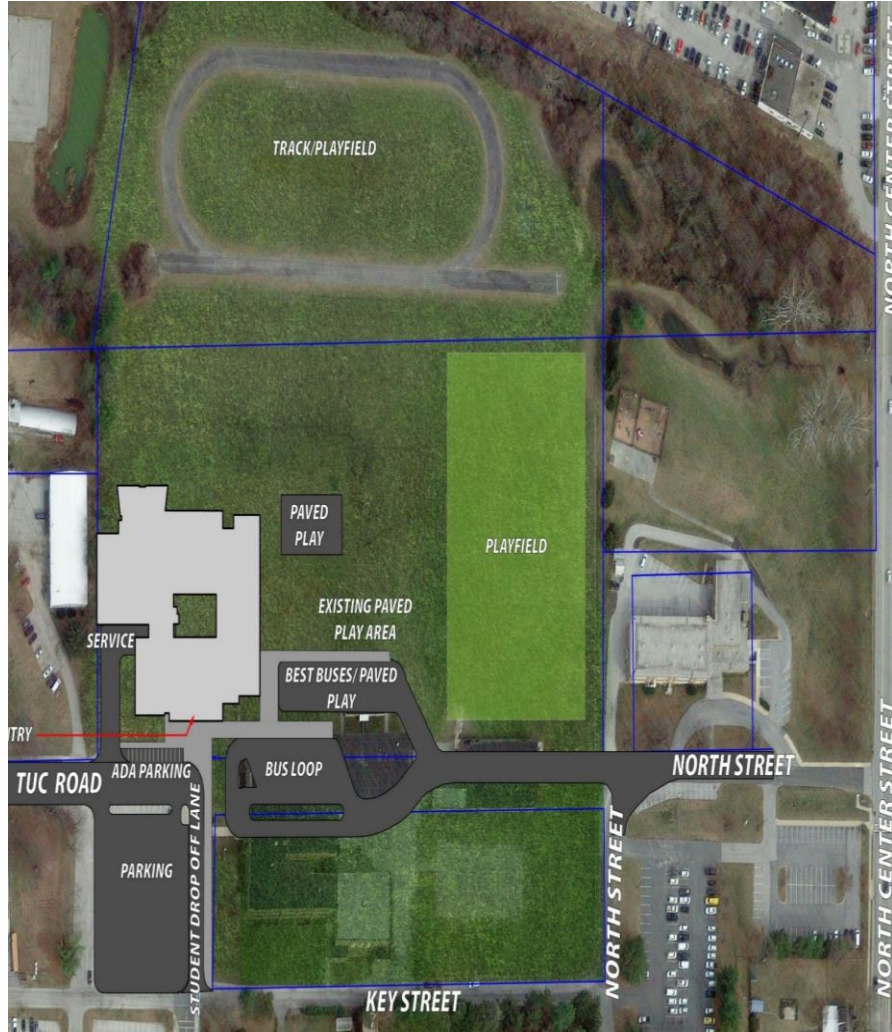




# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTON B: EAST MIDDLE SCHOOL SITE - NEW 2-STORY MIDDLE SCHOOL



#### PROS

- Improved site circulation
- Energy efficient building
- Functional adjacencies are optimized
- Existing building remains operational during construction

#### CONS

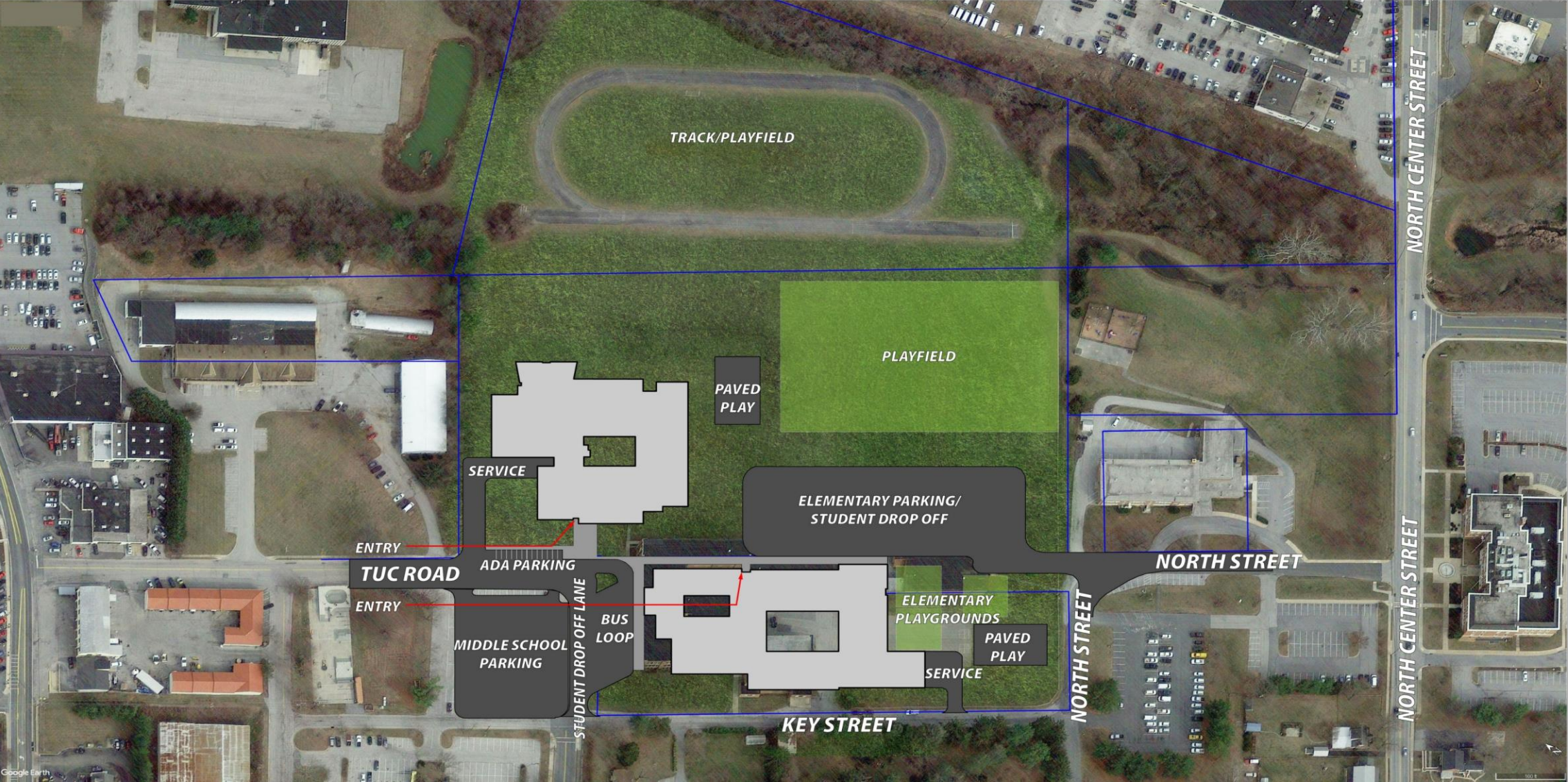
- Loss of play fields during construction
- Moderate impact on school operations (site use is limited during construction)
- New bus loop cannot be constructed until existing building is demolished
- Additional costs for site phasing



# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTION C: EAST MIDDLE SCHOOL SITE – NEW MIDDLE SCHOOL & ELEMENTARY SCHOOL





# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTION C: EAST MIDDLE SCHOOL SITE – NEW MIDDLE SCHOOL & ELEMENTARY SCHOOL



#### PROS

- Improved site circulation
- Energy efficient buildings
- Functional adjacencies are optimized
- Existing building remains operational during construction

#### CONS

- Most Expensive Option
- Longest Project Duration
- Most impact to the existing site
- Loss of play fields during construction
- Two buildings cannot be constructed at the same time due to existing school
- Limited site area upon project completion for the required playfields and playgrounds needed to serve elementary school, middle school, and 2 BEST programs
- Access from the elementary school to the playfields is awkward and requires a long walk
- Large increase of impervious area will require more stormwater management on site
- Limited area on site for required reforestation

#### Additional Considerations

\*Option would leave require redistricting for Westminster Area elementary schools , and leave the William Winchester Elementary building vacant



**EAST MIDDLE SCHOOL**  
**03 OPTIONS**

**FRIENDSHIP VALLEY ELEMENTARY SCHOOL SITE**





EAST MIDDLE SCHOOL

03 OPTIONS

OPTION D: FRIENDSHIP ELEMENTARY SCHOOL SITE – NEW 2-STORY MIDDLE SCHOOL





# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTION D: FRIENDSHIP ELEMENTARY SCHOOL SITE – NEW 2-STORY MIDDLE SCHOOL



#### Additional Considerations

**\*Option would require Middle School redistricting, and leave the East Middle building vacant**

#### PROS

- Lowest Cost Option
- Shortest construction duration
- No phasing costs
- Utilizes existing building pad
- Energy efficient building
- Functional adjacencies are optimized
- Existing East Middle School building remains operational during construction
- Minimal impact to FVES during construction
- Existing Stormwater management facility has room for expansion

#### CONS

- Loss of some Recreation & Parks playfields during and after construction (however, FVES playfields are not affected)
- Increase of impervious area on site
- Redistricting would be required
- Impact on Transportation



# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTION E: FRIENDSHIP ELEMENTARY SCHOOL SITE – NEW MIDDLE SCHOOL & ELEMENTARY SCHOOL





# EAST MIDDLE SCHOOL

## 03 OPTIONS

### OPTION E: FRIENDSHIP ELEMENTARY SCHOOL SITE – NEW K-8 SCHOOL

#### PROS

- Energy efficient buildings
- Functional adjacencies are optimized
- Existing East Middle School building remains operational during construction

#### CONS

- Second most costly option
- Most impact to the existing FVES site
- Loss of Recreation & Parks playfields during construction
- Loss of Recreation & Parks playfields permanently when project is complete
- Limited site area upon project completion for the required playfields and playgrounds needed to serve 2 elementary schools, middle school, and 2 BEST programs
- Access from the new elementary school to the playfields is awkward and requires a long walk
- Large increase of impervious area will require more stormwater management on site
- Limited area on site for required reforestation
- Increased traffic for arrival & dismissal of 3 schools & may require offsite road improvements



#### Additional Considerations

\*Option would require Middle School and Elementary School redistricting, and leave the East Middle and William Winchester Elementary buildings vacant



# EAST MIDDLE SCHOOL

## 03 OPTIONS

### SUMMARY OF PROS AND CONS

	OPTION A	OPTION B	OPTION C	OPTION D	OPTION E
Pros/Cons					
Adequate Space for Playfields & Playgrounds					
BEST Program is Connected to School					
Building Energy Efficiency					
Building Size Efficiency/ Functional Relationships					
Construction Cost					
Construction Duration					
Impact to Building Occupants					
Impact to Site During Construction					
Loss of Playfields During/After Construction					
Phasing Costs					
Reforestation Impact to Site					
Site Circulation Improvement/Traffic Increase					
Stormwater Management Increase					



# EAST MIDDLE SCHOOL

## 04 COST ESTIMATE

	<b>OPTION A</b> RENOVATION/ADDITION	<b>OPTION B</b> 2-STORY MIDDLE SCHOOL EMS SITE	<b>OPTION C</b> 2-STORY MIDDLE & 1- STORY ELEMENTARY SCHOOLS EMS SITE	<b>OPTION D</b> 2-STORY MIDDLE SCHOOL FVES SITE	<b>OPTION E</b> 2-STORY MIDDLE & 1- STORY ELEMENTARY SCHOOLS FVES SITE
Construction	\$35,294,490*	\$38,978,576	\$62,661,114	\$37,172,576	\$60,855,114
Site	\$7,556,998	\$7,139,104	\$11,687,406	\$7,139,104	\$11,687,406
Phasing Costs	\$5,294,174	\$1,559,143	\$3,133,056	\$0	\$0
Design	\$3,428,040	\$3,228,238	\$5,204,396	\$3,101,818	\$5,077,976
FF&E	\$2,999,535	\$3,228,238	\$5,204,396	\$3,101,818	\$5,077,976
Owner Contingency	\$1,285,515	\$1,383,530	\$2,230,456	\$1,329,350	\$2,176,276
Escalation (2 years)	\$4,468,621	\$4,441,346	\$7,209,666	\$4,147,573	\$6,789,980
<b>TOTAL</b>	<b>\$60,326,382</b>	<b>\$59,958,175</b>	<b>\$97,330,490</b>	<b>\$55,992,239</b>	<b>\$91,664,728</b>

\*ADA/Code Upgrades Only                      \$ 4,500,000

\*MEP System Upgrades / Roof / Windows Only  
\$18,000,000

(No Instructional Improvements)





Questions ?