



27 September 2016

WORK SESSION
Board of Supervisors

PROJECT OPTIONS

ESTABLISH OUTLINE THE ADDRESS PLAN TO SOLUTIONS **PROBLEM IMPLEMENT**

ASSESSMENT STUDY + LONG-RANGE VISIONING

PROCESS UPDATE

- Surveyed Each School Site's Buildings, Finishes, & Systems
- Analyzed Enrollment Data & Future Growth; Identified Program Deficiencies, Capacity Needs & Project Options
- Completed existing energy usage analysis; Established EUI for all existing facilities
- Met with maintenance, food service, + transportation staff to understand how various school operations might be affected by future projects

PROCESS UPDATE

Aug 10

Sept 14

MEETINGS

| Feb 09 | Principal Meetings & Facilities Tours |
|----------|---------------------------------------|
| Feb 16 | Principal Meetings & Facilities Tours |
| April 13 | School Board Meeting |
| April 27 | Facilities Committee Meeting |
| May 16 | Public Meeting |
| May 31 | Meeting with Elementary Staff |
| May 31 | Meeting with Middle & High Staff |
| July 20 | Maintenance & Transportation Meeting |
| July 25 | Food Service Meeting |
| Aug 03 | Public Meeting |

School Board Meeting

School Board Meeting

GROWTH + CAPACITY ANALYSIS

GCPS Growth

PROJECTIONS









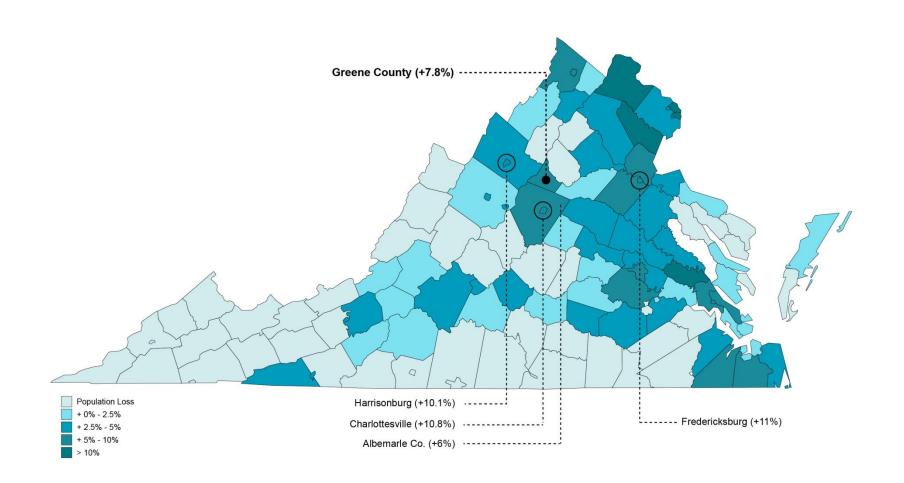






2005-2015





• Proximity to:

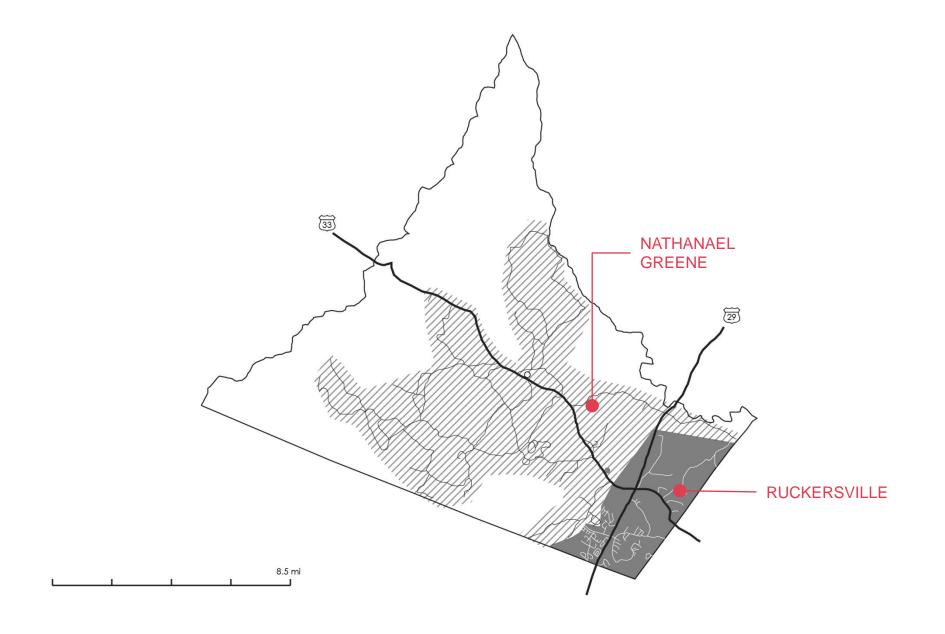
Albemarle Co.
Charlottesville
Harrisonburg (to some degree)

- Development-ready land along US-29
- Recent Development

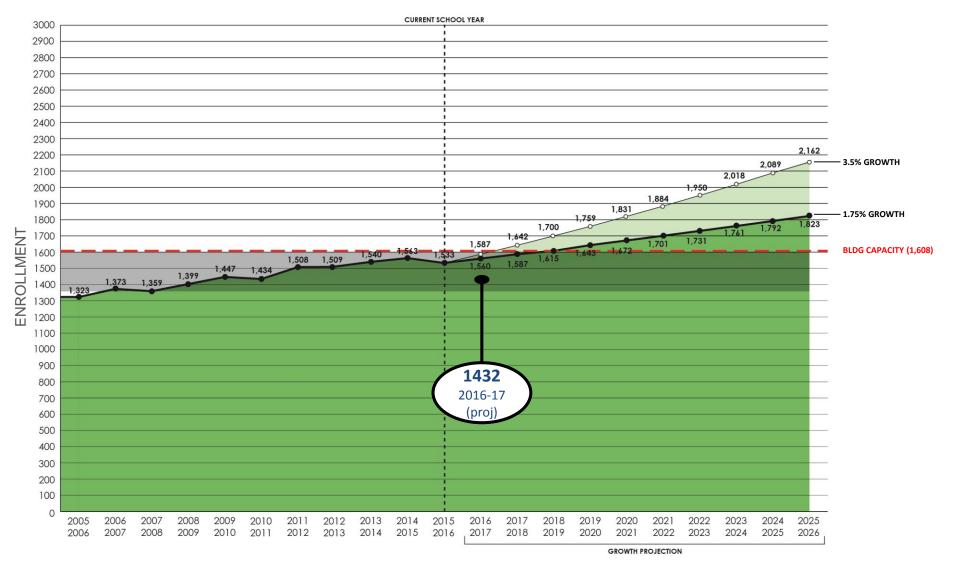
N.G.I.C. Highway Safety Crash Center New/expanded Retail + Housing

Birth Rate

Down since 2012
Elementary - likely remain down for ~ 4 more years
Growth likely to follow



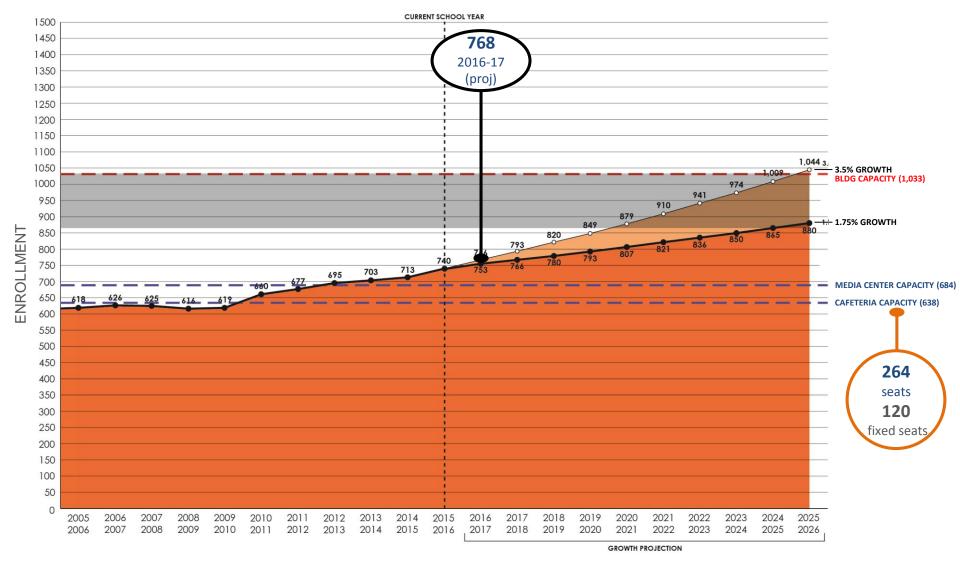
ELEMENTARY ATTENDANCE ZONES



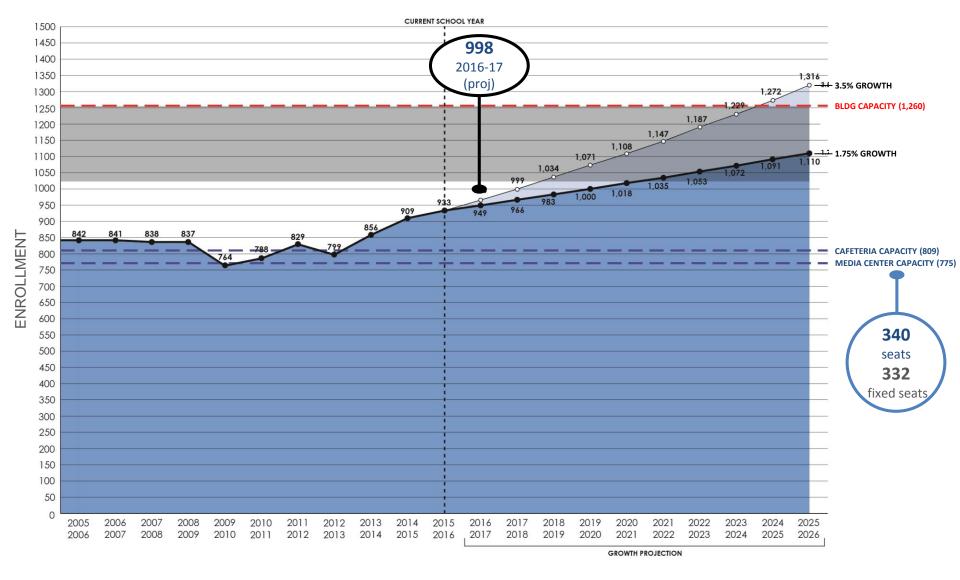
SCHOOL YEAR

COMBINED ELEMENTARY SCHOOL

PAST ENROLLMENT + GROWTH PROJECTIONS



SCHOOL YEAR



SCHOOL YEAR

HIGH SCHOOL PAST ENROLLMENT + GROWTH PROJECTIONS

- Every school approaching or over CAPACITY
- Every school lacking QUALITATIVE PROGRAM space to support education
- Middle School + High School KITCHEN + DINING spaces insufficient for current and growing enrollment; most kitchen equipment in district is nearing replacement
- Every school has TRAFFIC + PARKING issues

ENERGY EFFICIENCY + OPERATING COSTS

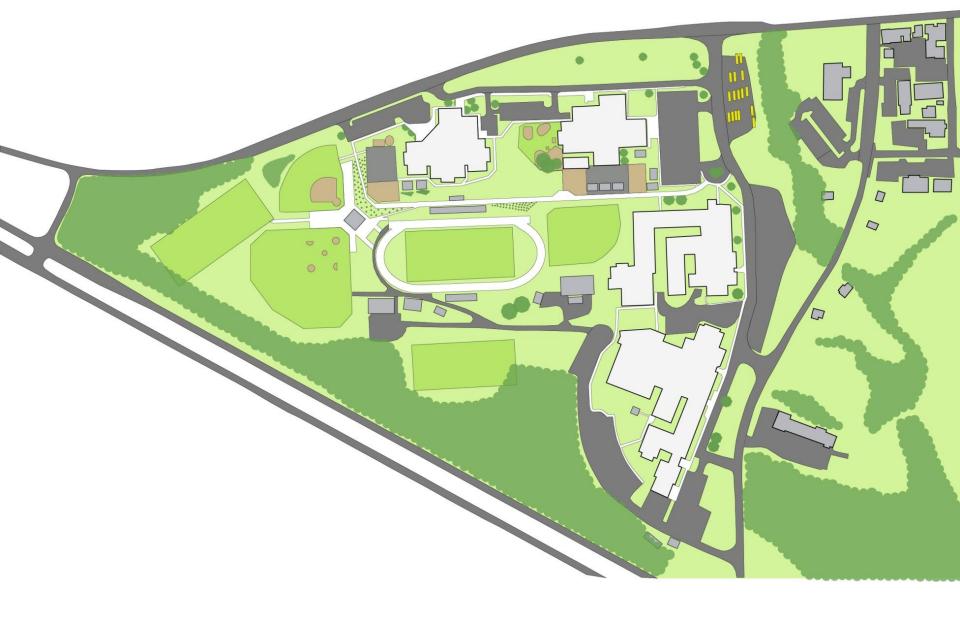
DESIGN, ENERGY + COSTS

K–12 *energy costs* are second only to *personnel costs* as the leading draw on school district operating budgets.

Each **energy unit** reduction saved in design + construction results in **continuous** monthly savings in operation over the life of the building.

SITE STRATEGIES

- Vehicular Flows + Pedestrian Safety must be addressed
- Outdoor learning, recreation + athletic space must be increased
- School Identity can be improved through site moves
- A new school is needed to alleviate density issues on all other school sites
- Remove bus parking from school sites



CURRENT CAMPUS PLAN

STANARDSVILLE CAMPUS

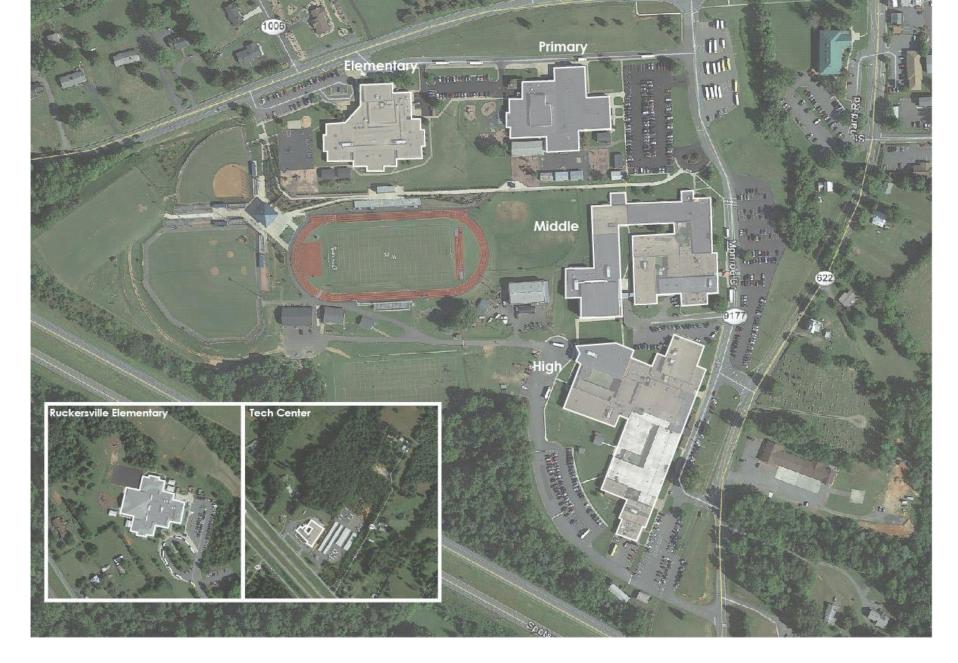


PROPOSED MASTER PLAN

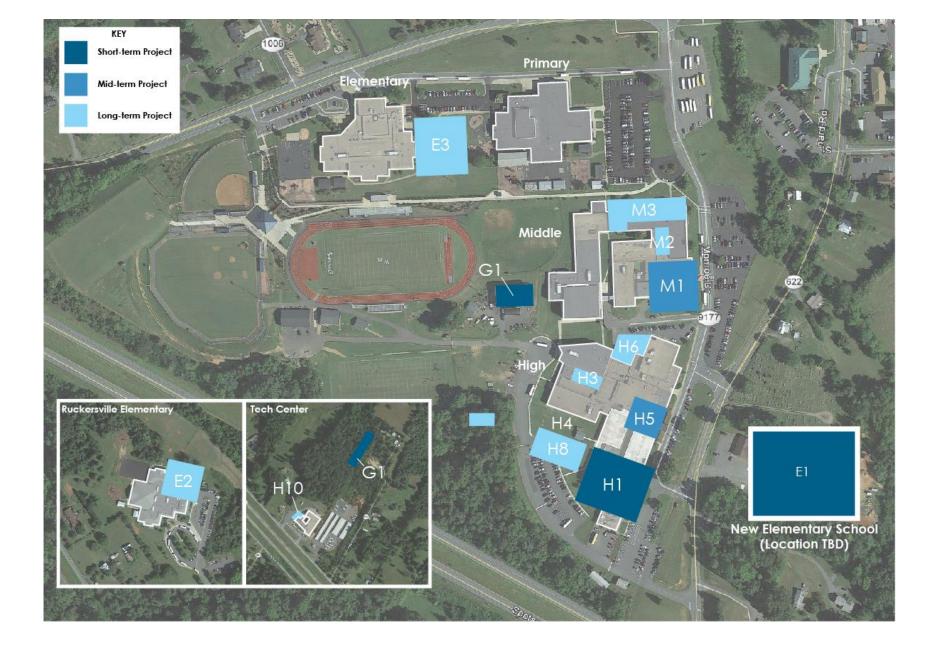
STANARDSVILLE CAMPUS

BUILDING STRATEGIES

- High School and Middle School Kitchen + Cafeteria deficiencies must be addressed
- Another school is needed to provide capacity relief
- A Central Operations Facility is an innovative solution to a number of issues (building and site)
- Qualitative Space to be found or created at all schools



EXISTING SITESTANARDSVILLE CAMPUS



PROJECT OPTIONS



COST PROJECTIONS

COST PROJECTIONS

Best use of the following cost estimates is to understand the **relative value** of each project, as compared to the other projects, in hopes of assisting prioritization of project needs and timelines.

Cost estimates will ultimately reflect **ranges of possible costs**, in most cases. There are a number of **variables** for each project type and final scopes of each project are not thoroughly defined yet.

Projects can always be done cheaper. However, these estimates represent funding assumptions that will result in **quality projects over the life of the buildings** – construction, operation, maintenance, education.

Variations of the plan are always possible. The **masterplan approach** is critical to providing **flexibility** in choices and decisions in the future, so that you can adapt as circumstances change – enrollment, available funds, etc.

PROJECT TIMELINES

Project timelines provided are **another metric** that can be used to **comparatively consider projects**.

The project timelines **are not the answer**. However, they are variables that can help you **balance cost and need**, both now and in the future.

CONSTRUCTION COSTS



\$10 / SF

\$250,000 - \$300,000

(per acre)

New paving

Stormwater

Bio-retention

Lawn

Plantings

Walks / Paths

*Does not include large quantity Storage (ponds)

CONSTRUCTION COSTS



(per acre)

New paving Stormwater

Bio-retention

*Does not include large quantity Storage (ponds)

Lawn **Plantings**

Walks / Paths

Site Furnishings

Survey / Testing

Utility Costs / Rights-of-Way

Architecture / Engineering Fees

Permits

Legal Fees

Financing Costs

Contingency

CONSTRUCTION COSTS



\$10 / SF

\$250,000 - \$300,000

20%

4.25% Annually

(per acre)

New paving Stormwater

Bio-retention

*Does not include large quantity Storage (ponds) Lawn

Plantings

Walks / Paths

Site Furnishings

Survey / Testing

Utility Costs / Rights-of-Way

Architecture / Engineering Fees

Permits

Legal Fees

Financing Costs

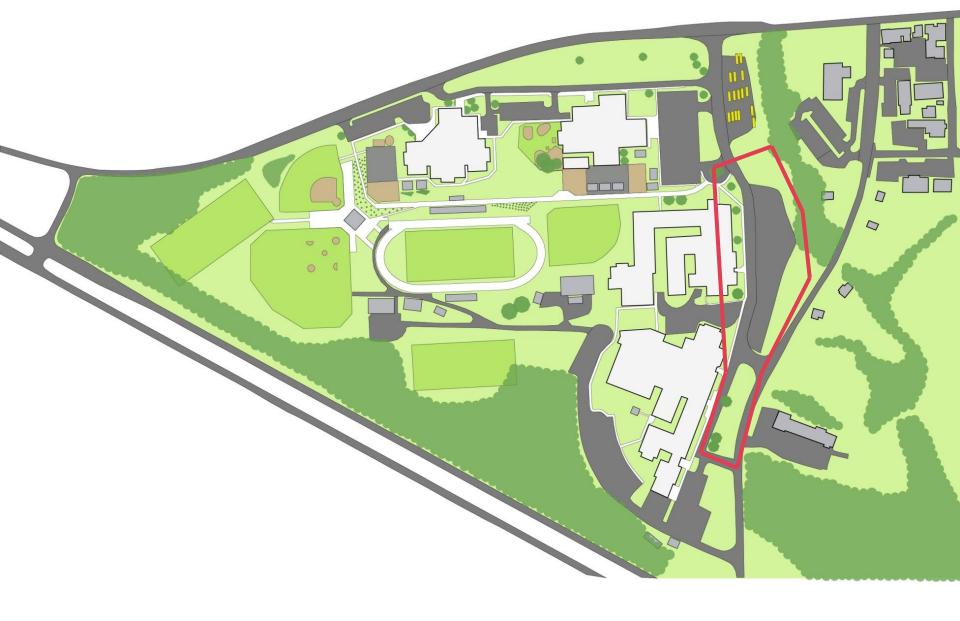
Contingency

PROJECT NAME

(PROJECT DESCRIPTION)

| S1 | | | | | |
|---------------|-------------------------|------------------------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$5 | 1,000 | \$5,000 | | |
| Paving | \$10 | 10,000 | \$100,000 | 20% | |
| Landscape | \$300,000 (per acre) | 38,465 (0.88 acres) | \$264,000 | | |
| Contingency | | 25% | \$300,887 | | |
| Total 2016 | | | \$1,504,434 | \$300,887 | \$1,805,321 |
| | | 2017 | \$1,568,373 | \$313,675 | \$1,882,047 |
| | | 2018 | \$1,635,029 | \$327,006 | \$1,962,034 |
| | | 2019 | \$1,704,517 | \$340,903 | \$2,045,421 |
| | | 2020 | \$1,776,959 | \$355,392 | \$2,132,351 |
| | | 2021 | \$1,852,480 | \$370,496 | \$2,222,976 |

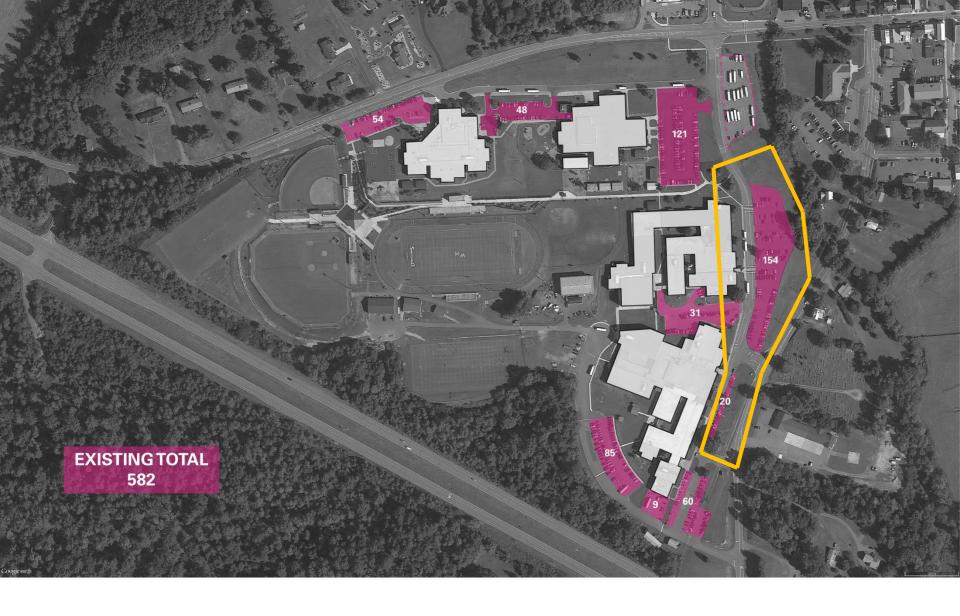




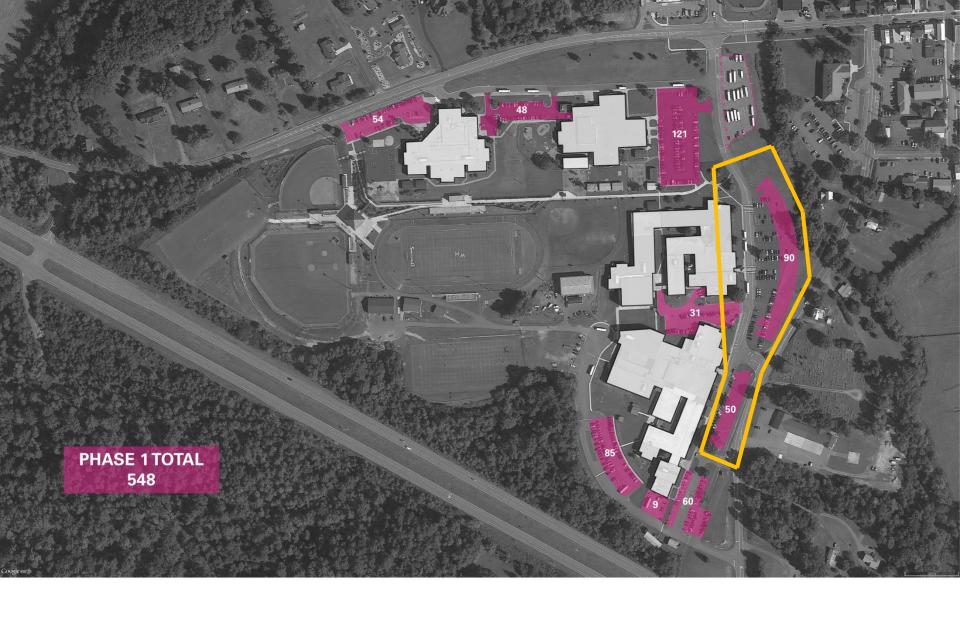
STANARDSVILLE CAMPUS - EXISTING



STANARDSVILLE CAMPUS - \$1



STANARDSVILLE CAMPUS - EXISTING



STANARDSVILLE CAMPUS - EXISTING

SITE MASTERPLAN

(Traffic + Safety, Parking, Landscaping)

| \$1 Monroe D | | | | | |
|---------------|-------------------------|------------------------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$4.50 | 78,295 | \$352,328 | | |
| Paving | \$10 | 58,722 | \$587,220 | | |
| Landscape | \$300,000 (per acre) | 38,465 (0.88 acres) | \$264,000 | 20% | |
| Contingency | | 25% | \$300,887 | | |
| Total 2016 | | | \$1,504,434 | \$300,887 | \$1,805,321 |
| | | 2017 | \$1,568,373 | \$313,675 | \$1,882,047 |
| | | 2018 | \$1,635,029 | \$327,006 | \$1,962,034 |
| | | 2019 | \$1,704,517 | \$340,903 | \$2,045,421 |
| | | 2020 | \$1,776,959 | \$355,392 | \$2,132,351 |
| | | 2021 | \$1,852,480 | \$370,496 | \$2,222,976 |

^{*} Majority of this project involves reorienting Monroe Dr. and converting it to One-Way (south), and reorganizing the parking to the east to free up space within for pedestrian and student use, new landscaping, and more generous main entry plaza for Middle School.

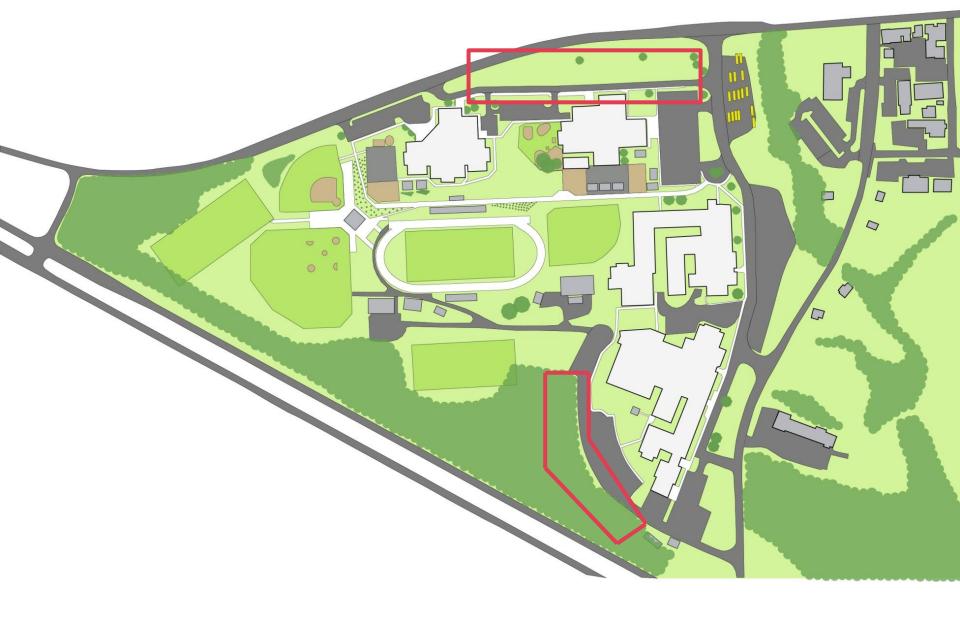
RANGE:

\$1.8M - \$2.07M

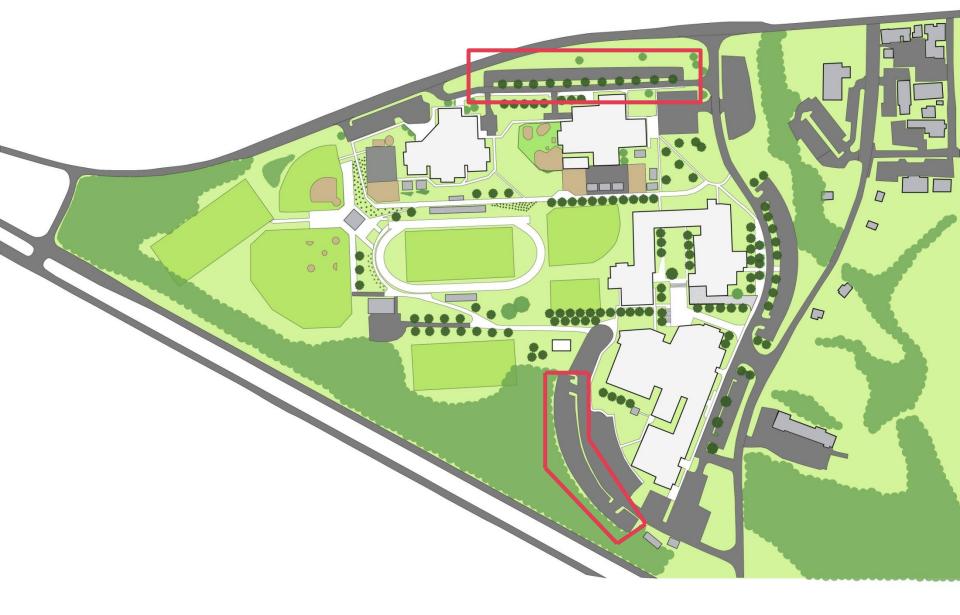
- 1. Due to uncertainty of final scope of improvements
- 2. Landscape number could be as much as \$500,000 per acre to account for unknown requirements of SWM system and/or existing issues.

^{**} Paving costs include any new or reworked asphalt areas, stormwater management with bio-retention.

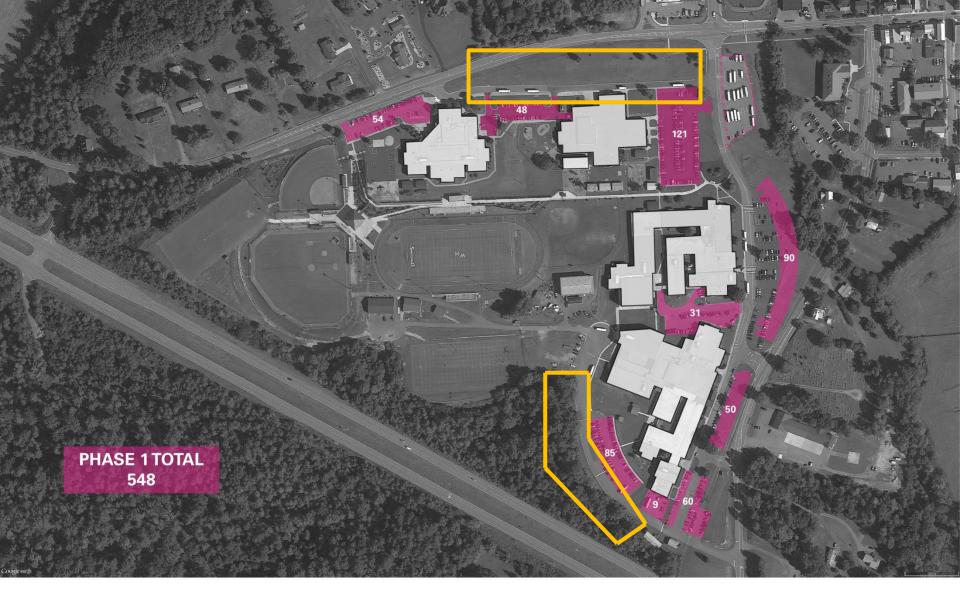
^{***} Contingency provided to account for potential of utility conflicts with new stormwater designs.

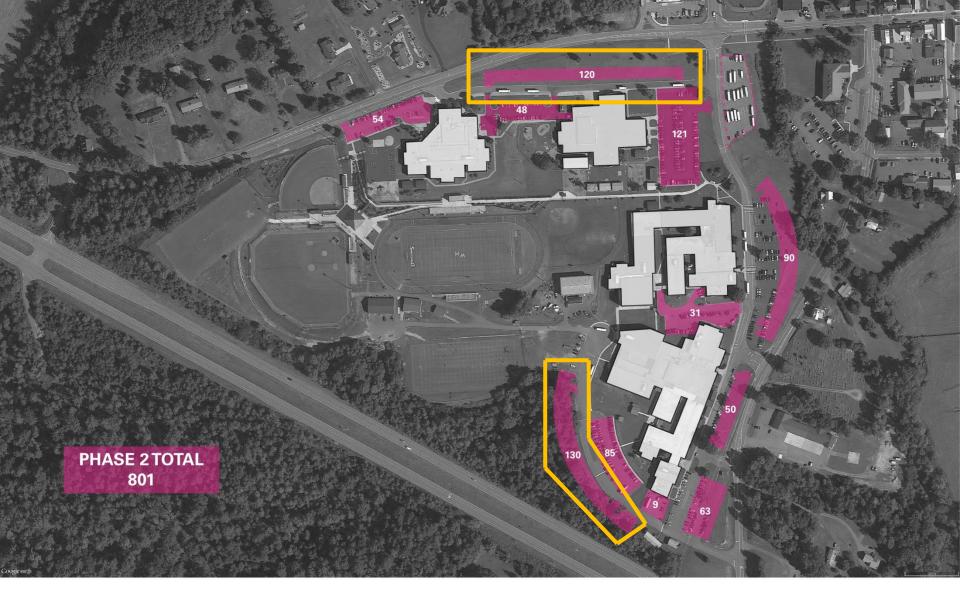


STANARDSVILLE CAMPUS - EXISTING



STANARDSVILLE CAMPUS - \$2





SITE MASTERPLAN

(Traffic + Safety, Parking, Landscaping)

| 2 New Park | king (WMHS, I | NGPS/NGES |) | | |
|---------------|-------------------------|-----------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$4.50 | - | | | |
| Paving | \$10 | 69,843 | \$698,430 | | |
| Landscape | \$300,000 (per acre) | - | | 20% | |
| Contingency | | 25% | \$174,608 | | |
| Total 2016 | | | \$873,038 | \$174,608 | \$1,047,64 |
| | | 2017 | \$910,142 | \$182,028 | \$1,092,17 |
| | | 2018 | \$948,823 | \$189,765 | \$1,138,58 |
| | | 2019 | \$989,148 | \$197,830 | \$1,186,97 |
| | | 2020 | \$1,031,186 | \$206,237 | \$1,237,42 |
| | | 2021 | \$1,075,012 | \$215,002 | \$1,290,014 |

^{*} This project provides additional parking (outside the main pedestrian zone) SW of high school rear drive and North of Wetsel Drive @ NGPS/NGES.

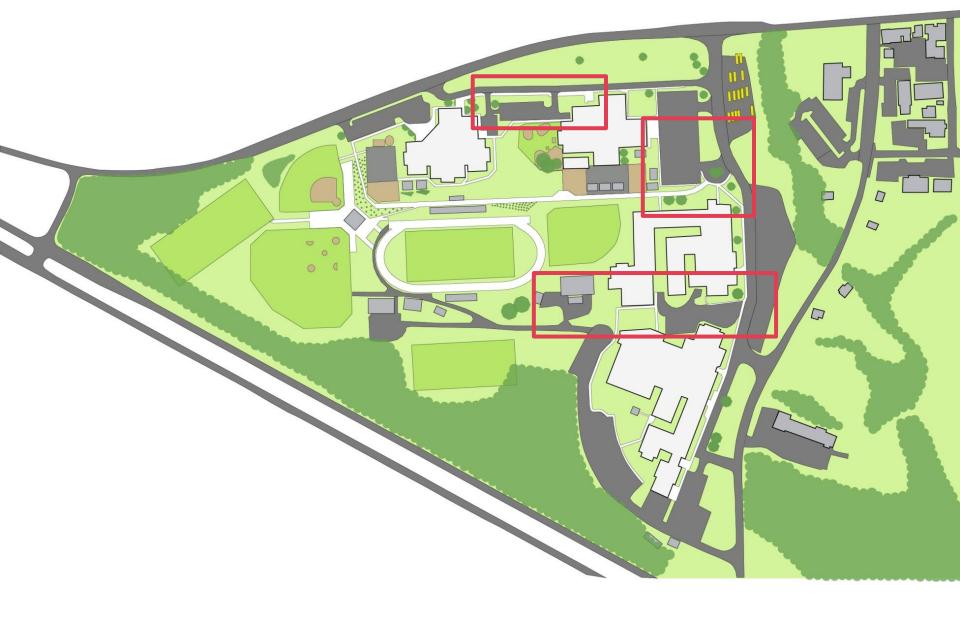
RANGE:

\$1.05M - \$1.26M

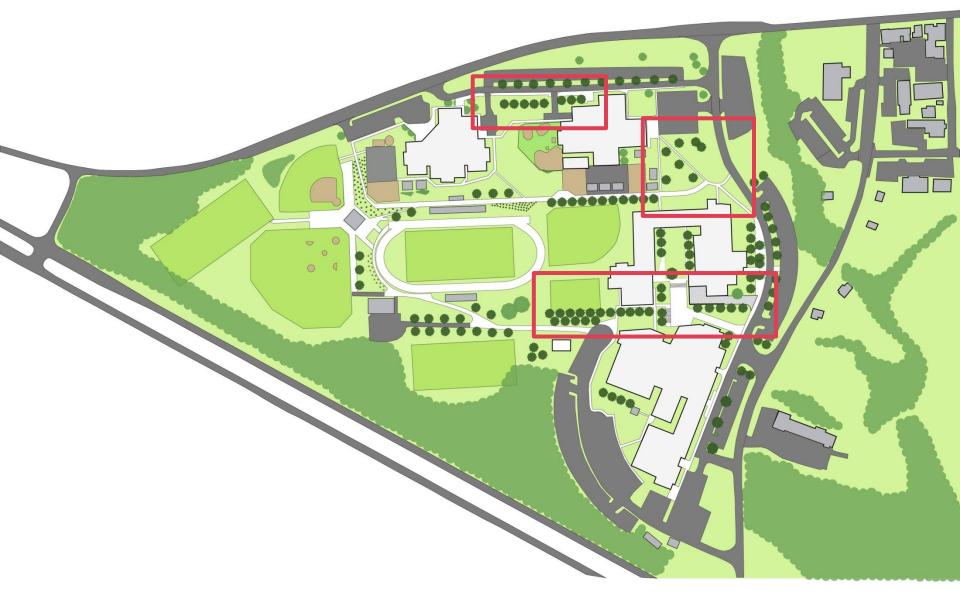
- 1. Due to uncertainty of final scope of improvements
- Paving number could be as high as \$12/sf to account for unknown requirements of SWM system and/or existing issues.

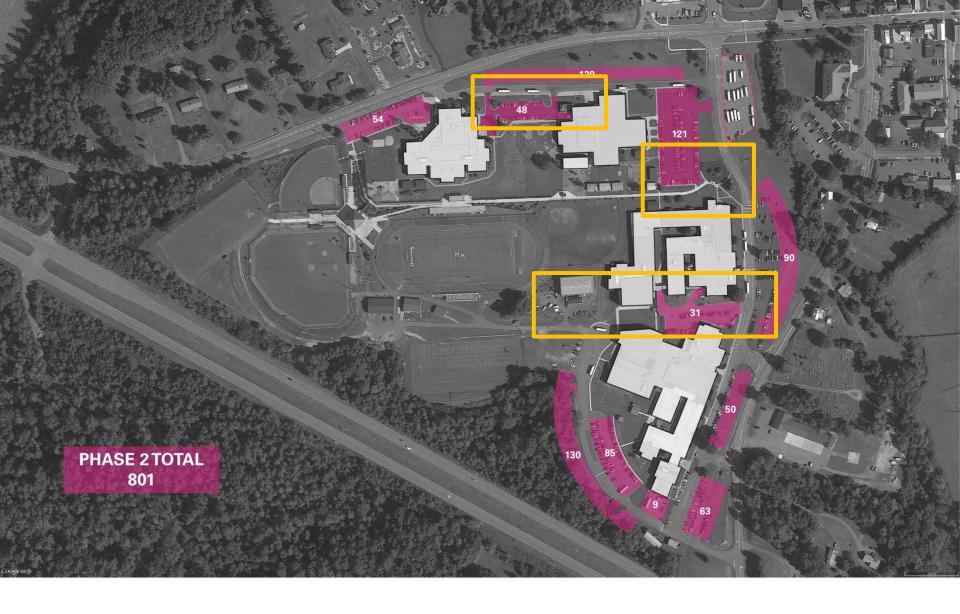
^{**} Paving costs include any new or reworked asphalt areas, stormwater management with bio-retention.

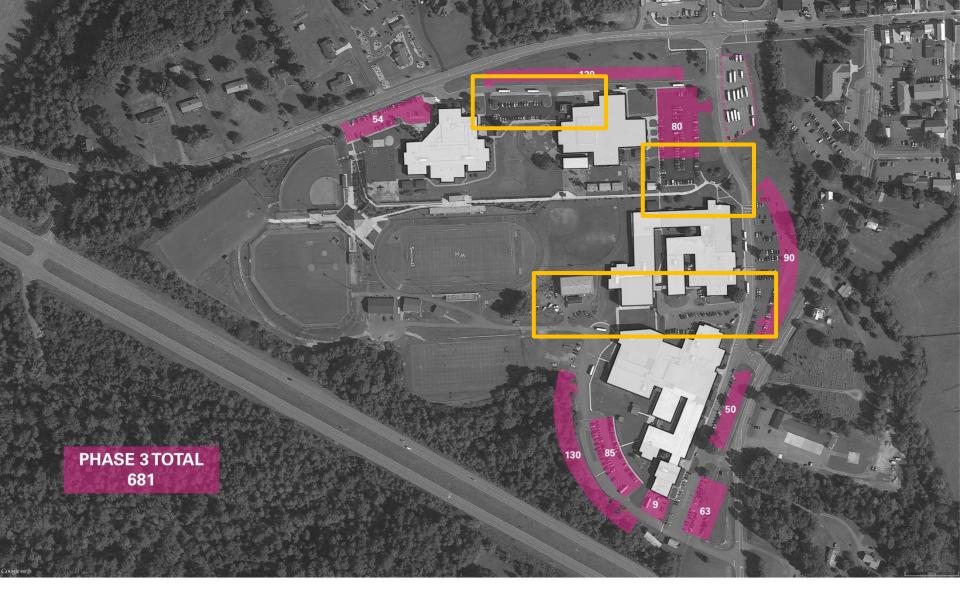
^{***} Contingency provided to account for potential of utility conflicts with new stormwater designs.



STANARDSVILLE CAMPUS - EXISTING







SITE MASTERPLAN

(Traffic + Safety, Parking, Landscaping)

| \$3 Convert I | | | | | |
|---------------|-------------------------|-------------------------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$4.50 | 60,111 | \$270,500 | | |
| Paving | \$10 | - | | | |
| Landscape | \$250,000 (per acre) | 139,075 (3.19 acres) | \$797,500 | 20% | |
| Contingency | | 25% | \$199,375 | | |
| Total 2016 | | | \$1,267,375 | \$253,475 | \$1,520,849 |
| | | 2017 | \$1,321,238 | \$264,248 | \$1,585,485 |
| | | 2018 | \$1,377,391 | \$275,478 | \$1,652,869 |
| | | 2019 | \$1,435,930 | \$287,186 | \$1,723,116 |
| | | 2020 | \$1,496,957 | \$299,391 | \$1,796,348 |
| | | 2021 | \$1,560,577 | \$312,115 | \$1,872,693 |

^{*} This project is the final move in the campus masterplan to create a green, park-like campus. Parking areas on the interior side of the loop roads are converted to landscape spaces for pedestrian, outdoor learning, and athletic use. Contingency provided to account for potential of utility conflicts with new stormwater designs.

RANGE:

\$1.52M - \$1.76M

- 1. Due to uncertainty of final scope of improvements
- Landscape number could be as much as \$300,000 per acre to account for unknown requirements of SWM system and/or existing issues.

^{**} Contingency provided to account for potential of utility conflicts with new stormwater designs.



TRAFFIC + SAFETY RUCKERSVILLE - EXISTING



RUCKERSVILLE - \$4

SITE MASTERPLAN

(Traffic + Safety, Parking, Landscaping)

| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
|---------------|-------------------------|-----------------------|----------------------|-----------------|---------------|
| Demo | \$4.50 | - | \$0 | | |
| Paving | \$10 | 30,000 | \$300,000 | | |
| Landscape | \$300,000 (per acre) | 2,500 (0.05 acres) | \$15,000 | 20% | |
| Contingency | | 25% | \$78,750 | | |
| Total 2016 | | | \$393,750 | \$78,750 | \$472,500 |
| | | 2017 | \$410,484 | \$82,097 | \$492,581 |
| | | 2018 | \$427,930 | \$85,586 | \$513,516 |
| | | 2019 | \$446,117 | \$89,223 | \$535,340 |
| | | 2020 | \$465,077 | \$93,015 | \$558,092 |
| | | 2021 | \$484,843 | \$96,969 | \$581,811 |

^{*} This project adds parking on the existing play field - location TBD. Parking could be accessed directly off of Progress Pl., in lieu of the entry road to the school to limit number of vehicle crossings.

RANGE:

\$472K - \$533K

- 1. Due to uncertainty of final scope of improvements
- 2. Landscape number could be as much as \$500,000 per acre to account for unknown requirements of SWM system and/or existing issues.

^{**} Landscape cost accounts for any plantings, as well as walks from the parking area to the school.

^{***} Contingency provided to account for potential of utility conflicts with new stormwater designs.

Site improvement project schedules are difficult to predict

Surveys, Utility Mapping + other testing

Studies – traffic, stormwater

Design

Agency Reviews + Approvals

Could Site Improvement Projects start in Summer 2017

Conceivable that **S1** could be done over the Summer 2017 (schedule would be very tight)

Likely best approach is to fully study, design, and obtain agency approval for full masterplan – then construct in phases

Requires more design fees up front, but ensures that each piece is related, preventing any need to revise recent work in subsequent phases.



CONSTRUCTION COSTS



E: 125 sf E: \$225 M: 150 sf M: \$250

H: 170 sf H: \$250

CONSTRUCTION COSTS



E: 125 sf

M: 150 sf

H: 170 sf

E: \$225

M: \$250

H: \$250

20% renovation

30% new construction

Furniture, Fixtures, Equip

Technology / AV

Survey / Testing

Utility Costs / Rights-of-Way

Building Commissioning

Architecture / Engineering Fees

Permits

Legal Fees

Financing Costs

Contingency

^{*}Land costs not included in typical project cost estimates

CONSTRUCTION COSTS



E: 125 sf

M: 150 sf

H: 170 sf

E: \$225

M: \$250

H: \$250

20% renovation

30% new construction

Furniture, Fixtures, Equip

Technology / AV

Survey / Testing

Utility Costs / Rights-of-Way

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Financing Costs

Contingency

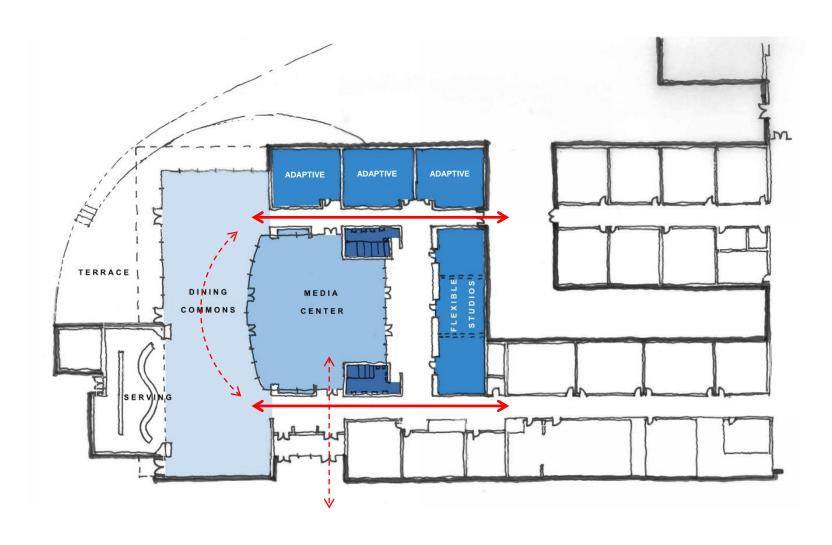
^{4.25%} Annually

^{*}Land costs not included in typical project cost estimates



PROPOSED DINING/MEDIA CENTER RENOVATION

WILLIAM MONROE HIGH SCHOOL



370 Seats Dining, 630 Seats Assembly (340 fixed seats currently)

PROPOSED DINING/MEDIA CENTER RENOVATION

WILLIAM MONROE HIGH SCHOOL



VMDO Precedent - DINING

DISCOVERY ELEMENTARY I ARLINGTON, VA

(Cafeteria, Media Center, Flexible Learning)

| H1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$20 | 11,341 | \$226,820 | | |
| Renov | \$160 | 11,970 | \$1,915,200 | 30% | |
| New | \$250 | 17,342 | \$4,335,500 | | |
| | | | | | |
| Total 2016 | | 29,312 | \$6,477,520 | \$1,943,256 | \$8,420,776 |
| | | 2017 | \$6,752,815 | \$2,025,844 | \$8,778,659 |
| | | 2018 | \$7,039,809 | \$2,111,943 | \$9,151,752 |
| | | 2019 | \$7,339,001 | \$2,201,700 | \$9,540,701 |
| | | 2020 | \$7,650,909 | \$2,295,273 | \$9,946,181 |
| | | 2021 | \$7,976,072 | \$2,392,822 | \$10,368,894 |

^{*} Option assumes any new equipment costs are in the Central Kitchen costs.



(Cafeteria, Media Center, Flexible Learning)

| H1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$20 | 11,341 | \$226,820 | | |
| Renov | \$160 | 11,970 | \$1,915,200 | 30% | |
| New | \$250 | 17,342 | \$4,335,500 | | |
| | | | | | |
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| | | 2017 | \$6,752,815 | \$2,025,844 | \$8,778,659 |
| | | 2018 | \$7,039,809 | \$2,111,943 | \$9,151,752 |
| | | 2019 | \$7,339,001 | \$2,201,700 | \$9,540,701 |
| | | 2020 | \$7,650,909 | \$2,295,273 | \$9,946,181 |
| | | 2021 | \$7,976,072 | \$2,392,822 | \$10,368,894 |

| * Option assumes any new equipment costs are in the Cer | ntral |
|---|-------|
| Kitchen costs. | |

| H1A wit | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF * | Construction Cost | Project Cost | Total Cost |
| Demo | \$20 | 11,341 | \$226,820 | | |
| Renov | \$160 | 11,970 | \$1,915,200 | 30% | |
| New | \$250 | 19,092 | \$4,773,000 | | |
| **Equip | | | \$400,000 | | |
| Total 2016 | | 31,062 | \$7,315,020 | \$2,194,506 | \$9,509,526 |
| | | 2017 | \$7,625,908 | \$2,287,773 | \$9,913,681 |
| | | 2018 | \$7,950,009 | \$2,385,003 | \$10,335,012 |
| | | 2019 | \$8,287,885 | \$2,486,365 | \$10,774,250 |
| | | 2020 | \$8,640,120 | \$2,592,036 | \$11,232,156 |
| | | 2021 | \$9,007,325 | \$2,702,198 | \$11,709,523 |

^{*} Gross square footage (GSF) difference a result of additional kitchen/serving area required to store, prepare, and serve food to growing enrollment, without the Central Kitchen.

^{**} Equipment costs required to upgrade existing equipment (based on age) and supplement with more equipment to address growing enrollment.

(Cafeteria, Media Center, Flexible Learning)

| 1 1 | | | | | |
|----------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$20 | 11,341 | \$226,820 | | |
| Renov | \$160 | 11,970 | \$1,915,200 | 30% | |
| New | \$250 | 17,342 | \$4,335,500 | | |
| | | | | | |
| Total 2016 | | 29,312 | \$6,477,520 | \$1,943,256 | \$8,420,776 |
| | | 2017 | \$6,752,815 | \$2,025,844 | \$8,778,659 |
| | | 2018 | \$7,039,809 | \$2,111,943 | \$9,151,752 |
| | | 2019 | \$7,339,001 | \$2,201,700 | \$9,540,701 |
| | | 2020 | \$7,650,909 | \$2,295,273 | \$9,946,181 |
| | | 2021 | \$7,976,072 | \$2,392,822 | \$10,368,894 |

| * Option assumes any new equipment costs are in the Cen | itral |
|---|-------|
| Kitchen costs. | |

RANGE:

\$8.42M - \$10.13M

* Due to potential for higher \$/sf for demolition scope

| H1A wi | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF * | Construction Cost | Project Cost | Total Cost |
| Demo | \$20 | 11,341 | \$226,820 | | |
| Renov | \$160 | 11,970 | \$1,915,200 | 30% | |
| New | \$250 | 19,092 | \$4,773,000 | | |
| **Equip | | | \$400,000 | | |
| Total 2016 | | 31,062 | \$7,315,020 | \$2,194,506 | \$9,509,526 |
| | | 2017 | \$7,625,908 | \$2,287,773 | \$9,913,681 |
| | | 2018 | \$7,950,009 | \$2,385,003 | \$10,335,012 |
| | | 2019 | \$8,287,885 | \$2,486,365 | \$10,774,250 |
| | | 2020 | \$8,640,120 | \$2,592,036 | \$11,232,156 |
| | | 2021 | \$9,007,325 | \$2,702,198 | \$11,709,523 |

- * Gross square footage (GSF) difference a result of additional kitchen/serving area required to store, prepare, and serve food to growing enrollment, without the Central Kitchen.
- ** Equipment costs required to upgrade existing equipment (based on age) and supplement with more equipment to address growing enrollment.

RANGE:

\$9.51M - \$11.2M

* Due to potential for higher \$/sf for demolition scope

COST PROJECTIONS

HIGH SCHOOL

(Cafeteria, Media Center, Flexible Learning)

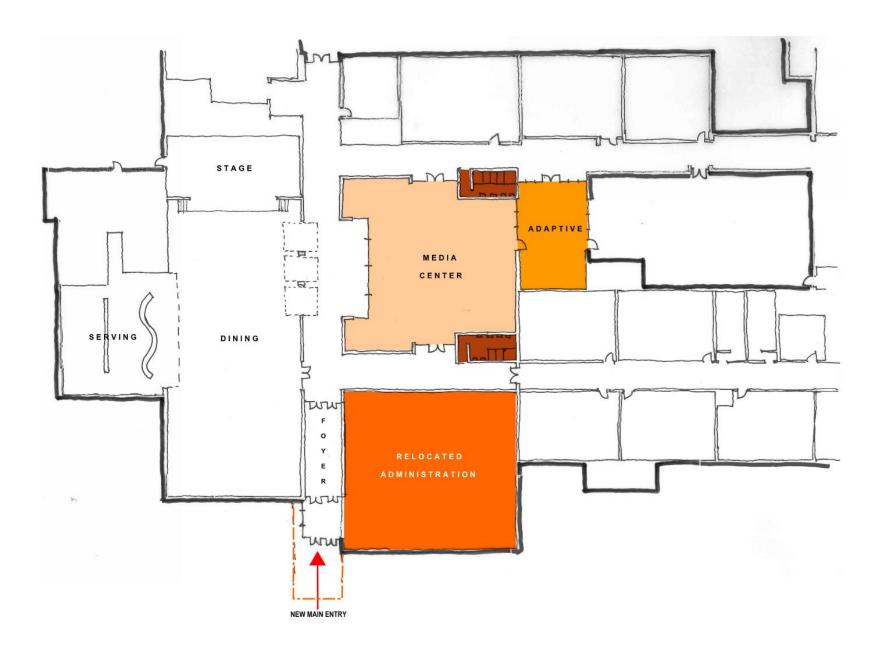
| Design | 19 SEP 2016 | 6 mo.* |
|-------------------------------|---------------|---------|
| Bidding + Negotiation | 17 MAR 2017 | 2 mo. |
| Construction Mobilization | 15 MAY 2017 | 2 wk. |
| Demolition/Construction Start | 05 JUN 2017 | 12 mo. |
| Substantial Completion | 01 JUN 2018 | |
| GCPS Move-in / Setup | JUN-JULY 2018 | 1-2 mo. |



^{*} Tight design schedule based on assumption that addition/renovation opening needs to coincide with beginning of school year.



RENOVATE DINING/MEDIA + RELOCATE ADMIN



RENOVATE DINING/MEDIA + RELOCATE ADMIN

MIDDLE SCHOOL



CSO Architects

MIDDLE SCHOOL - NEW IDENTITY

(Cafeteria, Media Center, Admin)

| M1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$12 | 7,465 | \$89,580 | | |
| Renov | \$160 | 13,922 | \$2,227,520 | 30% | |
| New | \$200 | 1,496 | \$299,200 | | |
| | | | | | |
| Total 2016 | | 15,418 | \$2,616,300 | \$784,890 | \$3,401,190 |
| | | 2017 | \$2,727,493 | \$818,248 | \$3,545,741 |
| | | 2018 | \$2,843,411 | \$853,023 | \$3,696,435 |
| | | 2019 | \$2,964,256 | \$889,277 | \$3,853,533 |
| | | 2020 | \$3,090,237 | \$927,071 | \$4,017,308 |
| | | 2021 | \$3,221,572 | \$966,472 | \$4,188,044 |

^{*} Option assumes any new equipment costs are in the Central Kitchen costs.



(Cafeteria, Media Center, Admin)

| M1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$12 | 7,465 | \$89,580 | | |
| Renov | \$160 | 13,922 | \$2,227,520 | 30% | |
| New | \$200 | 1,496 | \$299,200 | | |
| Total 2016 | | 15,418 | \$2,616,300 | \$784,890 | \$3,401,190 |
| | | 2017 | \$2,727,493 | \$818,248 | \$3,545,741 |
| | | 2018 | \$2,843,411 | \$853,023 | \$3,696,435 |
| | | 2019 | \$2,964,256 | \$889,277 | \$3,853,533 |
| | | 2020 | \$3,090,237 | \$927,071 | \$4,017,308 |
| | | 2021 | \$3,221,572 | \$966,472 | \$4,188,044 |

^{*} Option assumes any new equipment costs are in the Central Kitchen costs.

| M1A wi | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF * | Construction Cost | Project Cost | Total Cost |
| Demo | \$12 | 7,465 | \$89,580 | | |
| Renov | \$160 | 13,922 | \$2,227,520 | 30% | |
| New | \$200 | 2,996 | \$599,200 | | |
| **Equip | | | \$300,000 | | |
| Total 2016 | | 16,918 | \$3,216,300 | \$964,890 | \$4,181,190 |
| | | 2017 | \$3,352,993 | \$1,005,898 | \$4,358,891 |
| | | 2018 | \$3,495,495 | \$1,048,648 | \$4,544,143 |
| | | 2019 | \$3,644,053 | \$1,093,216 | \$4,737,270 |
| | | 2020 | \$3,798,926 | \$1,139,678 | \$4,938,603 |
| | | 2021 | \$3,960,380 | \$1,188,114 | \$5,148,494 |

^{*} Gross square footage (GSF) difference a result of additional kitchen/serving area required to store, prepare, and serve food to growing enrollment, without the Central Kitchen.



^{**} Equipment costs required to upgrade existing equipment (based on age) and supplement with more equipment to address growing enrollment.

(Cafeteria, Media Center, Admin)

| M1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF | Construction Cost | Project Cost | Total Cost |
| Demo | \$12 | 7,465 | \$89,580 | | |
| Renov | \$160 | 13,922 | \$2,227,520 | 30% | |
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| | | 2019 | \$2,964,256 | \$889,277 | \$3,853,533 |
| | | 2020 | \$3,090,237 | \$927,071 | \$4,017,308 |
| | | 2021 | \$3,221,572 | \$966,472 | \$4,188,044 |

| * Option assumes | any new | equipment | costs a | ire in the | Central I | (itchen |
|------------------|---------|-----------|---------|------------|-----------|---------|
| costs. | | | | | | |

| M1A w | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF * | Construction Cost | Project Cost | Total Cost |
| Demo | \$12 | 7,465 | \$89,580 | | |
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| | | 2019 | \$3,644,053 | \$1,093,216 | \$4,737,270 |
| | | 2020 | \$3,798,926 | \$1,139,678 | \$4,938,603 |
| | | 2021 | \$3,960,380 | \$1,188,114 | \$5,148,494 |

^{*} Gross square footage (GSF) difference a result of additional kitchen/serving area required to store, prepare, and serve food to growing enrollment, without the Central Kitchen.

RANGE:

\$3.4M - \$3.48M

* Due to potential for higher \$/sf for demolition scope

RANGE:

\$4.18M - \$4.26M

* Due to potential for higher \$/sf for demolition scope

COST PROJECTIONS

MIDDLE SCHOOL

^{**} Equipment costs required to upgrade existing equipment (based on age) and supplement with more equipment to address growing enrollment.

(Cafeteria, Media Center, Admin)

Design 9-12 months

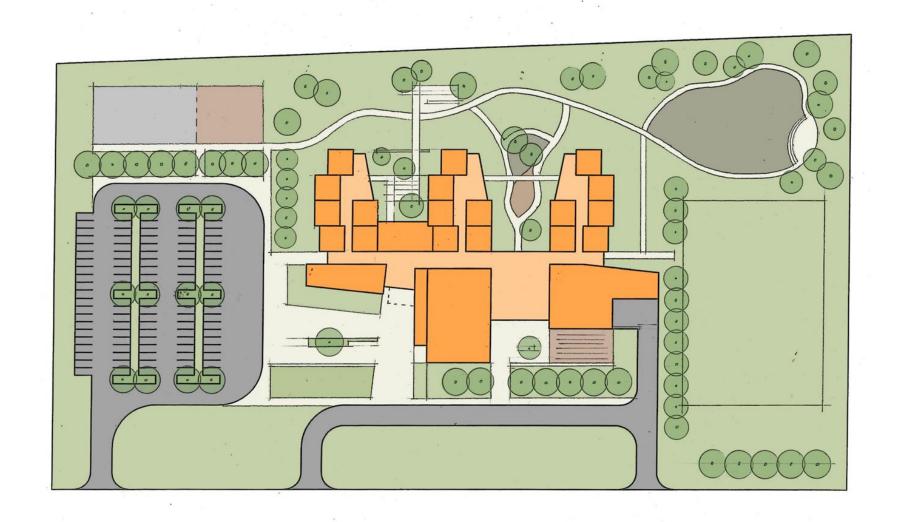
Bidding + Negotiation 2 months

Construction 12-15 months

GCPS Move-in / Setup 1-2 months

24-31 months





NEW ELEMENTARY SCHOOL

(650 students VDOE; 550 students actual)

| E1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF * | Construction Cost | Project Cost | Total Cost |
| Demo | | | | | |
| Renov | | | | 2007 | |
| New | \$220 | 81,250 | \$17,875,000 | 30% | |
| Site | \$40 | | \$3,250,000 | | |
| Total 2016 | | 81,250 | \$21,125,000 | \$6,337,500 | \$27,462,500 |
| | | 2017 | \$22,022,813 | \$6,606,844 | \$28,629,656 |
| | | 2018 | \$22,958,782 | \$6,887,635 | \$29,846,417 |
| | | 2019 | \$23,934,530 | \$7,180,359 | \$31,114,889 |
| | | 2020 | \$24,951,748 | \$7,485,524 | \$32,437,272 |
| | | 2021 | \$26,012,197 | \$7,803,659 | \$33,815,856 |

^{*} Gross square footage (GSF) assumes 125 sf / student (VDOE).



^{*}Land costs not included in typical project cost estimates

(650 students VDOE; 550 students actual)

(750 students VDOE; 630 students actual)

| E1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF* | Construction Cost | Project Cost | Total Cost |
| Demo | | | | | |
| Renov | | | | 2007 | |
| New | \$220 | 81,250 | \$17,875,000 | 30% | |
| Site | \$40 | | \$3,250,000 | | |
| Total 2016 | | 81,250 | \$21,125,000 | \$6,337,500 | \$27,462,500 |
| | | 2017 | \$22,022,813 | \$6,606,844 | \$28,629,656 |
| | | 2018 | \$22,958,782 | \$6,887,635 | \$29,846,417 |
| | | 2019 | \$23,934,530 | \$7,180,359 | \$31,114,889 |
| | | 2020 | \$24,951,748 | \$7,485,524 | \$32,437,272 |
| | | 2021 | \$26,012,197 | \$7,803,659 | \$33,815,856 |

| E1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF * | Construction Cost | Project Cost | Total Cost |
| Demo | | | | | |
| Renov | | | | 30% | |
| New | \$220 | 93,750 | \$20,625,000 | 30% | |
| Site | \$40 | | \$3,750,000 | | |
| Total 2016 | | 93,750 | \$24,375,000 | \$7,312,500 | \$31,687,500 |
| | | 2017 | \$25,410,938 | \$7,623,281 | \$33,034,219 |
| | | 2018 | \$26,490,902 | \$7,947,271 | \$34,438,173 |
| | | 2019 | \$27,616,766 | \$8,285,030 | \$35,901,795 |
| | | 2020 | \$28,790,478 | \$8,637,143 | \$37,427,622 |
| | | 2021 | \$30,014,074 | \$9,004,222 | \$39,018,296 |



^{*} Gross square footage (GSF) assumes 125 sf / student (VDOE).

^{*}Land costs not included in typical project cost estimates

(650 students VDOE; 550 students actual)

(750 students VDOE; 630 students actual)

| 1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF * | Construction Cost | Project Cost | Total Cost |
| Demo | | | | | |
| Renov | | | | 2007 | |
| New | \$220 | 81,250 | \$17,875,000 | 30% | |
| Site | \$40 | | \$3,250,000 | | |
| Total 2016 | | 81,250 | \$21,125,000 | \$6,337,500 | \$27,462,500 |
| | | 2017 | \$22,022,813 | \$6,606,844 | \$28,629,656 |
| | | 2018 | \$22,958,782 | \$6,887,635 | \$29,846,417 |
| | | 2019 | \$23,934,530 | \$7,180,359 | \$31,114,889 |
| | | 2020 | \$24,951,748 | \$7,485,524 | \$32,437,272 |
| | | 2021 | \$26,012,197 | \$7,803,659 | \$33,815,856 |

| E1 | | | | | |
|---------------|--------|--------|----------------------|-----------------|---------------|
| | \$ /sf | GSF * | Construction Cost | Project Cost | Total Cost |
| Demo | | | | | |
| Renov | | | | 2007 | |
| New | \$220 | 93,750 | \$20,625,000 | 30% | |
| Site | \$40 | | \$3,750,000 | | |
| Total 2016 | | 93,750 | \$24,375,000 | \$7,312,500 | \$31,687,500 |
| | | 2017 | \$25,410,938 | \$7,623,281 | \$33,034,219 |
| | | 2018 | \$26,490,902 | \$7,947,271 | \$34,438,173 |
| | | 2019 | \$27,616,766 | \$8,285,030 | \$35,901,795 |
| | | 2020 | \$28,790,478 | \$8,637,143 | \$37,427,622 |
| | | 2021 | \$30,014,074 | \$9,004,222 | \$39,018,296 |

*Land costs not included in typical project cost estimates

RANGE:

\$27.5M - \$31.7M

^{*} Due to unknowns of site development costs and size of school needed



NEW ELEMENTARY

^{*} Gross square footage (GSF) assumes 125 sf / student (VDOE).

(650 students VDOE; 550 students actual)

| 12 | months |
|----|-----------|
| | 2 |

Construction 18 months

GCPS Move-in / Setup 2 months

34 months



| ELEMENTARY | | | | | | |
|---------------------------|--------------|---------------------------|--|--|--|--|
| 750 students (630 actual) | 93,750 | GSF | | | | |
| 125 sf / student | \$220 | per sf | | | | |
| | \$20,625,000 | Building | | | | |
| | \$3,750,000 | Site (\$40/sf) | | | | |
| | \$24,375,000 | Total Construction | | | | |
| | \$7,312,500 | Project Costs (30%) | | | | |
| | \$31,687,500 | TOTAL PROJECT (2016) | | | | |

| MIDDLE | | |
|----------------------------|--------------|----------------------|
| | | |
| 1100 students (900 actual) | 165,000 | GSF |
| 150 sf / student | \$250 | per sf |
| | \$41,250,000 | Building |
| | \$6,600,000 | Site (\$40/sf |
| | \$47,850,000 | Total Construction |
| | \$14,355,000 | Project Costs (30%) |
| | \$62,205,000 | TOTAL PROJECT (2016) |

| HIGH | | | |
|-----------------------------|--------------|---------------------------|--|
| | | | |
| 1500 students (1200 actual) | 255,000 | GSF | |
| 170 sf / student | \$250 | per sf | |
| | \$63,750,000 | Building | |
| | \$10,200,000 | Site (\$40/sf) | |
| | \$73,950,000 | Total Construction | |
| | \$22,185,000 | Project Costs (30%) | |
| | \$96,135,000 | TOTAL PROJECT (2016) | |

*Land costs not included in typical project cost estimates



Important to do what you can do really well

We will work with GCPS to focus the best use of funds on students & building occupants, educational opportunities, and long-term benefit

As projects are established to move forward, VMDO will work with GCPS to more fully define the scope of each project. Revised scopes will receive further cost estimates that will be more accurate to the actual scope of each project. More accurate timelines for design/construction will be established at that time.

METHODS OF FUNDING

CAPITAL FUNDS Large Long-Term Projects

New Elementary School

DEBT SERVICE Bigger Immediate Need Projects

HS Cafeteria / Media Center
MS Cafeteria / Media Center

Traffic + Safety

OPERATIONAL Interventions

Student Life / Interior Renovations

QUESTIONS – Funding + Planning

What are available funds for first steps?

What is priority level of projects being considered for first steps?

What is reality of Central Kitchen approach?

As an initial project Possibility in near future

What are next steps to start identifying land for purchase for future projects?

VMDO