

CYCLE-BASED BUDGETING AND CONTINUOUS IMPROVEMENT AT JEFFERSON COUNTY PUBLIC SCHOOLS: YEAR 1 REPORT

Bo Yan

September, 2016

EXECUTIVE SUMMARY

In the past two years, Data Management, Planning & Program Evaluation Services Division and Business Services Division collocated to develop and implement a new budgeting model called cycle-based budgeting. By assigning an implementation and improvement cycle to each new program, this new budgeting model transforms new spending from new entitlement into time-bound commitment and creates the right incentive to encourage people to work diligently and creatively to continuously improve.

For the 2016-17 school year, \$22.89 million new spending was approved for 87 budget requests, with \$1.3 million from 11 new programs subject to review by the cabinet in 2018 when discussing and deciding the 2018-19 budget. Implementation and outcome data will impact whether the \$1.3 million should continue to be used for the 11 programs or reallocated for other purposes.

The longest financial commitment was made to 17 programs totaling \$11.6 million on a five-year implementation and improvement cycle. The cabinet will be tasked to review these 17 programs in 2022, which will have resulted in a total spending of \$69.6 million by then, and decide how to allocate an annual budget of \$11.6 million.

Cycle-based budgeting also complements the existing accounting system by tracking spending on Vision 2020. "Improve physical infrastructure", "Provide equitable access", and "Increase & deepen professional learning" are the top 3 strategies focused in the district's 2016-17 new spending. Nine of the Vision 2020 strategies received no new spending due to either lack of budget request targeting those strategies or budget requests being declined. The complete list of the 87 approved budget requests with the strategies they target is attached in Appendix I.

Equity was reflected in the \$22.89 million new spending for the 2016-17 school year, with more money approved for the Title I schools than for the non-Title I schools. The 2016-17 budget favored new district initiatives, with \$19.25 million approved for the central office programs. That said, 99.7% of the new spending in 2016-17 will be spent in schools and only \$68,000 will be spent in the central office.

To fulfill the impact of cycle-based budgeting, we will incorporate two to three existing programs into the new process when working on the 2017-18 budget. In addition, application and approval of the Title II money (about \$4 million) will be integrated. Moreover, scores from independent reviews of the proposals by staff in the two divisions will be better presented to the cabinet to facilitate budget discussions. Last, district initiatives involving school participation will be made available to schools on a competitive basis.

INTRODUCTION

In the 2014-15 school year, Financial Services Division and Data Management, Planning & Program Evaluation Services Division collaborated to develop and implement a new cycle-based budgeting model. This new budgeting model set expectations and accountability for each newly approved budget request, and tied every approved dollar to the strategies in Vision 2020.

This report looks deep into the 2016-17 budget request and approval data and intends to: 1) explain the rationale and significance of the new cycle-based budgeting model to a broader audience, 2) report the alignment between the approved new improvement initiatives and district's strategic plan, as well as the budget decisions' implications for the short-term and long-term financial planning, and 3) communicate the challenges remaining to be addressed for JCPS to better allocate resources to continuously improve.

In the following text, the cycle-based budgeting model is first briefly explained. Next, how this new budgeting model changes new spending from indefinite entitlement to time-bound commitment is illustrated with the approved 2016-17 budget requests. Then, alignment between the newly approved improvement initiatives and Vision 2020 as well as equity of the budget approvals are examined. Last, the remaining challenges are described with suggested action steps.

CYCLE-BASED BUDGETING

Cycle-based budgeting model was developed to address the limitations of incremental budgeting (lack of accountability and disconnect between outcomes and budget decisions) and zero-based budgeting (cumbersome to truly implement and potentially unnecessary disruptions) models. It can be understood as a combination of grant application and extension of zero-based budgeting.

On the grant application aspect, each new program or initiative must submit a budget request to specify its alignment with the district's strategic plan, intended measurable outcomes, and the time needed to achieve the outcomes.

On the extension of zero-based budgeting aspect, cycle-based budgeting extends the program review and budget decision cycle (cycle for program implementation and improvement) from the traditional annual to a more flexible time frame, which can be one year or multiple years¹.

During the cycle of a program, the implementation and performance data will be monitored and reviewed by program staff for adjustment purpose, but not by the district's senior leadership team for budget decision. That is, the program's funding is secure unless things go terribly wrong. At the end of the cycle, whether the program

Cycle-based budgeting was developed to address the limitations of incremental budgeting and zero-based budgeting.

¹ The budget request submitters propose the number of years needed to reach the measurable goals they set on the application form, but the district's senior leadership team makes the final decision, which can either shorten or lengthen the cycle.

accomplishes the measurable goals set at the beginning and whether it continues to align with the district's priorities will be reviewed with budget consequences.

Cycle-based budgeting helps create the time and space necessary for a program and initiative to be thoroughly planned, carefully implemented, closely monitored, and periodically reviewed. Clear expectations are set at the beginning and accountability is demanded at the end of the program. As a result, limited financial resources can be reallocated depending on program implementation and impact, thus making the flexible spending truly flexible. Please refer to Appendix II for a more detailed explanation of the rationale, design, and potential impact of cycle-based budgeting as well as the lessons learned in developing and implementing this new budgeting model.

FROM ENTITLEMENT TO COMMITMENT

In the past, once a new recurrent program was approved, it almost always turned into an entitlement and was funded year after year. With the implementation of the cycle-based budgeting model, an implementation and improvement cycle was assigned to each recurrent program approved for the 2016-17 school year. As a result, the district's new spending was transformed from new indefinite entitlement to new time-bound commitment. This change has two important implications for future budgetary planning and decisions.

First, for the program directors and school principals whose budget requests were approved, it sets the expectation that the commitment is time-bound and will be reviewed with consequences at the end of the implementation and improvement cycles. At the same time, explicitly and forcefully, it obligates the district's senior leadership team to exert its budgetary responsibility and authority based on those cycles.

Second, it significantly improves the district's ability to engage in both short-term and long-term financial planning. At the end of its cycle, each approved recurrent program will be either continued, downsized/expanded, or eliminated depending on its alignment with the district's strategic goals (which might be different several years later) and outcome. As a result, the district now knows how much money might be available for reallocation in the subsequent years.

Figure 1 on next page shows the distribution of \$22.1 million recurrent new spending in the 2016-17 budget by years of commitment (implementation & improvement cycle)². For each bar, the bottom number is the total number of approval budget requests and the top number is the total amount of those approved budget requests in million. Please note that four approved one-time budget requests totaling \$0.77 million are not included in this chart.

From this chart, 1.3 million dollars with 11 programs (See Appendix III for detail) are on a one-year implementation and improvement cycle, which means these 11 programs will be subject to review when



² Of the 22.89 million new spending approved for the 2016-17 school year, 0.77 million was one-time spending and the other 22.12 million was recurrent. Implementation and improvement cycle was assigned to the recurrent programs only.

developing the 2018-19 budget in 2018³. At the same time, it also means that the district could potentially have a maximum of 1.3 million dollars available for reallocation, if all of those 11 programs are deemed to be no longer aligned with the district’s strategic plan or do not produce the desired outcomes.

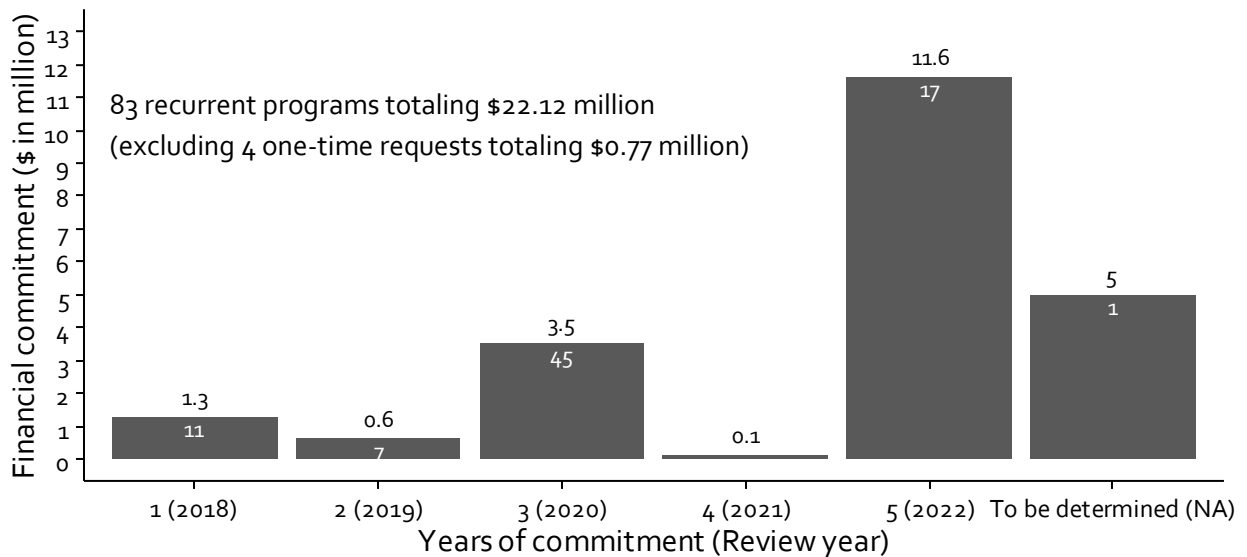


Figure 1 Financial commitment made in 2016-17 budget by implementation and improvement cycle⁴

Most of the new spending is long-term commitment on a five-year implementation and improvement cycle. Specifically, \$11.6 million will be spent annually on 17 programs for the next six years. When those programs are subject to review for the 2022-23 budget, the district will have dedicated \$69.6 million on the strategies and areas covered by those 17 programs.

It should be noted that long-term commitments come with oversight. The expensive programs with a long implementation & improvement cycle will be closely monitored by the Financial Planning and Planning & Program Evaluation departments. If serious issues are spotted, actions will be taken to address those issues before it is too late.

Implementation & improvement cycle (time-bound financial commitment) creates the necessary time and space as well as pressure and incentive for programs to succeed.

With the implementation and improvement cycle assigned to each approved budget request, each dollar to be spent comes with both expectations at the outset and accountability at the end. This time-bound financial commitment provides the necessary time and space as well as pressure and incentive for school and district administrators to implement and strengthen their improvement efforts. This is in square contrast to the hundreds of millions of money approved in the past, which will be funded permanently without

³ Because outcome data usually are not available until October of next year, programs on a one-year cycle will actually have been implemented for two years when they are up for review based on their outcome data.

⁴ The \$5 million was approved for tackling student behavioral issues. This chart will be updated once specific proposals are submitted.

accountability. In the Challenges and Next Steps section, we discuss how to incorporate the existing programs into this process and the benefits of doing so.

PARTIAL PRICE TAG OF IMPLEMENTING VISION 2020

Figure 2 shows the district’s effort to implement Vision 2020 by the amount of new spending approved for 2016-17 on each of the 30 strategies. In the chart, each bar represents the newly approved spending in thousands on the corresponding strategy, with the red portion indicating the money to be spent exclusively on the strategy and blue portion to be spent on both the corresponding strategy and other strategies⁵. For example, of the \$5.3 million approved for “Improve physical infrastructure”, \$5.01 million exclusively targets this strategy and \$0.28 million targets both this and other strategies.

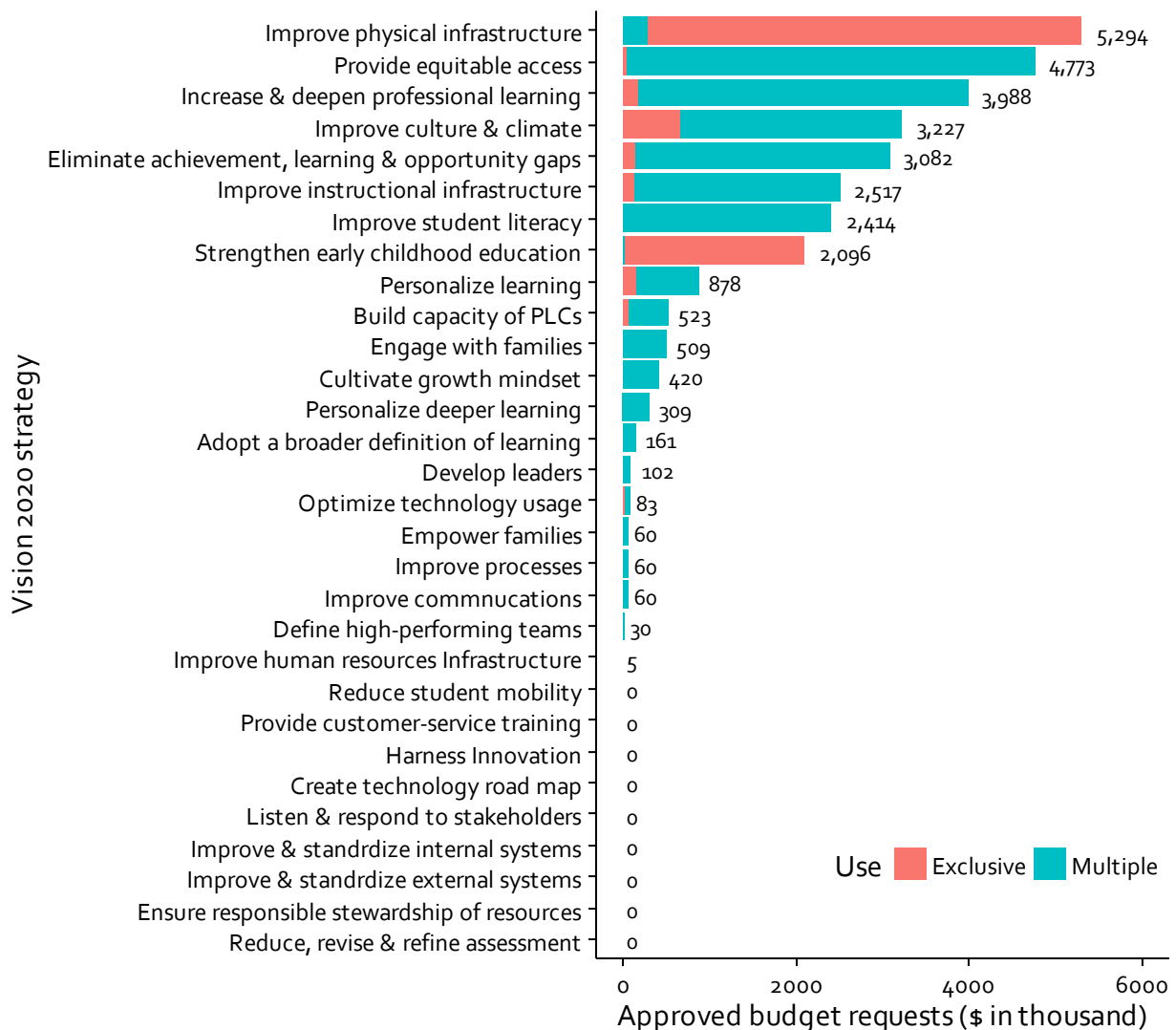


Figure 2 New 2016-17 spending on Vision 2020 strategies

⁵ Many budget requests intend to target more than one Vision 2020 strategy.

According to the chart, “Improve physical infrastructure” (\$2.0 million for Annual Facility Improvement Fund, \$2.0 for Increase Funding for New School Buses, etc.), “Provide equitable access” (\$1.2 million for ESL Department Budget Request, \$0.8 million for Stuart Middle School Redesign, etc.), and “Increase & deepen professional learning” (\$2.0 million for Bellarmine Literacy Project, \$1.2 million for ESL Department Budget Request, etc.) are the top 3 strategies focused in the district’s 2016-17 new spending. There is a laser focus on “Strengthen early childhood education”, with all of the 2.1 million dollars to be spent the strategy exclusively. For the nine Vision 2020 strategies at the bottom of the chart from “Reducing student mobility” to “Reduce, revise, & refine assessment”, there is no new spending due to either lack of budget request targeting those strategies or budget requests being declined.

Program	Cost center	Budget	Cycle	Strategy
Tackling Student Behavioral Issues	Administration	5.0	TBD	To be determined
Annual Facility Improvement Fund	AFIF	2.0	5	Improve physical infrastructure
Increase Funding for New School Buses	Transportation Services	2.0	5	Improve physical infrastructure
Bellarmine Literacy Project Teacher/Coach Positions	Curriculum and Instruction	2.0	5	Improve student literacy; Increase & deepen professional learning
ESL Department Budget Request Proposal	ESL	1.2	5	Provide equitable access; Eliminate achievement, learning & opportunity gaps; Increase & deepen professional learning
Norton Commons - Eight New Preschool Classrooms	Early Childhood	1.0	5	Strengthen early childhood education
STUART 7th and 8th GRADE ACADEMY - Middle School Redesign	Academic Achievement K-12 Region 3	0.8	5	Provide equitable access; Improve instructional infrastructure
FROST 6th GRADE ACADEMY	Academic Achievement K-12 Region 3	0.7	5	Provide equitable access; Improve instructional infrastructure
Conversion of 5 Preschool Half Day Classrooms to Full Day Classrooms	Early Childhood	0.6	5	Strengthen early childhood education
Health Services School Nurse Program	Physical Development and Health Services	0.5	1	Provide equitable access; Improve culture & climate; Engage with families

Table 1 Top 10 budget items (in million) approved for 2016-17

Two things should be pointed out about the new spending approved for the 2016-17 budget and the strategies it targets. First, no new spending on a strategy does not necessarily mean the strategy is not implemented. For instance, the development and implementation of cycle-based budgeting is a living example of ensuring responsible stewardship of resources, much progress has been made with reducing, revising, and refining assessment as well as strengthening the assessment system to improve teaching

and learning, and so on. Second, \$5 million (22% of the new spending) was approved for the 2016-17 budget to help schools manage student behavior without providing details on which strategy/strategies will be targeted. Once more is known about how the \$5 million will be spent, an updated accurate chart can be provided.

For now, Figure 2 informs us about which strategy might be over- or under-invested. More important, it provides the critical baseline data for assessing effectiveness of JCPS' new spending. In the coming years, we will be able to evaluate the return on investment in each of the invested strategies. That assessment will help the district make decisions on whether to increase spending on certain strategies that are successful, make adjustments to leadership for strategies that lack a return on the investment, or focus on new strategies, which will ultimately drive optimal use of the limited resources.

EQUITY

Of the 172 schools, 99 schools submitted at least one budget request and 73 did not submit any budget request. About half of the Title I schools (48 out of 95) submitted budget request(s) and the percentage was 66% for the non-Title I schools (51 out of 77). Table 2 shows the requested and approved budget amounts as well as approval rate for the Title I and non-Title I schools, respectively. Based on the results, equity is reflected in the new budget allocation for the 2016-17 school year, with more requests approved (\$3.0 million) and a higher approval rate (67.9%) for the Title I schools than the non-Title I schools (\$664 thousand approved and a 39.5% approval rate).

Equity is reflected in the new spending approved for the 2016-17 budget, with more money approved for the Title I schools than for the non-Title I schools.

Title I school	Requested	Approved	Approval rate	Spending
Yes	4,381,495	2,977,224	67.9%	5,861,330
No	1,681,447	664,044	39.5%	672,844

Table 2 2016-17 budget request and approval by Title 1 status

The two numbers in the last column of Table 2 shows the money to be spent on the Title 1 schools and non-Title 1 schools, respectively. The numbers are greater than the approved amounts because of the budget requests from the central office that will be spent in schools. That is, while \$3.0 million of budget requests submitted by the Title I schools was approved, the district will actually be spending \$5.9 million on just the Title I schools.

It should be noted that the above results excluded the \$14.2 million that will be spent district wide, \$2.0 million that will be spent on all elementary schools, \$0.2 million to be spent on non-school units, as well as \$4.6 million Section 7 money that mostly went to the Title 1 schools (\$4.2 million to be exact).

Detailed information about how much each Title I school requested, how much of that requested money was approved, and how much the district will be spending on the school can be found in Appendix IV at the end of this report.



BUDGET REQUEST AND APPROVAL BY LOCATION

The district approved 87 proposals totaling \$22.89 million new spending for the 2016-17 school year and declined 78 proposals totaling \$5.2 million at the same time. In Table 3, the first column shows the location, the second through fourth columns show the approved, declined, and total requested budget amounts, the fifth column shows the approval rate, and the last column shows the allocation. For example, \$22.01 million was requested by the central office departments (fourth column), of which \$19.25 million (second column) was approved and \$2.76 million (third column) was declined at an 87.5% approval rate (fifth column).

Location	Approved	Declined	Requested	Approval rate	Allocation (%)
Central office	19.25	2.76	22.01	87.5%	0.07 (0.3%)
Elementary	1.38	1.25	2.63	52.6%	
Combined	1.00		1.00	100.0%	
High	0.58	0.60	1.18	49.1%	22.82 (99.7%)
Middle	0.48	0.51	0.99	48.5%	
Other	0.21	0.07	0.27	75.6%	

Table 3 2016-17 budget request, approval and allocation (\$ in million)

From Table 3, the combined schools had the highest budget request approval rate (100%), which is followed by central office departments (87.5%) and other locations⁶ (75.6%). For the A1 schools, the approval rates approximate 50%.

It is important to point out that while the central office had the second highest approval rate with a total \$19.25 approved for the 2016-17 school year, only \$68,000 will be spent in central office⁷. That is, 99.7% of the new spending in 2016-17 will go to schools.

99.7% of the new spending for 2016-17 will go to schools.

Due to time constraint and limit in capacity, what Vision 2020 strategies the 78 declined proposals were targeting was not analyzed. Plans have been made to modify the budget proposal form for the 2017-18 budget request to make it easier to analyze the unfunded budget requests.

CHALLENGES AND NEXT STEPS

We have made strides in building a stronger budgeting model to better align financial resources with the district's strategy plan and set the stage for using the budgeting process to help programs succeed and demand accountability at the same time. That said, there is still an extra mile before crossing the finishing



⁶ Other locations refer to locations other than the central office departments and A1 schools, such as ESL Newcomer Center.

⁷ The \$68,000 was approved for two programs from the Curriculum Management Department: Stage One Family Theatre (\$50,000) and Extended Days for Staff Development (\$18,000).

line. Specifically, we need to tighten the implementation of the cycle-based budgeting model in the following four areas.

INCORPORATE EXISTING PROGRAMS INTO THIS PROCESS

With the cycle-based budgeting model, we have successfully documented the district's new spending, set expectations for every dollar, and built a mechanism for accountability. Despite the progress, the new spending each year only accounts for a tiny portion of the district's entire spending. For example, in the 2016-17 budget, the \$22.89 million new spending is about 1.7% of the entire \$1.4 billion budget.

At this point, we largely don't know how much of that \$1.4 billion is still aligned with the district's new strategic plan. Without clear goals set and documented, it is hard to know which programs are giving us return on the investment. As a result, programs that are not effective or no longer targeting the district's priorities continue to receive funding year after year without any accountability, which is not just a drain on our limited resources, but also hurts morale because it provides a wrong incentive that encourages people to be content with the status quo instead of working diligently and creatively to improve. The logical next step for this work is to gradually incorporate existing programs into the cycle-based budgeting process, which will help determine program owners⁸, identify costs, set goals and timelines (implementation and improvement cycles), and hold people accountable.

Currently, we are in the process of identifying two to three existing programs to be incorporated into this process. Specifically, an owner will be identified for each program and the owner will submit a budget request to specify alignment with Vision 2020, program goals, and time needed to achieve the goals, all of which will lead to program reset or adjustments in the following year's implementation. As with the newly approved programs, funding for the existing programs will be secure during the implementation and improvement cycle. At the end of the cycle, however, the program data will be reviewed with budgetary consequences.

As more and more existing programs are incorporated into this process, we will be able to know how the much of the district's budget is spent on what strategy each year, how much money has been spent on that strategy for how many years, and what our return has been on that investment. This critical information will allow JCPS to make important budgetary decisions on where and how much adjustment needs to be made based on evidence. Money saved from discontinuing ineffective programs can be reinvested on innovative and promising new initiatives (a practice that should be routinely conducted, but rarely done in most districts).

It should be emphasized that the ultimate goal of the cycle-based budgeting process is to improve instead of cut for two main reasons. First, it tends to be more economical to strengthen and improve an

⁸ Sometimes, an existing program might not have a district level owner who sets directions and manages operations due to leadership change. As a result, the program receives no or little attention from the district and the person who is actually in charge lacks either motivation or authority to run the program effectively and efficiently. All of this puts the program in a very difficult position to succeed. With cycle-based budgeting, a new owner will be designated whenever a program is impacted by a leadership change.

existing program than adopt a new program. Many times, the main reason for the failure of a program is poor implementation. Although poorly implemented, the program nonetheless has an infrastructure to build on. Focusing on improvement based on that infrastructure is usually less resource-demanding than starting from scratch, which involves recruiting new staff, providing new training and support, adjusting schedules, and so on.

The goal of incorporating existing programs into the cycle-based budgeting process is to improve instead of cut.

Second, improving an existing program is less disruptive than implementing a new program or providing no alternatives. An existing program is an integral part of the system. Tweaking it posts much fewer disruptions than integrating a new program into the existing fabric. If an existing program is cut without providing any alternative, the unmet needs will probably magnify, which not only disrupts the impacted area but could also spill over to other areas.

Putting a greater focus on improvement rather than cut, however, does not mean no programs will be eliminated. Sometimes, it simply makes more sense to rebuild than continue to tinker and mend. For that purpose, the information documented by the cycle-based budgeting process (goals, implementation and improvement cycle, and evidence of effectiveness) will help make the budget discussion less emotional, more rational and student centered.

INTEGRATE OTHER FUNDS INTO THIS PROCESS

So far, the cycle-based budgeting process only covers new spending that is not supported by categorical funds⁹ such as Title I and Title II funds. Historically, these categorical funds have been largely outside the purview of the district, although they are part of the district's discretionary spending. This is mainly due to the following two reasons.

First, categorical funds are designated for certain purposes and must follow strict government rules. This might have led to the inaccurate perception that it is difficult, if not impossible, to leverage these funds to achieve the district's strategic goals. Second, there is a lack of capacity to integrate these funds into the general budget discussion and decision making process.

Instead of being an integral part of the district's budget, allocation of these categorical funds is usually a stand-alone operation or only at times connected to the district's initiatives. As a result, we often do not know the true cost of a program or initiative. More important, it limits the district's ability to use its entire financial resources strategically and coherently.

To strengthen this area, Title II fund (about \$4 million per year) will be integrated into the cycle-based budgeting process for the 2018-19 budget. Title I (about \$37 million per year) and IDEA (about \$22 million per year) money will be integrated in the future.

MAKE BETTER USE OF THE PROPOSAL REVIEWS

⁹ Categorical funds are the federal and state government grants to be spent only for narrowly defined purposes. The three largest categorical funds in Jcps are Title I, Title II, and IDEA funds.

Of the 166 budget requests, 98 were reviewed by the Financial Planning Department and Planning and Program Evaluation Department before they went to the cabinet for budget decisions¹⁰. Specifically, based on a rubric based on eight domains¹¹, all 98 proposals were independently reviewed and given a score on each domain¹². The purpose of the independent reviews was twofold. First, it was intended to provide unbiased assessment on the alignment and quality of each proposal to facilitate the cabinet's decision making, because the sheer volume of information (although we have condensed it before presenting to the cabinet) and time constraint simply did not allow the decision makers to read through each proposal carefully before deliberation.

The second purpose of the independent reviews was to provide the budget request submitters with feedback on the strengths and weaknesses in their proposals, which can then be utilized to improve implementation if their proposals were approved. A well thought-of proposal is not a guarantee for success, but a poor or weak proposal is often a precursor to failure by making unfounded assumptions, overlooking or ignoring important areas, or under-estimating the obstacles. The independent reviews can reveal these deficits and help program owners think through their programs, thus increasing the likelihood of success.

Unfortunately, the independent review information was not well introduced and presented to the decision makers and thus not well used during the budget discussion. Figure 3 on next page shows lack of impact of the independent reviews on the cabinet's budget decisions. In the chart, each circle represents a budget request with the size representing the total amount of requested budget in thousand dollars. The horizontal axis represents alignment with the district's strategic plan, which was based on the independent review scores in two domains (alignment with the strategic plan and SMART goals), ranging between 2 and 6. The vertical axis represents the proposal quality, which was based on the other six domains, ranging between 6 and 18. The chart has two parts, with the upper part representing the approval budget requests in red circles and the bottom part representing the declined budget requests in blue circles.

Ideally, we would see most of the red circles (approved budget requests) clustering in the upper right corner with both high quality and alignment scores, and most of the blue circles (declined budget requests) clustering in the lower left corner with both low quality and alignment scores. In the chart, however, both the red and blue circles are all over the space. Plans have been made to better present the independent review scores to the decision makers during the 2018-19 budget discussion, as well as share them with the program owners to improve implementation.

¹⁰ Of the 166 budget request proposals, 45 were declined by assistant superintendents (if submitted by a school) or division chiefs (if submitted by a central office department). Among the remaining 121 proposals, 23 totaling \$10.4 million were submitted after the regular budget calendar ended due to various reasons.

¹¹ The eight domains are: 1) alignment with the strategic plan, 2) evidence of effectiveness, 3) SMART goals, 4) budget, 5) program needs, 6) target outcome, 7) implementation strategy, and 8) program monitoring.

¹² Of the 98 proposals, 20 were double-scored for reliability check. The double-scored proposals were correlated 0.75 with 100 % agreement within one on each of the eight categorical ratings on the rubric

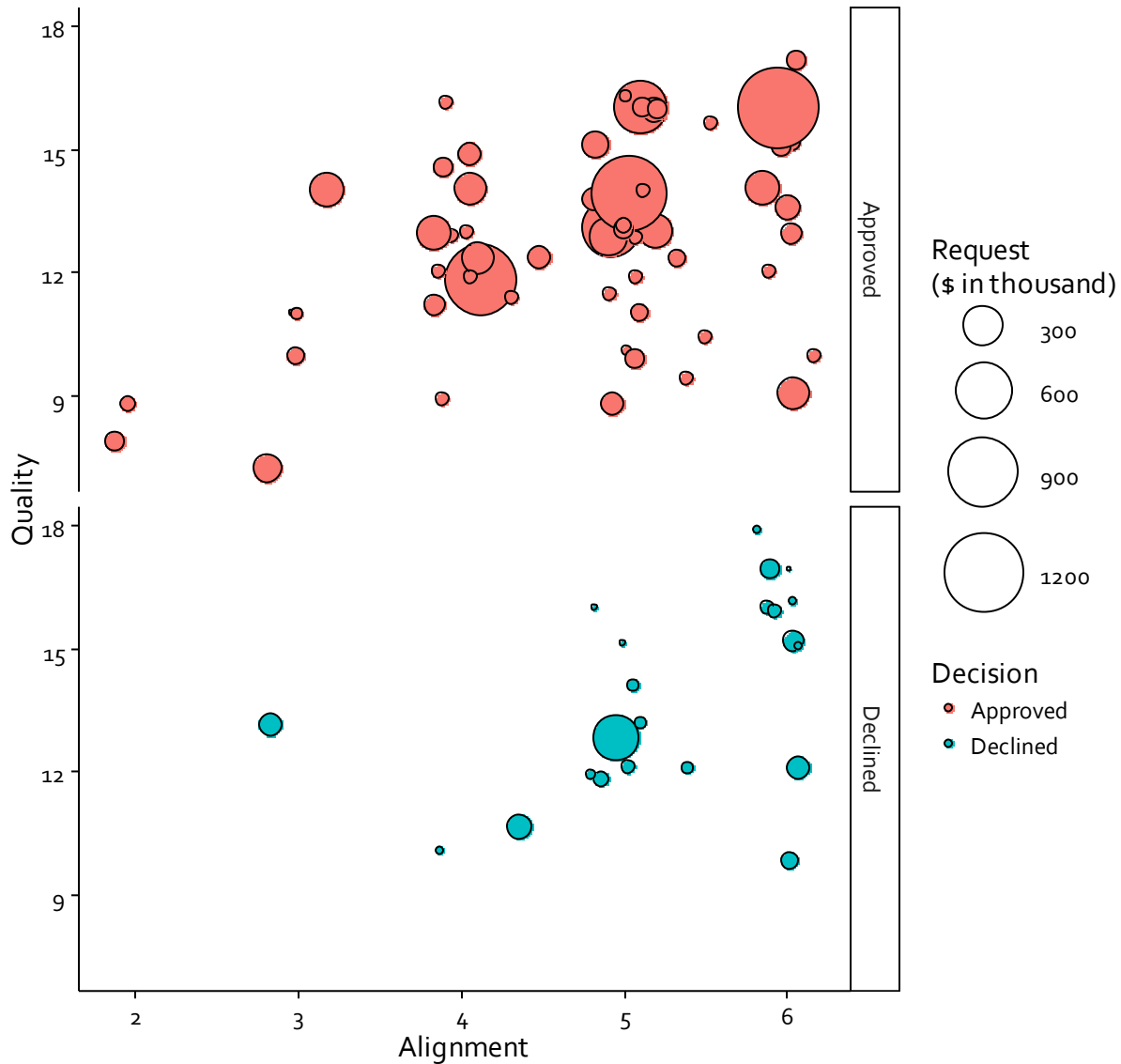


Figure 3 Relationship between independent review scores and budget request approvals

As far as budget decisions are concerned, at this point, the main purpose of the independent reviews is to assist the district’s senior leadership team with budget decisions by both reducing the cognitive load and injecting some level of objectivity concerning proposal quality and alignment (though far from being perfect). As we move forward, the relationship between the review scores and actual program outcomes will be tracked and analyzed. If there is a high correlation, it should give us more confidence in the validity of the review scores as early indicators of program success. As a result, the review scores should have more impact on the senior leadership team’s budget decisions. If there is a lack of correlation, the practice and rubric will be reviewed for improvement.

MAKE DISTRICT INITIATIVES COMPETITIVE OFFERINGS

As reported earlier, \$19.25 million (84.1%) of the approved 2016-17 new spending was from district initiatives with nearly all of them to be spent in schools. In the past, after a district initiative was approved, a school was either invited or required to participate, often regardless of whether the school was interested or had the capacity and determination to make the initiative a success in their school.

When a district initiative was forced into a school that didn't have the buy-in or capacity to implement it with fidelity for various reasons (e.g., there were already multiple school initiated programs), the initiative usually did not receive due attention from the school leadership and tended to produce poor results. This was not only a waste of resources for the district and a distraction to the school that was trying to improve through locally initiated programs, but also a lost opportunity for schools that had the interest and capacity but were excluded from participation.

Starting with the 2017-18 budget, all district initiatives involving school participation will be made available to schools on a competitive basis. Specifically, schools that desire to participate must submit an application through the budget request system to specify their target outcomes and implementation plan. The district will then make participation decision based on the merit of the applications and each school principal will be held accountable for the success of the initiative at their building.

CONCLUSIONS

In the past two years, under the leadership of Data Management, Planning & Program Evaluation Services Division and Financial Services Division, a team of staff from the two divisions worked closely to develop and implement a new budgeting model called cycle-based budgeting. This new budgeting model transforms new spending from new entitlement into time-bound commitment and creates the right incentive to encourage people to work diligently and creatively to improve.

For the 2016-17 school year, \$22.89 million new spending was approved for 87 budget requests, with \$1.3 million from 11 new programs subject to review by the cabinet in 2018 when discussing and deciding the 2018-19 budget. Implementation and outcome data will impact whether the \$1.3 million should continue to be used for the 11 programs or reallocated for other purposes.

The longest financial commitment was made to 17 programs totaling \$11.6 million on a five-year implementation and improvement cycle. The cabinet will be tasked to review these 17 programs in 2022, which will have resulted in a total spending of \$69.6 million by then, and decide how to allocate an annual budget of \$11.6 million.

Cycle-based budgeting also complements the existing accounting system by tracking spending on Vision 2020. "Improve physical infrastructure", "Provide equitable access", and "Increase & deepen professional learning" are the top 3 strategies focused in the district's 2016-17 new spending. Nine of the Vision 2020 strategies received no new spending due to either lack of budget request targeting those strategies or budget requests being declined.

Equity was reflected in the \$22.89 million new spending for the 2016-17 school year, with more money approved for the Title I schools than for the non-Title I schools. The 2016-17 budget favored new district

initiatives, with \$19.25 million approved for the central office programs. That said, 99.7% of the new spending in 2016-17 will be spent in schools and only \$68,000 will be spent in the central office.

To fulfill the impact of cycle-based budgeting, we will incorporate two to three existing programs into the new process when working on the 2017-18 budget. In addition, application and approval of the Title II money (about \$4 million) will be integrated. Moreover, scores from independent reviews of the proposals by staff in the two divisions will be better presented to the cabinet to facilitate budget discussions. Last, district initiatives involving school participation will be made available to schools on a competitive basis.

APPENDIX I: APPROVED 2016-17 BUDGET REQUESTS

Proposal	Cost center	Budget (thousand)	Strategy
Tackling Student Behavioral Issues	Administration	\$5,000.0	To be determined
Annual Facility Improvement Fund	AFIF	\$2,000.0	Improve physical infrastructure
Increase Funding for New School Buses	Transportation Services	\$2,000.0	Improve physical infrastructure
Bellarmine Literacy Project Teacher/Coach Positions	Curriculum and Instruction	\$1,951.3	Improve student literacy; Increase & deepen professional learning
ESL Department Budget Request Proposal	ESL	\$1,210.5	Provide equitable access; Eliminate achievement, learning & opportunity gaps; Increase & deepen professional learning
Norton Commons - Eight New Preschool Classrooms	Early Childhood	\$969.4	Strengthen early childhood education
STUART 7th and 8th GRADE ACADEMY - Middle School Redesign	Academic Achievement K-12 Region 3	\$751.2	Provide equitable access; Improve instructional infrastructure
FROST 6th GRADE ACADEMY	Academic Achievement K-12 Region 3	\$664.5	Provide equitable access; Improve instructional infrastructure
Conversion of 5 Preschool Half Day Classrooms to Full Day Classrooms	Early Childhood	\$642.3	Strengthen early childhood education
Health Services School Nurse Program	Physical Development and Health Services	\$509.3	Provide equitable access; Improve culture & climate; Engage with families
School Bus Repair Parts	Transportation Services	\$500.0	Improve physical infrastructure
OPERATIONAL COSTS - one-time only	Academic Achievement K-12 Region 3	\$313.3	Improve physical infrastructure
Contractual Nursing Services	Physical Development and Health Services	\$290.0	Provide equitable access; Eliminate achievement, learning & opportunity gaps
OPERATIONAL BUDGET RECURRENT - Middle School redesign	Academic Achievement K-12 Region 3	\$280.4	Provide equitable access; Improve physical infrastructure

Conversion of 5 Preschool Half Day Classrooms to Full Day Classrooms - One Time Classroom Setup Cost	Early Childhood	\$269.2	Strengthen early childhood education
Addition of Resource Teachers	Diversity, Equity and Poverty Division	\$225.8	Provide equitable access; Improve culture & climate; Improve instructional infrastructure
Request for Three PBIS District Leads (195 Day Resource Teachers)	Academic Support Services	\$225.8	Improve culture & climate
Middle School Counselors/APs	Moore Traditional School	\$224.1	Improve culture & climate; Improve instructional infrastructure
2 Middle School Assistant Principals	Valley High School	\$207.9	Improve culture & climate; Improve instructional infrastructure
Continuation of Current Administrative School Support for Shawnee	The Academy @ Shawnee	\$205.3	Improve culture & climate; Improve instructional infrastructure
CARDS Program	Diversity, Equity and Poverty Division	\$200.0	Improve culture & climate
Increase Funding for New Maintenance Trucks	Transportation Services	\$200.0	Improve physical infrastructure
Providing Teacher Support and Building Professional Capacity through One Mission, One Voice and TJ 101	Thomas Jefferson Middle	\$195.1	Build capacity of PLCs; Increase & deepen professional learning
Norton Commons - Eight New Preschool Classrooms - One Time Classroom Setup Cost	Early Childhood	\$183.3	Strengthen early childhood education
Instructional Support Coaches for Literacy and Mathematics	Western Middle	\$144.3	Cultivate growth mindset; Build capacity of PLCs; Increase & deepen professional learning
VALLEY HIGH SCHOOL - Middle School Redesign	Academic Achievement K-12 Region 3	\$137.2	Improve instructional infrastructure
Math and English Interventionist	Pleasure Ridge Park High	\$130.1	Personalize learning; Eliminate achievement, learning & opportunity gaps
Valley High School Assistant Principal	Valley High School	\$108.8	Personalize learning; Personalize deeper learning; Improve culture & climate
Assistant Principal	ESL Newcomer Center	\$108.8	Eliminate achievement, learning & opportunity gaps; Personalize deeper learning; Improve culture & climate

Continuation of Current Assistant Principal Position at Doss	Doss High	\$108.8	Improve culture & climate; Build capacity of PLCs; Increase & deepen professional learning
260 Day Specialist I (PD Support)	Curriculum and Instruction	\$103.6	Increase & deepen professional learning
Reach SOI 9 week Extended Day sessions (3 sessions per year)	Atkinson Academy	\$103.1	Provide equitable access; Improve student literacy; Eliminate achievement, learning & opportunity gaps
High School Counselor	Valley High School	\$96.5	Provide equitable access; Eliminate achievement, learning & opportunity gaps; Improve culture & climate
Counselor	ESL Newcomer Center	\$96.5	Eliminate achievement, learning & opportunity gaps; Improve culture & climate
Challenger Center at Academy @ Shawnee	Administration	\$95.0	Adopt a broader definition of learning; Personalize learning
Valley Prep Middle School Counselor	Valley High School	\$94.1	Provide equitable access; Eliminate achievement, learning & opportunity gaps; Improve culture & climate
RP budget	Diversity, Equity and Poverty Division	\$80.0	Provide equitable access; Cultivate growth mindset; Improve culture & climate
Westport MS Improvement Priority GCC Support Position 16-17	Westport Middle School	\$74.8	Eliminate achievement, learning & opportunity gaps; Improve culture & climate
Funding for Goal Clarity Coach	Jeffersontown High School	\$74.8	Build capacity of PLCs
Career Readiness	Seneca High	\$72.2	Personalize learning
Literacy Resource Teacher	Roosevelt-Perry Elementary	\$72.2	Improve student literacy; Increase & deepen professional learning; Develop leaders
Improving Teacher Effectiveness	Maupin Elementary	\$72.2	Increase & deepen professional learning
Remaining Instructor III positions	Semple Elementary	\$72.1	Eliminate achievement, learning & opportunity gaps; Cultivate growth mindset
Music	Layne Elementary	\$66.0	Adopt a broader definition of learning; Personalize learning; Provide equitable access
Math Teacher	Butler Traditional High School	\$65.0	Personalize learning; Provide equitable access; Eliminate achievement, learning & opportunity gaps
Compressive Literacy Learning	Wheeler Elementary	\$65.0	Personalize learning; Improve student literacy; Eliminate achievement, learning & opportunity gaps
STEM Program	Tully Elementary	\$65.0	Personalize learning; Eliminate achievement, learning & opportunity gaps
Vo tech teacher for computer science	Southern High School	\$65.0	Personalize learning

Positive Action and Learning Coach (Modeling for students and coaching for staff)	Atkinson Academy	\$65.0	Eliminate achievement, learning & opportunity gaps; Improve culture & climate; Increase & deepen professional learning
Showcase of Schools / School Choice Advertising Campaign	Communications and Community Relations	\$60.1	Improve communications; Improve processes; Empower families
Mental Health Counselor	Portland Elementary	\$60.0	Improve culture & climate
Mental Health Counselor	Minors Lane Elementary	\$59.0	Eliminate achievement, learning & opportunity gaps
Mental Health Counselor	Field Elementary	\$59.0	Personalize deeper learning; Cultivate growth mindset; Improve culture & climate
Mental Health Counselor	Valley High School	\$59.0	Improve culture & climate
Mental Health Counselor	Byck Elementary	\$59.0	Improve culture & climate
MyPath Continuation for 2016-17 School Year - Pending Results of 2016 JCPS Pilot	Curriculum and Instruction	\$50.6	Provide equitable access; Optimize technology usage
Stage One Family Theatre	Curriculum Management	\$50.0	Provide equitable access
In-School Security Monitor for urban school in Old Louisville	Cochran Elementary	\$41.0	Improve culture & climate
Musical Instrument Budget Increase	Curriculum and Instruction	\$40.0	Personalize learning; Provide equitable access
School Nurse at Seneca	Physical Development and Health Services	\$39.2	Provide equitable access; Improve instructional infrastructure
Price Elementary School Student Success Coach	Price Elementary	\$33.9	Eliminate achievement, learning & opportunity gaps; Improve culture & climate
Success Coach	Portland Elementary	\$32.6	Personalize deeper learning; Cultivate growth mindset; Improve culture & climate
Response To Interventionist	Indian Trail Elementary	\$32.5	Personalize learning; Improve student literacy; Eliminate achievement, learning & opportunity gaps
ESL Support in Math	Lassiter Middle School	\$32.5	Provide equitable access; Eliminate achievement, learning & opportunity gaps
Life Skills Teacher	Butler Traditional High School	\$32.5	Eliminate achievement, learning & opportunity gaps
Improve Culture / Climate with a Success Coach	Rangeland Elementary	\$32.4	Personalize learning; Improve culture & climate; Improve instructional infrastructure

3rd grade reading pledge Student Success Coach (Instructor III)	Minors Lane Elementary	\$32.4	Provide equitable access; Improve student literacy; Eliminate achievement, learning & opportunity gaps
Increased Learning and Safety	Maupin Elementary	\$32.4	Provide equitable access; Cultivate growth mindset; Improve culture & climate
Kindergarten Readiness Coach (a.k.a. Instructor III or Student Success Coach)	Minors Lane Elementary	\$32.4	Improve student literacy; Eliminate achievement, learning & opportunity gaps
Wilkerson Reading Interventionist	Wilkerson Elementary	\$32.4	Improve student literacy; Eliminate achievement, learning & opportunity gaps
Jtown Elementary Success Coach	Jeffersontown Elementary	\$32.4	Improve student literacy; Strengthen early childhood education
INSTRUCTOR 1-Success Coach	Mcferran Preparatory Academy	\$32.4	Eliminate achievement, learning & opportunity gaps
Semple Success Coach 2016-17	Semple Elementary	\$32.4	Eliminate achievement, learning & opportunity gaps; Improve culture & climate
Gilmore Lane Budget Request Proposal 2016-2017	Gilmore Lane Elementary	\$32.4	Eliminate achievement, learning & opportunity gaps; Improve culture & climate
Instructor III- Success Coach	Luhr Elementary	\$32.4	Eliminate achievement, learning & opportunity gaps
Budget Request for Success Coach	Fern Creek Elementary	\$32.4	Eliminate achievement, learning & opportunity gaps; Improve culture & climate
Student Success Coach	Okolona Elementary School	\$32.4	Eliminate achievement, learning & opportunity gaps; Improve culture & climate
Instructor III/STC - Computer Lab	Barret Traditional Middle	\$32.4	Optimize technology usage
Teacherpreneur JCPS VOICE	Curriculum Management	\$30.0	Define high-performing teams; Increase & deepen professional learning; Develop leaders
Mental Health 1/2 Position	Blue Lick Elementary	\$29.5	Provide equitable access; Improve culture & climate; Improve instructional infrastructure
Student Safety	Eastern High	\$27.2	Improve culture & climate
Teacher for interventions	Alex R Kennedy Elementary School	\$25.4	Provide equitable access; Improve student literacy; Eliminate achievement, learning & opportunity gaps
Improve Student Literacy Part 2	Rangeland Elementary	\$20.8	Improve student literacy; Eliminate achievement, learning & opportunity gaps; Increase & deepen professional learning
Extended Days for Staff Developers	Curriculum Management	\$18.0	Personalize learning

Intervention/Acceleration Budget Request	Laukhuf Elementary	\$17.9	Personalize learning; Eliminate achievement, learning & opportunity gaps
Extended Days for Curriculum Specialists	Curriculum and Instruction	\$14.2	Improve student literacy; Increase & deepen professional learning
Minority math teacher	Eastern High	\$5.0	Personalize learning; Provide equitable access; Improve human resources Infrastructure

Table 4 Budget requests approved for 2016-17

APPENDIX II: CYCLE-BASED BUDGETING

An organization's budget should mirror its strategic vision and goals by funding programs that most support these priorities and meet the greatest needs. Accordingly, an effective budgeting process should be engaged with both allocation of new spending and reallocation of existing spending to meet those goals.

Generally, a district's budget can be categorized into two parts. One part is *norm-based spending*, which is usually determined by a set of rules based on student enrollment. For example, class size caps at different grade levels dictate how many teachers a school can employ based on student enrollment and, in some districts, school enrollment determines how many counselors, specialists, custodians, or principals a building can have.

In contrast to norm-based spending that rests on rather fixated rules districts have control over but seldom change, the other part is *flexible spending* that districts use to run various programs and launch initiatives. While norm-based spending constitutes the bulk of a district's annual budget, budget discussions and decision making often center on the smaller-portion flexible spending that allows districts to implement strategic priorities and execute improvement plans. How to help a district make the best use of its flexible spending is the focus of this project.

LIMITATIONS OF EXISTING BUDGETING MODELS

Many budgeting models have been developed over the years. In the K-12 setting, incremental budgeting and zero-based budgeting are probably the two most widely adopted models. With incremental budgeting, the budget used for the current fiscal year becomes the base for incremental change (either increase or decrease) for the next fiscal year. For zero-based budgeting, budget development starts with nothing in terms of budgeted dollars, and every spending item needs to be justified for approval.

At the core, budget decisions should be aligned with strategic priorities and tied to outcomes. For existing programs, those that are closely aligned with the district strategic plan and have been proven to be effective should be continued or expanded with funding support; ineffective ones or programs that do not focus on the district's priorities should be altered or discontinued with the savings reallocated. For new programs and initiatives, the spending should be justified by alignment, evidence of effectiveness and well-developed implementation plans.

Consequently, budget decisions serve as both a compass, directing a district's attention and improvement effort on areas of greatest needs, and a force that drives people to be more cost-impact oriented by spending public money efficiently and effectively. Unfortunately, both incremental budgeting and zero-based budgeting are limited in achieving these two goals.

The problem with incremental budgeting is obvious for the disconnection between budget decisions and outcomes. Under this model, a program automatically becomes permanent once it is approved. With this entitlement status, people expect to receive more or less of what they received last year and largely spend it in the way in which it has been spent, often regardless of how it has improved teaching and

learning. This creates an environment for people to become complacent since they are neither motivated nor pressured to continuously improve.

Since incremental budgeting does not provide a process through which existing programs can be reviewed for adjustments or discontinuation, this budgeting model tends to focus on the allocation of new spending. The reallocation of existing spending is largely not exercised except when there is a budget crisis.

Compared to incremental budgeting, the key advantage of zero-based budgeting is the inherent annual process that forces people to justify both existing and new spending according to certain criteria, which can also be used as an opportunity to reflect upon program implementation for improvement.

The main challenge for many districts is that it is rather tedious and time-consuming to implement a real zero-based budgeting process, especially for large districts with tens of thousands of budget items. There are also situations where most of the budget items are continuously approved each year, producing a result equivalent to that from an incremental budgeting model. In such cases, the zero-based budgeting process is in name only.

The annual review and decision cycle, which is the fundamental strength of zero-based budgeting, can also be a disadvantage, especially in education where many programs take at least one year to get fully implemented and more time to effect. Often times, a decrease in student achievement might be observed at the end of the first year implementation of an effective program as students and teachers are still adapting to the new method or strategy. With the annual decision cycle, such programs may not survive the first year scrutiny although they will produce positive results in the long run.

CYCLE-BASED BUDGETING

To overcome the limitations of the incremental budgeting and zero-based budgeting models, we developed a new budgeting model termed cycle-based budgeting, which can be understood as a combination of grant application and extension of zero-based budgeting.

On the grant application aspect, each new program or initiative must submit a budget request using an online application form. In the application, in addition to filling out budget items and amounts, the request submitter needs to specify measurable goals such as increasing the percentage of students meeting the state math standard by 3%, or decreasing discipline referrals by 5%, as well as the number of years they need to accomplish those goals.

On the extension of zero-based budgeting aspect, cycle-based budgeting extends the program review and budget decision cycle from the traditional annual to a more flexible time frame, which can be one year or multiple years. The budget request submitters propose the number of years needed to reach the measurable goals they set on the application form, but the district's senior leadership team makes the final decision, which can either shorten or lengthen the cycle.

During the cycle of a program, the implementation and performance data will be monitored and reviewed by program staff for adjustment purpose, but not by the district's senior leadership team for

budget decision. That is, the program's funding is secure unless things go terribly wrong. At the end of the cycle, whether the program accomplishes the measurable goals set at the beginning and whether it continues to align with the district's priorities will be reviewed with budget consequences.

The cycle-based budgeting model also enhances the existing accounting system by enabling a district to look at its budget from a different yet badly needed angle. Budget discussions and decisions on flexible spending usually revolve around programs. Once a program is approved, however, the total program spending is routinely broken down into budget items and recorded using the corresponding accounting code. The accounting system allows a districts to track spending and answer questions such as how much money is spent on salaries, benefits, supplies, and services; or examine the distribution of budget allocation by district department and school building. However, it fails to link a district's spending to its focus areas and improvement strategies. It is very difficult, if not entirely impossible, to find out where money is spent in terms of those focus areas and whether spending on the improvement strategies makes a difference.

Through the online application form, cycle-based budgeting provides the missing link by enabling a district to track spending around a district's strategic planning and execution, as well as answer questions such as how much money has been spent on literacy, math intervention, discipline, or certain subgroups. Most important, it allows a district to examine the academic return on investment by looking at whether the spending has led to the intended outcomes.

Altogether, these three key features of cycle-based budgeting (similarity to grant-application, extension of zero-based budgeting, and enhancement of the existing accounting system) help create the time and space necessary for a program and initiative to be thoroughly planned, carefully implemented, closely monitored, and periodically reviewed. Clear expectations are set at the beginning and accountability is demanded at the end of the program. As a result, limited financial resources can be reallocated depending on program implementation and impact, thus making the flexible spending truly flexible.

LESSONS LEARNED

One of the key reasons for the success of this project is that it was built on existing infrastructure instead of starting something brand-new. Before this project, Jefferson County Public Schools already had a process through which department heads and school principals needed to submit budget requests for approval. This project improved that process by adding the above mentioned additional components necessary to implement the cycle-based budgeting model.

The tools developed to support the cycled-based budgeting process must be user-friendly and easy to use. From a cost-benefit perspective, the electronic budget request form is easier to fill out than the paper form used in the past; a declined budget request can be easily modified and resubmitted next year; and the finance team can monitor and track budget requests in real time. Instead of introducing additional work, the tools made things easier for the stakeholders, which led to a smooth transition.

Last but most important, leadership is crucial to the success of this project. Before the project started, both the Director of Planning and Program Evaluation and Director of Finance expressed a desire to

improve the budget request and approval process they had put in place. This project was well aligned with their vision at the very beginning. With this close alignment, this project received continuous attention and support from leaders, which helped communicate the purpose and goal of this project with the district's other top leaders and get thorny issues resolved quickly.

APPENDIX III 11 PROGRAMS TO BE REVIEWED IN 2018

Proposal	Cost Center	Budget
Health Services School Nurse Program	Physical Development and Health	\$509,301
Contractual Nursing Services	Physical Development and Health	\$290,000
Challenger Center at Academy @ Shawnee	Administration	\$95,000
Remaining Instructor III positions	Semple Elementary	\$72,140
Comprehensive Literacy Learning	Wheeler Elementary	\$65,045
Vo tech teacher for computer science	Southern High School	\$65,045
Mental Health Counselor	Portland Elementary	\$59,972
MyPath Continuation for 2016-17 School Year	Curriculum and Instruction	\$50,600
Stage One Family Theatre	Curriculum Management	\$50,000
School Nurse at Seneca	Physical Development and Health	\$39,177
Teacherpreneur JCPS VOICE	Curriculum Management	\$30,000
	Total	\$1,326,280

Table 5 \$1.3 million to be reviewed in 2018

APPENDIX IV NEW SPENDING BY TITLE I SCHOOL

Title I School	Requested	Approved	Declined	Allocated
Stuart Middle				\$999,630
Valley High School	\$566,341	\$566,341		\$951,979
Robert Frost Sixth-Grade Academy	\$10,000		\$10,000	\$912,961
Moore Traditional School	\$224,088	\$224,088		\$226,288
The Academy @ Shawnee	\$205,310	\$205,310		\$207,510
Maupin Elementary	\$104,523	\$104,523		\$206,383
Semple Elementary	\$104,490	\$104,490		\$206,350
ESL Newcomer Center	\$205,310	\$205,310		\$205,310
Thomas Jefferson Middle	\$195,135	\$195,135		\$197,335
Portland Elementary	\$92,618	\$92,618		\$194,478
Roosevelt-Perry Elementary	\$137,218	\$72,173	\$65,045	\$174,033
Atkinson Academy	\$168,120	\$168,120		\$168,120
Western Middle	\$144,346	\$144,346		\$146,546
Seneca High	\$154,125	\$72,173	\$81,952	\$111,350
Doss High	\$108,770	\$108,770		\$108,770
Jacob Elementary				\$101,860
Westport Middle School	\$339,542	\$74,795	\$264,747	\$76,995
Layne Elementary	\$132,090	\$66,045	\$66,045	\$66,045
Southern High School	\$65,045	\$65,045		\$65,045
Minors Lane Elementary	\$64,700	\$64,700		\$64,700
Byck Elementary	\$58,972	\$58,972		\$58,972
Rangeland Elementary	\$53,164	\$53,164		\$53,164
Cochran Elementary	\$40,976	\$40,976		\$40,976
Lassiter Middle School	\$55,972	\$32,522	\$23,450	\$34,722
Price Elementary	\$171,072	\$33,850	\$137,222	\$33,850
Indian Trail Elementary	\$32,522	\$32,522		\$32,522
Okolona Elementary School	\$32,350	\$32,350		\$32,350
Gilmore Lane Elementary	\$32,350	\$32,350		\$32,350
Wilkerson Elementary	\$32,350	\$32,350		\$32,350
Luhr Elementary	\$32,350	\$32,350		\$32,350
Mcferran Preparatory Academy	\$32,350	\$32,350		\$32,350
Blue Lick Elementary	\$94,531	\$29,486	\$65,045	\$29,486
Liberty High School				\$2,200
Newburg Middle School	\$47,068		\$47,068	\$2,200
Farnsley Middle				\$2,200
Waggener High School				\$2,200
Breckinridge Metropolitan School	\$66,396		\$66,396	\$2,200
Waggener High School				\$2,200
Conway Middle School				\$2,200
Carrithers Middle School				\$2,200
The Phoenix School of Discovery				\$2,200
Frederick Law Olmsted Academy North				\$2,200
Frederick Law Olmsted Academy South				\$2,200

Camp Taylor Elementary		
Cane Run Elementary		
Fairdale Elementary School	\$32,350	\$32,350
Greenwood Elementary School		
Waller-Williams Environmental		
Breckinridge Franklin Elementary		
G. Chaffee TAPP/South Park		
Fairdale High School		
Kenwood Elementary		
Coral Ridge Elementary	\$32,350	\$32,350
Goldsmith Elementary	\$19,000	\$19,000
Watson Lane Elementary		
Stonestreet Elementary	\$7,805	\$7,805
Watterson Elementary	\$47,019	\$47,019
Zachary Taylor Elementary		
Kerrick Elementary School	\$4,553	\$4,553
Dixie Elementary		
Cochrane Elementary	\$65,045	\$65,045
Western High School	\$97,000	\$97,000
Sanders Elementary		
Crums Lane Elementary	\$6,000	\$6,000
Shacklette Elementary	\$26,018	\$26,018
Slaughter Elementary		
Trunnell Elementary		
Johnsontown Road Elementary	\$32,350	\$32,350
Gutermuth Elementary		
Wellington Elementary		
Wilt Elementary		
Hartstern Elementary		
Auburndale Elementary School	\$49,434	\$49,434
Klondike Elementary	\$119,045	\$119,045
Mill Creek Elementary		
Blake Elementary		
Knight Middle School		
Central High School		
Wheatley Elementary		
Mary Jo and William MacDonald Maryhurst Academy		
Bellewood Children's Home		
Brooklawn		
Engelhard Elementary		
Foster Traditional Academy		
Frayser Elementary		
Hazelwood Elementary School		
Iroquois High		
Young Elementary	\$8,110	\$8,110
King Elementary		

Rutherford Elementary				
Shelby Traditional Academy				
Coleridge-Taylor Elementary				
Kennedy Elementary Montessori	\$31,222		\$31,222	
Home of the Innocents Discovery				
Westport TAPP				
Total	\$4,381,495	\$2,977,224	\$1,404,271	\$5,861,330

Table 6 2016-17 budget request, approval, and allocation by Title I school