

# The High School Project

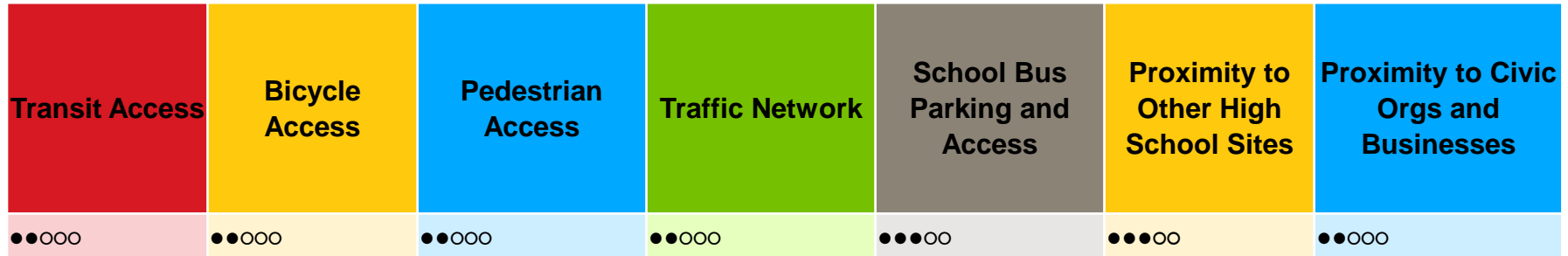


## Supporting Documents to Site Investigation, Site Alternatives, and Cost Comparisons

September 19, 2019

# Site Analysis

## Francis C. Hammond Middle School Site – Transportation Review

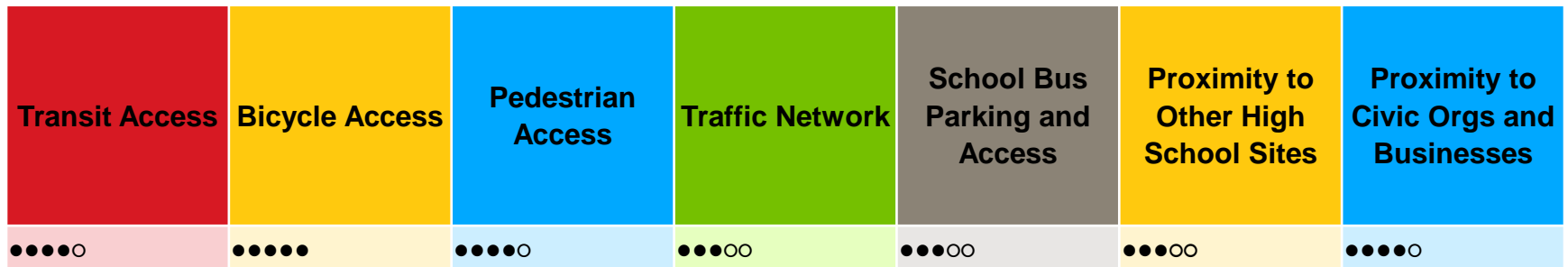


○○○○○ No score  
●○○○○ Very poor  
●●○○○ Poor  
●●●○○ Fair  
●●●●○ Good  
●●●●● Excellent

- Site has fewer existing issues and concerns than the King Street and Minnie Howard sites
- There is adequate parking
- Buses all queue on site
- Site doesn't include separation of buses from parking and pick-up/drop-off areas, as recommended in the ACPS High School Campus Educational Specifications
- Site ranks lowest in the composite transportation scores, which account for multimodal access, proximity to student population, and other criteria

# Site Analysis

## George Washington Middle School Site – Transportation Review

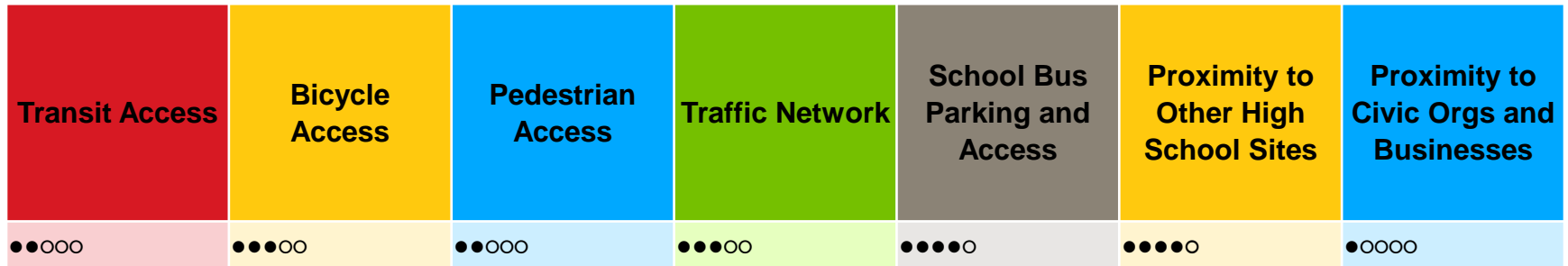


○○○○○ No score  
●○○○○ Very poor  
●●○○○ Poor  
●●●○○ Fair  
●●●●○ Good  
●●●●● Excellent

- Site has fewer existing issues and concerns than the King Street and Minnie Howard sites
- There is space to create adequate parking
- Buses all queue on site
- Site is adjacent to multi-modal options including a Metrorail station and bicycle trails
- Site does not include separation of buses from parking and pick-up/drop-off areas, as recommended in the ACPS High School Campus Educational Specifications

# Site Analysis

## T.C. Williams King Street Campus – Transportation Review



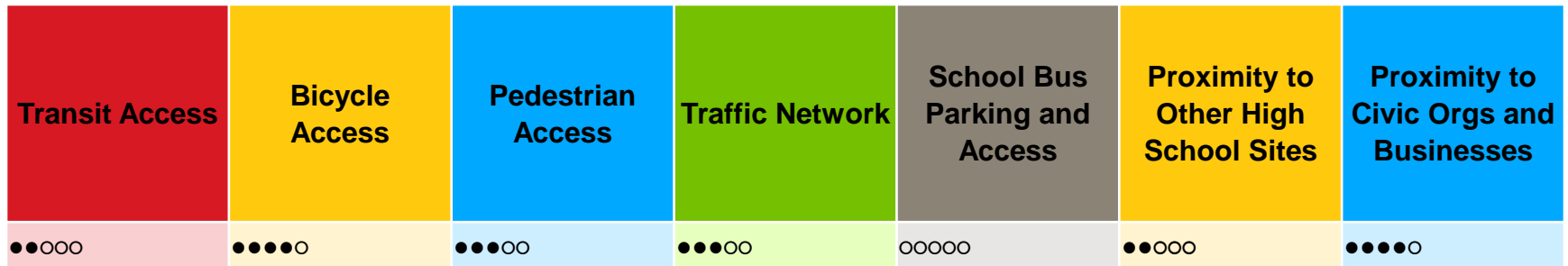
○○○○○ No score  
●○○○○ Very poor  
●●○○○ Poor

●●●○○ Fair  
●●●●○ Good  
●●●●● Excellent

- Parking and site access facilities generally overburdened
- Although circulation is separated, drivers often ignore these designations and/or load/unload passengers curbside on King Street
- Students often park in adjacent neighborhoods
- Connections and circulation between the King Street and Minnie Howard campuses not conducive to pedestrians/bicycles due to the auto-oriented nature of the roadways connecting the campuses

# Site Analysis

## Potomac Yards Site – Transportation Review



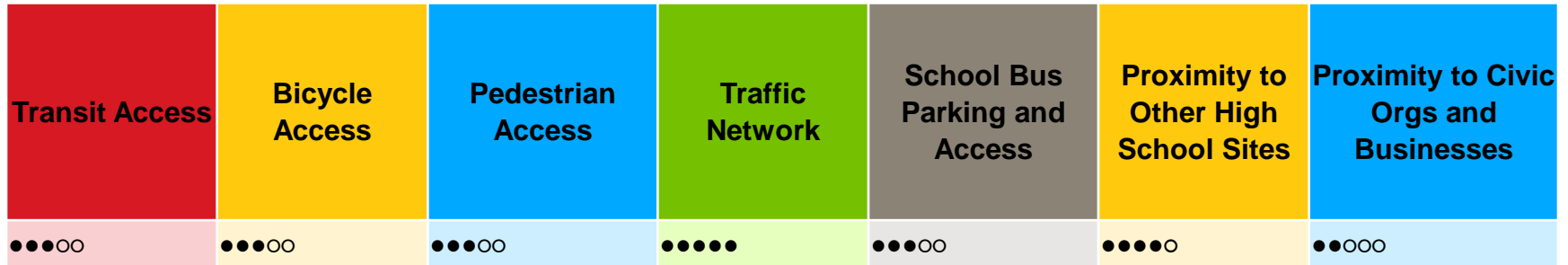
○○○○ No score  
●○○○○ Very poor  
●●○○○ Poor  
●●●○○ Fair  
●●●●○ Good  
●●●●● Excellent

\* Potomac Yard redevelopment plans will likely increase transit, bicycle, and pedestrian access scores.

- Challenge of accommodating school buses and pick-up/drop-off operations in a compact urban setting
- Currently no bus or pick-up/drop-off loops or loading/unloading zones planned or room for them
- Schools in urban locations usually provide room for these activities curbside, taking advantage of space provided for on-street parking and the street grid for circulation

# Site Analysis

## Minnie Howard Campus – Transportation Review



○○○○○ No score  
●○○○○ Very poor  
●●○○○ Poor  
●●●○○ Fair  
●●●●○ Good  
●●●●● Excellent

- Parking facilities are at capacity
- Current site access does not include separation of buses from parking and pick-up/drop-off areas, as recommended in the ACPS High School Campus Educational Specifications
- Braddock Road has two lanes in each direction, reducing back-ups on the street itself
- Connections and circulation between the King Street and Minnie Howard campuses not conducive to pedestrians/bicycles due to the auto-oriented nature of the roadways connecting the campuses

# Site Analysis

## Transportation Comparison – ALL SITES

*(TC WMS Satellite and NOVA not included)*

	Transit Access	Bicycle Access	Pedestrian Access	Traffic Network	School Bus Parking and Access	Proximity to Other High School Sites	Proximity to Civic Orgs and Businesses
King Street	●●○○○	●●●○○	●●○○○	●●●○○	●●●●○	●●●●○	●○○○○
Minnie Howard	●●●○○	●●●○○	●●●○○	●●●●●	●●●○○	●●●●○	●●○○○
Potomac Yard*	●●○○○	●●●●○	●●●○○	●●●○○	○○○○○	●●○○○	●●●●○
George Washington MS	●●●●○	●●●●●	●●●●○	●●●○○	●●●○○	●●●○○	●●●●○
Francis C. Hammond MS	●●○○○	●●○○○	●●○○○	●●○○○	●●●○○	●●●○○	●●○○○

○○○○○ No score

●○○○○ Very poor

●●○○○ Poor

●●●○○ Fair

●●●●○ Good

●●●●● Excellent

\* Scores reflect current site conditions. Potomac Yard redevelopment plans will likely increase transit, bicycle, and pedestrian access scores.

# Cost

## Typical Cost Components

### Capital Costs

- Site Costs – *acquisition and development*
- Building (Hard) Costs – *new construction and/or renovation*
- Soft Costs – *professional services including project management, design, permits, legal fees, contingencies, furniture and equipment (FF&E)*
- Delivery method

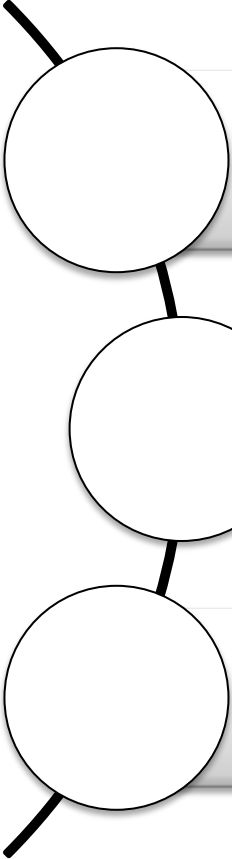
### Operating Costs

- Staffing (*Instructional, Administrative, Support*)
- Maintenance
- Utilities
- Food service



# Cost

## Basic Assumptions Used to Compare



**A.** Most costs will increase at the same rate (regardless of approach) because costs may be based on amount of students and square footage of the building, which are the same in each scenario.

**B.** The focus of the comparative analysis is on differences caused by the a particular approach and educational model

**C.** Cost benchmarks and updated construction industry projections confirm that the current High School Project capital budget estimate is inadequate due to market escalation and predictions since 2017.

# Cost

## Cost Assumptions that Change Per Model

### Educational Staffing

- 2nd HS needs a principal and student activities/athletics staff

### Transportation

- For Two High Schools approach, school bus transportation would depend upon the student assignment strategy - neighborhood boundaries (walk zone-based) versus lottery, application process or choice (city-wide)
- For CHSN, school bus transportation from home to assigned program building may fluctuate based on the amount of locations and locations of students attending each campus (no inter bus or shuttle transportation between classes would be planned)

### Security

- Commingling age groups on GW and Hammond sites is a concern and could require increased security personnel and costs

# Cost

## Other Development Cost Drivers

What amenities/open spaces must be replaced at locations on and off any site

Amenity requirements during and after construction

Possibility of other site costs or agreements

Below grade parking costs to develop more above grade space

Differences between cost to develop differing site constraints (e.g. topography)

Costs to extend ACPS technology network at any non-ACPS locations (e.g. Potomac Yards and NOVA/Tyler Building)

Potomac Yard costs may benefit by development incentives or Public Private Partnerships (P3) opportunities (TBD)

# Cost

## Staffing

Instructional staffing is expected to be largely based on enrollment.

Facilities staffing is typically based on square footage.

Some variables may cause changes such as increased administrators or reduction of duplicated staff at multiple campuses; however, based on discussions and information to date, we would evaluate staffing costs as about equal for both models

**These are expected to be approximately equal in either model.**

# Cost

## Maintenance

While maintenance is typically based on square footage, **for the CHSN**, if more than two campuses are pursued, increased systems and management across campuses of maintenance activities may cause a cost exposure or could offer efficiencies if procured and negotiated accordingly.

We would therefore consider **maintenance costs to be potentially higher in a Connected High School Network.**

# Cost

## Food Service

In all scenarios, students will need access to food

We assume that an additional comprehensive high school would require the establishment and maintenance of an additional kitchen and kitchen management team. The CHSN may only require an expansion of kitchen services at T.C.

We would therefore evaluate **food service costs to be potentially higher in a two high schools model.**

# Cost

## Transportation

Both scenarios are expected to impact transportation.

A CHSN may allow for more students to be considered within a walk zone depending on placement of campuses **and thereby decreasing transportation requirements.**

However, the CHSN will require a sophisticated system to ensure efficient and reliable transportation of students to the various campuses scheduled which may change based upon the day.

**NOTE:** The school scheduling objectives will minimize or not require travel between school campuses during school hours.

Transportation to a second high school would depend upon student assignment (see slide 10). Costs could be higher if city wide programs are offered to the new high school.

We would therefore hypothesize that **transportation costs may be close to equal for both models**

# Cost

## Utilities

Utility costs are based on the **energy efficiency and water use** of a building.

Some **variability in costs** may be realized such as increased costs for operating multiple facilities or decreased costs for eliminating the need to recreate large, open and energy-use heavy core spaces in a CHSN model.

However, at this time utility costs would just be assessed using square footage. We would therefore evaluate **utility costs to be equal in both models.**



# Cost

## Educational Programming Drivers

### Cutting Edge STEAM/STEM School

- Could require specialized spaces that increase the typical cost average assumed cost/sf

### King Street Expansion/Chinquapin Suggestion

- Chinquapin was granted to the City of Alexandria by the National Park Service to be used as open recreational land in perpetuity
- Consideration and swapping for other land requires equity in value and use, city and federal agreement, an application process, possible legislative action
- Adding Chinquapin to the decision timeline would extend the entire development schedule by potentially three to five years