Educational Considerations
Designing for a 21st Century Learning Environment
The future Dover Area High School
Educational Considerations for Future DAHS:
Designing a 21st Century Learning Experience

# 1 Small Learning Communities

- Learning is done via projects and in student teams and often cross disciplinary (i.e. science, math, English).
- Promote a sense of identity.
- Refocusing the attention away from grade level groupings and focusing on teamwork and a community of learners around a specific area of study.
- Students are being grouped in classrooms according to their learning styles.
- The future DAHS is proposing 5 Student Learning Communities and will need to consider the structure of these SLCs.
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#2 Distance Learning

- Technology will provide greater opportunities for distance learning and cost-effective delivery of basic educational programs. School buildings and classrooms will need to be designed to accommodate these new ways of learning.
- Mobile devices and tablets are driving a dramatic shift in accessibility.
- DAHS is going one-to-one for the 2016-2017 academic year.
- The future DAHS will need to incorporate numerous settings for students: traditional, blended, hybrid, cyber, alt. ed, and CTE.
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#3 Flexible Learning Spaces

- Teachers and students use all of the classroom. Every part of the room can be used for something different and it can happen at a moment’s notice, especially with the use of technology.

- Flexible Learning Spaces consist of learning labs or maker type spaces. These rooms are “rough and ready” with laser cutters and technology that allows for a hands-on learning experience.

- Gives students room to explore and succeed.

- Students receiving special education are now learning in classrooms with non-disabled peers (Least Restrictive Environment). Schools must be prepared to accommodate disabled children in ways that do not isolate them.
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#3 Flexible Learning Spaces

• Diverse spaces of different sizes, purposes, and qualities can enhance the classroom settings. Designs today encourage the opportunity for collaboration by having a layout that promotes easy flow into adjacent spaces.

• The future DAHS will need to consider more flexible design in order to meet this challenge.
#4 Go Green

- Low maintenance, high performing and long lasting school design can have a huge impact on the sustainability of school. There are an abundance of products that are both sustainable and aesthetically pleasing, making attractive and sustainable design (i.e. green roofs, recycle carpet, or vinyl tile flooring) that doesn’t require harsh chemicals or polishes.
- Sustainable design elements are can also be incorporated through the use of signage that encourages students and faculty to make sustainable choices.
- Proper ventilation, good acoustics, quality indoor air quality (IAQ) and abundant daylight has a positive impact on students’ attendance, concentration and performance.
- The future DAHS will need to consider more ‘go green’ concepts in order to meet this challenge.
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#5 Incorporating Technology

• If you were to walk into a brand new, state-of-the-art school you might see armchairs in the library with outlets on the side, tables with a built-in power supply and even charging stations similar to those in an airport terminal. Technology requires huge demand on the infrastructure.

• The spaces need to remain relevant to the changing technologies and programs used in the industry.

• Creating spaces that fit the learning or teaching method or style so that learning can happen anywhere, especially with the use of technology.

• Some furniture solutions include tables with “plug and play” power and data ports, which allows the space to serve as either a technologically-rich, one-to-one computing environment, or as a general classroom.

• DAHS is going one-to-one for the 2016-2017 academic year.

• The future DAHS will need to consider both the infrastructure, (i.e. accessibility) as well as the design to respond to the ever changing world of technology.
Financial Considerations

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Future Capital Project/Debt Planning

- Preliminary projections for 2016/2017 show an ending General Fund fund balance of approximately $12.68M.
- Projected capital reserves available funds for 16/17 are at approximately $9.6M without transferring a portion of unassigned general fund monies at the end of 2016.
- The reserves the District have built over the past several years have put the District in a position to utilize those funds for capital improvement projects with minimal additional burden to the taxpayers of the District.
### Projected Capital Reserves

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Beginning Fund Balance</td>
<td>$6,998,739</td>
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<tr>
<td>15/16 Projected Expenditures</td>
<td>$(1,355,056)</td>
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<tr>
<td>Assigned FB transfer from GF</td>
<td>$4,324,000</td>
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<tr>
<td>Interest</td>
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<tr>
<td>Current Capital Project Fund Balance</td>
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<tr>
<td>16/17 D-10 Projects for approval 4/19</td>
<td>$(365,449)</td>
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<tr>
<td><strong>Projected Available Capital Project Funds</strong></td>
<td><strong>$9,614,949</strong></td>
</tr>
</tbody>
</table>
Potential Effect (worst-case) on Average Tax Bill (April presentation)

- Assumed:
  - $60M new HS only without renovations
  - No state reimbursement
  - Utilizing $5M in District reserved funds
  - Interest Rates as of April +60 bps

- Total equivalent mills needed = 1.84

- The average tax bill would increase approx. $30, phased in over a period of 7 years for approx. a total of $214 increase; or, mills would need re-allocated in the current budget to debt service; or, a combination of both.
Potential Effect (best-case) on Average Tax Bill

• Assumed:
  • $65M project providing an allocation for both a new HS at the intermediate school site and renovations to the existing HS
  • State reimbursement at 6%
  • Current Rates (60 year lows) + 60 and 75 bps
  • Utilizing $8M in District reserved funds (as long as District receives Plancon funds due from previous projects)

• Total equivalent mills needed = 1.74

• The average tax bill could increase approx. $20 per year for a period of 10 years for approx. a total of $220; or, mills would need re-allocated in the current budget to debt service; or, a combination of both.
Moving Forward

Administration will need consensus to move forward on the following:

1. Identify Scope of work (Building vs. Renovation)
2. Creating Project Team
3. RFP for Architectural Services