



CHRISTOPHER JOHNSON  
ASSISTANT SUPERINTENDENT OF FINANCE AND OPERATIONS

TO: Board of Education  
FROM: Chris Johnson  
Dave Conway  
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SUBJECT: 2019 and Beyond Needs Analysis and Next Steps

## **Introduction**

The District embarked on a process during the 2017-18 school year to analyze future facilities needs with the launch of the first phase of a 2019 and Beyond Facilities Study. The goal of this phase of master facilities planning is to provide a comprehensive assessment of all facilities, develop short- and long-term District goals and objectives related to facilities, and identify the deficiencies in the facilities that prevent the District from achieving those goals. The District selected the Cashman Stahler Group to complete this portion of the study, and Steve Cashman has prepared a draft report, which is attached and summarized here. Based on the overall assessment and the goals and needs identified by constituents in this phase, a proposed timetable is provided to prioritize these needs and to develop a tentative phasing plan to address them.

## **Draft District Facility Goals**

Based on the assessment, the following draft goals have been developed and are presented in no particular order:

- Improve academic spaces at the both campuses, using the research and standards developed as part of the Winnetka Campus Project (2017) including appropriate size, technology, and furniture.
- Develop appropriate spaces for students receiving special services and the staff and faculty who support them.
- Create spaces that allow students to collaborate and easily access academic and student services support.
- Improve office and work spaces in a manner that continues the strong tradition of faculty accessibility for students and collaboration amongst faculty while providing for efficient use of support staff.
- Enhance and supplement the athletic and Kinetic Wellness facilities at the Winnetka Campus, providing students with adequate indoor space for training/practice and improved competition space that meets current standards.

- Improve swimming facilities by providing a pool of adequate size with enhanced diving capabilities and space for spectators that allows the District to continue to host the State Swim meet and other events.
- Improve off-site athletic facilities at Duke Childs Field, reducing safety issues related to errant baseballs and flooding, and improving bathroom and support functions.
- Create a new artificial turf playing surface at the Winnetka Campus, providing for increased usability for Kinetic Wellness classes and the athletic program.
- Maintain and improve the building envelope, mechanical, plumbing, and electrical systems on both campuses, decreasing maintenance costs, improving energy efficiency, and ensuring a safe and comfortable environment for students and staff.
- Update technology infrastructure systems, providing support for the teaching and operational functions of today and tomorrow.
- Implement energy efficiency improvements at both campuses, reducing energy expenditures and modeling environmental stewardship for our students.
- Continue to implement appropriate safety and security enhancements at both campuses, providing a safe environment for students and staff.

### **Summary of Findings by Area**

*Academic Spaces* - The District's Winnetka Campus Project defined the new District standard for academic spaces, with appropriately sized classrooms that use flexible furniture and modern technology. Departments using the spaces clearly identified how the new spaces support teaching and learning. The study found that 31 of 79 classrooms on the Winnetka Campus meet the new standard. On the Northfield Campus, 14 out of 32 meet the standard.

Based on this analysis, we recommend that a plan be developed to ensure all instructional spaces are the proper size and have appropriate technology and furniture by 2030. The analysis shows that some classrooms may already be adequately sized for their function and may only require furniture and technology enhancements, while others may need to be expanded to an adequate size in addition to furniture and technology improvements. The study also showed that elective spaces at the Winnetka Campus meet needs and standards, and that selective improvements are needed to some spaces on the Northfield Campus. *These results are detailed in Attachment B: Section 2A pg. 1*

*Enrollment and Scheduling Efficiency*- A scheduling efficiency study was conducted to understand how spaces are used. Typically, high schools have a scheduling efficiency rate of 75%-80%, meaning classrooms and other spaces are in use that percentage. Our current efficiency is 58% overall (including electives) and 75% for core academic spaces and Business Education. Steve Cashman also analyzed enrollment based on the Kasarda Demographic Projection and compared it to available space. The analysis shows that there is adequate space if the total number of students is consistent with the projection over the next 10 years and if course enrollment patterns are consistent. It further showed that we

have the opportunity to create larger classrooms in existing spaces by decreasing the total classroom count at the Winnetka Campus while still maintaining efficiency standards. *These results are detailed in Attachment B: Section 2A pg. 8*

*Athletic and Kinetic Wellness Spaces* – The study found that while the District has made several notable improvements to Athletic and Kinetic Wellness spaces, including new and resurfaced tennis courts, re-constructed tracks on both campuses and a concession and bathroom building at the Northfield Campus, significant needs remain to support the school day Kinetic Wellness program and the after-school athletic program. Major findings include an inadequately sized and difficult to maintain Gates Gymnasium at Winnetka, a lack of an indoor field house space also at the Winnetka Campus, a shallow and inadequate pool at Northfield, an aging and inadequately sized pool at the Winnetka Campus, and off-site baseball and softball facilities at Duke Childs Field that flood and are not optimally configured for current needs. *These results are detailed in Attachment A: Section 1A – pg. 6*

*Site, Envelope, Mechanical, Electrical and Plumbing* – The study found that the District’s buildings are well-maintained through the combination of consistent maintenance over time and the replacement of selected systems in existing buildings or in the construction of new spaces. The needs analysis demonstrates this approach should be continued with regular maintenance on an annual basis, including the replacement of roofs and upgrades to mechanical systems, with a focus on several areas: the final remaining steam boilers at the Winnetka Campus, which heat the Gates Gym and the pool are past their useful life and expensive to operate, should be considered for replacement as part of a larger project to update Kinetic Wellness and Athletic spaces. At the Northfield Campus, the single-pane windows used throughout the campus are energy inefficient and are expensive to maintain, and should be considered for replacement. *These results are detailed in Attachment A: Section 1B – pg. 32*

*Energy Efficiency* – As part of the study, the District worked with the Smart Energy Design Assistance Center (SEDAC), which is housed at the University of Illinois and provides consulting services to clients across the state. SEDAC visited both campuses and has prepared a detailed report about the energy efficiency in the current configuration. SEDAC has previously worked with the District, and the updated reports show that many previous issues have been addressed, which have slowed the growth in utility costs at both campuses.

Their report has a set of recommendations for each campus that will improve energy efficiency and reduce utility usage, some with payback periods as short as 12 months, such as replacing existing lightbulbs with energy efficient LED bulbs. Some of these needs are in areas that have previously been renovated or constructed, and these improvements can be implemented as time and budget allows. Others can be considered as further improvements occur, which will allow them to be implemented at the lowest possible cost

and will ensure that work is not undertaken in areas that will subsequently be remodeled. *These results are detailed in Attachment C*

### *Security*

The District has completed an analysis of the security at both campuses using the services of Facilities Engineering Associates (FEA) and Telgian Engineering and Consulting. Steve Cashman has also reviewed the results of these studies and has assisted in the development of two sets of recommendations to enhance security. Phase I improvements were approved by the Board of Education in July 2018, and those projects are underway and will be concluded this September. Phase II improvements will be discussed at the August Board of Education meeting and may be presented for approval in September 2019. Subsequent work be proposed as part of the prioritization this process for completion over future years. *Attachment B: Section 1C – pg. 50*

### **Plan to Analyze Needs**

This year, we will establish a process to analyze and prioritize the needs that have been identified as a result of this study. This will also include developing potential conceptual solutions and a proposed sequence to address them over the next 15 years. This process will be led by the Facilities Steering Committee, with periodic reports to the Board of Education and Administrative/Campus Leadership Teams. It will use the results of the needs analysis as a basis for the work, but will also involve further research through subcommittees. This research will include understanding how peer schools have addressed the issues we have identified. It is expected the district will architecture services on a T&M basis during this fiscal year to assist in this work, and that these costs will be include in the Physical Plant Services budget.

### **Plan to Analyze Finances**

The process to analyze the financial resources available to support these needs will be conducted through the Finance Committee. Last year, the committee reviewed a preliminary analysis of resources available including the District’s reserves, operating budget, and existing bonding capacity. During the review last year, the committee considered discussed how the first phase of any work that will occur in the years FY 20 – FY 24 could be completed using these existing resources, without requiring a referendum or additional taxpayer funding related to facilities. The committee will review cost estimates and updated financial projections to develop a recommendation about the amount of available funds for the first five years of the plan.

### **Develop Phased Recommendations**

Through understanding the needs and the resources available to address them, a proposed 15-year framework will be developed, with work prioritized based on the benefit it will bring to students, reducing energy and maintenance costs, and maintaining a safe environment for students and staff that is aligned with available financial resources. This resulting report will be presented to the Board of Education in May 2019. Subsequently, a

list of potential projects for the summer of 2020 will be proposed in June 2019, and the Board will consider the approval of the first year of work. Each year thereafter the plan will be updated in May to reflect current estimates and priorities and specific projects for the following year will be presented for approval each June.

**Schedule: 2018-19**

<b>Date</b>	<b>Group</b>	<b>Date</b>
Review identified needs and goals with Department Leaders and Faculty/Staff	Campus Leadership Team Meetings Campus Staff meetings	September & October 2018
Identify available financial resources and recommended parameters	Finance Committee	December 2018
Develop conceptual potential solutions to address needs	Administration Facilities Staff Architect	November 2018 - March 2019
Align with Strategic Plan	Strategic Planning Team Administration	January - March 2019
Develop preliminary phasing plan	Administration	March 2019
Develop order of magnitude cost estimates	Facilities Staff Pepper Construction	March 2019
Present preliminary phasing plan	Administration	May 2019
Select Architect for 2020 Projects	Administration/Board of Education	June 2019
Approve summer 2020 projects	Board of Education	July 2019

**Conclusion**

The facilities needs analysis provides a foundation that can be used to develop a long-term facilities plan for the District that can guide our work over the next 15 years. The analysis acknowledges the significant progress made in recent years with the generous support of the community and its taxpayers. It also indicates that needs still exist in order to maintain highly functioning facilities that will allow New Trier to continue to provide an excellent academic and extracurricular program. Over the next several weeks, the format will be finalized and the remaining sections of the supporting data will be added. I look forward to collaborating with the Facilities Steering Committee, Finance Committee and the Board of Education on the next phase of this project.