

## Table of Contents

Carmen Schools of Science and Technology Project Narrative	Page
Section I. Absolute Priorities	
A. Absolute Priority 1 - Experience Operating High Quality Charter Schools	1
B. Absolute Priority 2 - Low-Income Demographic	3
Section II. Competitive Preference Priorities	
A. Competitive Preference Priority 1 - (b) School Improvement	4
B. Competitive Preference Priority 2 - Promoting Diversity	6
C. Competitive Preference Priority 3 - Novice Applicant	11
Section III. Invitational Priority	
A. Rigorous Evaluation	12
Section IV. Selection Criteria	
A. Quality Applicant - Carmen Schools of Science and Technology	12
1. Demonstrated Success in Increasing Student Achievement	13
2. (i) Success in Closing Achievement Gaps	15
3. Achieving Results for Low-Income and Educationally Disadvantaged Students	16
B. Assisting Educationally Disadvantaged Students	17
C. Project Design - Replicating Carmen	31
D. Management Plan & Personnel	35
1. Management Plan	36
2. Business Plan	39
3. Financial & Operating Model	45
4. Plan for Closing Schools	48
5. Qualifications of Management Team	50
E. Evaluation Plan	57
Section V. Application Requirements	58

## Section I - Absolute Priorities

### A. Absolute Priority 1 - Experience Operating High-Quality Charter Schools

Carmen Schools of Science and Technology (Carmen) currently operates two distinct schools at two different locations<sup>1</sup> and is opening a third in August 2016 with the singular mission of graduating all students as critical thinkers and self-directed learners prepared for success in college, meaningful careers, community involvement, and family life. Carmen's first campus<sup>1</sup>, Carmen High School of Science and Technology, South (Carmen South), opened in 2007 on Milwaukee's predominantly Hispanic south side. Carmen South has consistently scored higher on ACT exams than all non-selective Milwaukee public high schools. Under new Wisconsin statewide requirements all public high school juniors must take the ACT in March each year. In March 2016, the juniors at Carmen South scored almost a point higher than last year's statewide average for *all* students, and more than three points higher than Hispanic or low-income students statewide. Carmen South students perform better than Milwaukee public high schools on all performance measures, including ACT scores, attendance, mobility, graduation rates and college enrollment (See Section IV. A. Quality Applicant). Because of the high achievement of students at Carmen South on the national ACT exam and high participation and

---

<sup>1</sup> Carmen uses the term campus to describe a distinct school in a single building with its own leadership team and staff. Carmen South operates a grades 9-12 school at 1712 S. 32nd Street, Milwaukee. A second distinct school, Carmen High School of Science and Technology, Southeast (Carmen Southeast), which is authorized by MPS under the same charter contract as Carmen South, is opening in August 2016 at 2500 Oklahoma Ave., Milwaukee, under the leadership of a different team and staff. Carmen Southeast is launching with a freshman class of 200 students and will serve 800 students in grades 9-12 within five years. Carmen Northwest is located at 5496 N. 72nd Street, Milwaukee, and serves grades 6-12. Carmen Northwest has separate leadership teams for the middle and high school grades but is considered one school by the authorizer and the Wisconsin Department of Public Instruction.

## Carmen Schools of Science and Technology

pass rates on the College Board's Advanced Placement (AP) exams, Carmen has ranked among the top ten Wisconsin schools on one or both of the U.S. News & World Report's Best High Schools and the Washington Post's Most Challenging High Schools lists over the past four years (See Appendix F for ACT and AP data). Also, Carmen is the only charter network in Milwaukee to be awarded an expansion and replication grant from the national Charter School Growth Fund (See Appendix C for letter of support).

Due to Carmen South's high degree of success serving predominantly low-income Hispanic students, Milwaukee Public Schools (MPS) asked Carmen to replicate its high school model and add a middle school on the city's largely African-American northwest side. As a response to this need, Carmen Northwest Middle/High School (Carmen Northwest), opened in 2013. The first junior class at Carmen Northwest is already closing achievement gaps for low-income and students of color. African American students in the school's first junior cohort (85% low-income; 73% African American) took the ACT in March 2016 and scored nearly three points higher than the Wisconsin and Milwaukee Public Schools (MPS) averages for African American students (see Appendix F). Low-income students at Carmen Northwest (87% FRPL) also out-performed MPS and Wisconsin students in the same cohort on the ACT. Further, Carmen Northwest students have higher attendance and lower mobility rates than MPS students.

This fall, Carmen will open a third high school, Carmen High School of Science and Technology, Southeast (Carmen Southeast), to meet the high family demand for Carmen seats (i.e., 400 students are on the 9th grade wait list at Carmen South last year). Carmen Southeast will be co-located in a 400,000 square foot building currently housing an under-enrolled and under-performing traditional MPS high school (see Competitive Preference Priority 1, (b) School Improvement). Both of Carmen's schools are chartered under contracts authorized by MPS and

## Carmen Schools of Science and Technology

both have been considered in good standing after each annual review by the authorizer. Carmen South is in the fourth year of its second five-year charter contract and Carmen Northwest is in its third year of its first five-year charter contract. Carmen Southeast is authorized under the same contract as Carmen South. The Carmen South contract is up for a five-year term renewal next year. As noted by the authorizer, “Carmen is in good standing under the terms of both of its charter school contracts with MPS, including academic, program, and financial performance.” Carmen has consistently had cash reserves under both of its contracts and has only had to access its standing line of credit once in the nearly ten years since the first school opened. Further, Carmen has always been within 5-10% of enrollment projections and now maintains waiting lists for some or all grades at both established schools. Many of the students enrolling in the new Carmen Southeast opening in August 2016 come from the Carmen South 9th grade waiting list.

Carmen plans to replicate Carmen Northwest Middle School in August 2017 and replicate the combined middle/high school in August 2018 under the expansion and replication project proposed in this grant. The authorizer is working with Carmen to continue to expand the partnership and Carmen is in discussions with MPS to identify locations within the MPS facility portfolio where the next Carmen school can open in 2017 (See also letter in Appendix C.)

### **B. Absolute Priority 2 - Low-Income Demographic**

Carmen is serving Milwaukee’s most educationally disadvantaged students with 89.5% of students qualifying for free or reduced price lunch (FRPL) network-wide. By comparison, 67.3% of MPS students and 39.5% of Wisconsin students qualify for FRPL. The neighborhoods targeted for new school locations mirror these demographics as is further detailed in Section IV B and C and Appendix E.

## Section II - Competitive Preference Priorities

### **A. Competitive Preference Priority 1 - Serving High-Need Students, (b) School Improvement**

The replication and expansion proposed in this project meets Competitive Preference Priority 1. Carmen is not only replicating its model, but it is doing so in a strategic fashion in partnership with Milwaukee Public Schools to assist the district in implementing academic or structural interventions to serve students attending MPS schools that have been identified for improvement, corrective action, closure, or restructuring under section 1116 of the ESEA.

Public charter schools are like Carmen exempt from certain district and state educational policies and regulations in order to have the freedom and flexibility to create innovative educational models that address long-standing challenges in education. Many charter schools have created program models that address the large and growing gaps in achievement between low-income and non-low-income students and between students of color and non-minority students. Under the original vision of charter schools, it was expected that once an innovative model is proven successful, the charter school would share the results (best practices) widely to ensure the innovations are incorporated in traditional public schools. Carmen takes this goal very seriously and has long shared its methods and program components through Milwaukee community organizations like Schools That Can Milwaukee (see letter of support in Appendix C) and directly with MPS high school leaders.

Carmen is known locally for its track record of successfully partnering with MPS to improve school options for students attending failing schools. The facility Carmen Northwest now occupies previously housed a school that was identified for closure by MPS. When planning for the launch of Carmen Northwest, Carmen worked in close coordination with MPS to ensure that students enrolled in the closing school were automatically allowed enrollment at the new

## Carmen Schools of Science and Technology

Carmen Northwest campus. In order to continue improving educational options on the northwest side, Carmen is currently working closely with MPS, the Silver Spring Neighborhood Center, the Milwaukee Housing Authority and other partners in intentionally constructing a conception to graduation college and career pipeline for children in the neighborhood surrounding Carmen Northwest. Carmen anticipates continuing efforts like this at the three new campuses proposed here, with partnerships already formed for the new Carmen Southeast high school. (See also Section IV. C. and Appendix C for further detail).

Carmen's first replication at Carmen Northwest is already showing that the Carmen model, first delivered at the 97% Hispanic Carmen South, is transferrable to a student population that is 80% African American (see Section IV A. and Appendix F). Thus now is the appropriate time to begin seeking more strategic ways to share best practices from the successful Carmen charter school model to one or more traditional public schools. Carmen is taking its commitment to knowledge transfer to the next level by undertaking a strategic partnership with MPS at the Casimir Pulaski High School (Pulaski) campus. Pulaski has been on the Wisconsin chronically failing schools list for several years. Through the Carmen-Pulaski Partnership, Carmen will be able to open another south side high school campus -- Carmen High School of Science and Technology, Southeast (Carmen Southeast) -- to serve up to 800 students, many from Carmen South's waiting list of over 400 students, and also share Carmen's best practices that have been developed and implemented over the last ten years at its first two schools.

The Carmen-Pulaski Partnership will involve the direct transfer of specific components and best practices of the Carmen charter model to a traditional public high school of similar size. The end goal of the partnership is to build two distinct, high-performing and independently managed high schools in one MPS facility. Carmen leadership will achieve this goal by

## Carmen Schools of Science and Technology

replicating its high school model a second time at Carmen Southeast while also working with the MPS Pulaski High School leadership team to share Carmen culture, curriculum, and instruction practices that have proven to assist in closing long-standing achievement gaps for low-income and students of color (see details of the Carmen education model in Section IV. B.).

The Carmen-Pulaski partnership is one strategy of the MPS “Rethinking High Schools” initiative. The Carmen network leadership and the Carmen Southeast high school leadership team have been working with MPS and Pulaski High School leaders to identify program components and instructional practices from the Carmen model that Pulaski will be adopted for implementation with their new freshmen class beginning in August 2016. The partnership launched its planning phase in November 2015 with the establishment of five Working Groups with specific roles and expectations. Teachers, school leadership, students, parents and community members from Carmen, Pulaski, and the surrounding neighborhoods make up the five Working Groups. The partnership is anticipated to provide a new strategic model for future charter-district partnerships, including another one between Carmen and MPS referenced in this proposal as the new Carmen middle/high school to open in 2018.

### **B. Competitive Preference Priority 2 - Promoting Diversity**

Carmen meets Competitive Preference Priority 2 -- Promoting Diversity because it has a record of promoting student diversity, including racial and ethnic diversity; serving students with disabilities; and serving English Language Learners (ELL).

## Carmen Schools of Science and Technology

2015 - 2016	Hispanic	White	Black	Asian	Indian	ELL	SPED	FRPL
Carmen Northwest (Grades 6-12)	12.4%	4.7%	79.8%	2.4%	0.4%	1.9%	14.5%	87.3%
Carmen South (Grades 9-12)	96.7%	2.2%	0.8%	0.3%	0%	12%	6%	92.8%
Carmen Network	46.9%	3.7%	47.6%	1.6%	0.2%	6.0%	11%	89.5%
MPS	25.6%	12.9%	53.4%	6.3%	0.7%	9.1%	20.4%	67.3%
WI	11.3%	71.2%	9.4%	3.8%	1.2%	3.0%	13.7%	39.5%

Source: Wisconsin Department of Public Instruction

### 1. Promoting Student Diversity, Including Racial and Ethnic Diversity

Planning teams for Carmen schools have found through focus groups with families and community leaders in Milwaukee that parents want their children to attend quality schools relatively close to home, but they also want their children to attend schools that are representative of Milwaukee's diverse populations. Unfortunately, Milwaukee is one of the most segregated cities in America<sup>2</sup>, with racial groups clustered in discrete geographical locations. In order to recruit a diverse group of students to Carmen Northwest, which is located in a predominantly African American neighborhood, students on the waiting list for the South Campus were sent enrollment information about the new campus. When Carmen Northwest opened three years ago, over 50 parents of Hispanic students who live on the south side but were on the Carmen South waiting list decided to pay for their own bus to travel the more than ten miles to attend Carmen Northwest, creating a more diverse student population (80% African

---

<sup>2</sup> In "The Persistence of Segregation in the Metropolis", Brown University professor John Logan and Florida State University professor Brian Stults found that Milwaukee and Detroit are the two most segregated cities in America (US 2010 Project Report, 2011).

## Carmen Schools of Science and Technology

American, 12% Hispanic, and 5% White) than would have been likely otherwise, and more diverse than either of the two large, traditional MPS high schools in the same region of the city.

Unlike MPS, Carmen does not receive funds for bus transportation and like most charter schools in Milwaukee, does not offer transportation. Thus nearly 70% of students attending Carmen Northwest and 80% of students attending Carmen South live within two miles of the school. In contrast, MPS buses students to schools all over the city not just to magnet or selective admission schools. Many families want to attend a high performing school in their own neighborhood, and Carmen has come to be regarded as one of the strongest neighborhood options for Milwaukee's youth. Further, neighborhood schools provide educational anchors for neighborhood revitalization and economic development and Carmen is serving as just such an anchor in each neighborhood it serves (see Appendix C). However, since Milwaukee is such a racially segregated city, it is essential that schools play a strong role in preventing racial isolation. In addition to student recruitment efforts, Carmen facilitates and promotes diversity through shared educational experiences, including:

- Fielding racially diverse competitive athletic teams by combining teams from Carmen South and Northwest campuses.
- Exposing all students to Spanish language and culture courses.
- Encouraging all Carmen students to participate in joint extra-curricular activities.

### 2. Serve Students with Special Needs

The middle school enrollment at Carmen Northwest includes 20% students with special needs and the high school enrollment is 13.5% students with special needs. The special education student population at Carmen South is historically lower, with 6% in 2015-2016. This is partly because of the relatively high proportion (30%) of students at Carmen South who enter from

religious elementary schools where special education services are not provided as well as the relatively lower proportion of Milwaukee's Hispanic public school students designated as having special needs compared to Milwaukee's African American public school students. However, this past year MPS started an early enrollment program through which all students applying to MPS high schools apply in October the year before instead of the February before the school year. Prior to this new policy, only those students applying to MPS' selective admissions schools applied in October thereby leaving many students with special needs placed in lower percentages in those and any schools that had October deadlines. Since Carmen schools have always used the October deadline, students who don't apply until later are often put on a waiting list because more applications are usually received than seats available and a lottery must be used. However, with the change that MPS undertook this last fall, Carmen had double the number of students with special needs apply in October than in previous years, and so the incoming August 2016 freshman classes at both Carmen South and the new Carmen Southeast have just over 10% students with special needs, double the Carmen South 9th grade enrollment rate the year before.

### 3. Serve English Language Learners

The school-, district-, and statewide ELL rates shown in the demographics table above aren't as meaningful as the 9th grade ELL rates at the high school level. Because most students, if served well, lose their ELL designation over the course of high school, the most important values are the ELL rates for incoming freshmen. Carmen South, which is 97% Hispanic, has a significantly higher proportion of incoming 9th grade students designated ELL (31%) than either MPS (10.3%) or Wisconsin (4.7%). By the end of their first year in high school, ELL students at Carmen lose their ELL designation at a much higher rate than at MPS. Among the 31% of 9th graders at Carmen South over the past three years who were ELL students at the beginning of the

## Carmen Schools of Science and Technology

year, 55% of them were no longer designated ELL by the end of their 9th grade year after taking the annual spring ACCESS test required for ELL designation purposes. In contrast, over the same time period, of the 10.7% of incoming 9th grade students in MPS who were ELL, only 15% of them were no longer designated ELL after taking the spring ACCESS test.

Carmen's education model has been developed with and for a diverse population of educationally disadvantaged students with the goals of meeting or exceeding Wisconsin academic content and achievement standards (Common Core and Next Generation Science Standards) and graduating students college- and career-ready. The high school model includes two English courses, World Literature and English Grammar and Composition, for all 9th grade students. This structure allows for greater support for ELL students and has contributed to decrease in ELL designated students.

Carmen creates a diverse student population and builds students' academic backgrounds while providing them with the proper tools to explore future interests and potential careers. While our enrollment process is structured intentionally to build a student body that is eager to learn, Carmen does not discriminate in admissions on the basis of gender, race, religion, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, disability, or on any other basis prohibited by local, state or federal law. Enrollment at Carmen is open to students living anywhere within the Milwaukee city limits. When more applications are received than seats are available, a random lottery is held.

Carmen promotes enrolling a diverse student population, serving students with special education needs, and English Language Learners by:

- Hosting school tours for neighborhood families, local business, educational and political leaders, as well as representatives from community-based organizations.

## Carmen Schools of Science and Technology

- Holding focus groups and public information meetings in preparation for launching each new Carmen campus.
- Maintaining relationships with and a database of school leader, guidance counselor, and teacher contacts throughout the city.
- Distributing information, meeting fliers, and brochures at target neighborhood restaurants, coffee shops, popular stores, and cultural festivals.
- Sending enrollment information to addresses provided by MPS for 5<sup>th</sup> grade and 8<sup>th</sup> grade students in MPS schools seeking middle school and high school seats.
- Visiting the homes of MPS 5<sup>th</sup> and 8<sup>th</sup> grade students within one mile of the Carmen campus to provide enrollment information and answer questions.
- Recruiting parents of students already enrolled in the school to be marketing ambassadors for the school in a variety of settings.
- Working with Spanish language radio stations and journals (e.g., the Spanish Journal) to publicize the school.
- Canvassing single resident homes, apartments, and public housing in the neighborhoods of the schools.
- Providing materials in both English and Spanish.

### **C. Competitive Preference Priority 3 - Novice Applicant**

Carmen meets Competitive Preference Priority 3 -- Novice Applicant because it has never received a Replication and Expansion grant, has never been a member of a group application that received such a grant, and has not had an active discretionary grant from the Federal Government in the five years before the deadline.

### Section III - Invitational Priority

#### A. Rigorous Evaluation

Carmen regularly conducts and will continue to conduct rigorous evaluations of its schools through the use of a continuous internal network audit process. In addition to this process, Carmen will use independent evaluators to study the fidelity to which the Carmen model is replicated at multiple new schools and which components and practices can be successfully transferred to a traditional public school through a strategic partnership. Please see Section IV. E. Evaluation Plan and Appendix H: Carmen Schools Feedback and Audit Cycle for information on Carmen's internal and external evaluation strategies.

### Section IV - Selection Criteria

#### A. Quality Applicant - Carmen Schools of Science and Technology

*The mission of Carmen Schools of Science and Technology is to graduate all students as critical thinkers and self-directed learners prepared for success in college, meaningful careers, community involvement, and family life.* To achieve the mission, Carmen aims to (1) increase student achievement, (2) close long-standing achievement gaps, particularly racial and economic gaps, and (3) achieve performance results across a wide spectrum of success indicators including attendance rates, mobility rates, graduation rates, high school non-completion rates, and college enrollment rates. Carmen schools must perform better than local public schools and the district on all measures to meet the terms of its charter contracts but the overarching goal is to have students at Carmen achieve at or above Wisconsin state averages for *all* students.

1. Demonstrated Success in Increasing Student Achievement

a. *Academic Achievement. College Readiness and College Attainment*

The state of Wisconsin has changed its state testing requirements each year for the last three years, making it virtually impossible to compare schools with district or state outcomes over time. A new Wisconsin K-8 grades test was launched in 2015-2016 and the results are not yet published. Carmen has used NWEA MAP growth data in the meantime to measure academic growth of students in the Carmen Northwest middle school grades (i.e., the only school with a middle school component prior to the replications proposed here). These data can be compared to MPS and to high performing national outcomes such as those for the Charter School Growth Fund charter networks.

Over the last three years, Carmen Northwest middle grades (80% African American, 18% SPED) had an average of 64.5% of students meet MAP growth goals in math and 59.3% in reading, compared to 55.5% for math and 55.7% for reading among MPS middle grade students (53% African American, 26% Hispanic, 20% SPED) (Tables 1. and 2. in Appendix F). CSGF-supported high performing charter networks averaged 71% in math and 63% in reading, however, they note that Carmen Northwest students are achieving growth outcomes well-above the average when compared to sub-cohorts of CSGF-supported schools with similar demographics. MAP publishes a national conditional growth percentile and in 2015-2016 Carmen math students were at the 72nd percentile for growth and reading students were at 79th percentile for growth. According to CSGF, their entire portfolio average growth ranking was at the 61st percentile for math and 55th percentile for reading.

In 2014 Wisconsin -- under pressure to change its high school test from the one administered to students in the beginning of 10<sup>th</sup> grade to one that better measures student

## Carmen Schools of Science and Technology

performance at the end of high school -- passed a law requiring all Juniors in public schools to take the ACT in March each year. The first administration was March 2015 and the second in March 2016; results for MPS and Wisconsin are only available for 2015 but the Carmen scores are available for both years (Table 4., Appendix F). This is the first time Wisconsin has had a nationally recognized college readiness test where 100% of all students were required to take the test. On the Junior exam, Carmen South and Carmen Northwest Hispanic, African American, and FRPL students outperformed their comparable sub-cohorts on the ACT at both the district and statewide levels. In fact, in 2016, Carmen South outperformed *all* students in Wisconsin by one point on the ACT, and by 3-5 points when examined by race and income sub-cohorts. The outperformance is even greater when compared to local public high schools in the neighborhoods where Carmen South and Carmen Northwest are located. For example, Carmen Northwest's first class of Juniors, which is predominantly African American, outperformed its comparable schools by four points, and Carmen South Hispanic students outperformed the same sub-cohort in comparable schools by six points, when compared to data from 2015.

Wisconsin has always published schoolwide and district scores on the ACT, using the ACT school, state and district report cards. Until 2015, however, only 63% of Wisconsin students took the ACT. At MPS schools and Carmen schools, 100% of students took the ACT as Juniors each year for the past five. The state publishes annual reports that ACT sends to schools and districts showing the average ACT scores, drawn from the most recent tests taken by each cohort of graduating seniors. Carmen South is the only Carmen school with a graduating class so no Carmen Northwest data is available. But Carmen has consistently outperformed the district FRPL and Hispanic sub-cohorts and state sub-cohorts (Table 3., Appendix F). These data, although available for the last three years, are not as useful as Table 4 (ACT for Juniors) because

of the difference in participation rates (ie., only about 50% of students of color took the ACT before the state started requiring it in 2015, compared to 100% of students in those cohorts at Carmen and MPS).

Students at Carmen over the last two years have exceeded both national and Wisconsin averages for the percentage of total students taking AP exams who passed with scores of 3 or higher each year (Figure 1., Appendix F). Also, the Wisconsin average for percent of graduating seniors passing at least one AP exam while in high school is 22%, the national average is 20%, while the Carmen average has been in the low 80% for the past two years (Table 5., Appendix F). Students at Carmen also have exceeded both district and state averages for percent of students enrolling in college the fall after high school graduation, with Carmen at 87% for the class of 2015, MPS at 37%, Wisconsin at 59% and national at 67%. Given the fact that 90% of Carmen students are low-income and over 30% have been undocumented since the first school opened, this is an even greater outcome. Carmen's low-income graduates enroll in college at double the rate of national, state and district averages (Figure 3., Appendix F).

## 2. (i) Success in Closing Achievement Gaps

According to the National Assessment of Educational Progress (NAEP), Wisconsin has the highest achievement gap in the country for African American students. By the time African American students are in the 8<sup>th</sup> grade, their NAEP math scores are an astounding 44 points behind their White counterparts – a gap that is 14 points larger in Wisconsin than the national average gap. The gap between Whites and Hispanics is not as large comparatively, but by the 8<sup>th</sup> grade Hispanic math students are still 23 points behind their fellow White students (Figures 4. and 5., Appendix F). Public education is the great equalizer, and yet in Wisconsin, and particularly in Milwaukee, most public schools are failing to adequately educate children and

teens, particularly children of color who come from low-income backgrounds. Carmen was established to close these achievement gaps by addressing the serious educational disadvantages students bring to high school in Milwaukee.

As part of its charter contract with MPS, Carmen middle school students are evaluated on a gap-closure formula that sets a target of reducing the gap between national percentile rankings in reading and math at the beginning of the school year against the 50<sup>th</sup> percentile nationally. A school should reduce the gap by at least 15% to be considered compliant. Carmen Northwest (only Carmen school with middle grades) substantially outperformed the district on this gap closure parameter, with 64% gap closure in math compared to 1% MPS-wide, and 19.5% gap closure in reading (compared to 1.2% MPS-wide. Carmen does not have access to comparable data for individual schools.

Gap closure results for race and income are summarized for high school in Section V. A. subsection 1. Demonstrated Success in Increasing Student Achievement (above). Overall, Carmen schools are closing the gap in income and race compared to the district and state on the ACT and college enrollment (Tables 3. and 4. and Figure 3, Appendix 4). ELL comparisons are not made because of the low number of ELL students at Carmen once they are out of 9th grade.

### 3. Achieving Results for Low-Income and Educationally Disadvantaged Students

Factors like attendance and student mobility and high school non-completion rates are important measures of school climate and if students don't come to school, they won't achieve. Students at Carmen schools have higher average attendance rates than their FRPL and African American or Hispanic counterparts in comparable schools or in MPS or Wisconsin (Table 7., Appendix F). Carmen South has consistently out-performed both MPS and Wisconsin in average daily attendance for all students and Carmen Northwest is within two percentage points of the

rate for all students (92% vs. 94% statewide). Mobility rates at both Carmen South and Carmen Northwest are more than 10 percentage points higher, on average, than in MPS. The average six-year high school non-completion rate at Carmen over the past three years for *all* students averaged 4.1%, while it was 27.7% in MPS and 8.4% statewide. Carmen's non-completion rates for the FRPL and Hispanic student sub-cohorts were 10-20% lower than the state's over the same years (Table 10., Appendix F).

Carmen seniors are accepted to four-year colleges at a rate of 100%. Comparable data is not tracked for MPS and Wisconsin. However, it is possible to compare first to second year college persistence rates for students who do enroll in college to national rates. Carmen graduates stay in four-year college after the first year at a rate between 10-15% higher than the national average for *all* students, regardless of demographic (Figure 6. Appendix F). Carmen students stay in two-year colleges from the first to second year at a rate of 100% over the last four years for which data is available, compared to a national persistence rate of just under 60% over the same time period (Figure 7., Appendix F). Finally, five year college retention rates for Carmen's first two classes, the Class of 2011 and Class of 2012 (both 90% low income and 30% undocumented and can't qualify for in-state tuition or federal loans or grants), show 42% and 45%, respectively, having graduated or still enrolled in college (Figure 8., Appendix F).

### **B. Assisting Educationally Disadvantaged Students**

Carmen's model is specifically designed to challenge and support educationally disadvantaged students with specific interventions to master national and Wisconsin academic content and academic achievement standards. The model described below describes Carmen's: (1) Mission and Vision, (2) Focus on Educationally Disadvantaged Student Populations, (3)

Academic Program Components, (4) Instructional Design, (5) Content Standards and Core Curriculum, and (6) College and Career Readiness Program.

1. Mission and Vision

*Carmen's mission is to graduate all students as critical thinkers and self-directed learners prepared for success in college, meaningful careers, community involvement, and family life.* Carmen envisions students achieving proficiency in scientific inquiry, creative discovery, and constructive problem-solving; professional-level skills in the uses of 21st century technology; and admission to colleges that will lead to careers as civic leaders, authors, artists, scientists, teachers, doctors, or any other family-and community-sustaining career. "Carmen" is an acronym derived from the last names of well-known Hispanics whose successful careers are among those listed as goals in the Carmen vision statement. C = Cesar Chavez (community organizer), A = Isabel Allende (author), R = Diego Rivera (artist), M = Mario Molina (scientist), E = Jaime Escalante (teacher), and N = Antonia Novello (physician).

Additionally, Carmen envisions purposefully establishing a culture based on specific Habits of Mind and Habits of Heart:

- *Habits of Mind:* All students and staff pursue excellence in Eight Abilities: communication, analysis, problem-solving, applying values in decision making, social interaction, developing a global perspective, effective citizenship, and aesthetic engagement (see description of the Outcomes Framework for these Eight Abilities in Appendix H). All students and staff display passion for learning and appreciation for good work. All students and staff welcome new perspectives and challenging ideas.

## Carmen Schools of Science and Technology

- *Habits of the Heart*: Everyone strives to bridge cultures through learning, work, service, and celebration. Everyone contributes to a vital and compassionate community. Everyone respects the multiple traditions that sustain democracy and build a just society.

### 2. Focus on Educationally Disadvantaged Student Populations

As explained in Section IV. A. (2) Closing Achievement Gaps, Carmen aims to serve educationally disadvantaged youth and reduce the long-standing economic and racial achievement gaps in the Milwaukee public education landscape. In planning for expansion, Carmen analyzed population and economic data from the 2010 census to identify areas where the most underserved students live. Carmen's third school, Carmen Southeast, will open in August 2016 in the 53215 zip code region. A total of 63% of residents of this zip code are Hispanic, compared to 17% citywide; only 6.5% of residents in this zip code have completed college, compared to the citywide average of 14.2%. Over a third of adults in the 53215 zip code did not complete high school. This location is home to the most rapidly growing youth population and near where Carmen's South Campus had more than 400 students on the incoming 9<sup>th</sup> grade waiting list. It is also the area where Carmen intends to locate its new Carmen Middle School to open in 2017. Candidate areas for the new Carmen Middle/High School to open in 2018 are the 53205, 53206 and 53210 zip codes, two of which serve the lowest income youth in Milwaukee, the vast majority of whom are African-American.

### 3. Academic Program Components

Carmen's academic program has been developed for a diverse population of educationally disadvantaged students with the goal of meeting or exceeding Wisconsin state outcomes on the ACT college readiness standards, the Common Core standards, and the ACT Work Keys career readiness standards. Key elements of the model are detailed below.

a. *STEM Focused College Prep*

Rigorous Academics. ACT has published numerous studies showing that one of the single factors with the highest correlation to a student actually completing a college education is the academic rigor of his or her high school curriculum, as manifested in the number and types of academic courses completed. Carmen’s academic course and credit requirements for graduation are more rigorous than any public or private high school in Milwaukee. In order to graduate from a Carmen school, students must complete four years of college preparatory mathematics, beginning with at least Algebra 1 and ending with at least with Pre-calculus or Calculus; five years of English (including two full-year courses in 9th grade); four years of social studies/history; and four years of laboratory science. In addition, students must take at least three full years of Spanish, and two or more semesters in the Arts. The purpose of having a focus on science at Carmen is two-fold: to create scientific habits of mind that are useful in any life pursuit, and to meet the demand for workers in the science, technology, and engineering careers.

Middle school students must take three years of mathematics aligned to the Common Core standards such that most students can enter high school ready to take Geometry rather than Algebra and have the opportunity to complete Calculus by graduation. The Carmen middle school humanities curriculum follows the Common Core frameworks for literature, language and social studies and is supported by instructional resources from the Great Books Foundation. The science curriculum at this level includes inquiry modules from the Delta Education FOSS Middle School Science Curriculum and the Carolina Biological STC Secondary School Curriculum, both of which align with the national Next Generation Science Standards, also adopted by Wisconsin.

Stopping Social Promotion. Carmen knows that for students to stay and succeed in college they have to be prepared to attain at least a “C” in each of their classes. Therefore, the

## Carmen Schools of Science and Technology

Carmen grading and grade promotion requirements are more stringent than those of other Milwaukee area and Wisconsin public schools. Students who earn semester grades below a “C” or 73 percent are required to participate in mid-year inter-session and/or summer session terms to attempt to raise their grades up to a “C.” Similarly, middle school students are not promoted if they earn lower than failing grades in more than half of the core courses after participating in summer sessions.

Engineering Electives. Carmen offers four engineering courses based on the Project Lead the Way (PLTW) curriculum for high school students. Students who pass the end of course assessment can earn college credit. In the Class of 2016, 4% of Carmen graduates received prestigious full-tuition engineering scholarships.

AP Courses. All high school level students are expected to take one or more Advanced Placement (AP) courses that can yield college credit. AP courses are offered in all subject areas and available to students beginning in the 10th grade. Enrollment in AP classes is open to all students regardless of GPA or other academic measures that could serve as gatekeepers and the school pays the AP Exam fees for all students. A total of 80% of Carmen graduates in the Class of 2015 passed at least one AP course while in high school (see Appendix F).

Dual Enrollment for College Credit. In 2014 Carmen established a partnership with University of Wisconsin-Milwaukee (UWM) to pilot a dual enrollment course in College Algebra, and 97% of the students passed the end of year exam and earned college credit from UWM. Plans are underway to expand dual enrollment opportunities over the next few years.

Career and Technical Education Program. Carmen is collaborating with local technical colleges and other colleges in order to develop Career and Technical Education programs in health professions, information technology, and manufacturing technology to supplement the

core Carmen curriculum. This program has a dual purpose: 1) ensure students have multiple pathways to family and community sustaining careers, and 2) increase the diversity of course offerings to better help students explore interests and develop passions.

Extended School Day and Year. Carmen employs an extended school day and year in order to give students the time necessary to achieve above average academic gains and close achievement gaps. Middle and high school students attend regular school hours from 8:00 a.m. to 3:45 p.m. and more than 180 days each year, not including the teacher-led after school academic program.

*b. Intervention Opportunities*

While the components of Carmen’s core model described above are critical to student success, reaching all students requires supplementary programs and individualized approaches that complement and support core academics. These interventions ensure that all Carmen students, including the lowest and highest performing students are provided the resources needed to significantly increase their academic growth each year.

Blended Learning. In order to create an individual learning plan for each student, Carmen utilizes computer based math and reading programs to identify students’ foundational skills and set growth and attainment goals for the year. Students spend 45 minutes per day using either ALEKS for math or Achieve 3000 for reading.

After School Support. Students who are earning grades below a “C” are required to attend an after school academic tutoring program until the student consistently maintains a “C” or higher. Teachers lead structured academic support sessions four days per week for an hour each day to provide additional instruction in a small group setting.

Inter-Session & Summer School. Carmen employs a three-week inter-session in January and a summer school program during which students make up failed courses (i.e., with grades below a “C” or 73%) or may take an enrichment course they may not otherwise be able to fit into their schedules during the regular school year.

Double ELA & Math Courses in Grade 9. All incoming 9<sup>th</sup> grade students are placed in two English Language Arts classes, one to focus on reading skills development and one to focus on grammar and writing. Students who are significantly below the college readiness benchmark for math on the ACT EXPLORE or Aspire exam that is given at the beginning of 9th grade are placed in Algebra and a supplementary pre-Algebra skills class.

c. *21st Century Skills and Career Readiness*

Advisory Program. All students are assigned to an advisor from the first day of their Bridge to Middle School or Bridge to High School Program. The advisor -- usually a teacher but other staff also may elect to serve in this role -- works with the student from the bridge program through to graduation. The role of the advisor is to assist the student in the developing college and career readiness skills and to ensure that the student has access to the resources he or she will need to be successful at Carmen.

Bridge Program. Incoming 6th and 9th grade students attend a 60-80 hour program in August that includes orientation to Carmen’s culture, mission and vision and practice of the life and study skills necessary to be successful in school. Math and literacy instruction is also included to help get the students ready for middle or high school level work. Students are introduced to strategies for developing the growth mindset, character traits (see below), and planning skills necessary for success in school.

Character Education. Carmen has developed a cultural framework based on three core values: respect, responsibility and trust that all staff and students apply consistently in recognizing positive and negative behaviors. Further each school adopts a set of character traits that all work to develop and celebrate.

Eight Abilities Framework. Carmen partnered with Alverno College in Milwaukee to scale Alverno's internationally-recognized Abilities-Based Instructional Model for adolescents in a secondary school setting. There are eight abilities all Carmen graduates must demonstrate mastery of by graduation: aesthetic engagement, analysis, communication, developing a global perspective, effective citizenship, problem solving, social interaction, and valuing in decision making.

The model set developmental outcomes addressing critical thinking and moral reasoning skills, along with communication and interpersonal abilities that enhance academic success in higher education, workplace performance, and citizenship. A detailed description of the framework, expected student outcomes for each ability over the four years of high school, and how the abilities are assessed are provided in Appendix H.

Student Internship Program. Students who maintain a cumulative GPA of 2.5 or higher may, beginning in their sophomore year, participate in the Carmen internship program. At Carmen South, students intern in entry-level positions where they can practice professional skills, including communication and problem solving. Corporate sponsors and private donors support a college scholarship program for participating student interns. At Carmen Northwest and in future years at Carmen Southeast and the new Carmen high school to be launched in 2018, a more targeted career-focused internship program is being launched that will prepare students to

serve as youth apprentices in their senior year in the health professions or in information technology.

Community Service & Retreats. Carmen requires middle school students to complete at least 10 hours and high school students to complete at least 20 hours of community service annually. Most service projects are carried out jointly with teachers, parents, and the school's local community partners and are tied to learning goals embedded in the school's advisory curriculum.

#### 4. Instructional Design

The Carmen Instructional model centers on the belief that effective instruction is student centered with the teacher facilitating learning instead of imparting knowledge. In order for teachers to deliver this type of instruction, they must use strategies to manage their classroom and deliver content. Carmen teachers are trained in and continuously practice Doug Lemov's Teach Like a Champion strategies. Additionally, teachers must use data to design their instruction to tailor content and approaches to learning to the strengths and areas for growth of their students. With this data, they are then able to choose the appropriate best practices to design their lessons. Among the best practices used by Carmen are rigorous reading access points and Great Books' Shared Inquiry discussion methods to instill in students the ability to access content on their own through strong reading skills. The comprehensive instructional and coaching model is located in Appendix H and summarized below.

Teach Like a Champion Strategies. The strategies in Doug Lemov's Teach Like a Champion originated from his study of the successful Uncommon Schools charter schools in New York. He identified 49 strategies of master teachers to help new and struggling teachers become champions in the classroom. Carmen's schools use these concrete, specific, and easy to

learn steps in onboarding new teachers; in ongoing professional development of all teachers, regardless of content area specialty; and during individual instructional coaching of teachers. Carmen teachers use Teach Like a Champion strategies to set high academic expectations, engage students in the lesson, create a strong classroom culture, and set and maintain high behavioral expectations.

Data-Driven Instruction. As described in Paul Bambrick-Santoyo's Driven by Data, when implemented well, data-driven instruction has the power to dramatically improve student performance. Carmen leaders and teachers continuously address the four components that need to be in place: rigorous assessment, skills in analysis, accountability of action, and a growth mindset culture. Teachers collaborate with others who teach the same course as well as with school and network staff to design and vet rigorous assessments. After delivering these assessments to students, teachers analyze the results to determine what their students know, what their students are struggling with and, as a result, what instructional strategies were successful or unsuccessful with their students. In collaboration with the course team and instructional coach, teachers then make action plans to increase their students' achievement. This process occurs not only at the end of course units with summative assessments, but also throughout units with formative assessments. The growth mindset leads the teachers to believe they can always improve in their instructional choices and that their students can always improve.

Rigorous Reading Access Points and Great Books Shared Inquiry. Carmen has embraced the strategies of Doug Fisher and Nancy Frey in Rigorous Reading, including their five access points to rigorous reading: purpose and modeling, close and scaffolded reading, collaborative conversations, an independent reading staircase, and demonstrating understanding and assessing performance. By including reading instruction in all classes, Carmen teachers are developing

students as self directed learners by increasing their ability to access content through their own reading.

Teachers also facilitate higher level discussions of literature and informational texts in all content areas using the Great Books Shared Inquiry technique. This discussion method of teaching has been developed and refined by the Great Books Foundation over the last sixty years. Similar to Socratic seminars, Shared Inquiry discussions are led by students answering a discussion question after completing activities to effectively use the text in their discussion. In this process, students read and annotate the text. Next, they re-read the text using a specific annotation strategy designed by their teacher. Lastly, before they begin the discussion, students form their answer to the shared inquiry question. Throughout the discussion, students are prompted to respond to each other using textual evidence. After the discussion, students reflect on their answer to the shared inquiry question using their experience in the discussion.

Vertically Aligned Best Practices. Content in each subject is vertically aligned throughout grades 6-12 to ensure that students are building on their knowledge and skills each year. Additionally, each grade level focuses on specific study skills, note taking techniques, and organizational habits, so that students are gradually building towards greater ownership of their learning. Content-specific study skills, note taking techniques, and organizational habits, such as research and writing skills, also scaffold throughout each year of instruction. Teachers use these guides to make decisions about instructional strategies appropriate for their subject area and grade level.

Co-Teaching. Carmen's student support services program includes co-teaching by regular and special education teachers to create supportive and inclusive classrooms as well as resource room support. Also, the Carmen Middle School model includes elements of co-teaching by

humanities and STEM teacher teams. Instruction in co-teaching classrooms varies depending on the strengths of the teachers and the content of the lesson. Collaborative options include one teacher/one assistant, one teacher/one observer, station teaching, parallel teaching, alternative teaching, and team teaching. All co-teacher teams use a variety of co-teaching strategies and minimize the use of one teacher/one assistant and one teacher/one observer approaches.

## 5. Content Standards & Core Curriculum Program

### a. *Middle School Framework*

SUBJECT	GRADE 6	GRADE 7	GRADE 8
<b>English</b>	<u>Engage New York Curriculum</u> Some Core Texts Include: - <i>The Lightning Thief</i> - <i>Bud, Not Buddy</i> - <i>Dragonwings</i>	<u>Engage New York Curriculum</u> Some Core Texts Include: - <i>A Long Walk to Water</i> - <i>Lyddie</i> - <i>Narrative of the Life of Fredrick Douglas</i>	<u>Engage New York Curriculum</u> Some Core Texts Include: - <i>Inside Out &amp; Back Again</i> - <i>To Kill a Mockingbird</i> - <i>The Omnivore's Dilemma: The Secrets Behind What You Eat</i>
<b>Math</b>	<u>Engage New York Curriculum</u> Some Topics Include: -Ratios and Unit Rates -Rational Numbers -Expressions and Equations -Statistics	<u>Engage New York Curriculum</u> Some Topics Include: -Rational Numbers -Percent and Proportional Relationships -Statistics and Probability -Geometry	<u>Engage New York Curriculum</u> Some Topics Include: - Integer Exponents and the Scientific Notation -The Concept of Congruence -Examples of Functions from Geometry -Introduction to Irrational Numbers Using Geometry
<b>Science</b>	<u>Modules Covered</u> -Forces and Motion -Properties of Matter -Biodiversity (basic cells) -Weather and Climate	<u>Modules Covered</u> -Simple Machines -Digestion and Motion -Respiration and Circulation -Planetary Science	<u>Modules Covered</u> -Populations and Ecosystems -Exploring the Nature of Light -Mixtures, Compounds and Elements -Earth History
<b>Social Studies</b>	<u>Geography and Cultures</u> -Geography -World Cultures & Religion -Ancient Cultures & Religion	<u>US History 1400-1865</u> -Native American History -American Revolution -African American History -Civil War	<u>US History 1865- Modern Day</u> -Reconstruction -American Cities -WWI & WWII -Civil Rights
<b>Electives</b>	<u>Options:</u> -Art -Music -Physical Education		

*b. High School Framework*

\* Denotes course required for graduation  
 AP = Advanced Placement course

	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>English</b> 5 credits	World Literature* AND English Grammar and Composition*	British and Early American Literature*	American Literature* (required if student does not take AP English Lit.) OR AP English Literature and Composition	English Language and Composition 12* (required if student does not take AP English Lang.) OR AP English Language and Composition *** AP English Literature and Composition (considered an elective in 12 <sup>th</sup> grade)
<b>Math</b> 4 credits	Algebra 1* OR Geometry	Geometry* AND/OR Algebra 2 with Trigonometry	Algebra 2 with Trigonometry* OR Pre-Calculus	Pre-Calculus* OR AP Calculus AB
<b>Science</b> 4 credits	Biology*	Chemistry*	Physics* OR Environmental Science OR AP Biology	Physics OR Environmental Science* (required if student does not take AP Science course) OR AP Biology
<b>Social Studies</b> 4 credits	World Cultures*	U.S. Government * OR AP U.S. Government and Politics	U.S. History* *** AP Psychology	Economics* (0.5 credit) AND Psychology (0.5 credit) OR Sociology (0.5 credit) OR AP Psychology
<b>Spanish</b> 3 credits	Spanish 1, 2 or 3	Spanish 1, 2 or 3 OR Advanced Spanish Grammar and Composition	Spanish 2 or 3 OR Advanced Spanish Grammar and Composition OR AP Spanish Language and Culture	Spanish 3 OR Advanced Spanish Grammar and Composition OR AP Spanish Language and Culture OR AP Spanish Literature and Culture
<b>Fine and Performing Arts</b> 1 credit	Digital Photography; Foundations of Art Acting 1; Introduction to Theatre Arts Music Ensemble--Band; Choir; Instrumental Survey Physical Education			
<b>Engineering</b> 4 credits of engineering (optional)	PLTW Introduction to Engineering Design; PLTW Principles of Engineering; PLTW Digital Electronics; PLTW Engineering Design and Development			
<b>Advisory</b> Annual participation required: 2 credits (0.25 per semester)				

6. College & Career Readiness Program

Although college and career preparation occurs in all classes, the advisory program includes specific skills and benchmarks to promote and evaluate college and career readiness outside of academic subjects. Below are outlines of the middle and high school advisory programs.

*a. Middle School Level*

The Carmen middle school environment is built upon strong relationships based on our core values of respect, responsibility and trust. Through the Middle School Advisory Framework (See Appendix H), we ensure a safe, welcoming, and aspirational learning environment focused on achieving our middle school mission and vision “Earn. Celebrate. Grow.”

Grade Level	Theme	High School Preparation	Character Trait Focus
6th Grade: The Eagles Hatch in the Nest	The 6th grade program drives to help students understand Carmen’s expectations, and build solid foundational habits of scholar. The theme is learning and growth; students need to believe in themselves as learners and build confidence to explore, and self-control to help maximize their learning time.	Organization Impulse control Building confidence	Self-Control Determination Integrity
7th Grade: The Eagles Nurture Themselves & Their Team	The 7th grade program is designed to help students understand their personalized learning styles and preferences on a deeper level. The focus on TEAM is a theme throughout the activities.	Communication Celebrating diversity	Teamwork Social Intelligence Gratitude
8th Grade: The Eagles Lead the Way	The 8th grade program empowers students to set a good example for our younger eagles, and to build the structures they see fit that will ensure our Earn. Celebrate. Grow. vision comes to fruition.	Empowering Prepare for HS HS Visits Mentoring 6th & 7th Grade	Curiosity Zest Leadership

*b. High School Level*

Carmen’s high school level Advisory Program (See Appendix H) is based on many of the same principles as the middle school model but with an added emphasis on college and career preparation. The foundations of the advisory program include academic advising, relationship building, and community service. Each year, students develop and build on prior experience with goal-setting, professional workplace skills, career exploration, college planning, financial

literacy, and retreat preparation. As summarized in the table below, students also benefit from a comprehensive system of programs designed to support students through high school and beyond.

BRIDGE PROGRAM	CAREER TRAINING	STUDENT INTERNSHIP PROGRAM	COLLEGE BOOT CAMP	POST TRANSITION
As part of a comprehensive transition approach, all new 9th grade students attend a summer program that offers academic remediation and enrichment, social support, and orientation activities that are designed to enhance their ability to succeed during their freshman year.	Carmen offers three career tracks including health sciences, manufacturing technologies, and computer engineering. Students following a career track participate in dual enrollment courses with local technical colleges. In addition, students will have the opportunity for job shadowing and summer internships in their career track.	The Carmen Student Internship and Scholarship Program places students into entry-level clerical internships within local corporations and non-profit organizations to gain real-world work experience, professional role models, and personal confidence. For each semester that a student successfully serves as an intern, he or she earns valuable college scholarships.	All rising seniors attend a summer College Boot Camp that provides students an opportunity to learn about the details of the college application process, work on real college applications, prepare multiple essays, update their resumes, develop a scholarship list and work on their personalized "college road map" to help them achieve their college and scholarship goals.	All graduating seniors work with the Post-Transition Coordinator to complete an exit survey and receive help with deposits, financial aid issues including verification, freshmen orientation, placement testing and class registration. The Post-Transition program assists students all the way through college graduation.

**C. Project Design for Replicating Carmen**

Carmen South opened in 2007 to provide a free and public college preparatory option for economically disadvantaged and predominantly Hispanic youth living on Milwaukee’s south side. Answering the call from Milwaukee Public Schools to expand to Milwaukee’s predominantly African American north side, and recognizing the need to work with students before high school, Carmen Northwest Middle/High School of Science and Technology (Carmen Northwest) opened in 2013. Under this project proposal, Carmen seeks funding to support the August 2016 opening of its third school, Carmen Southeast, which is also on Milwaukee’s south side; a fourth school, which will be a middle school to open in 2017 on the south side; and a fifth

## Carmen Schools of Science and Technology

school, which will be another middle/high school to open in 2018, most likely on the north side.

Additionally, funds will support a rigorous evaluation of the Carmen model and the strategic partnership Carmen is undertaking with Milwaukee Public Schools at the Pulaski High School facility. The results of the evaluation will allow Carmen to share best practices and knowledge to improve outcomes for all students in Milwaukee, and with other districts and charter networks nationally.

### 1. Expansion Timeline

The following five-year timeline details the planning and implementation of each new school to open under the project.

School/Expansion or Replication		2016-2017		2017-2018		2018-2019		2019-2020		2020 - 2021	
		Grade Levels	Seats	Grade Levels	Seats	Grade Levels	Seats	Grade Levels	Seats	Grade Levels	Seats
Carmen Southeast	Replication	9	200	9 - 10	360	9 - 11	500	9 - 12	680	9 - 12	800
New Carmen Middle School	Replication	Planning Year		6	100	6 - 7	200	6 - 8	300	6 - 8	310
New Carmen Middle/High School	Replication	n/a	n/a	Planning Year		6, 9	200	6-7, 9-10	390	6 - 11	590
Total New Seats Added in the Project Term (Cumulative)		200		460		900		1,370		1,700	

2. Project Goals, Objectives, and Outcomes

Goal 1. *Meet the demand for student seats at high quality Carmen schools by increasing the number of Carmen schools.*

MEASURABLE PROJECT OUTCOMES	HOW WE WILL MEASURE
<ul style="list-style-type: none"> <li>· Leases and charter contracts are negotiated within the time frame stated in the timeline</li> <li>· 85% of staff invited back remain from one year to the next</li> <li>· 90% of open teacher positions are filled by June 15 each year</li> <li>· Non-MPS per pupil revenues are within 10% of financial projections</li> <li>· Expenses are within 10% of financial projections</li> <li>· 90% positive responses are received from all staff on satisfaction surveys</li> </ul>	<ul style="list-style-type: none"> <li>Contract and lease dates</li> <li>Personnel records</li> <li>Personnel records</li> <li>Quarterly financial reports</li> <li>Quarterly financial reports</li> <li>Bi-annual network-wide school climate surveys</li> </ul>

Goal 2. *Replicate the Carmen education model with fidelity at three new schools.*

Each project outcome listed below is an expectation for the first three years of a new school’s operation. After three to four years, a new school is expected to operate at the same level as Carmen South, the first Carmen school. The achievement gap for incoming middle and high school African American students is larger than it is for Hispanic students in Milwaukee, so new schools with predominantly African American populations will score lower on some academic achievement tests but are expected to show the same or higher growth than schools with high populations of students from subgroups with smaller achievement gaps.

MEASURABLE PROJECT OUTCOMES	HOW WE WILL MEASURE
<p><u>School Culture</u></p> <ul style="list-style-type: none"> <li>· The school-wide average daily attendance rate exceeds the average daily attendance rate for MPS high school students.</li> <li>· Student mobility rates at Carmen are half as high as MPS rates (e.g., 5% if MPS is 10%).</li> <li>· The school-wide average daily attendance rate is 90 percent or higher in year one, 92% or higher in year 2, 94% or higher in year 3 and 94% or higher subsequent years (i.e., higher than current Wisconsin state average for secondary schools).</li> <li>· 90% positive responses are received from all students and parents on satisfaction and school climate surveys</li> </ul> <p><u>Academic Outcomes</u></p> <ul style="list-style-type: none"> <li>· The average annual composite score growth on the ACT test series given in 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grades is at least 1.5 points.</li> <li>· 30% of students pass at least one non-Spanish language AP course and the corresponding exam before they graduate from a Carmen school.(Note: Wisconsin 2013 average for this parameter is 20%)</li> <li>· 30% or more students who graduate from Carmen major in STEM fields, including the health professions, in college.</li> <li>· 90% of students in the first graduating class are admitted to a four-year college and 100 percent are admitted to a two-year college or certification program. Rates of admission to four-year colleges will increase in subsequent years.</li> <li>· Year 1 to Year 2 college persistence rate is at least 70% and higher in subsequent Carmen high school graduating classes.</li> <li>· 75% of students who receive sufficient financial aid and scholarships to be able to <i>graduate from</i> college within six years.</li> </ul>	<p>Carmen keeps all of the data listed in this table on a network electronic database with dashboards. Data for MPS and Wisconsin are accessible through MPS and Wisconsin data warehouses.</p> <p>A post-transition coordinator for the network tracks all students attending college using FERPA authority agreed to by graduates at the time of high school graduation and Beyond 12 software. Carmen has been able to track 100% of its graduates as to whether they enroll or college or not, including those who re-enroll after leaving or who enroll more than three years after high school graduation.</p>

Goal 3. *Share components and best practices of the Carmen education model to a traditional public high school through a strategic partnership with Milwaukee Public Schools.*

PROJECT OBJECTIVES	OUTCOMES
<p>Identify components of the Carmen model that can be reasonably adopted by Pulaski High School and adopt them.</p> <p>Improve school climate and academic outcomes at Pulaski.</p> <p>Strengths and challenges of the Partnership between the charter and traditional high schools and use to continually improve.</p>	<p>Pulaski High School will be using the summer bridge program, 9<sup>th</sup> grade core curriculum framework, and instructional and coaching models of Carmen in the first year of the partnership and build out with each subsequent 9<sup>th</sup> grade class (See Evaluation Plan)</p> <p>The school climate and academic performance indicators listed for Carmen under Goal 2 will improve at Pulaski by 25% or more from where they were at the beginning of the partnership in the first three years of implementation and progressively more in subsequent years.</p>

**D. Management Plan and Personnel**

Carmen employs an education model that has proven to be effective in closing the achievement gap of educationally disadvantaged students in Milwaukee. Carmen also has a team in place that has a strong track record of managing high-quality schools and now successfully replicating the Carmen model. In seeking to further replicate its model, Carmen brings the following: (1) A management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks, (2) A business plan for improving, sustaining, and ensuring the quality and performance of charter schools created, (3) A multi-year financial and operating model with a demonstrated commitment of current and future partners, and evidence of broad support from stakeholders critical to the project’s long-term success, (4) A plan for closing charter schools supported, overseen, or managed by the applicant that do not meet high standards

of quality, (5) Highly qualified personnel with experience managing projects of the size and scope of the proposed project.

1. Management Plan

a. *Timeline, Milestones, and Responsibilities*

<b>Task</b>	<b>Milestones</b>	<b>Team(s) Responsible</b>	<b>Target Month of Completion (Year Prior to Each School Opening/Start of School Year)</b>
<b>Secure Needed Approvals</b>	Negotiate leases for new school properties	Executive; Operations	September-November
	Contract terms approved by Carmen & MPS Boards for new charters	Executive; Operations	September-November
<b>Hire/ Develop Staff</b>	Principal-in-training identified and training plan set	Executive	August
	Recruitment strategy/event commitments and postings finalized	Talent Recruitment	October-December
	Instructional, support staff hired	School Leaders	January - June
	Professional development scheduled and planned	Curriculum and Assessment	May
	All staff in house for training and professional development	School Leaders/Principal; Curriculum and Assessment	August
<b>Enroll Students</b>	Execute outreach and PR strategy	Admissions; Partnership Dirs	September – April
	First enrollment application deadline	Admissions	November
	At least forms completed for 50% of target enrollment met	Admissions	January
	At least 75% of target enrollment met	Admissions	April
	100% of target enrollment met	Admissions	June
	New student orientation complete	School Leaders	July
<b>Prepare Facility/ Secure Materials</b>	Audit of existing facility, furnishings and equipment complete/needs identified	Operations	February
	Facility improvements completed/occupancy certificate secured; All materials and supplies in house	Operations	July
<b>External Evaluation</b>	Proposals solicited from VARC, Children's Research Center, and UWM	Executive; Partnership Directors	September – November (2016)
	External team selected/contract	Executive; Partnership Dirs	December (2016)
	Annual school evaluations completed and reviewed	External Evaluation Team; Executive; Central Administration; School Leaders	December (annually beginning in 2017)
	Summary and recommendations complete for Carmen Model Analysis	External Evaluation Team	December (2018)
	Conferences/media releases complete	External Evaluation Team	January – December (2019)

*b. Development of High-Quality Staff*

The Carmen philosophy on human capital is that the best talent is developed internally. Detailed below are how Carmen intentionally supports teacher and leadership development and how it uses staff evaluation to provide constructive feedback and ensure quality. A detailed description of the Carmen Coaching Model is included in Appendix H and summarized below.

*Developing School Leaders.* Effective school leaders are essential for successful schools. Carmen maintains a strong pipeline of school leaders with most of the current and proposed leaders for the new schools having started at Carmen in either a teaching, assistant principal or other similar role. Carmen has accessed both external and internal resources to achieve this. Seven Carmen staff completed requirements for and earned state Administrative Leadership licenses over the past two years. Two Carmen principals completed the Ryan Fellowship - Accelerate Institute Program in Chicago. One was the principal at Carmen South for three years and will start Carmen Southeast. The other was a Director of Curriculum and Instruction at Carmen South and will take over as principal there. In addition, one year prior to the launch of each new school, a principal-in-training is identified for the new campus and a one-year plan developed to build and augment his or her skills. The current co-principal of Carmen Northwest Middle School is taking on the principal-in-training role to plan the new southside Carmen Middle School to open in 2017. Principals and assistant principals (i.e., Deans of Students and Directors of Curriculum and Instruction) receive additional professional development specific to their expertise and areas of need. The Instructional Leadership team -- a learning community composed of the Carmen network Director of Curriculum, Instruction, and Assessment, the Principals and school-based Directors of Curriculum and Instruction for STEM and Humanities - - meets two times a month in order to address network wide curriculum and instruction issues

and provide a forum for practicing the skills needed to be a strong instructional leader. The network Culture team -- composed of the Carmen network Director of Student Internships and Career Readiness, and the school-based principals and Deans of Students and School Culture -- also meets regularly to address issues and provide feedback through consultancy protocols.

*Developing Excellent Teachers.* Onboarding of new teachers takes place during 80 hours of professional development in the two weeks before new students arrive for orientation, and for returning teachers three to four days before new student orientation. Activities include basic training on essential elements of the Carmen school model, including the mission and vision, instructional model, curriculum components, school and classroom culture, and the use of technology needed to execute these elements.

Throughout the school year, there are 8-10 network-wide professional development days when shared priorities are addressed, and the collective knowledge of the teams from each campus is leveraged.

Each campus has 2-3 hours of professional development each week during an early release day (time varies at each campus and according to the stage of development of the school). This time is used for campus meetings, collaboration between subject area, grade level, and advisory teams not possible during the normal school day, and differentiated professional development based on the needs of students and teachers at a specific campus.

The key lever to increase teacher effectiveness is individually tailored, instructional coaching. While professional development and collaborative teams can provide additional ideas for instruction and support, instructional coaching is the targeted support that moves teachers to quick and significant growth in their instruction. Coaches are principals, directors of curriculum

and instruction, department chairs, and proven teacher-leaders and they receive training from the network team to implement the Carmen coaching model.

*Performance Evaluation of Teaching Staff.* The Carmen Teacher Evaluation Model is rooted in the belief that professionals need information about their level of practice in order to continuously improve their performance. As a result, The Carmen Teaching Framework, based on Charlotte Danielson's Framework for Teaching but integrating specific annual objectives to support the Carmen model, is grounded in a constructivist view of learning and teaching. Although it is used for evaluation, the Carmen Teaching Framework is primarily used to aid in teacher development. Each domain of the rubric is made up of components that describe unsatisfactory, basic, proficient, and distinguished teaching by giving examples of student outcomes and teacher actions. Coaches and teachers have the understanding that these components describe the teaching and not the teacher; therefore, this tool is used to help teachers and coaches have a common understanding of what outstanding instruction looks like, sounds like, and feels like.

Throughout the year, teachers receive feedback about progress towards their goals as well as ratings on the Carmen Teaching Framework at a mid-year and an end of year evaluation. The coaching cycle, which includes professional growth goal meetings, mid-year and end-of-year evaluations, and support for struggling teachers, is illustrated in the graphic below and described in detail in Appendix H: The Carmen Network Instructional, Teacher Development, and Coaching Model

## 2. Business Plan

Carmen developed its expansion and replication business plan in early 2015. The Carmen Board of Directions and leadership team developed the business plan and a five-year financial

model that takes the network to sustainability on only public per-pupil funds. Below is a description of how Carmen improves, sustains, and ensures the quality and performance of its schools in the areas of: facilities, central administration, financial management, student academic achievement, human resources, student enrollment, governance, oversight, and community engagement.

### *a. Facilities*

Carmen South, Carmen Northwest and the new Carmen Southeast high school to open in August 2016 are each housed in leased Milwaukee Public Schools (MPS) facilities. Carmen South serves 360 Carmen students in a circa 1928 middle school facility shared with an MPS elementary school that serves 340 students. Carmen Northwest is also located in a former district middle school that was transferred to Carmen after the district decided to close the existing school due to its chronic low performance and under-enrollment. Both campuses have amenities that support Carmen's goal of providing a comprehensive high school experience which includes laboratories for science and technology, a gym for varsity level competitive sports, music rooms and an auditorium for band and theater, and other specialty spaces to support extra-curricular activities.

Carmen has executed a lease with MPS to house the new Carmen Southeast within a low-performing and under-utilized district high school where the MPS Pulaski High School will continue to operate as a distinct school but in partnership with Carmen in order to adopt some of Carmen's program components to improve academic outcomes for Pulaski students. As summarized in Section II. Competitive Preference Priority 1 - Serving High-Need Students, (b) School Improvement, the goal is not only to occupy a district facility that has the desired amenities (i.e., auditorium with theater, science laboratories, art and band rooms, state of the art

## Carmen Schools of Science and Technology

automotive technology training facility, updated varsity athletic fields for all high school sports), but also to provide students who have been attending a historically poor-performing school (Pulaski) with a program built on a proven track record of success. Carmen Southeast will be the first Carmen school to operate in a facility actually designed for use as a high school.

Carmen is currently working with MPS to identify south side facility options for the new Carmen middle school to open in 2017. The most likely option is a former elementary school building no longer in use by the district that is more than adequate for the planned 310 student middle school. For the new middle/high school to open in 2018, Carmen's Head of Schools and the district Superintendent have discussed a similar type of strategic co-location as is being launched in 2016 with Carmen Southeast and MPS Pulaski High School, but the next one likely would be on the north side of Milwaukee, where MPS has only one high performing high school other than Carmen Northwest and the district school is a selective admissions school. Carmen has always had a very positive working relationship with MPS, collaborating with three MPS Superintendents and navigating through many changes in the elected Milwaukee Public Schools Board of School Directors over the last ten years. Thus it is a reasonable assumption that favorable charter and lease arrangements will continue for any new schools proposed as part of this expansion initiative (see also letter from MPS in Appendix C).

Carmen leadership is also preparing backup plans in the event a facility is not identified in time for planned openings. Options for housing the two planned new schools in private, commercial facilities have been evaluated and a former parochial school facility that will be available to house the new middle school. Other options are leasing rehabbed commercial space.

*b. Central Administration*

Over the past two years Carmen has been building a Central Administration Team in order to lay a strong foundation for overseeing the finances, student academic achievement, facilities and operations, and human capital and professional development components of a network of schools. The current and future network organization charts are included in Appendix H: Current and Future Organization Charts.

As the Carmen network continues to grow the Central Administration will oversee the core functions of the organization, while maintaining a focus on the Carmen vision. Each individual Carmen school is autonomous in several ways and led by a principal, while remaining consistent and accountable to certain non-negotiable terms of the Carmen education model. The operations model adopted by the Carmen network places responsibility for day-to-day school functions primarily at the schools, and reserves a relatively lean Central Administration function for network-wide financial and human capital services; facilities management; alignment of network curriculum, assessment and instructional practice; mission and vision alignment and culture continuity among the campuses; public relations; data systems management; and external reporting and charter contract compliance. The decision rights and responsibility distribution between the Central Administration and the schools is summarized in Appendix H:

Responsibility Centers: Central Administration, School Sites, and Shared.

*c. Financial Management*

Carmen is funded primarily by state per pupil funds allocated through MPS, which serves as the LEA for all charters it authorizes. Carmen South, which is now ten years old, was supported in its startup phase with public and private grants, but after its fourth operating year, the school was fiscally self-sustaining on state public funds, Federal Title funds, and part B of

IDEA. The financial model for Carmen's expansion initiative includes 3-5 years of start up funding for each new school but then allows for sustainability on Wisconsin public per pupil and Federal Title and IDEA funds (see five-year budget plans for each existing and planned school in Appendix G).

As the network has grown, Carmen has scaled its financial management team and operations structure to ensure Carmen's ongoing capacity to maintain financial health and integrity. Two new professionals -- a *Financial Manager* and a *Director of Operations* -- were hired within the past two years and both brought backgrounds in school finance and financial management. In addition, the Carmen board brought in a new accounting firm, Ritz Holman LLC, in the spring of 2016 to provide accounting services and back-office support at the level needed to support a rapidly growing organizational budget. Ritz Holman LLC brings extensive experience in the public and charter school sector as well as in nonprofit accounting. Together this team ensures compliance with current and new mandates, maintains required state and federal reports, and ensures the fiscal accountability of the network.

*d. Student Academic Achievement*

The *Director of Curriculum, Assessment and Instruction* and the *Instruction and Professional Development Manager* along with the *Directors of College Transition and Career Readiness* will devote a significant amount of time to developing and training staff on implementing the Carmen model, monitor progress on student achievement goals, and expand partnerships and college and career pathways.

*e. Human Resources and Student Enrollment*

The *Director of Human Resources and Student Enrollment* works closely with the operations and school-level admissions teams in developing and executing strategies to maintain

## Carmen Schools of Science and Technology

and grow student enrollment to meet Carmen’s goals. Working with her site-based business managers, the Director also oversees health and other employee benefits. As the network grows and human resource needs become more complex, Carmen will rely both on human resources consultants, through its membership in MRA-The Management Team and additional support staff. School-level admissions coordinators will take on increasing responsibility for student enrollment, allowing the Director to maintain focus on high-level strategy and human resource development.

### *f. Governance, Oversight and Community Engagement*

Carmen Schools of Science and Technology’s Board of Directors has authority over all policy decisions regarding the operations of network schools. Together with the Head of Schools, the Board of Directors is accountable to the charter authorizer for ensuring that the schools follow the provisions of the charter contracts. The Board’s Bylaws also specify a committee vehicle, the School Improvement Committee, as a tool for facilitating community engagement with each school. These committees provide the Board of Directors stakeholder input into its policy making function. The Bylaws require that each School Improvement Committee includes representatives from the Board of Directors, the parent community, the faculty, the student body, as well as neighborhood, education and business leaders, principals of K-5 and K-8 feeder schools, higher education representatives from admissions and science and technology departments, and others with a stake in the success of the school.

The Board of Directors also has authority over the schools’ budgets. Over the last few years, the Carmen Board of Directors has started the transition from a “founding” board to a “sustaining” board. Once the Carmen board and MPS agreed that the success of the South Campus warranted expansion of the Carmen model, it became clear that a new kind of board was

needed to grow the institution. In planning for Carmen Northwest, a board management consultant assisted the Carmen Executive Committee and board members in ascertaining necessary changes or new representations and committee and term structures that are needed for successful expansion. The Carmen Board is comprised of a mix of community leaders and people who have been directly involved in education or community-based organizations. Business and community leaders with significant fundraising experience have been added over the past few years. (See Appendix B for a list of Carmen board members and their affiliations.)

### 3. Multi-Year Financial and Operating Model and Stakeholder Support

#### a. *Overview of Carmen's Financial and Operating Model*

Carmen is seeking \$2,348,343 in CSP funding in order to support the execution of its growth plan. A total of 85% of these funds will be used directly at the school site level and 15% will support and strengthen the central administrative team's capacity to effectively replicate its schools and ensure the scalability and fidelity of the Carmen model. As is detailed in the budget narrative section, grant funds will provide for initial planning and implementation in alignment with the funding requirements. Principals-in-training (i.e., in the planning year before the school opens) and admissions coordinators will be funded at the site level and staff directly engaged with professional development, replication of the academic and cultural models, and recruitment of a high-performing instructional team will be funded at the network level. Approximately 50% of the total CSP funding request will be used to provide for classroom furniture, student materials and other equipment necessary to operate a quality academic program.

In addition to the CSP funds, Carmen will receive public per pupil funding from Wisconsin, which is passed through MPS -- the LEA, as well as funds from Federal Title program and IDEA sources, private grants, and independent donors. The Carmen Board of

## Carmen Schools of Science and Technology

Directors has engaged in a multi-year planning process which has included a significant emphasis on reaching financial sustainability in the growth model within the next five years. By the start of the 2020-2021 school year, Carmen will be fully sustainable on public per pupil and categorical funds alone. By that time, Carmen will have attained its goal of building operating reserves to fund a minimum of 40 days of working capital for all campuses with the exception of the final new campus which will have 25 days of working capital on hand by August 2020.

Carmen's five-year financial models for the network and each current and future school and campus are presented in Appendix G: Supplemental Organizational Budgets and Financial Information.

### *b. Commitment of Funding Partners*

Grant support from the national Charter School Growth Fund (CSGF) was secured in the summer of 2015 and provides a significant backbone for Carmen's expansion. The \$3.5 million CSGF grant for the growth and expansion of the Carmen network of charter schools will be distributed across Carmen Northwest, which will be enrolled at capacity in 2017; Carmen Southeast, which is opening in 2016, and the two new schools proposed here to open in 2017 and 2018. At the schools already operating, these funds will largely be used to offset central administrative (CA) costs, which are embedded in each school budget on a pro rata basis. As Carmen grows, the CA cost will be spread across a larger school population and current schools will be fully self-sustaining.

CSGF's investment continues Carmen's solid track record of raising funds to support growth. Carmen raised \$1.4 million to launch Carmen South and over \$2.2 million to launch Carmen Northwest, not including more recent investments to support ongoing growth. Funds raised over the past ten years for the launch of Carmen South and Carmen Northwest include: the

## Carmen Schools of Science and Technology

Wisconsin Department of Instruction (DPI) NCLB state block grants for charter school startups (\$1.5 million); Bill and Melinda Gates Foundation (through the Milwaukee-based small high school initiative) (\$400,000); Walton Family Foundation (\$500,000); Betty Brinn Foundation (\$45,000); Bostik Inc. (\$20,000); M&I Bank Foundation (\$500,000); Caterpillar Foundation (\$190,000); Trinity Foundation (\$150,000); and The Burke Foundation (formerly Trinity - \$550,000).

Carmen's Board of Directors is leading an effort to increase both private and foundation fundraising to support Carmen's growth. The Board, with the support of a campaign consultant and leadership from the Head of Schools, is leveraging Carmen's position as the only high school in the city undertaking a replication initiative. To date, over \$125,000 in private donations have been secured and multi-year grant commitments of \$915,000 (not including the CSGF commitment) are expected to be executed during the summer of 2016 with additional proposals pending. Local private and charter elementary schools have successfully replicated with the support of the Milwaukee philanthropic community and Carmen anticipates success with continued fundraising. Local philanthropists understand that strong K-5 and K-8 schools need high performing middle and high schools where they can send their students and are interested in growing Carmen to fill this gap (see support letter from The Burke Foundation in Appendix C).

### *c. Stakeholder Support*

The successful expansion of the Carmen network is predicated on the many strong relationships its leaders have built with community organizations, community leaders, national school reform organizations, and other charter management organizations both nationally and in Milwaukee.

## Carmen Schools of Science and Technology

National strategic partnerships include the Charter School Growth Fund and Teach for America. CSGF is supporting Carmen's expansion/replication efforts and introduced Carmen to other high performing charter networks (e.g., STRIVE, YES Prep, Denver Schools of Science and Technology) that have provided valuable advice and collegial relationships to Carmen, which is the only high school network in Milwaukee replicating its educational model. Teach for America is a critical partner in human capital recruitment for both teachers and future Carmen leaders.

Local partnerships include Milwaukee Public Schools, the Housing Authority of the City of Milwaukee, and various neighborhood and economic development organizations operating where Carmen schools are located (e.g., Layton Boulevard West Neighbors, Silver Spring Neighborhood Center, Southgate). The Housing Authority and City of Milwaukee have included Carmen Northwest as the quality 6-12 school in the Choice Neighborhood HUD-supported initiative. MPS partners with Carmen to lease school facilities and to strategically adopt the successful elements of Carmen's model. The community-based organizations are Carmen's partners in neighborhood revitalization efforts and community service. (See support letters from the organizations listed here and additional ones in Appendix C.)

#### 4. Plan for Closing Schools

Carmen engages in multiple efforts to ensure that any slippage in progress toward meeting the academic, financial, and operational performance benchmarks set forth in the charter contract is identified and resolved before reaching a level that cannot be reversed or would lead to significantly weakened outcomes. School leaders and network staff engage in rigorous regular evaluations and data assessments throughout the school year and at specified points. The Carmen network's annual school audit process, included in Appendix H, provides a comprehensive

## Carmen Schools of Science and Technology

review of each school's culture and academics from multiple perspectives and provides the basis for development of new network-wide and school site annual goals and interventions. Failure to show improvement on goals and meet academic growth goals in multiple areas for a sustained period of years, with the exact number dependent on the age of the school, would provide grounds for closure. In addition, should there be a substantial change to charter school funding such that Carmen could no longer effectively operate its schools, Carmen's Board of Directors would proceed with school closure.

The School Dissolution Plan outline is given in Appendix H, and shows how Carmen would proceed, consistent with its charter contract requirements and the authorizer's procedures. As an independent charter school authorized by MPS, all records would be turned over to MPS, which serves as the LEA for all charters it authorizes. Under the dissolution plan, the authorizer is notified immediately in the event of a closure decision. The parents of all currently enrolled students would be notified immediately and provided with information on other school enrollment options as well as a complete set of official records, including transcripts and health forms as necessary for future school enrollment. The plan calls for the appointment of Custodians of Student Records and of Personnel Records and of a Trustee for Finance and an Independent Auditor. The student records would be transferred to schools where the students enroll or to MPS, for students who already graduated. The personnel records would be maintained by the Custodian of Personnel Records and will be kept for the required period of time. A list of all former employees would be shared with MPS. All assets of the school to be closed would remain the property of Carmen unless acquired with public per pupil funds in which case they would be turned over to MPS, the LEA. Since buildings are leased through MPS, the affected lease would be terminated according to the lease terms. A financial audit of

the school would be performed within six months of closure, or earlier depending on whether the school closed toward the end of a fiscal year. The financial trustee would ensure that all bills are paid for within 30 days of receipt and prepare a final financial report to the Carmen board and to MPS. The auditor would prepare a final audit once all financial reports are prepared and invoices paid.

#### 5. Qualifications of Management Team

Carmen has built a highly qualified management team with the experience necessary to successfully achieve the goals of this project. Below is a summary of each key team member's experience, role, and responsibilities. Resumes are included in Appendix B.

*Dr. Patricia Hoben, Co-Founder and Head of Schools* Throughout her career in science and public policy Dr. Hoben has been a passionate advocate for programs to increase the supply of women and underrepresented minorities prepared to work in science and engineering professions. She served as a Program Officer for a \$10 million, K-12 science education grants initiative at the Howard Hughes Medical Institute in Maryland in the early 1990s and, after moving to Minnesota, Dr. Hoben served as Associate Director of the Bakken Museum and as Vice Chair of Minnesota's public-private science and math education reform board (Sci/Math MN). Dr. Hoben directed and raised the funds for a \$6 million community partnership to strengthen public K-12 science curriculum and instruction in Minneapolis. After moving to Milwaukee, Dr. Hoben led the planning team for the first Carmen High School of Science and Technology campus on Milwaukee's south side and served as the founding school leader. In July 2013 she led the opening of Carmen Northwest and transitioned to the role of Head of Schools. Dr. Hoben holds a doctoral degree in Molecular Biophysics and Biochemistry from Yale University and graduated *magna cum laude* from the University of Colorado, Boulder, with a

## Carmen Schools of Science and Technology

B.S. degree in Molecular, Cellular and Developmental Biology. Dr. Hoben is accountable to the Carmen Board of Directors. Her responsibilities include development and implementation of strategic plans; board development, training and support; external relations; development and fundraising; budget development and management; school expansion initiatives; and quality monitoring across the network. Beginning in 2017, the title for this role will be “CEO” only.

Anna Flores, Director of Human Resources and Student Enrollment, joined Carmen in 2007 and now serves as the Director of Human Resources and Student Enrollment. Anna has been involved with all aspects of business management, human resources, and enrollment at Carmen and possesses a significant amount of institutional knowledge. In addition, Anna has built relationships with elementary feeder schools throughout Milwaukee and possesses a high level of insight into Carmen families needs and goals. Anna will graduate from Alverno College in December 2016 with a B.A. in Communication, Management, and Technology.

Heather Heaviland, Director of Operations, joined Carmen in July 2015. In this role, Heather is responsible for oversight of network-wide operations and finance, with a focus on building scalable infrastructure. Prior to joining Carmen, Heather led the regional consulting division of a nonprofit community development financial institution. In that role, Heather was responsible for developing the infrastructure, business relationships, and human capital that enabled her division to efficiently deliver services to over fifty clients each year, 25% of which were charter schools. In addition, Heather and her team managed multiple multi-million dollar grant programs on behalf of the organization. Heather holds a Master’s in Public Policy and a Master’s in Sociology from the University of Chicago.

Amanda Gentine, Director of Curriculum, Instruction, and Assessment, joined Carmen in 2014 as the Director of Curriculum and Assessment. Now she oversees the Carmen network

## Carmen Schools of Science and Technology

academic team, including the Manager of Student Support and the Manager of Instruction and Professional Development. Amanda leads network instructional leadership team meetings, oversees the development of all network-wide assessments, and collaborates with other network academic staff to develop and deliver network-wide professional development. Amanda holds a B.S. degree in English from Notre Dame and an M.A. in Instruction from Alverno College.

Bevin Christie, Director of the Student Internship Program, Career Readiness and Community Engagement, joined Carmen in 2008 as the Director of the Student Internship Program at Carmen South. In her current network role, Bevin is responsible for career readiness for the Carmen network, which includes the internship program, developing a career and technical education program, and youth apprenticeships. She also oversees advisory programming, community engagement, including partnerships for student community service, and leads the network Carmen Culture Team. She holds both a B.A. in Communication, Management, and Technology and an M.A. in Education from Alverno College.

Beth Mesrobian, Director of College Transition, joined Carmen in 2011 as the College Transition Coordinator for Carmen South. Since then she has created and led the college transition program that supports students through college graduation. Now as the network's Director of College Transition, Beth is responsible for overseeing a fully implemented college transition program at the two current Carmen high school campuses, including two site-based College Transition Coordinators and a network Manager of Post-Transition Services, and initiating college transition programs at all new schools. Before joining Carmen she worked at Accenture as a Senior Analyst. She holds a B.A. in History from Princeton and a College Counseling Certificate from UCLA.

## Carmen Schools of Science and Technology

Aaron Lippman, Carmen Southeast Principal, joined Carmen in 2013 as the Principal of Carmen South. Since taking over, he has led Carmen South's staff and students to significant gains in the areas of reading achievement on the ACT exam by doubling the year to year growth from PLAN to ACT, and created management and accountability systems that are in use now at Carmen Northwest. Aaron will be launching Carmen's third high school campus, Carmen Southeast, and will oversee its growth to 800 students, which will make it the largest high school in the Carmen network. Before joining Carmen, Aaron was an Accelerate Institute Ryan Fellow. Aaron has a B.A. from the University of Wisconsin-Madison, an M.A. in Education from DePaul University and an M.A. in School Leadership from Concordia University.

Janis Meinke, Carmen South Principal, joined Carmen in 2010 as a mathematics teacher and later became the Director of Curriculum and Instruction, STEM at Carmen South. She is completing a Ryan Fellowship and taking over as Principal of Carmen South in July 2016. Before joining Carmen, Janis taught math at a private school in Milwaukee for nine years. She holds a B.A. in Mathematics from University of Wisconsin, Milwaukee, and an M.A. in Administrative Leadership from Alverno College.

Kyra Vandebunte, Carmen Northwest High School Principal, joined Carmen Northwest in 2014 as Director of Curriculum and Instruction for STEM and became Principal/Campus Director in 2016. Over the past few years she has coached and mentored teachers across content areas and collaborated with teachers to develop high quality assessments and curriculum that supports the holistic development of students. Before joining Carmen, Kyra was a Teach for America Corps member and a Manager of Teacher Leadership Development at Teach For America, Milwaukee. She holds a B.A. in Communication from the University of Michigan, an

## Carmen Schools of Science and Technology

M.A. in Educational Policy and Leadership from Marquette University, and an M.A. in Administrative Leadership from Alverno College.

Kris MacDonald, Planning Year Principal/Principal-In-Training, joined Carmen in 2014 as Dean of Students and School Culture for the middle school at Carmen Northwest. She'll transition this year into the role of Principal-in-Training under which she will plan the launch of the middle school to open on the southside of Milwaukee in 2016. Before joining Carmen, Kris taught abroad in China and served as the Academic Manager of a school in Costa Rica. She also taught at KIPP San Francisco Bay Academy and served as a School Director for Teach for America, Chicago. She holds a B.A. in Psychology from the University of Wisconsin - Madison, an M.A. in Education from Alliant International University, and an M.B.A. in Educational Leadership from Milwaukee School of Engineering as a Woodrow Wilson Fellow.

Kaylee Jackson, Carmen Northwest Middle School Principal, joined Carmen in 2014 as Director of Curriculum and Instruction for the Carmen Northwest middle school grades and will serve as Principal of the middle school grades at Carmen Northwest beginning in July 2016. Before joining Carmen, Kaylee taught English for five years in both middle and high school grades at another Milwaukee charter school. She holds a B.S. in Education from the University of Wisconsin - Milwaukee and an M.S. in Educational Leadership from Cardinal Stritch University.

Jodi Goldberg, Carmen-Pulaski Partnership Co-Director, joined Carmen in January 2016 and works with Milwaukee Public Schools and Carmen as Co-Director of the Carmen-Pulaski Partnership. Her responsibilities include managing and facilitating communication among five Working Groups and the Steering Committee that are making decisions about and strategies for implementing the collaboration between the Carmen Southeast charter school and

the MPS Pulaski High School. Before joining Carmen, Jodi served as Director of Local Engagement for GreatSchools. She also was a coach for charter school planning teams and founding school leaders under the Gates Foundation's Small High School Initiative in Milwaukee. Jodi holds a B.A. and M.A. in English Literature from Kentucky Wesleyan College and Marquette University, respectively.

Amanda Mehr, Manager of Instruction and Professional Development, joined Carmen in 2010 as a 2010 Teach for America Corps member teaching English at Carmen South. In the fall of 2013, Amanda joined Carmen Northwest as the founding Director of Curriculum and Instruction. Amanda is now the Manager of Instruction and Professional Development for the Carmen network. Her responsibilities include collaborating with network and campus staff to plan and execute professional development for teachers and school leaders including new and returning teacher onboarding, network wide professional development days. She also manages instructional coaching and led development of a school audit process to ensure school quality and alignment to the Carmen model. She holds a B.A. in Writing and Political Science and an M.A. in Educational Policy and Leadership from the Marquette University, and an M.B.A. in Educational Leadership from Milwaukee School of Engineering as a Woodrow Wilson Fellow.

## **E. Evaluation Plan**

### 1. External Evaluation

Carmen is requesting \$104,925 to support third party evaluation teams to conduct an assessment of Carmen's education model, its replicability, and transferability to a traditional public school. The specific purpose will be to: a) identify the specific elements of Carmen's model that have the strongest correlation with academic success and college attendance and persistence rates and ensure those elements are replicated with fidelity at each school, and b)

identify practices and strategies that can be successfully disseminated to other schools and the document the successes and challenges of the Carmen-Pulaski Partnership. As a first step in this process, Carmen requested preliminary proposals from the NCCD Children's Research Center (CRC) and from the University of Wisconsin, Milwaukee Department of Education. The CRC has conducted many evaluations of charter schools in Milwaukee over the past 20 years and the researchers at the University of Wisconsin, Milwaukee recently completed a two-year study of a highly visible multi-organization education partnership in Milwaukee.

*a. Evaluation of the Carmen Education Model and Fidelity of Replication at Multiple Schools*

CRC would conduct a comprehensive process evaluation of the Carmen model that describes the model components and examines implementation fidelity of the model at the new school sites. Both Carmen Southeast and the new south side middle school will be evaluated.

CRC will also undertake an outcome or impact analysis to examine and compare student outcomes. They will conduct analyses of Carmen's data from existing and new schools to examine key outcomes, including attendance, parent participation, academic achievement, and postsecondary success.

This potential approach is premised on meeting What Works Clearinghouse Evidence Standards for a quasi-experimental design study or randomized controlled trial.

*b. Evaluation of the Carmen-Pulaski Partnership*

An evaluation team composed of University of Wisconsin, Milwaukee, Department of Education would conduct a development evaluation of the Carmen-Pulaski Partnership. Developmental evaluation is particularly appropriate for innovative initiatives such as replication and new approaches to school improvement. Since program innovation, replication and improvement require assessing how a program model is functioning in a new dynamic context,

real time evaluative thinking and feedback from developmental evaluators provides adaptive guidance as well as documentation of progress. Developmental evaluation targets assessment of program systems, growth in understanding of improvement processes, and tracks and documents evidence. Evaluators monitor and assess the plan-implement-monitor-adjust and continuous improvement actions associated with key program model components. Preliminary project evaluation questions include the following:

1. How well does Carmen replicate its established model at its third high school to be established within the Pulaski Campus?
2. How much of Carmen's model is replicated at the MPS Pulaski High School?
3. Does Pulaski High School improve? (Anticipated outcome indicators: school climate, attendance, suspensions, and academic performance as measured by annual growth on PLAN and ACT and STAR, as appropriate to grade level)
4. What are the strengths and challenges of the collaboration?

## 2. Annual Evaluation and School Audits by Carmen Schools

Carmen uses an annual school audit process to provide feedback and recognize both strengths and challenges of each school. Beyond quantitative measures the audit has several components to gather information about all aspects of the school environment as described in detail in “Carmen Schools Feedback and Audit Cycle” in Appendix H.

## Section V - Application Requirements

- (a) Please see Section IV. C and E.
- (b) Please see Section IV. A and D.
- (c) Please see Section IV. D.
- (d) Please see Section IV. A and B as well as Appendix E.
- (e) Please see Section I Absolute Priority 1 and Section IV. D.
- (f) Please see Section IV. D.
- (g) Please see Section II Competitive Preference 1 and Section IV. D.
- (h) We are not requesting waivers of any Federal statutory or regulatory provisions.
- (i) Please see Section IV. D.
- (j) Please see Section II Competitive Preference, Priority 2 - Promoting Diversity.
- (k) Carmen is required by its charter contracts to serve children with disabilities in the same manner as its local educational agency, Milwaukee Public Schools, serves children with disabilities in its other schools, including providing supplementary and related services on site to the same extent to which the local educational agency has a policy or practice of providing such services on the site to its other public schools.
- (l) Please see Section I Absolute Priority 1
- (m) Please see Appendices E and F.
- (n) Please see Appendices E and F.
- (o) Not applicable.