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COMPETITIVE PREFERENCE PRIORITIES

(7) SUPPORTING COLLEGE ACCESS AND SUCCESS

The extraordinary success of the Edwards Middle School in dramatically raising student achievement in ELA, math and science through eighth grade and increasing student engagement in school through its comprehensive enrichment programming demonstrates the impact the TILT model can have on preparing students for rigorous high school work and access to and success in college. Though the TILT model will primarily target students in middle grades, research has shown that “the level of academic achievement that students attain by eighth grade has a larger impact on their college and career readiness by the time they graduate from high school than anything that happens academically in high school” (ACT, 2008). In addition to significantly increasing students’ academic preparation and prospects for high school completion, the TILT model provides schools with the additional time they need to implement practices that build the study skills, expectations and awareness needed for college attainment including:

- 1) *Organizational and self-management skills:* With more time, TILT schools can support the development of time and task management, note taking, and follow-through skills that are critical to educational success.
- 2) *Culture of high expectations and accountability:* TILT schools build students’ self-expectations and sense of self-efficacy, key determinants of future educational attainment, by engaging students in setting goals and monitoring their own progress.
- 3) *College-focused enrichments:* Through enrichment classes, students in TILT schools can visit college campuses, become familiar with college affordability and application processes, and interact with college students who may serve as mentors or teachers.

(8) ADDRESSING THE UNIQUE LEARNING NEEDS OF STUDENTS WITH DISABILITIES (SWD) AND LIMITED ENGLISH PROFICIENT (LEP) STUDENTS

Concentrated in urban and low-income areas, schools selected to participate in the TILT project will have large populations of SWD and LEP students, who have been shown to benefit from increased learning time. A recent study of student outcomes at KIPP Academy Lynn, whose school day is 50 percent longer than traditional public schools in the area, reported that LEP and SWD students showed dramatic academic progress (Angrist, et al, 2010). As a result of their longer school day, Edwards Middle School have benefitted from several strategies to address the unique learning needs of SWD and LEP students that are not as accessible to schools with a more traditional school schedule. These strategies will be replicated as part of the TILT model in schools selected to participate in this project, including:

- Weekly scheduled time during the school day for teachers to collaborate with special education teachers and LEP specialists to examine student data, create individual work plans, and adapt and modify curriculum as necessary.
- Quadruple-dosing of individual and small group tiered interventions that target students' specific skill deficits, based on the analysis of interim and formative assessments:
 - An emphasis on differentiated instruction and hands-on, experiential learning opportunities during core academic classes that is critical for students who are particularly struggling to grasp basic concepts;
 - Daily “Academic Leagues” which provide small group instruction to students grouped by specific academic need. League placement is adjusted as progress is shown;
 - Twice a week during scheduled enrichment programming, students receive additional support in ELA, language acquisition, or math instruction by specialists, precluding the need for students to be pulled-out of core academic classes; and

- Students who are still struggling despite these daily multiples doses of support are targeted for two “Acceleration Academies,” week-long, intensive small group academic classes taught by the strongest teachers from in and beyond the district during school vacations.

Evidence from the Edwards Middle School is encouraging about the potential of TILT schools to dramatically improve outcomes for SWD and LEP students. Among LEP students (27 percent of the student body at the Edwards), rates of proficiency have soared. Last year, Edwards LEP students achieved a 36 percent proficiency rate in ELA and a 33 percent proficiency rate in math. Particularly impressive are the gains made by eighth grade students. Eighth grade LEP students reached a 58 percent proficiency rate in ELA, more than twice the rate for LEP students across the state (23 percent) and up from 0 percent the year before the school implemented more learning time. In math, the gains were also impressive: 63 percent proficient compared to a state average of 14 percent and an Edwards pre-conversion rate of 15 percent. Among special education students (32 percent of the school) the Edwards also experienced significant gains in comparison to the year prior to additional time. Edwards special education students reached a 25 percent proficiency rate in ELA and a 15 percent proficiency rate in math, up from 10 percent and 2 percent, respectively, in the year before the school implemented more learning time. The eighth grade special education students’ proficiency rates increased from 14 percent to 31 percent proficient in ELA and from 3 percent to 28 percent in math. Using the state’s growth measure, which compares each student to those with similar prior test score histories, LEP students at Edwards achieved a median student growth percentile of 66 in ELA and 58 in math, among the highest in the state (*see Appendix J for Edwards data graphs*).

PROPOSAL NARRATIVE

The Boston Public Schools (BPS), in partnership with the National Center on Time & Learning (NCTL), requests \$3 million for the **Turnaround with Increased Learning Time (TILT)** project, an (i3) Development grant under Absolute Priority 4: *Innovations that Turn Around Persistently Low-Performing Schools; (a) targeted approaches to reform*. This proposal puts forward a plan to replicate and codify the extraordinarily successful turnaround, fueled by increased learning time, of Boston's Edwards Middle School. The same people and entities that authored the success at the Edwards will bring this model to bear in two more Boston middle schools with the support of an i3 grant. This effort will catalyze school turnaround and the rapid acceleration of achievement for 1000 Boston students per year, further refine the most effective strategies for significantly increasing learning time to close achievement and opportunity gaps in the middle grades, broadly disseminate lessons learned throughout the education field, and develop the model so it can be implemented cost effectively at a large scale.

A. Need for the Project

A(1) AN EXCEPTIONAL APPROACH TO THE CHALLENGE OF SCHOOL TURNAROUND

The TILT Model—An Exceptional Approach to Harnessing Increased Learning Time to School Turnaround

Significantly more time for students and teachers is at the core of the TILT model and is what distinguishes it from other school turnaround efforts. When implemented correctly, increased learning time can be a foundational strategy for persistently low-performing schools to accelerate student achievement and narrow or even eliminate chronic achievement gaps among groups of students separated by socioeconomic, demographic, language, and disability characteristics. By partnering with NCTL, the leading organization in the field of expanded learning time on a project that seeks to harness the power of time to school turnaround, BPS promises to further refine and address the current shortage of effective, time-centric school

reform models. Based on years of lessons learned through their direct work with and deep study of schools across the country, NCTL has well documented that expanded time schools that are most successful in closing achievement gaps implement increased learning time as part of a coherent strategy that includes strong instructional leadership, more intensive and purposeful use of data, and efforts to improve teacher effectiveness.

TILT schools undergo a rigorous and comprehensive planning process, supported by NCTL, to redesign their entire school day from the bottom up, to add 300 hours more per year, translating to nearly two hours of additional instructional time per day for ALL students (*see Appendix J for Edwards schedule pre vs. post ELT*). The additional time is balanced between three priorities: more time for high quality academic instruction focused on specific student needs; more time for enrichment programming that has often been stripped from the school day; and more time for teachers to collaborate in order to improve instruction and address student learning needs. This three-pronged approach to adding significantly more time enables schools to increase teacher effectiveness, provide individualized instruction and offer a curriculum that engages and prepares students for success in the 21st century global economy. Based on the success of the Edwards, the rationale and approach for these three main components of the TILT model follows:

1. More time for core academics and a differentiated, data-driven approach to instruction and individualized support for all students. In underperforming schools, teachers need additional time to address skill and knowledge deficits. More time for high-quality academic instruction and individualized academic support is essential to help struggling students reach proficiency. TILT Schools implement plans that increase instructional time for all core subjects by creating longer math and/or ELA blocks, emphasizing the important subjects of science and

social studies which are often sacrificed when greater weight is placed on the math and ELA, and providing effective academic support classes that target individual student needs. Two of the major innovations created by the Edwards to rapidly accelerate academic performance are **Academic Leagues** and **Acceleration Academies**. Academic Leagues are in-school intervention classes that meet for four hours every week. All students participate in Academic Leagues and are assigned to leagues based on their most pressing academic needs and to a teacher who has been selected for his/her matching strengths. Class size in Academic Leagues is half the size of core classes and teachers closely monitor students' progress through frequent assessments. As students show academic progress, their League placement is adjusted accordingly. Acceleration Academies occur during the February and April school vacation weeks and target the students who are poised for improvement but need an additional dose of academic instruction that is tailored to their specific needs. Acceleration Academies provide intense small group classes and are staffed by a cadre of teachers from within and beyond the district who are recruited based on their outstanding track records.

As described in detail in Competitive Preference Priorities, the TILT Model will also serve the needs of LEP and SWD students by providing the additional targeted support and differentiated instruction that is especially critical for these students. With Academic Leagues and the ability to triple and quadruple dose if necessary with Acceleration Academies or additional academic enrichment blocks, the TILT schools have the flexibility to provide additional learning time for these students while never pulling them from core academic classes.

2. More time for teachers to collaborate in order to improve their effectiveness and instructional quality. Teacher quality is the most important school-related factor influencing student achievement (Rivkin, Hanushek & Kain, 2005; Sanders & Rivers, 1996; Wayne and

Youngs, 2003). Although teacher performance improves with collaborative planning and professional development, the conventional school calendar does not allow sufficient time for teachers to engage in these activities. In expanded time schools, by contrast, teachers meet to discuss student work, provide and receive feedback on pedagogical practices, and participate in instructional coaching to improve teaching methods. When implemented effectively, this time has a tremendous impact on teaching quality, and subsequently, student outcomes. TILT schools build opportunities for teachers to meet by grade-level or subject-area several times a week into their schedule. In addition, the full faculty, including representatives from key partnering organizations, meets at least twice per month to work on professional development. Each time teachers meet, either in small teams or school-wide, they work on one of these strategies: Using learning time effectively to individualize instruction and provide engaging enrichment programming; Analyzing student data and work to identify which students need specific tiered interventions, the focus of the interventions, how students should be grouped, and how to adjust instruction and curriculum; Building teacher expertise in content and instructional strategies by using peer observations and model lessons related to the school's instructional focus; and Communicating across teams and the school community including publicly sharing data to highlight successes and ongoing areas of need. NCTL works with schools to ensure that all teacher time is well-planned, highly structured, and coordinated across all grade levels and teacher teams.

3. More time allows for robust enrichment programs and partnerships. Time spent on science, social studies, art, music and physical education in the nation's elementary schools has decreased by one-third since the 2002 No Child Left Behind legislation catalyzed an intense focus on ELA and math (McMurrer, 2008). Yet as the ability to innovate becomes a key attribute

of success in the global economy, American young people need scientific knowledge, awareness of social and historical context, and the ability to problem solve, think creatively, and work in teams. With more time, schools can engage students in inquiry-based science and social studies in addition to athletics, art and music. Increasing learning time also enables schools to offer an array of enrichment programming that is connected to state standards, builds student skills and interests, and deepens student engagement. Moreover, by offering students opportunities that appeal to their diverse skills and interests, expanded time schools can increase student engagement and ultimately reverse high drop-out and failure rates. Students at TILT schools have the opportunity to choose from several electives per year from a menu of options developed through student and teacher input. Enrichment programming will focus on building student mastery by offering a progression of classes that culminates in a project exhibit or performance in front of the larger school community. Electives are be taught by school teachers and specialists from partnering community-based organizations. Partnerships play an important role at TILT schools and range in size and scope from smaller, locally-based organizations that can provide high quality, unique elective programming to larger, more national organizations that can serve large numbers of students at one time.

This strategic combination of more time for core academics, more time for enrichment programs, and a deep focus on strengthening instruction has had a powerful effect on the success of the middle grade students as evidenced by the Edwards in increasing the academic achievement of students across all grades and subgroups (*see Competitive Preference Priorities, A(3), Appendix C and D*). Research has shown the importance of eighth grade achievement as an indicator of college and career readiness (ACT, 2008). Therefore by improving the academic achievement and engagement at the middle grades, TILT will ultimately result in higher high school

graduation rates for students from participating schools. Additionally interviews with graduates of Edwards when they are in high school have shown that the culture of high expectations and enrichment programs at Edwards prepared them for the wide-range of opportunities at high school and the hard work necessary for academic success.

A(2) LACK OF EFFECTIVE INCREASED LEARNING TIME STRATEGIES IN SCHOOL TURNAROUND EFFORTS

For nearly three decades, educators and government leaders have called for significant reform to the nation's school calendar. Two seminal reports on American education, *A Nation at Risk* in 1983, and *Prisoners of Time* issued in 1994 by the National Education Commission on Time and Learning called for an increase in learning time in our nation's schools. More recently, President Obama and Secretary of Education Arne Duncan have echoed this call for change, highlighting increased learning time as a core strategy for turning around persistently low-performing schools. USED guidelines for several ARRA grant programs including Race to the Top, i3, and the Title I School Improvement Grant (SIG) program, now require "increased learning time" as a component of the Transformation and Turnaround SIG models. Further, these two reform models have been by far the most popular options selected by the first round SIG grantees, resulting in as many as 1,150 schools in the 2010-2011 school year mandated to increase learning time for students (Hurlburt, 2011).

SIG schools' requirement to add time combined with a growing recognition that time is an essential component of school reform efforts, has created an unprecedented wave of district public schools in need of proven well-documented models that effectively add learning time. In response, policymakers and education leaders across the country are already considering opportunities to lengthen their school day and/or year. Increased learning time by itself will not necessarily improve student performance and there is a risk that schools will simply tack on

small amounts of time to their schedules without the thoughtful and strategic planning that is necessary for successful implementation of an expanded school day. Now more than ever, educators need proven models and approaches for how to transform schools by leveraging additional time for learning, particularly strategies to convert existing schools and empower existing teachers to take advantage of more learning time. The successful transformation of the Edwards, which serves as the model for TILT project, occurred under similar circumstances, has the potential to serve as a blueprint for districts across the country, and is deserving of more systematic study.

The Unmet Need for Struggling Students in the Middle Grades

The need for bold turnarounds as exemplified by the Edwards is particularly acute at the middle school level. Neither BPS nor any other urban district can achieve our ambitious goals for students to graduate college ready if we cannot reverse the documented and troubling slide that typically occurs in the middle grades. Middle schools' persistent problems with behavior, teen alienation, disengagement, and low achievement have led their being labeled “the Bermuda Triangle of education” (Juvonen et al, 2004). Problems in the middle grades have lasting consequences, and as yet few American middle schools offer the personal support and academic rigor that best predict student success. Because the middle grades serve as the critical inflection point between elementary school preparation and high school success, BPS seeks this grant to further demonstrate the effectiveness of a middle school model that uses significantly more learning time to catalyze school turnaround, accelerate academic performance gains and more deeply engage students in a more well-rounded education.

A(3) EDWARDS MIDDLE SCHOOL—A POWERFUL PROOF POINT FOR THE TILT PROJECT

The TILT model incorporates the key elements of success at BPS's Edwards Middle School, which has shown that significantly more learning time, steered well by data and

delivered well by effective teachers, can catalyze rapid acceleration of student academic performance and eliminate achievement and opportunity gaps. Just a few years ago, the Edwards was on the verge of being shut down. The long-struggling school had among the lowest math scores of any middle school in the city and the school's enrollment was dwindling as even neighboring families chose to send their children elsewhere. Faculty and student morale was low, and family engagement was almost non-existent. Like other middle schools in Boston, students left the building at 1:30 p.m. every day.

In the fall of 2006, Edwards became one of the pioneering Massachusetts public schools taking part in the Massachusetts Expanded Learning Time Initiative, a competitive grant program that challenges participating schools to redesign and expand their school day for all students. Though the Edwards had previously taken some essential reform actions, the inflection point in the Edwards' dramatic turnaround can be tied directly to the moment it re-opened its doors with a brand new school day rebuilt from the ground up to include 300 more hours of learning and personalized instruction per year. With an expanded school day, the Edwards has added time for science and social studies instruction every day and boasts a daily hour of enrichment, with offerings that rival those at elite private schools, including a band, a football team, a renowned theater program, and student apprenticeships with Google and MIT. In just three years, the school went from dwindling enrollment to the city's most over-selected middle school.

Today, the Edwards has risen to become one of the highest performing middle schools in Boston, dramatically narrowing and even eliminating achievement gaps for its disadvantaged students. From a starting point of the lowest math scores of any middle school in the city, with just 12-15 percent of its students in any grade scoring proficient on state standardized test, the

Edwards test scores have soared by as much as two to three-fold, with impressive growth by all subgroups of students in ELA, math, and science. Since expanding their school day in fall 2006, Edwards has increased the percentage of students achieving proficiency by 25 percentage points in English Language Arts and by 29 percentage points in math. Particularly impressive are the gains made by students who have benefitted from three years of expanded learning time: the Edwards has entirely closed the eighth grade achievement gap with the state in math and dramatically narrowed the gap in English Language Arts (ELA) and science. By looking at subgroup data, it is clear that Edwards is making gains for all students. In only three years after expanding learning time, Edwards improved proficiency rates in English for limited English proficient students and Latino students by more than 30 percentage points, low-income students by more than 20 percentage points, and by more than 10 points for African American students and SWD. In math the results are similarly impressive with low-income and Latino students improving by more than 30 percentage points, African American students improving by 25 points, and SWD and limited English proficient students improving by over 10 points each. In addition, preliminary 2011 data is even stronger, further evidence that the TILT model is accelerating achievement of all students served (*see Appendix J for Edwards data graphs*).

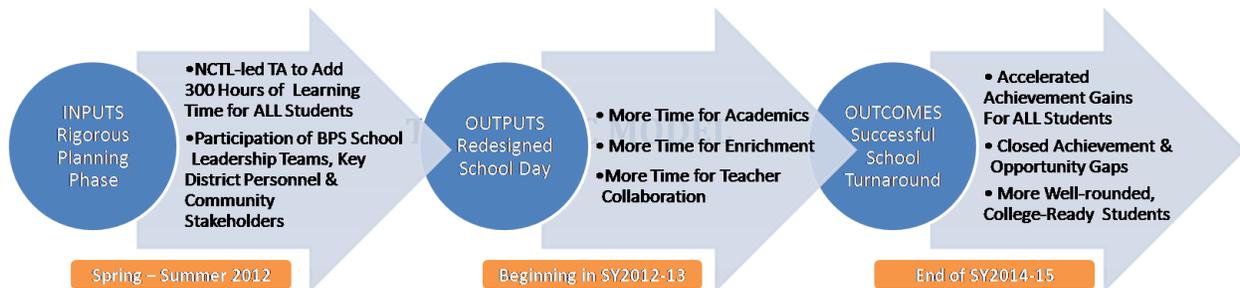
The Edwards has achieved these results despite an extremely challenging student demographic: 90 percent low-income; 30 percent special education; and 27 percent limited English proficiency. The findings presented above, especially the large effect sizes found in the comparison study (*see Appendix D for a comprehensive study of the impact of the expanded school day at the Edwards*), suggest that the Edwards-based TILT model has very positive effects on student achievement, student growth and in closing achievement gaps. With NCTL's technical assistance, the new TILT schools are likely to experience similar results.

B. Quality of the Project Design

B(1) PROJECT GOALS, OBJECTIVES, STRATEGIES, AND OUTCOMES

The goal of this project is to further develop and test the innovative expanded learning time practices piloted at the Edwards Middle School in order to inform school turnaround efforts in Boston and beyond. To accomplish this, the TILT project has three primary objectives, each with a corresponding set of strategies and desired outcomes.

Objective 1: *Successful implementation of the TILT model at two additional Boston Public Middle Schools in order to accelerate school turnaround and student achievement. A total of approximately 1,000 high-need students per year in low-performing schools will directly benefit. An i3 grant would support: 1) a planning phase to begin in spring 2012 and continue through the summer; and 2) three years of implementation of an expanded school day beginning in fall 2012.*



Objective 1 Strategies: Participating schools will be supported with expert guidance and a comprehensive program of technical assistance designed and led by NCTL. Primary strategies include:

Competitive School Selection Process. As a result of the Edwards’ demonstrated success, in 2009 all other district middle schools in Boston petitioned to become expanded learning time schools. Because of this high demand, if funded, BPS will institute a competitive process to determine which schools will participate in the TILT project. The criteria that we will use to select interested middle schools include: 1) NCLB accountability status that meets the i3 requirement

of persistently low-performing schools; 2) strong school-wide and community interest in and capacity to significantly increase learning time; and 3) results-oriented school leadership that has a recent track record of effectively implementing focused school improvement efforts. All selected schools will have high levels of minority students, English language learners, and student bodies that are at least 75 percent low-income. This process will be led by TILT Project Director and BPS Chief Innovation Officer Jeff Riley with support from NCTL.

Comprehensive Planning Phase. Each school will assemble an Instructional Leadership Team that will lead the school’s redesign process, including the principal, lead teachers, union leaders, key school staff, and representatives from community stakeholders critical to the school’s turnaround efforts. NCTL works closely with this team building their capacity to make key decisions about TILT implementation and drive the transformation of the school from within. NCTL’s technical assistance consists of monthly day-long leadership sessions for school teams and weekly support from NCTL and district coaches. NCTL shares case studies, videos, school profiles and other tools to help schools shape plans for the longer school day and years and is broken down into four main components:

(1) Needs Analysis	Identify and prioritize goals for student and instructional improvements based on analysis of student data and how effectively time is used across the school and within classrooms using NCTL’s Effective Time Use Audit tools.
(2) Sharing of Best Practices & Lessons Learned	Introduce specific strategies that the Edwards utilizes including: <ul style="list-style-type: none"> • Tools to maximize instructional time & minimize non-instructional time • Creating time for effective teacher collaboration • Academic Leagues & Acceleration Academies • Integrating outside partners • Resource allocation & staffing decisions
(3) Building a Schedule	Create a schedule that aligns with student needs, adding 300 hours of more time for core academics, enrichment programming, and teacher collaboration.
(4) Moving Towards Opening Day	Develop final plans for additional academic support blocks, design enrichment, and create plans for teacher collaboration time. Address operational issues including transportation, final budget details, and food service.

Execution of an Expanded School Day. Beginning in school year 2012-13, each participating middle school will implement deep change in the three dimensions of the TILT model. While implementation will require the coordinated effort of all staff members and partners, the school's Instructional Leadership Team and an NCTL TILT Director will be the primary organizing forces behind implementation. The Instructional Leadership Team meets biweekly to ensure that all learning time is being well spent and that the elements of TILT are being well executed:

- *More Time for Core Academics.* As detailed in section A(1), TILT schools will implement plans that increase instructional time for all core subjects. In addition, the effective execution of Academic Leagues and Acceleration Academies will require guidance from the Instructional Leadership Team and NCTL to ensure they are carried out across all teams of teachers and any necessary partner staff.
- *More Time for Teacher Collaboration.* Successful implementation of TILT will include collaborative approaches to improving instruction such as instructional rounds, peer observation, and model lessons. Organized by the Instructional Leadership Team, this work will be focused on a small set of instructional priorities that all staff will work on together. With more time for collaboration, teacher teams will also be able to execute short term data cycles where they assess students; identify students who need re-teaching or targeted support; provide small group, center-based support, or intensive remediation; and then re-assess to see if the interventions were successful.
- *More Time for Enrichment Programming.* Enrichment programming designed to build transferable skills and nurture talents beyond reading, writing, and arithmetic will be embedded into the school day for each child. Students will have the opportunity to choose from several electives per year that build mastery by offering a progression of classes that

culminates in a project exhibit or performance in front of the larger school community.

Electives will be taught by school teachers and specialists from partnering community-based organizations.

Ongoing Monitoring and Refining. During the subsequent two years of implementation, NCTL's technical assistance supports the Instructional Leadership Team in refining and improving how their redesign plan is being implemented across the school, ensuring that increased learning time meets its full potential to drive school improvement. While the structure of the TA will remain consistent over project span, the content will be adapted based on the specific needs of the schools and the overall intensity of services will decline as schools improve and build the capacity to manage the improvement effort. Throughout the process, NCTL also provides TA at the district level which focuses on securing the labor, budget, and operational flexibilities necessary to implement TILT as well as identifying the federal, state, and local funding to support its sustainability.

Objective 1 Outcomes: As the Edwards School has done, the TILT schools will create Performance Agreements that clearly and publicly state their school-wide goals in academic achievement, student engagement, and teacher collaboration and instructional improvement. These Performance Agreements will be created in collaboration with NCTL and include ambitious outcome and implementation benchmarks that will be reviewed and reported on regularly as part of a Dashboard Monitoring Process (*see section D(1)*). All TILT schools will include and achieve the following outcomes by the end of year three of implementation: (1) achievement gaps in the exit grades between students in participating schools and students statewide, will be reduced by at least by 75 percent or entirely closed in ELA, math and science; (2) all students will be engaged in daily enrichment activities; (3) student efficacy and

engagement in schools will be increased by 50 percent over baseline data as reported using a nationally recognized survey instrument; (4) teachers will report greater job satisfaction and effectiveness in meeting students' needs; and (5) enrollment will rise as they become schools families desire, attendance will improve, and student disciplinary incidents will decline.

Objective 2: *Further refine and develop alternative resource allocation, scheduling, and staffing strategies to sustain the expanded school day beyond the i3 grant.*

Objective 2 Strategies: A component of NCTL's ongoing support will be to assist participating schools to rethink how to allocate resources and schedule staff to support their expanded school days more cost effectively. Currently the Edwards staggers the schedules of a subset of staff in order to accommodate veteran teachers who are unable to work the entire expanded school day. Building on this strategy, BPS and NCTL will work during the initial years of implementation to create a comprehensive resource allocation, staffing, and scheduling approach that will result in the ability to sustain the TILT model with only nominal additional costs. Utilizing such strategies as staggering the schedules of all staff both during the day and over the course of the year, creating staffing flexibility by hiring staff that can play multiple roles, utilizing community partnerships, and incorporating technology-based blended learning opportunities into the school day, schools will become less dependent on additional funding to support the increased learning time.

Objective 2 Outcomes: As a result of these strategies for cost effectively increasing learning time, by school year 2015-2016, participating schools will be able to maintain their expanded and redesigned schedules by using nominal additional funds to be supplied by the district.

Objective 3: *Investigate and document TILT effective practices and lessons learned to inform continuous improvement efforts and disseminate findings to the broader education field to ensure*

the national movement to increase learning time is informed by a deep understanding of “what works.”

Objective 3 Strategies: NCTL is the acknowledged leader in the field of increased learning time and currently reaches large education audiences through a variety of mechanisms. As part of ongoing national studies of expanded time schools, they will probe the experiences, challenges and early successes of TILT schools supported through this grant through site visits, interviews with principals, teachers and students, as well as classroom observations. NCTL will create videos, case studies, briefings, sample schedules, recorded webinars on specific topics, and Powerpoint presentations. NCTL will disseminate their findings through their website, its partnerships with national organizations, such as West Ed, that support substantial networks of districts and schools, journal submissions, op-ed pieces, book chapters, conferences, online resources and e-communications as well as periodically convening researchers and educators.

Objective 3 Outcomes: By the end of the third year of implementation of an expanded school day, NCTL will have created a range of highly accessible knowledge capture products on the TILT schools that feature specific programs, design features, and effective instructional approaches. Further, hundreds of districts and schools across the country will have gained access to and taken advantage of detailed blueprints and implementation tools for adopting the TILT model. The products will showcase how these schools use additional time to boost student achievement and engagement in learning, use data to improve instruction, and improve the effectiveness of leadership and teachers through intensive professional development.

B(2) PROJECT COSTS, NUMBERS OF STUDENTS TO BE SERVED, SCALING ESTIMATES

This project will directly serve approximately 1,000 BPS students per year over three years of implementation and will potentially impact far more students because of dissemination

activities described in section B(1). The cost of this proposed project, including matching funds, is \$3.45 million, including an annual operating cost of approximately \$985 per student per year and start up costs of \$25,000 (to support the planning phase) and total project evaluation costs of \$300,000. Based on the national average annual per pupil expenditure of about \$10,440 and a TILT cost at scale of approximately 6 percent more, TILT replication for 100,000 students costs \$62.6 million annually; 250,000 students is \$156.6 million annually; and 500,000 students is \$313.2 million annually. Start-up costs are estimated to be \$12,500 per school, thus at an average of 500 students per school, reaching 100,000 students, 250,000 students and 500,000 students would require, respectively, \$2.5 million, \$6.25 million, and \$12.5 million of one-time costs.

B(3) COSTS REASONABLE GIVEN THE EXPECTED GAINS IN STUDENT ACHIEVEMENT

Based on our experience we estimate the cost of implementing the longer school day and year to be an additional 6 percent of the average per pupil spending in a district for 30% more time. At the Edwards, this can be broken down to an hourly cost of less than \$4 per student for individualized support in academics, engaging enrichment activities, and for teachers to meet and improve their trade, a relatively reasonable amount given the extraordinary academic gains Edwards students made since the school converted to an expanded day. Further, as a result of the school's success and unique offerings for an urban middle school, enrollment at the Edwards has surged, resulting in recaptured per pupil state dollars that the school had lost during their years of decline.

Comparatively, according to the Out of School-Time Finance Project, the average hourly cost of a traditional after school program is over \$7 per student and often does not include a curricular design aligned to students' academic needs nor one that also supports teachers (Grossman, et al, 2009).

B(4) BPS AND NCTL COMMITTED TO INCREASED LEARNING TIME AS A CORE STRATEGY FOR SCHOOL REFORM

BPS's five-year Acceleration Agenda explicitly incorporates turnarounds and increased learning time in the core set of strategies, and the district has made important strides in both of these areas. Last year BSP successfully negotiated for increased learning time at all of the district's turnaround schools and are currently working with NCTL to further study and refine its implementation in an effort to spread the effective practices district-wide. If the TILT model continues to prove effective, BPS is committed to the model as a long-term strategy for turning around persistently low-performing schools and to increasing learning time widely to ensure schools have the time to help all students succeed. Further, this project is led and championed by Jeff Riley, whose success in turning around the Edwards in his role as principal has led to his promotion first as Deputy Superintendent overseeing all of the districts middle and k-8 schools, to his current role as Chief Innovation Officer. His firsthand knowledge of the strategies that catapulted the Edwards to one of the district's highest performing schools combined with his current charge of scaling up effective practices district-wide, further ensures that the TILT model, if warranted, will be more widely adopted.

The TILT project enjoys deep stakeholder support as evidenced by the enclosed letters in from the state and city leaders and has established a base for long-term sustainability and success (*see Appendix G for letters of Support*). BPS anticipates sustaining and growing its use of increased time, relying on expanding support at the federal, state and local levels. On the federal front, SIG funding is a new long-term source of support and draft proposals for reauthorization of the Elementary and Secondary Education Act include other federal funding streams as does the TIME Act, which was recently filed in Congress. At the state level, even in an extraordinarily difficult budget environment, Massachusetts has maintained its budgetary support for expanded

learning time at the Edwards and 18 other schools across the state. Further, NCTL is actively working with state leaders to permanently embed financing for increased time in the state's core funding formula. Finally, a major component of the TILT project is to refine and develop alternative resource allocation, scheduling, and staffing strategies to sustain the expanded school day beyond the i3 grant. With support from NCTL, effective strategies will accompany any future efforts in the district to expand learning time.

C. Quality of the Project Evaluation

C(1) AND C(2) AIR EVALUATION PLAN TO ASSESS PROGRAM IMPACT AND FACILITATE FURTHER REPLICATION

American Institutes for Research (AIR) will conduct a rigorous external evaluation of the TILT project in participating Boston schools to assess: (a) the fidelity of implementation as well as the facilitating factors and challenges to implementation and (b) the impact of the program on academic and non-academic student outcomes. The district's process for selecting participating schools precludes a randomized control trial design, yet it is important that the evaluation yield strong results as the district must know the extent to which the Edwards model can be replicated successfully. To this end, the evaluation will employ a comparative interrupted time series design to examine the effectiveness of the intervention. This approach and its robustness to threats to internal validity are described in more detail below.

Evaluation Purpose. The evaluation will be designed to track each component of the logic model (*see B(1) page 13*). As such the evaluation will be designed to answer the following research questions (1) *Inputs*: To what extent are the schools receiving technical assistance to strengthen teacher and school leader effectiveness, use data to drive continuous improvement and strengthen core instruction, and create and implement a plan for increased learning time?; (2) *Outputs*: Has additional time been added to the school day? To what extent is this time being

used for core academic instruction, enrichment programs, and teacher collaboration?;

(3)*Outcomes*: Does implementation of the TILT model lead to greater academic achievement and student engagement?

Sample. As has been described above, two schools will be carefully selected by BPS based on a set of well articulated criteria, including NCLB accountability status, school and community capacity to implement the model, and strong school leadership. Using the same criteria, the evaluation team will select two comparison schools that will not implement the model that look as similar as possible to the two treatment schools. Input, output, and outcome data will be collected in both treatment and comparison schools as a part of the evaluation. Collecting both implementation data (information on program inputs and outputs) and outcome data will allow the evaluation to not only determine the extent to which the TILT schools increase student achievement, but also have a clear understanding of how TILT schools differ from other, similar BPS middle schools and thereby understand the critical components associated with any observed program effect.

Measuring Implementation Fidelity. AIR will examine program implementation to (1) provide periodic formative feedback to BPS and partner organizations and (2) describe the implementation process to enable future replication and scale-up or testing in other settings. AIR will collect implementation data via a teacher survey, administered once per year, site visits conducted twice per year, and a document review. The teacher survey will be used to gather information on the extent to which elements of the program as described in section A(1) (e.g., collaborative planning time, data driven approaches) are being implemented. Site visits will allow researchers to gather in-depth information about program implementation with data collected through principal, key administrator, and coach interviews, teacher focus groups, and

classroom observations. Interview and observation protocols will focus on documenting *how* staff members implement key components of the program, and what factors support or impede their ability to do so. Finally, the document review will involve collecting and reviewing documents related to program implementation, including the school schedule, policies and procedures related to teacher collaboration, data use, school leadership team, professional development, and academic and enrichment programming. School schedules will be used to calculate the length of the school day as well as the amount of time set aside for core academic instruction, enrichment programs, and teacher collaboration.

The teacher survey data will be analyzed to generate descriptive statistics about the extent to which key elements of the program are implemented at each school and the level of buy-in among all new teachers and those who taught in the school prior to the program. Site visit data and documents will be coded according to specific themes, and a team of analysts will use a consensual qualitative research (CQR) method to identify recurring themes and patterns across all three sources of data.

Measuring Impact on Student Outcomes. Ultimately the goal of the TILT school reform model is achievement for all students, decrease the achievement gap, and improve students' engagement in school by providing well rounded learning opportunities. Academic and non-academic data will be provided by BPS for individual students in both the program and comparison schools. Academic measures will include MCAS raw scores in ELA and math at Grade 5 (baseline), Grades, 6, 7, and 8 and for Grades 5 and 8 in science. Formative assessment data also will be provided using district-wide benchmark assessments. Non-academic measures to be provided by BPS include both attendance and disciplinary actions. AIR will administer a nationally-benchmarked student level survey at baseline and at the end of Years 1 and 3 of

implementation to both program and comparison students to measure student engagement. With the exception of the student survey data (which will be analyzed using a difference-in-difference approach), data for all outcome measures from at least three years prior to the implementation of the TILT program and each year following implementation in both program and comparison schools for the interrupted time series analysis.

The time series data will allow AIR to evaluate student outcomes using an interrupted time series design (ITS). ITS is one of the strongest quasi-experimental designs when a comparison or control series can be constructed (Shaddish, Cook, & Campbell, 2002). In such a design, the program effects are identified by comparing changes in the outcomes of one group over time to changes in the outcomes of another (comparison) group over the same time period. This design thus relies on two sources of variation to inform the analyses: comparisons across individuals and comparisons over time. This combination supports more robust impact estimates than a design that only relies on change over time (the standard interrupted time series framework) or on comparisons across individuals (such as a propensity score analysis).

The analysis will compare the outcome trends in TILT schools in the years preceding program implementation to outcome trends in the years following program implementation to determine: (1) the extent to which there is a sharp discontinuity in TILT schools at the point of implementation, and (2) the extent to which there is a change in the slope after the initiative was introduced. Given the nested structure of the data, three-level hierarchical linear models (students nested in time nested in schools) will be used to measure the effect of the TILT model on student outcomes. The trends in the comparison schools will be included in the model to control for factors other than the TILT model that influence student performance in BPS.

Reporting and Communication. The mixed methods evaluation proposed here will

provide detailed information on the implementation and effect of the key elements of TILT. Two memoranda per year will be provided to BPS and its TILT partners—one at mid-year and one at the end of the year. In the last year of the project there will be a final report. After the release of each report, the evaluation and implementation teams will meet to discuss the findings and to identify future areas of interest for subsequent data collection periods. The final report will synthesize all findings, comparing practices, student academic performance and student non-academic measures over time. The proposed plans for reporting and meetings with the evaluator will ensure that BPS and its partner organizations obtain sufficient information to allow refinement and further development of the approach.

C(3) SUFFICIENT RESOURCES BUDGETED FOR EFFECTIVE PROJECT EVALUATION

The project budget reflects sufficient resources for AIR to carry out the project evaluation plan at \$300,000, based on similar projects of this scope and scale. Further, the AIR team who will complete the evaluation offers broad experience with quantitative, qualitative, and mixed-methods research and evaluation studies focused on interventions as well as knowledge of current issues in educational policy and practice at the school, district, state, and national levels (*see Appendix J for AIR CAPE statement; Appendix F for resumes of key personnel*).

D. Quality of the Management Plan and Personnel

D(1) MANAGEMENT PLAN

As lead applicant, BPS will ensure that project milestones are reached on time and within budget. The Project Director, Jeff Riley, is uniquely positioned to lead this project, because he is both the principal that pioneered this work to great success at the Edwards, and now, as the district's Chief Innovation Officer, will have operational responsibility for TILT schools. To effectively oversee the initiative, BPS will create a TILT Steering Committee chaired by Mr. Riley and co-chaired by NCTL Vice President Ben Lummis, to review on a monthly basis

overall progress of the project and direct adjustments as necessary. The steering committee will also consist of the principals of the participating schools, and NCTL's TILT Director who will work in direct support of the schools (*see D(2) for personnel descriptions*).

While the overall success of the initiative will be the responsibility of Mr. Riley and Mr. Lummis, execution of the specific deliverables at each school will occur through an integrated series of school-based teams that are accountable to the principals at each school: Admin Team, Instructional Leadership Team, and Teacher Teams (*see Appendix J for team membership and primary responsibilities*). The management of the teams at each level and the integration of their work will determine the success of TILT. For that reason, the Admin Team at each school will use an Implementation Dashboard to assess implementation benchmarks and student outcomes. The Admin Team will report to the Steering Committee against the implementation benchmarks monthly and assessment and student engagement goals quarterly. This data will be posted publicly across each school and will be reported and analyzed by the Instructional Leadership Team and all Teacher Teams to drive adjustment and improvement as needed.

Summary of Objectives, Project Milestones, and Key Action Steps			
Objective 1: Successful implementation of TILT model at two additional Boston Public Middle Schools in order to accelerate school turnaround and student achievement.			
Milestone	Key Action Steps	Responsibility	Timeline
<i>Selection of Schools</i>	<ul style="list-style-type: none"> Develop RFP, selection criteria, review process, and outreach to interested schools 	TILT Steering	Jan-Feb 2012
<i>Successful execution of Planning Phase leading to TILT schools opening with 300 more hours of learning time</i>	<ul style="list-style-type: none"> Develop Instructional Leadership Teams (ILT) at each school Facilitate 5 Planning Sessions for ILTs to learn effective ELT practices and develop comprehensive Implementation Plans Approve school Implementation Plans, Performance Agreements, and Dashboards by TILT Steering Committee 	NCTL TILT Director, BPS Project Coordinator, and Principals working with ILTs from each school	Feb-Aug 2012

<i>Implementation and ongoing refinement</i>	<ul style="list-style-type: none"> Monitor implementation and outcomes by reporting against Implementation Dashboard Adjust and improve teacher collaboration, instruction, and enrichment programs by based on data collected for Implementation Dashboard 	Admin Team Teacher Teams	Sep 2012 -Jul 2015
Objective 2: Further refine and develop alternative resource allocation, scheduling, and staffing strategies to sustain the expanded school day beyond the i3 grant.			
Milestone	Key Action Steps	Responsibility	Timeline
<i>Groundwork for generating low-cost approaches for expanding time</i>	<ul style="list-style-type: none"> Introduce ILTs to alternative resource allocation strategies Lead negotiations for resource flexibility agreement for TILT schools with District 	TILT Steering Committee and NCTL TILT Director	Oct 2012 - Apr 2013
<i>Pilot and refine Alternative staffing and scheduling in Years 2 & 3</i>	<ul style="list-style-type: none"> Develop and pilot staggered schedules with subset of staff in SY2013 Introduce and test technology and partner-based solutions in SY2014 	ILTs and NCTL TILT Director	Sept 2013 Sept 2014
<i>Sustainable model launched in Year 4 of implementation</i>	<ul style="list-style-type: none"> Implement full cost-effective resource allocation approach using staggered schedules, technology-based solutions, partner organizations, and flexible staff roles 	All school-based personnel led by Admin Team and Principal	Sept 2015 <i>post i3 funding</i>
Objective 3: Investigate and document TILT effective practices and lessons learned to inform continuous improvement efforts and disseminate findings to the broader education field to ensure the national movement to increase learning time is informed by a deep understanding of “what works.”			
Milestones	Key Action Steps	Responsibility	Timeline
<i>Interim profiles and annual reports on implementation efforts written and distributed by NCTL</i>	<ul style="list-style-type: none"> Share reports, tools and artifacts from TILT project online and at conferences and trainings across the country by NCTL Integrate and disseminate lessons learned across BPS 	NCTL VP for Knowledge Management TILT Project Director	Beginning Spring 2013 Beginning Summer 2013
<i>Project evaluation interim and final reports completed and distributed</i>	<ul style="list-style-type: none"> Create data collection system and protocols to coordinate NCTL and AIR efforts to document implementation practices and outcomes Implement evaluation plan 	AIR, NCTL VP for Research AIR	Spring 2012 Ongoing through Fall 2015
<i>Online Blog to document and disseminate nationally TILT progress</i>	<ul style="list-style-type: none"> Develop blog schedule between teachers, principals, TILT Project Director, principals, and NCTL TILT Director Identify outlets for implementation blog to direct online traffic and build readership. 	TILT Project Director and NCTL TILT Director	Spring 2012

D(2) QUALIFICATIONS OF THE PROJECT DIRECTOR AND KEY PROJECT PERSONNEL

A well-seasoned, deeply committed and results-driven team will lead the work of this project, all with extensive track records of success in implementing complex projects, collaborating with each other and in obtaining important results for at-risk students (*see Appendix F for resumes*). In addition to the individuals below, this project will be led at the school-level by highly-effective, proven principals who will be vetted as part of the competitive school selection process, and be supported by school leadership teams comprised of individuals with demonstrated abilities to motivate, train, and empower their colleagues.

* ***TILT Project Director, Steering Committee Co-Chair Jeff Riley*** over his 15 years in education has been a teacher, Teach For America corps member, administrator, principal, deputy superintendent overseeing all BPS middle and k-8 schools and is currently the district's Chief Innovation Officer. As the former principal of the Edwards Middle School largely responsible for its turnaround, he has the ability to translate their effective strategies to schools district-wide and ensure they are implemented with fidelity.

* ***TILT Steering Committee Co-Chair Ben Lummis*** leads the School Transformation and State & District Engagement program areas of NCTL as VP of ELT Programming and Policy. He directs all of the organization's technical assistance and support to states, districts, and schools, and has been instrumental to the development of all state and federal policy efforts on expanded learning time. He will oversee and direct all of NCTL's support to schools participating in TILT.

* ***NCTL TILT Director Colleen Beaudoin*** currently works intensively with three Boston turnaround schools to implement expanded learning time. She has over 20 years experience in public education as curriculum coordinator, principal, assistant principal and teacher. She will lead NCTL's direct support to participating schools through the planning and implementation of

an expanding school day including weekly onsite consultation with the school's leadership, trouble-shooting implementation problems, and monitoring progress towards student achievement and overall school improvement goals.

* ***TILT Strategic Advisor Chris Gabrieli*** is an entrepreneur across the fields of business, nonprofits and public policy. As Chairman and co-founder, he is one of two Managing Partners of NCTL. Chris is a visionary who is deeply involved on a daily basis in the strategic direction and senior management of NCTL and will provide ongoing guidance to the project, including playing an active role in fundraising for the project and increasing its national exposure.

* ***Fran O'Reilly, NCTL VP for Research*** directs a robust research agenda to broaden the national commitment to successful strategies for expansion of learning time and will manage the project's partnership with its outside evaluator, AIR. Formerly she was Principal Associate at Abt Associates and has authored dozens of papers and publications on education policy.

* ***Claire Kaplan, NCTL VP for Strategy and Knowledge Management*** will lead the documentation and dissemination of effective TILT strategies. At NCTL she is involved in developing strategic direction of the organization and oversees its national investigation into effective practices of highly-performing expanded learning time schools.

* ***TILT Independent Evaluator AIR*** will conduct a rigorous external evaluation of the project led by Kelly Hallberg and Susan Therriault, both of whom have extensive experience. During its 65 years, AIR has evaluated the implementation and impact of innovations designed to improve the educational performance, achievement, and attainment of at-risk students in thousands of schools and other local education settings using a wide range of designs, data collection methods, and analytic approaches. AIR has played leadership roles in relevant studies including the Study of Schools Targeted for Improvement Using Title I Section 1003(G) Funds Provided Under

ARRA and Qualitative Research Study of the School-wide Practices of High Performing Charter, Pilot, and Traditional Schools in Boston.

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