

**APPENDIX A**

**AMENDMENT REQUEST AND SUPPORT**

**MATERIALS**

1. NEW SCHOOL AMENDMENT REQUEST FORM
2. AMENDMENT REQUEST DOCUMENTS



Arizona State  
Board for  
Charter Schools



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## New School

### Charterholder Info

#### Charter Holder

**Name:**  
Math and Science Success  
Academy, Inc.

**CTDS:**  
10-87-98-000

**Mailing Address:**  
1557 W. Prince Road  
Tucson, AZ 85705  
> [View detailed info](#)

#### Representative

**Name:**  
Tatyana Chayka

**Phone Number:**

### Downloads

 [Download all files](#)

### Form Fields

#### Name of school

Academy of Math and Science Heroes Park

#### Grade levels to be served

K  
1st  
2nd  
3rd  
4th  
5th  
6th  
7th  
8th

#### First day of Operation

07/23/2020

#### Physical Address

8001 W Missouri Ave  
Glendale, AZ 85303

**Physical Phone Number**  
(623) 547-5587

**Physical Fax Number**  
(623) 547-5587

**Mailing Address**  
3448 N 1st Ave  
Tucson, AZ 85719

**Mailing Phone Number**  
(520) 887 - 5392

**Mailing Fax Number**  
(520) 888 - 1732

## Attachments

### Board Minutes

 [Download File](#) – Heroes Park Resolution

### Occupancy Documentation

 [Download File](#) – Compliance Assurance

 [Download File](#) – Heroes Park Schematics and Occupancy

Lease agreement or proof of purchase for facility –  [Download File](#)

Copy of Fingerprint Clearance Card for school site administrator –  [Download File](#)

Copy of liability insurance coverage –  [Download File](#)

Narrative –  [Download File](#)

### Additional Information

 [Download File](#) – Enrollment Matrix

 [Download File](#) – Agricultural Heroes Park

 [Download File](#) – Staffing Matrix

## Enrollment Cap

**Is an Enrollment Cap Increase being added to this request?**

Yes, an Enrollment Cap Increase is also being requested.

**From:**  
2550

**To:**  
3650

Occupancy Documentation –  [Download File](#)

## Grade Level Change

**Is a Grade Level Increase being added to this request?**

No

Curriculum Samples

No documents were uploaded.

## Feedback

Feedback

## Signature

Charter Representative Signature  
Tatyana Chayka 03/21/2019

**Math and Science Success Academy –New School Site**  
***Academy of Math and Science Heroes Park***

**Describe the rationale for this request:**

We are requesting approval of a new school site, Academy of Math and Science (AMS) Heroes Park for the 20-21 school year.

This application is submitted based on our track record of delivering high performance in low-income and underperforming areas, the high demand exhibited for our programs, as well as our organization's mission and commitment to serving as many underserved students as we can. We will provide a program that is unique to this area and will significantly outperform the average school in the neighborhood.

We are also *requesting an increase in our enrollment cap from 2550 students to 3650 students to accommodate* our projected combined enrollment for Math and Science Success Academy, AMS Glendale, AMS Peoria Advanced, and AMS Heroes Park.

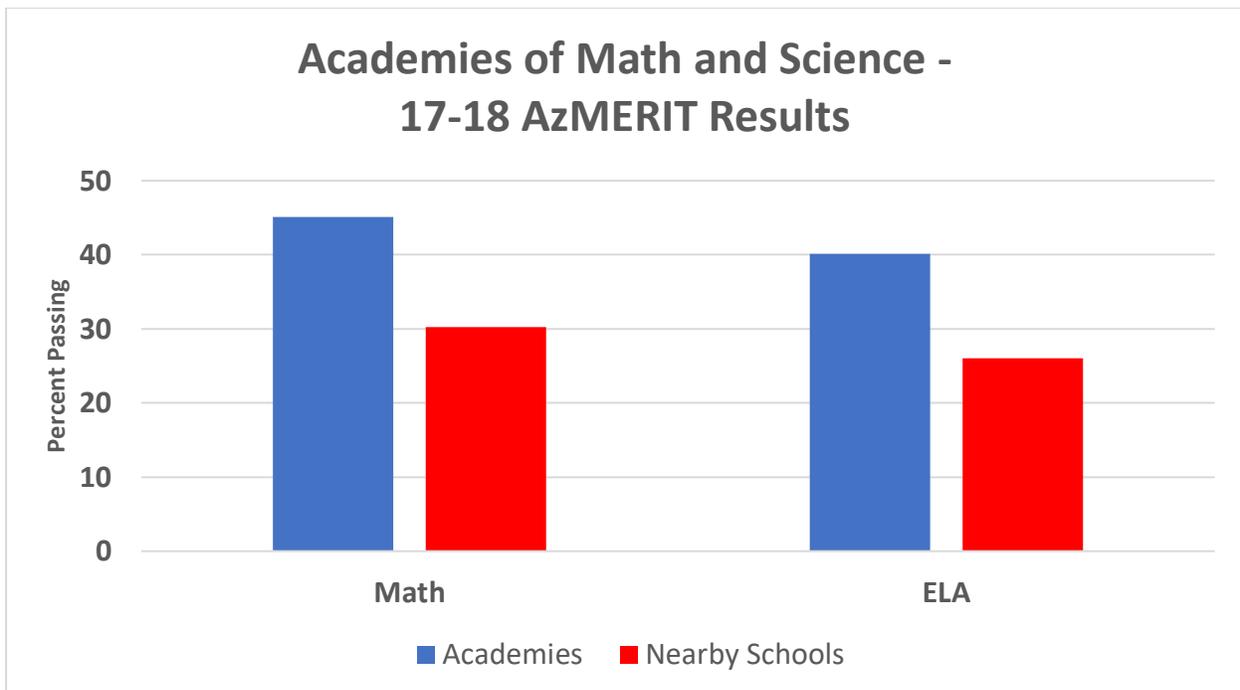
**Summary of Capabilities and Track Record:**

- Financial Framework & Capacity (see Appendix for FY 18 – FY22 projections)
  - We meet all authorizer requirements including the new financial criteria and have modeled that criteria for the Board's review for FY 18 – FY 22
  - Issued bonds for all current campuses and modeled further expansion with RBC Capital corroborating our ability to grow and issue at a rated BB
- Enrollment (see Appendix for graphs)
  - Increase of approximately 50% over last three years with successful school launches 100% of the time
  - Large waiting lists (approximately 85% of network enrollment last 2 years) – estimated this year at 3000+
- Academic Performance
  - Charterholder MASSA outperformed 328/345 K-8 Schools in Arizona for all >75% FRL 17-18 AzMERIT composite pass %
  - Related AMS school also applying for new site: AMS Prince outperformed 342/345 K-8 Schools in Arizona ranking 3<sup>rd</sup> in state for all >75% FRL 17-18 AzMERIT composite pass %
  - All network campuses highly performing and meet academic framework
- Targeting High Needs Area
  - High needs area, 29.3% (3 miles) AzMerit ELA/Math Pass % vs 41% AZ Avg.
- Track Record of Compliance
  - AMS has been eligible for expansion and in compliance with ASBCS policies over its 20 year long track record
- Hiring
  - We have 100 applications for every 1 hire (8842 from December 1, 2018 to 2/14/2019), 5x the industry average meaning we have capacity today to hire for all positions planned for 20-21

- Management Team & Execution (see Appendix for bios)
  - We have scaled the management team to match the growth of our network and have an experienced K-12 executive team experienced in handling growth
  - Successfully launched all sites previously applied for including recent 950+ first

Based on research of demand for this area and our experience enrolling students at other sites, we anticipate an enrollment of 1100 students in grades K-8 during our first year of operation.

See below for the network’s performance vs nearby schools (all schools within 3 mile radii of existing campuses):



All AMS schools have received many awards for school performance. The AMS network received the runner-up Arizona Daily Star Reader’s Choice award for “Best Company to Work For” in 2018. The AMS Prince School was named the State Charter School of the Year in 2016, was named a National Blue Ribbon School by the U.S. Department of Education, has received an EPIC Gold Gain Award from the national initiative by New Leaders for New Schools for above-average student gains as determined by Mathematica Policy Research, and has been recognized as a Title I High Performing Reward School and a High Flyer (for work with SPED students) by ADE. AMS Prince School and MASSA School were recently recognized as one of the top schools in Tucson closing the achievement gap by the Education Equality Index (and for a second year in a row).

Parents report a high satisfaction with AMS schools. See below for a ranking of schools by parent reviews (as measured by # of 5-star parent reviews on Greatschools.org including all schools within 5 miles of radii versus all private, public, and charter K-12):

- AMS Prince ranks 2/118
- MASSA ranks 1/63
- AMS Camelback ranks 3/138
- AMS Flower ranks 2/192

The new school will operate on a 200-day calendar.

**Provide a detailed staffing plan consistent with each Staffing Chart submitted with this request. Describe how the staffing (administrative, instructional, and non-instructional), enrollment, and target population needs will be addressed by the following processes: Recruitment; Hiring; and Training**

*Staffing changes:*

In the explanation below, replacement of staff refers to hiring of positions already in place for the prior year. The assumption is that we will retain 80% of staff, which is below historical track record at all of our schools.

For 19-20,

- MASSA will need to replace 10.4 FTEs and will hire .5 more FTEs for a total of 10.9 FTEs.
- AMS Glendale will likely not need to replace the initial 6 FTEs as they will only have been employed for ½ a year, 2 FTEs will be eliminated (marketers), and will need to hire 71.6 FTEs total.
- AMS Peoria Advanced will likely not need to replace the initial 5 FTEs as they will only have been employed for ½ a year, 1 FTE will be eliminated (marketer), and will need to hire 54 FTEs total.
- AMS Heroes Park will need to hire 6 FTEs (marketers, front office, Principal)
- Total hiring needs: 142.5.

For 20-21,

- MASSA will need to replace 10.5 FTEs.
- AMS Glendale will need to replace 15.1 FTEs and will hire one additional FTE for 16.1 FTEs total.
- AMS Peoria Advanced will need to replace 11.6 FTEs.
- AMS Heroes Park will likely not need to replace the initial 6 FTEs as they will have only been employed for ½ a year (and one position will be eliminated) and will need to hire 74.5 new FTEs.
- Total hiring needs: 112.7 FTEs

For 21-22

- MASSA will need to replace 10.5 FTEs.
- AMS Glendale will need to replace 15.3 FTEs and will hire one additional FTE for 16.3 FTEs total.
- AMS Peoria Advanced will need to replace 11.6 FTEs.
- AMS Heroes Park will need to replace 15.9 FTEs and will not hire more total FTEs.
- Total hiring needs: 54.3 FTEs

The total hiring needs will continue to be 54.3 FTEs yearly under the existing charter holder. We have identified an experienced assistant principal within our network for one of the new

Principal positions, at AMS Heroes, and are interviewing candidates both in and out of network for the other positions. We have a strong pipeline of teacher leaders and other leadership at every level to fill our existing positions and usually do this by end of February leading up to the school year.

*Track record of success:* The team at the Academies has extensive experience with recruiting, hiring, and training new staff for school expansions. For the 18-19 school year, our staff successfully identified, recruited, assessed, hired, and on-boarded approximately 200 new employees for our Tucson and Phoenix school locations as well as backoffice. We are approximately halfway done with recruiting for the 19-20 school year and are tracking for completion on May 1<sup>st</sup>, 2019.

See staff retention numbers below:

School	Percent Retention from 2015-16 to 2016-17	Percent Retention from 2016-17 to 2017-18	Percent Retention from 2017-18 to 2018-19
AMS Camelback School	96%	74% <sup>1</sup>	95%
AMS Prince School	90%	96%	93%
AMS Flower School	74%	88%	90%
MASSA School	87%	96%	97%

Recruiting:

Recruiting of administrative, instructional, and non-instructional staff is addressed by a similar process, as outlined below.

Since December 1, 2018, we’ve had 8842 teachers apply translating roughly to 100 resumes per hire.

**Process:** Starting in December of each year, network office support staff begin recruiting for the upcoming school year through multiple recruiting channels. Our strategy is to be omnipresent across every major platform that a teacher could possibly use. Recruiters post teacher-friendly advertisements stressing the core values of our organization on various general and teacher-specific employment websites, top-ranking Universities' job boards, multiple social media applications, and the schools’ own websites. School leaders represent the network and recruit potential candidates at gatherings such as career fairs, Teach for America summits, and local educational events.

All interested candidates submit an application through our website with a resume, cover letter and/or writing sample, and 3 references. Applicants are evaluated by various metrics such as

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<sup>1</sup> Between the 2016-2017 school year and the 2017-2018 school year, the AMS Camelback School transitioned to a new principal. Some transition in teaching staff is typical with the transition to a new principal.

writing skills, mission alignment, job stability in the past, and written content assessments in their areas of specialization. Suitable candidates are scheduled for an interview, typically with a school principal. To ensure each new team member is a quality fit for our organization, all candidate interviews include specific questions related to motivation, personality, and values; technical competence; team skills; problem solving abilities; and prior evidence of success. Teachers are asked to conduct a sample lesson after receiving our teacher evaluation worksheet. Through this process, we find intelligent and motivated candidates who love teaching, have the fortitude to work long and flexible hours, are quick learners, and whose work ethic and values will mesh well with the school's instructional philosophy.

### Hiring:

Our network office employs fulltime HR managers who work to on-board all staff. The HR managers collect all required personnel information to ensure employees can be compensated on time, performs reference and background checks, assists all employees with signing up for health insurance and other employer-provided benefits, and ensures the school maintains documentation of each teacher's qualifications, including proof of Appropriately Certified status and valid fingerprint clearance card status. This person also works with the finance team to ensure legal compliance with all aspects related to employment and subsequently oversees compliance of HR files during audits.

Our Director of Talent oversees the pacing of completion of hiring to ensure that we are on track to filling all open positions and completing all processes by June 15 for all open positions for each school year.

To ensure efficiency and fidelity in our hiring and onboarding processes, we employ a variety of intake systems such as SmartSheet and CRM solutions such as Newton and custom integration with ADP in order to more easily track these processes.

### Training - Instructional Staff

In order to ensure our instructional program is carried out with effectiveness and fidelity, the Academies provide several different forms of training and professional development. New teachers undergo three weeks of training before the start of the school year. This training includes hands-on learning and application of the school's instructional procedures and practices as well as curriculum-specific training for the school's core subjects and various other school expectations related to human resources, attendance tracking, grading, parent and student communication, culture, and deadlines. Every teacher receives an instructional manual, which serves as the basis for all teacher training throughout the year. Each school also has an instructional coach who continuously mentors and coaches teachers, performs classroom observations, and provides additional training on an as-needed basis during planning periods and professional development days. Teachers have planning time to allow them to observe each other's classrooms. Teachers also meet weekly in professional learning communities (PLCs) with the other teachers in their grade level to review and discuss lesson plans and teaching strategies. Professional development and PLCs are held Fridays following a half day for students. Teachers additionally meet with principals bi-weekly to receive feedback on performance, set goals, and

go over the use of data to inform instruction. Evaluation of teachers occurs at least twice per year after sufficient time and training has been provided to learn the school's expectations.

### Training – Administrative and Non-Instructional

Administrative personnel that are hired begin with shadowing existing administrative personnel in the network and receive manuals detailing job responsibilities. New and existing staff also attend conferences which help with their understanding of school software (i.e. PowerSchool) and any state and federal reporting requirements such as the MEGA Conference. Additionally, staff participate in instructional rounds observing other campuses continually, even after the initial shadow period.

Front office: Front office positions shadow front office personnel at other campuses for several weeks in conjunction as they work on taking on some of the roles at the local campus.

School leaders: Assistant school leaders, Deans, and Instructional Coaches will shadow existing team members in the same position for several weeks. Generally, an assistant principal hired as a principal at AMS has at least one year of experience working as an AP at AMS and shadowing a principal and subsequently once promoted shadows principals for another half of an academic year while working on school launch for a new campus.

All school leaders attend a yearly 2 week Leadership Training conducted by AMS on all of the essential components of the AMS school model and on required compliance items with state and federal authorities including SPED, HR and legal, ADE, and ASBCS.

All instructional leaders attend a monthly all-day training and debriefing meeting where leaders from all sites bring up concerns or issues they are having and are provided targeted feedback and training by network leadership in critical areas.

All personnel meet with their direct supervisors on a bi-weekly basis for feedback and to bring up any issues on which they need support.

### **Identify the target population of the proposed school, and demonstrate a clear understanding of the following:**

*The students the proposed school intends to serve (with demographic profile):*

AMS has conducted studies on 100% of student addresses in prior years of operation and have found that roughly 75% of all enrollments network-wide occur within 3 miles of each site.

The area surrounding our proposed site at 8001 W Missouri Ave in Glendale, Arizona has a demographic makeup similar to that of our other schools. These students have the same risk factors as students at our existing school sites and will need similar targeted programs to remedy academy skill deficits. Since we intend our school to be primarily a neighborhood school, our analysis of the expected student population is based on the demographics of nearby schools within a 3-mile radius around the proposed site. Based on averages from all public schools

within a 3-mile radius of our proposed site, along with zip code census data, we expect the following student demographic breakdown:

- Free or Reduced Lunch: 88.4%
- Minority: 86.9%
- English Language Learner: 17.0%
- SPED: 11.2%
- High School Graduates: 78.3%
- Bachelor's Degree or Higher: 12.6%

See below for the statistics for the 85706 and 3-mile radii statistics for the existing Math and Science Success Academy campus:

- Free or Reduced Lunch: 79%
- Minority: 93.25%
- English Language Learner: 15.46%
- SPED: 5.7%
- High School Graduates: 66%
- Bachelor's Degree or Higher: 6.7%

*How the population is similar to, or different from, the population currently served by the school(s) operating under the charter:*

This new population is predominantly low income and Hispanic, as at MASSA. The data we have obtained from above is from disaggregated data from schools in a 3-mile radius in the area as well as census data for 85303.

While AMS Heroes Park is more likely to have families come from a FRL background, they are more likely to be college and high school graduates and less likely to be minorities. The SPED population, however, at AMS Heroes Park is significantly higher than at MASSA.

AMS has a proven track record for working with high ELL and low achievement populations utilizing a multi-tiered intervention program and extended school day and year as well as great teaching and culture.

Because of our tiered intervention model, additional instructional time, and specific teacher training oriented around inclusion, training for instruction in hard to reach learners, SIOP, and ELL students, we feel confident we can reach exceptional results with this population.

*Whether the students will be primarily neighborhood or commuter:*

We expect our students to be primarily neighborhood students. Across all but one school in our network, over half the students live within two miles of each campus, and almost 75% of students live within a three-mile radius of each campus.

*Demographic Profile of the Population:*

The demographic profile was mentioned and analyzed above.

*Current levels of academic performance and needs not currently met for the target population:*

One of the main factors considered in our selection of this school location was the performance of nearby schools. The average passing rate on the AzMERIT exam for schools in a 3-mile radius of AMS Heroes Park’s proposed location was only 29.3%, 14.1% below the state average. Within a 5 mile radius, 37.35% and 21,243 students in the area are enrolled in schools which rank in the bottom 20<sup>th</sup> percentile of passing % of all K-8 schools in the state of Arizona.

It’s worth noting that across math and ELA passing %s on the AzMERIT, only 2 schools had better achievement scores out of 77 K-8 schools in a 5 mile radius around the location.

Based on our analysis of nearby campuses, AMS Heroes Park will be unique operating on a 200-day calendar year and providing significantly more instructional time on a daily basis for all students (whether on-level, advanced, or remedial) than nearby schools. Additionally, AMS Heroes Park will offer STEM curriculum, foreign languages, and extracurricular programs that are not offered in nearby schools.

Collectively, the schools in the neighborhood we are intending to serve are not providing enough quality school options for students in the community. Please see the tables below for additional details about the performance of schools surrounding the proposed school site.

**AMS Prince vs Schools in a 5 Mile Radius of AMS Heroes Park**

Total Schools	FY 18 Letter Grade	Total Charter Schools	FY 18 State Assessment Data Greater than Math and Science Success Academy		
			AzMERIT ELA (>47%)	AzMERIT Math (>51%)	AIMS Science (>72%)
1	A	0	1	1	1
25	B	6	0	0	0
32	C	5	0	0	0
14	D	2	0	0	0
0	F	0	0	0	0
5	NR	0	0	0	0
Total Number of Schools			Total Number of Schools Performing Better than Math and Science Success Academy (Percentage of Total)		
77		13 (16.9%)	1 (1.3%)	1 (1.3%)	1 (1.3%)

**MASSA (charter holder) vs Schools in a 5 Mile Radius of MASSA**

Total Schools	FY 18 State Assessment Data Greater than Math and Science Success Academy		
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	FY 18 Letter Grade	Total Charter Schools	AzMERIT ELA (>47%)	AzMERIT Math (>51%)	AIMS Science (>72%)
0	A	0	0	0	0
8	B	0	0	1	0
18	C	2	0	0	0
8	D	1	0	0	0
3	F	1	0	0	0
2	NR	1	1	1	0
Total Number of Schools		Total Number of Schools Performing Better than Math and Science Success Academy (Percentage of Total)			
39	5 (12.8%)	1 (2.6%)	2 (5.1%)	0 (0%)	

There are nearly 56,873 children in grades K-8 within a 5-mile radius of the proposed location for AMS Missouri. The population of K-8 age children near our proposed location, combined with the high number of low performing schools within the same area, shows that this area is desperately in need of the quality school choice options that an AMS new school will provide.

Many students in this area do not have access to the type of high quality education that Academy of Math and Science is able to provide. Our network has a track record of producing results far above the mean in the areas with underperforming schools and with large populations of disadvantaged or at-risk populations.

*Needs Not Currently Met for the Target Population*

A program which provides for high student achievement is the major need which is not being met in the proposed area. Extended day and year instruction are not being provided at nearby campuses. AMS conducted a sample of calls to schools in the area and found that although some offer sports, none offer basketball, soccer, and football to students beginning in 3<sup>rd</sup> grade as we do, which is a major source of leverage for us with students for high achievement.

**Describe how the school will provide a quality academic option and/or a unique program of instruction that is currently unavailable to the target population.**

AMS Heroes Park will be unique in the current market for many reasons. We will:

- Directly address the needs of students of all backgrounds seeking a college-preparatory education.
- Involve parents in various ways to reduce the mobility rate which is common in the area by setting clear expectations up front about what it takes to make it into college. Parents are looked at as multiyear partners.
- Stay open up to 12 hours a day, depending on parent need. This encourages single parents and other working parents to enroll their children and stay enrolled in the school.
- Offer significantly more instructional time (up to 50% more than surrounding schools).

- Offer daily, required, specials classes such as foreign language in mandarin and Russian, music including piano, guitar, choir, and theory, physical education, STEM programs beginning in Kindergarten, and art.
- Teach children habits of mind, character habits, and study skills to prime students for high levels of achievement.

**Identify the number of instructional days the school will be in session.**

The school will be in session for 200 instructional days per year.

**Provide a Justification for the Enrollment Targets Identified in Each Enrollment Matrix:**

Once need based on academic results are established, enrollment targets for each campus are based off of a maximum custom saturation metric AMS created, which models the currently enrollment at AMS schools and distribution at various radii as well as our organization’s capacity to operationally handle the student increase. The metric approximates the following simplified measure: We aim to serve no more than 10% of the total public school K-8 population in a 3 mile in every neighborhood we serve as our programs have a demonstrated capacity of recruiting the same population % at several of our existing sites. AMS Heroes Park meets that measure (in fact we are only serving 5%). We have been tracking recruitment costs over the last 5 years as we’ve undertaken significant expansion and have successfully planned for and recruited our target for each year.

*Plans for Meeting Each Year’s Enrollment Targets*

Our network track record and waiting lists support our projections for AMS Buckeye.

The dates in the table in this document (the timeline for enrollment) summarize our methods to meet enrollment targets. In addition to online methods of recruitment, we will be doing substantial in-person recruitment within the community neighboring our proposed location. 4 employees (all parents of our Phoenix schools) will be setup in pre-selected high foot traffic areas for face-to-face personal marketing with parents. Other methods of recruitment may be used, if needed, including targeted postcard mail marketing as well as canvassing of nearby residential areas.

Advertising for MASSA will be extremely limited as the campus has been at full capacity plus a significant wait list for several years.

We are currently halfway through recruitment at AMS Glendale and AMS Peoria Advanced (target of 1839 between the two) for their opening years and are on track for completing recruitment prior to May 15<sup>th</sup> utilizing all of the methods detailed below for AMS Heroes Park. We recruited over 200 students at our very first event for both campuses less than a month into marketing and that momentum has continued.

For the new campus AMS Heroes Park: In 19-20 (for 20-21), we expect to recruit an average of 70 students per month from in-person marketing for a total of 560 students over eight months

with our proposed marketing timeline within this application. Our online campaigns can be expected to generate an average of 55 enrollments per month for a total of 440 students over eight months. Finally, the mailing campaigns will result in an expected estimated total of 100 enrollments. In all, between these three recruitment strategies, we can expect to enroll 1100 students.

These estimates are based on actual students registered. Actual students that submit enrollment packets for consideration but for one reason or another do not register (move, new school, waitlisted), will likely be considerably higher.

*Necessary advertising and/or promotion to meet enrollment targets.*

The Academies of Math and Science have a successful track record of meeting enrollment targets. Last year, we grew by 1400 students and despite that growth, we waitlisted approximately 3000 students. For our recently approved new school site, Academy of Math and Science Desert Sky, we began day 1 with 950 students and an almost 1000 student waiting list.

In addition to online methods of recruitment, we will be doing substantial in-person recruitment within the community neighboring our proposed location. We will be setting up booths and local venues at local supermarkets and many other retail areas. Four parent employees will be setup in these pre-selected high traffic areas for face-to-face personal marketing with parents. Other methods of recruitment may be used if needed including targeted postcard mail marketing as well as canvassing of nearby residential areas. We will utilize social media marketing through various social media platforms and will utilize Google Adwords to maximize our visibility to potential parents and students searching for schools online. We will also hold a series of open houses for the new school beginning in January of 2020 and ending in early May of 2020.

*The timeline for enrollment at the proposed school, and how it will be communicated to the public:*

Our experience opening and enrolling new charter schools has taught us to start the process early, and that we need to communicate to the public through all available venues, while focusing face-to-face marketing at local venues. We will begin marketing for the new school by December 2019 to be prepared for an opening in Fall 2020. The chart below summarizes the projected start and end dates for each of our marketing and enrollment activities. We will be communicating to the public in person, through mailing, through online advertising, and through social media.

12/1/19	Social media campaign for 20-21 school year
12/1/19	Begin in-person marketing at high-density areas

1/1/20	Start Google Adwords and other online advertising campaigns and begin taking student enrollment packets for 20-21 school year
1/1/20	Post 20-21 Enrollment Packet on all Academies websites and begin pre-enrollments for the 20-21 school year
1/15/20	Distribute first mass brochure/postcard mailing / first open house
2/26/20	Send follow up mailer if needed / second open house
3/1/20	Hold student lottery
5/1/20	Last open house
7/15/20	Complete enrollment paperwork for all students expected for the 20-21 school year
7/1/20	End in-person marketing campaign. Back to school/meet your teachers night.
7/1/20	Scale back social media campaign and online advertising for start of school year
7/23/20	First day of school

*For An Increase: Number of Returning Students and Anticipated New Student Enrollment*

Historically, AMS has retained 80-90% a year of students, depending on campus. All of the estimates below are based off of the lower assumption of 80%.

Existing campus under charter, Math and Science Success Academy recruitment need:

- 19-20: From the 642 K-7<sup>th</sup> graders enrolled at MASSA for the 18-19 school year, we anticipate that 513 will return leaving 187 to recruit for the 19-20 school year.
- 20-21: From the 641 K-7<sup>th</sup> graders enrolled at MASSA for the 19-20 school year, we anticipate that 512 will return leaving 187 to recruit for the 20-21 school year.
- 21-22: From the 615 K-7<sup>th</sup> graders enrolled at MASSA for the 20-21 school year, we anticipate that 492 will return leaving 208 to recruit for the 21-22 school year.

Existing campus under charter, AMS Glendale recruitment need:

- 19-20: 1039
- 20-21: From the 971 K-7<sup>th</sup> graders enrolled at AMS Glendale for the 19-20 school year, we anticipate that 776 will return leaving 272 to recruit for the 20-21 school year.
- 21-22: From the 985 K-7<sup>th</sup> graders enrolled at AMS Glendale for the 20-21 school year, we anticipate that 788 will return leaving 259 to recruit for the 21-22 school year.

Existing campus under charter, AMS Peoria Advanced recruitment need:

- 19-20: 800
- 20-21: From the 736 K-7<sup>th</sup> graders enrolled at AMS Glendale for the 19-20 school year, we anticipate that 588 will return leaving 209 to recruit for the 20-21 school year.
- 21-22: From the 730 K-7<sup>th</sup> graders enrolled at AMS Glendale for the 20-21 school year, we anticipate that 584 will return leaving 214 to recruit for the 21-22 school year.

New campus AMS Heroes Park recruitment need:

- 20-21: 1100 K-8
- 21-22: From the 1036 K-7<sup>th</sup> graders enrolled at AMS Heroes Park for the 20-21 year, we anticipate that 829 will return leaving 269 to recruit for the 21-22 school year.

Total Recruitment Need for MASSA, AMS Glendale, AMS Peoria Advanced, AMS Heroes Park:

- 19-20: 2026 (currently at 60% to target)
- 20-21: 1768
- 21-22: 950

### **A description of the market analysis that supports the successful enrollment of the projected student count:**

The selected site meets AMS's criteria for:

- Unique programs not offered by any local schools (not a single school in the radius offers both Russian and Mandarin nor piano and guitar)
- Only a few schools offer 3-4 pm extended day instruction
- None offer a 200 day school year
- Achievement in the area is low, 14% below AZ state AVG
- Sports programs are still relatively limited and don't start as early as AMS's do in 3<sup>rd</sup> grade

Once need based on academic results are established, enrollment targets for each campus are based off of a maximum custom saturation metric AMS created, which models the currently enrollment at AMS schools and distribution at various radii as well as our organization's capacity to operationally handle the student increase. The metric approximates the following simplified measure: We aim to serve no more than 10% of the total public school K-8 population in a 3 mile in every neighborhood we serve as our programs have a demonstrated capacity of recruiting the same population % at several of our existing sites. AMS Heroes Park meets that measure.

We selected our proposed site by combining population density, income, minority, and poverty rate data from the most recent US Census with AzMERIT passing % and school enrollment data from the ADE. To help narrow our search, we obtained a population density heat map and overlaid it with school performance data, then cross-referenced the resulting map against the census data to ensure we were in a low-performing and low-income area. We also worked with

Collier's International to develop a saturation map of the greater Phoenix area. Based on these factors, we targeted several 3-mile radius areas for our property search, obtained over 50 properties within these areas from Colliers, and ultimately selected the property based on the proximity to main roads, cost, and existing utility infrastructure.

Our projected enrollment for AMS Heroes Park is 1100 students during year one and beyond. There are over 56,000 children grades K-8 within a 5-mile radius of the proposed location for AMS Heroes Park. The population of K-8 age children near our proposed location, combined with the high number of low performing schools within the same area, shows that this area is desperately in need of the quality school choice options that an AMS new school will provide. There are currently 21,243 students or 37.35% within a 5-mile radius of AMS Baseline's location enrolled in the bottom 20% of all schools in the state of Arizona by AzMERIT % passing.

Based on all factors, we have determined that we will meet enrollment targets and likely have excess demand each year of operation as we have at all of our campuses.

*Other Educational Options Available to Students in the Target Area:*

See below for a list of schools serving any of grades K-8 and distance away from the proposed school site current as of 17-18.

<b>School Name</b>	<b>Distance</b>	<b>School Name</b>	<b>Distance</b>
Coyote Ridge	0.6	Isaac E Imes School	3.2
Camelback Academy	0.6	John F. Long	3.3
Sunset Ridge Elementary School	0.8	Glendale Landmark School	3.4
Bicentennial North School	0.9	Sun Valley Elementary School	3.4
Discovery School	0.9	Marc T. Atkinson Middle School	3.5
Bicentennial South School	0.9	Sheely Farms Elementary School	3.5
Desert Mirage Elementary School	1.1	Bret R. Tarver	3.6
Tomahawk School	1.2	Frank Borman School	3.6
ACCLAIM Academy	1.5	Desert Oasis Elementary School	3.6
Heatherbrae School	1.6	EAGLE College Prep Maryvale	3.7
Westwind Elementary School	1.6	Copper King Elementary	3.7
William C Jack School	1.7	Cartwright School	3.7
Challenger Middle School	1.7	Imagine Desert West Middle	3.7
Don Mensendick School	1.7	Imagine Desert West Elementary	3.7
AMSC	1.7	Palm Lane	3.7
Desert Garden Elementary School	1.7	Carol G. Peck Elementary School	3.8
Estrella Middle School	1.9	Glenn F Burton School	4.0
Sunset Vista	1.9	Alta Loma School	4.0
Starlight Park School	1.9	Santa Fe Elementary School	4.1
Holiday Park School	2.0	Garden Lakes Elementary School	4.1
Westland School	2.0	Andalucia Middle School	4.1
Desert Spirit	2.0	Melvin E Sine School	4.2
Desert Sands Middle School	2.2	Rio Vista Elementary	4.2

Desert Horizon Elementary School	2.2	James W. Rice Primary School	4.2
Harold W Smith School	2.3	Glendale American School	4.3
Western School of Science and Technology	2.4	Charles W. Harris School	4.3
Pendergast Elementary School	2.4	Glenn L. Downs School	4.4
G. Frank Davidson	2.4	Copper Canyon Academy	4.4
Pioneer Preparatory - A Challenge Foundation	2.4	Sunridge Elementary School	4.4
Great Hearts Academies - Maryvale Prep	2.5	Ira A Murphy	4.5
Sunset School	2.5	Porfirio H. Gonzales Elementary School	4.5
Raul H. Castro Middle School	2.6	Liberty Traditional Charter School	4.6
Westland School Brighton Campus	2.7	Barcelona Middle School	4.6
Manuel Pena Jr. School	2.8	Country Meadows Elementary School	4.7
Sonoran Sky Elementary School	2.8	Justine Spitalny School	4.7
Amberlea Elementary School	2.9	Fowler Elementary School	4.8
Cotton Boll School	3.1	Arizona Desert Elementary School	4.8
Peralta School	3.2	Sahuaro Ranch Elementary School	4.9
Villa De Paz Elementary School	3.2		

*Explanation of Need for the School*

Please see earlier sections.

*Other Factual Data to Support the Need:*

Although we are almost 2 years out, we have begun to collect parent petitions for the area and are approaching 300 petitions for this location.

**Identify the concrete resources, if any, needed for implementation. Consider the changes needed to curriculum, assessment, and instruction to implement this request. Provide the rationale for your response. If the response indicates that resources are not needed to implement the request, explain why:**

We plan to implement the same curriculum set at our new school as we have at MASSA. MASSA costs are usual for the upkeep of the existing student population and the addition of new students accounting for less than \$100,000 in equipment and supplies.

Total supplies and equipment for 20-21 school year spent prior to July 2020 will be approximately \$1.8 MM, \$1.7 MM of which will be for the new campus (see method of acquisition and financing below).

AMS Heroes Park will take the majority of resources as follows:

<b>Curriculum</b>	<b>Program Name</b>	<b>Cost for Class of 30</b>	<b>Total Classes</b>	<b>Total Cost</b>
Elementary Reading	Open Court	\$5,500.00	27	\$148,500.00
Middle School Reading	Realms of Gold and Novel Sets	\$3,000.00	6	\$18,000.00
Reading Remediation Program	Corrective Reading	\$6,286.69	6	\$37,720.14
Elementary/Middle School Write Source	Write Source	\$1,308.00	33	\$43,164.00
Saxon Math	Saxon Math	\$3,546.00	33	\$117,018.00
Elementary Science	My Pals are Here and Delta Modules	\$1,005.00	27	\$27,135.00
Middle School Earth Science	Earth Science Investigations	\$2,950.00	6	\$17,700.00
Middle School Biology and Physics	Life Science and Foundation of Physics	\$2,950.00	6	\$17,700.00
Elementary Social Studies	HM Social Studies	\$1,082.00	27	\$29,214.00
Middle School Social Studies	My World History and American History	2142	6	\$12,852.00
A/R	Accelerated Reader	\$1,400.00	27	\$37,800.00
Study Island	Study Island	\$462.00	19	\$8,778.00
NWEA	Map Assessments	\$375.00	33	\$12,375.00
Foreign language and music curriculum	Teacher-selected	\$3,000.00	4	\$12,000.00
Art	Various supplies	\$3,000.00	2	\$6,000.00

Teacher supplies	Various supplies	\$450.00	52	\$23,400.00
			<b>Total:</b>	<b>\$569,356.14</b>

In addition to curriculum, we will also need the furniture and technology resources listed below.

<b>Equipment/Supply Must Have</b>	<b>Price Each</b>	<b>QTY</b>	<b>Total Price</b>	
Small Bookcases	\$171.95	50	\$8,597.50	
Large Bookcases	\$191.95	100	\$19,195.00	
Bulletin boards	\$70.88	100	\$7,088.00	
White boards	\$179.88	150	\$26,982.00	
Rugs-Elementary	\$299.88	24	\$7,197.12	
IT Systems: Phone system, intercom, commercial printers, internet equipment, .5:1 chromebook-student ratio and charting carts, projectors all classrooms	\$900,000.00	1	\$900,000.00	
Single pedestal file cabinets	\$324.95	60	\$19,497.00	
Office large file cabinets	\$600.00	4	\$2,400.00	
Motorola Radios	\$279.00	40	\$11,160.00	
1100 student desks and chairs	\$70.00	1100	\$77,000.00	
Cafeteria tables	\$300.00	26	\$7,800.00	
Teacher desks	\$300.00	52	\$15,600.00	
Horshoe tables	\$150.00	16	\$2,400.00	
Guitars, pianos, and piano benches	\$175.00	130	\$22,750.00	
			<b>Total:</b>	<b>\$1,127,666.62</b>

**The first payment for a school year is not distributed until August 1st of the Fiscal Year. Explain how the Charter Holder will manage all expenses, including, but not limited**

**to, those already identified in the staffing and resource components of the narrative, prior to receiving this initial payment.**

AMS Heroes Park is set to open in the fall of 2020 with a targeted first year and final enrollment of 1100 students. In order to achieve this target, the network office will be responsible for leading the principal in the recruitment of both students and staff. Any short-term deficits in cash flow will be covered through intercompany loans, a projected network-wide cash balance of \$8,400,000 as of June 30<sup>th</sup>, 2020, and a banking line of credit of over \$1,000,000.

The new school will not be charged management fees for recruiting, marketing, and all support services provided until the school has received at least several months of state payments.

Total short-term cash needs for AMS Heroes Park per our budget and prior experience should not exceed \$851,000, broken up as follows:

- Teachers and parapro salaries and benefits - \$290,000
- Administrator salaries and benefits - \$109,000
- Front office salaries and benefits - \$84,500
- In-person marketer salaries and benefits - \$52,500
- Online/postcard/radio costs/professional services - \$100,000 (only used if other methods are ineffective)
- Capital expenses - \$90,000 (the remaining \$1,610,000 will be purchased through bond proceeds)
- Facilities costs - \$0 (through use of capitalized interest)
- Management fees - \$125,000 (the majority of management fees will be deferred for at minimum several months)

We are able to support these startup costs concurrently with startup costs for the other new school sites we are launching per our financials.

### **Recruiting, hiring, and training employees**

Our network office will source all candidates and provide all HR support. The leadership of the school will interview the teachers and provide training.

Teachers and paraprofessionals will receive approximately 3 weeks of training budgeted at \$290,000 for the month of July.

Administrator salaries to launch the school are budgeted at \$109,000, which includes bringing on the administrators on the staffing attachment at various times from December 2019 through June 2020, marketing and taking new enrollments and training teachers.

### **Advertising and promoting the school**

Front office support is estimated to be at \$84,500 (the leadership team will need in registering new students).

We will utilize four part-time parent employees or independent contractors (not on staffing attachment) to promote the school beginning in December 2019. They will be setup in pre-selected high traffic areas for face-to-face personal marketing with parents. Based on previous experiences, we are allocating \$52,500 to this task.

Other methods of recruitment may be used if needed, including targeted postcard mail marketing as well as canvassing of nearby residential areas. We will also utilize social media marketing through Facebook and Twitter, and will utilize Google Adwords to maximize our visibility to potential parents and students searching for information about schools online. Additionally, we may also employ radio. We will also hold a series of open houses for the new school beginning in January 2020 and ending in early May 2020. Social media and postcard marketing costs should not exceed \$100,000.

### **Purchase of concrete resources.**

Prior to the school's implementation, we will purchase the necessary concrete furniture, supplies, and curricular resources listed in the tables above. Most of this is categorized as capital expenses (approximately \$1,600,000 of the total expenses in the tables above) and will be purchased through use of tax-exempt bond proceeds upon issuance of further bonds, anticipated to happen prior to October of 2019 for start of construction in November 2019.

### **Facilities**

We are purchasing the site at 8001 W Missouri, Glendale, Az. which consists of approximately 8.1 acres of undeveloped land with existing utility infrastructure. We will renovate the site to allow us to operate our standard academic model at all of our campuses. We will use capitalized interest to defer debt costs for AMS Heroes Park. We will defer debt costs at least until September 2020 to get us through a period where no state aid payments are made.

We have an experienced construction team that in total has overseen over \$500 MM of construction projects including at least 20 school construction projects.

The depreciation and interest expense as well as principal is budgeted to average 20% of the total expenditures of the school, which will drop to an anticipated 15% or less upon the second year. All other facility costs are budgeted at 3% of total annual expenditures. We have negotiated a long escrow period with the site owners and will develop the site and permanently finance it with a tax-exempt public bond issuance, as we have done for several of our campuses in the past. Any further renovation or expansion will be financed through subordinate lending or the refinancing of existing bonds. If needed, we can also obtain financing from other lenders we have worked with in the past including CSDC, AB&T, and RAZA Development Fund. AMS Heroes Park will add to the financial strength of the Academy of Mathematics and Science, Inc. which will meet all ASBCS financial requirements as shown in the appendix below. This financial performance is possible because of capitalized interest deferring first year debt costs.

## APPENDIX: FINANCIALS

Financials below show that the AMS network will be compliant with all ASBCS financial requirements at the corporation level as well as the network as a whole. The order of presentation is as follows: 1. Math and Science Success Academy, Inc. corporation which will hold the MASSA, AMS Glendale, AMS Peoria Advanced, AMS Heroes Park schools, 2. “Network” which includes the 3 corporations that serve as Academies of Math and Science 3. Academy of Mathematics and Science, Inc. which will carry the financials for AMS Prince, AMS Buckeye, and AMS Baseline and 4. AMSS, Inc. corporation, which will not be adding any campuses.

	MASSA Inc Consolidated Financials				
	FY18	FY19	FY20	FY21	FY22
Student Enrollment	652	695	2502	3936	3936
<b>Projected Revenues</b>					
State & Federal Assistance	\$ 4,870,820.95	\$ 6,208,902.45	\$ 20,996,669.55	\$ 34,127,668.13	\$ 34,596,472.24
Management Services	-	-	-	-	-
Other Revenue/Rent	148,358	152,752	241,283	403,238	338,749
<b>Total Projected Revenue</b>	<b>5,019,179</b>	<b>6,361,654</b>	<b>21,237,953</b>	<b>34,563,127</b>	<b>34,968,248</b>
<b>Projected Expenses</b>					
Salaries	2,040,207	2,196,117	8,594,659	13,175,406	13,319,216
Benefits	387,879	483,146	1,854,507	2,818,457	2,849,197
Purchased Professional Service	105,079	178,421	454,139	577,337	589,976
Additional Property Services	163,190	174,783	705,013	925,428	948,564
Other Services	279,254	299,053	1,324,334	2,202,433	2,228,658
Management Fees	749,841	1,104,248	2,898,193	5,179,636	5,240,283
Supplies	156,118	161,656	621,537	977,235	1,001,396
Miscellaneous	101,118	981,106	1,350,534	1,242,926	1,368,224
Interest and Rent	615,598	463,599	2,982,151	4,310,222	4,303,607
Depreciation	360,696	416,954	1,372,072	2,281,865	2,281,865
<b>Total Projected Expenses</b>	<b>4,958,980</b>	<b>6,459,082</b>	<b>22,557,139</b>	<b>33,690,945</b>	<b>34,130,986</b>
<b>Projected Net Income</b>	<b>\$ 60,199</b>	<b>\$ (97,428)</b>	<b>\$ (1,119,186)</b>	<b>\$ 872,182</b>	<b>\$ 837,262</b>
<b>Cash Basis Adjustments</b>					
Capital Building and Equipment	(247,019)	(67,516)	(96,662)	(128,883)	(128,883)
Depreciation	360,696	416,954	1,372,072	2,281,865	2,281,865
Principal and Capitalized Interest	(421,818)	(259,917)	1,019,838	1,066,940	(767,376)
Other	-	-	-	-	-
<b>Cash Basis Net Income</b>	<b>\$ (247,941)</b>	<b>\$ (7,907)</b>	<b>\$ 1,176,062</b>	<b>\$ 4,092,104</b>	<b>\$ 2,222,868</b>
<b>Total Cash On Hand</b>	<b>\$ 678,550</b>	<b>\$ 670,644</b>	<b>\$ 1,846,705</b>	<b>\$ 5,738,809</b>	<b>\$ 7,961,677</b>
<b>Arizona State Board for Charter Schools Financial Metrics</b>					
1. Going Concern					
2. Default					
3. Unrestricted Days Liquidity	53.86	40.51	49.05	66.69	91.24
4. Adjusted Net Income	420,896	319,526	252,886	3,154,047	3,119,127
5. Lease Adjusted Debt Service Coverage Ratio	1.0	1.1	1.1	1.47	1.46
6. Average Daily Membership	40%	7%	260%	57%	0%

	Network of Academies of Math and Science				
	FY18	FY19	FY20	FY21	FY22
<b>Student Enrollment</b>	<b>2624</b>	<b>3831</b>	<b>6027</b>	<b>9550</b>	<b>9549</b>
<b>Projected Revenues</b>					
State & Federal Assistance	\$ 21,002,408.92	\$ 31,976,962.55	\$ 51,004,897.55	\$ 82,708,717.85	\$ 83,703,266.95
Management Services	-	-	-	-	-
Other Revenue/Rent	967,057	562,298	651,068	1,089,083	895,371
<b>Total Projected Revenue</b>	<b>21,969,466</b>	<b>32,539,261</b>	<b>51,655,966</b>	<b>83,830,022</b>	<b>84,631,665</b>
<b>Projected Expenses</b>					
Salaries	8,298,793	12,344,383	20,338,220	32,492,141	32,857,180
Benefits	1,591,879	2,664,085	4,424,658	6,983,016	7,061,477
Purchased Professional Service	526,941	629,322	953,654	1,245,557	1,274,056
Additional Property Services	777,563	1,156,071	1,711,398	2,364,463	2,423,463
Other Services	1,726,533	2,563,833	3,780,004	6,140,732	6,216,218
Management Fees	2,605,415	4,279,468	6,946,323	11,811,662	11,924,468
Supplies	669,770	935,565	1,474,671	2,367,974	2,425,537
Miscellaneous	612,064	2,068,258	3,672,814	3,196,185	3,530,800
Interest and Rent	4,465,728	2,736,499	5,394,360	9,426,207	9,406,456
Depreciation	2,451,526	2,655,711	4,010,647	6,140,731	6,140,533
<b>Total Projected Expenses</b>	<b>23,726,211</b>	<b>32,033,197</b>	<b>53,106,751</b>	<b>82,168,668</b>	<b>83,260,189</b>
<b>Projected Net Income</b>	<b>\$ (1,756,745)</b>	<b>\$ 506,064</b>	<b>\$ (1,250,785)</b>	<b>\$ 1,661,354</b>	<b>\$ 1,371,476</b>
<b>Cash Basis Adjustments</b>					
Capital Building and Equipment	(923,211)	(513,886)	(322,235)	(418,897)	(418,897)
Depreciation	1,901,278	2,655,711	4,010,647	6,140,731	6,140,533
Principal and Capitalized Interest	(187,397)	(355,067)	579,938	3,128,231	(1,464,476)
Other	2,793,448	(658,177)	103,402	(2,876)	(1,830)
<b>Cash Basis Net Income</b>	<b>\$ 1,930,764</b>	<b>\$ 1,634,645</b>	<b>\$ 3,120,967</b>	<b>\$ 10,508,543</b>	<b>\$ 5,626,805</b>
<b>Total Cash On Hand</b>	<b>\$ 3,682,015</b>	<b>\$ 5,316,660</b>	<b>\$ 8,437,628</b>	<b>\$ 18,746,170</b>	<b>\$ 24,372,975</b>
<b>Arizona State Board for Charter Schools Financial Metrics</b>	Indicates entity is in compliance with charter board financial dashboard key metric				
1. Going Concern					
2. Default					
3. Unrestricted Days Liquidity	63.17	66.06	62.73	90.00	115.35
4. Adjusted Net Income	694,781	3,161,775	2,759,863	7,802,085	7,512,008
5. Lease Adjusted Debt Service Coverage Ratio	1.11	1.91	1.69	2.74	1.56
6. Average Daily Membership	34%	46%	57%	58%	0%

	AMS Inc Consolidated Financials				
	FY18	FY19	FY20	FY21	FY22
Student Enrollment	1415	1680	1719	3808	3807
Projected Revenues					
State & Federal Assistance	\$ 11,372,744.31	\$ 13,564,299.75	\$ 14,694,900.78	\$ 33,025,148.66	\$ 33,388,351.01
Management Services	-	-	-	-	-
Other Revenue/Rent	707,179	295,957	275,955	550,690	420,129
Total Projected Revenue	12,079,923	13,860,257	14,970,856	33,575,839	33,808,480
Projected Expenses					
Salaries	4,432,764	5,533,193	5,723,623	13,061,027	13,210,949
Benefits	848,026	1,217,303	1,259,197	2,802,272	2,834,460
Purchased Professional Service	302,402	208,821	219,840	382,515	392,199
Additional Property Services	447,684	516,551	530,031	950,771	974,429
Other Services	1,050,912	1,308,900	1,331,795	2,778,042	2,813,607
Management Fees	1,168,923	1,397,618	1,731,056	4,278,368	4,305,945
Supplies	320,005	416,369	413,122	939,862	962,128
Miscellaneous	243,284	556,301	1,721,742	1,322,308	1,492,655
Interest and Rent	2,357,345	1,236,038	1,205,654	3,928,317	3,927,845
Depreciation	1,497,476	1,347,340	1,347,158	2,567,448	2,567,250
Total Projected Expenses	12,668,822	13,738,435	15,483,219	33,010,928	33,481,466
Projected Net Income	\$ (588,899)	\$ 121,822	\$ (512,363)	\$ 564,911	\$ 327,014
Cash Basis Adjustments					
Capital Building and Equipment	(676,192)	(286,793)	(88,804)	(153,246)	(153,246)
Depreciation	1,232,807	1,347,340	1,347,158	2,567,448	2,567,250
Principal and Capitalized Interest	(251,750)	(309,150)	(319,900)	2,396,291	(347,100)
Other	1,522,917	(658,177)	103,402	(2,876)	(1,830)
Cash Basis Net Income	\$ 1,342,275	\$ 215,042	\$ 529,493	\$ 5,372,528	\$ 2,392,089
Total Cash On Hand	\$ 1,890,515	\$ 2,105,557	\$ 2,635,049	\$ 8,007,578	\$ 10,399,666
Arizona State Board for Charter Schools Financial Metrics					
1. Going Concern					
2. Default					
3. Unrestricted Days Liquidity	61.77	62.02	68.04	96.01	122.79
4. Adjusted Net Income	2,431,495	1,469,162	834,795	3,132,359	2,894,264
5. Lease Adjusted Debt Service Coverage Ratio	1.84	1.75	1.34	1.65	1.60
6. Average Daily Membership	44%	19%	2%	122%	0%

	Academy of Math and Science South, Inc.				
	FY18	FY19	FY20	FY21	FY22
Student Enrollment	557	1456	1805	1805	1805
<b>Projected Revenues</b>					
State & Federal Assistance	\$ 4,758,843.66	\$ 12,203,760.34	\$ 15,313,327.21	\$ 15,555,901.06	\$ 15,718,443.70
Management Services	-	-	-	-	-
Other Revenue/Rent	111,520	113,589	133,830	135,155	136,493
<b>Total Projected Revenue</b>	<b>4,870,364</b>	<b>12,317,350</b>	<b>15,447,157</b>	<b>15,691,056</b>	<b>15,854,936</b>
<b>Projected Expenses</b>					
Salaries	1,825,822	4,615,073	6,019,938	6,255,708	6,327,015
Benefits	355,974	963,637	1,310,954	1,362,287	1,377,820
Purchased Professional Service	119,461	242,080	279,675	285,705	291,881
Additional Property Services	166,689	464,736	476,355	488,264	500,470
Other Services	396,368	955,880	1,123,874	1,160,257	1,173,954
Management Fees	686,651	1,777,602	2,317,074	2,353,658	2,378,240
Supplies	193,647	357,540	440,012	450,877	462,014
Miscellaneous	267,661	530,851	600,538	630,951	669,920
Interest and Rent	1,492,785	1,036,862	1,206,556	1,187,669	1,175,004
Depreciation	593,353	891,417	1,291,417	1,291,417	1,291,417
<b>Total Projected Expenses</b>	<b>6,098,410</b>	<b>11,835,680</b>	<b>15,066,393</b>	<b>15,466,794</b>	<b>15,647,737</b>
<b>Projected Net Income</b>	<b>\$ (1,228,046)</b>	<b>\$ 481,669</b>	<b>\$ 380,764</b>	<b>\$ 224,262</b>	<b>\$ 207,200</b>
<b>Cash Basis Adjustments</b>					
Capital Building and Equipment	-	(159,576)	(136,768)	(136,768)	(136,768)
Depreciation	307,774	891,417	1,291,417	1,291,417	1,291,417
Principal and Capitalized Interest	486,171	214,000	(120,000)	(335,000)	(350,000)
Other	1,270,530	-	-	-	-
<b>Cash Basis Net Income</b>	<b>\$ 836,430</b>	<b>\$ 1,427,510</b>	<b>\$ 1,415,413</b>	<b>\$ 1,043,911</b>	<b>\$ 1,011,849</b>
<b>Total Cash On Hand</b>	<b>\$ 1,112,949</b>	<b>\$ 2,540,460</b>	<b>\$ 3,955,873</b>	<b>\$ 4,999,784</b>	<b>\$ 6,011,632</b>
<b>Arizona State Board for Charter Schools Financial Metrics</b>					
1. Going Concern					
2. Default					
3. Unrestricted Days Liquidity	73.79	84.73	104.82	128.74	152.84
4. Adjusted Net Income	635,838	1,373,087	1,672,182	1,515,679	1,498,617
5. Lease Adjusted Debt Service Coverage Ratio	2.11	2.93	2.17	1.78	1.75
6. Average Daily Membership	11%	161%	24%	0%	0%

## **APPENDIX: MANAGEMENT TEAM OF THE NETWORK**

The following individuals comprise the senior management team of the network:

*Ms. Tatyana Chayka, Founder of AMS*

Ms. Chayka is the founder of AMS and leads the network's academic programs. She has more than 27 years of education and administrative experience in both secondary and post-secondary settings. In 2000, Ms. Chayka founded the AMS Prince School in Tucson, Arizona. Her vision was to create a school which offered a superior education in mathematics and science to at-risk and under-served students who are traditionally denied the opportunity of a quality education. She has conducted research regarding student achievement which has been published by Richard Schmuck in "Practical Action Research." She has presented on grant funding at the National Alliance for Public Charter Schools Annual Conference and served as a mentor teacher for the University of Phoenix. Ms. Chayka graduated with a Master of Science in Mathematics with a focus on Secondary Education from the University of Pedagogy in Tashkent, Uzbekistan, and a Master of Educational Administration and Supervision with a focus in Business from Arizona State University's Leadership for Educational Entrepreneur's program.

*Mr. Kim Chayka, Co-CEO*

Mr. Chayka oversees the operations and growth of the network. He is a published author with contributions ranging from newspapers, education blogs, and the Journal of School Choice. In 2016, he received the Hammer award from Glenn Hammer, President of Arizona Chamber of Commerce and Industry. He has presented at the annual Arizona Charter School Association's Annual Conference on topics including replication and scaling, facilities development and academics, and he has led presentations at other conferences, including A for Arizona's Annual Conference and the National Alliance for Public Charter Schools' Annual Conference. He graduated Magna Cum Laude from the Eller College of Management at The University of Arizona, majoring in Business Economics with a Bachelor of Science in Business Administration and is a New Schools for Phoenix 2014 Fellow.

*Mr. Steven Hykes – Chief Financial Officer*

Mr. Hykes graduated with a Bachelor of Science from the University of Akron with a minor in Economics. He began his career in public accounting working in the fields of audit, tax and mergers and acquisitions for both Deloitte and PricewaterhouseCoopers. Mr. Hykes received his Certified Public Accounting license from the State in April 2015. He has a diverse background having managed restaurants, volunteered overseas and done both educational and non-profit work. Most recently he was the Chief Financial Officer of United Way of Tucson and Southern Arizona, where he spent three years overseeing various financial aspects of the nonprofit charity. Mr. Hykes joined AMS in January 2016.

*Ms. Adriana Rodriguez – Superintendent*

Ms. Rodriguez has been a teacher and administrator for 21 years and is in her fourteenth year working with AMS. Ms. Rodriguez was instrumental in the founding of MASSA, beginning with the MASSA School as founding principal. She has lead sessions at conferences including at the National Alliance for Public Charter Schools Annual Conference. Ms. Rodriguez graduated with a Masters of Educational Leadership from Northern Arizona University ("NAU") and a Bachelors of Arts in Political Science from Whittier College and holds various certifications in primary grade content areas and structured English immersion.

*Erik Greenberg – Chief Operating Officer*

Mr. Greenberg graduated with a Bachelor's of Arts in International Business from the University of Colorado in 2005 and received an MBA from the University of Phoenix in 2009. Mr. Greenberg spent 9 years working at University of Phoenix leading several locations as Campus Director and President with some of the best student growth and retention in the Northeast Region. He also spent several years working as the VP of Ops for Endeavor Schools overseeing 13 campuses across 6 geographically distinct markets and supporting the acquisition and integration of 22 new schools. He was a three-year letter winner as a Collegiate Football Player, which informs his outlook on leadership and moving progress forward.

*Mr. Robert Biggs – Chief Information Officer*

Mr. Biggs' career started in the Department of Entomology at the University of Arizona where he studied the effects of genetically-modified crops' insect pest populations. After gaining an interest in Information Technology while building IT tools to manage data collection and presentation, Mr. Biggs transitioned to a career in technology. Throughout his career he has managed multiple multi-million-dollar IT implication projects that touch on a wide variety of technologies including networking, server systems, communications, line-of-business applications (EHR, CRM), and cloud solutions. He built and managed teams of IT professionals, emphasizing skill-building and career progression. He has provided CIO services to many for-profit and non-profit organizations in various industries including medical, public safety, education, retail and government. Mr. Biggs has been consulting with AMS since 2015 and joined formerly in 2017.

*Mr. Ettor Strada – Director of Special Education*

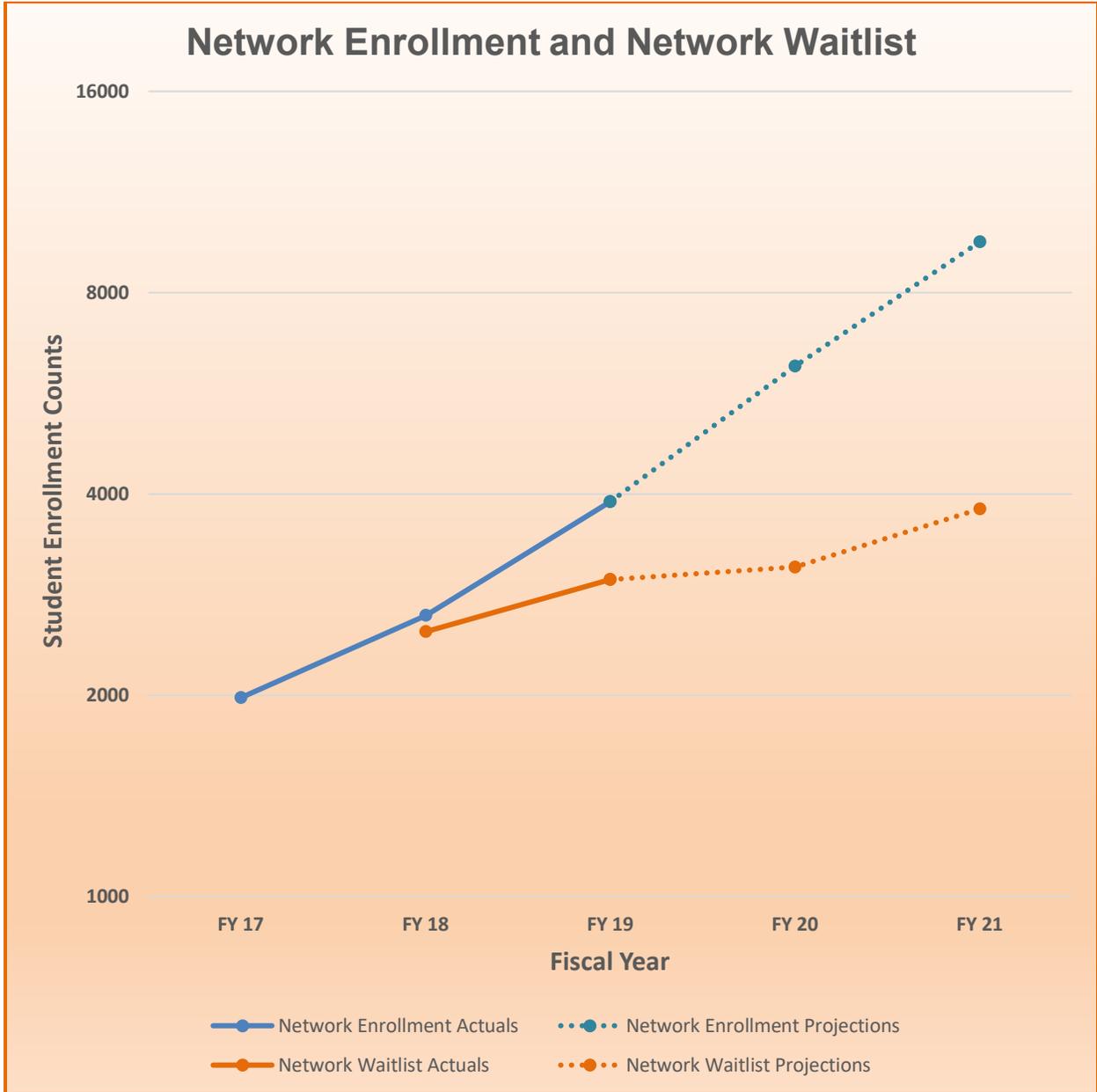
Mr. Strada graduated Cum Laude from Tarleton State University with a Bachelor's of Science in Interdisciplinary Studies with an emphasis in Special Education. He is in his seventh year with the AMS network. Mr. Strada served 14 years of active duty in the Marines as a leadership instructor, division communication instructor and net control station supervisor. He completed two combat tours in Desert Storm and Somalia. Prior to joining the network, he worked as a special education teacher at local public schools and was an Upward Bound Instructor at the Pima Community College. Mr. Strada has created a successful Special Education program for the Schools. His program was recently recognized by the Arizona Department of Education when it was awarded the "High Flyer District of Merit" award based on the high academic progress of students with disabilities on AIMS over a three-year period.

*Mr. Chris Louth – Director of Facilities and Construction*

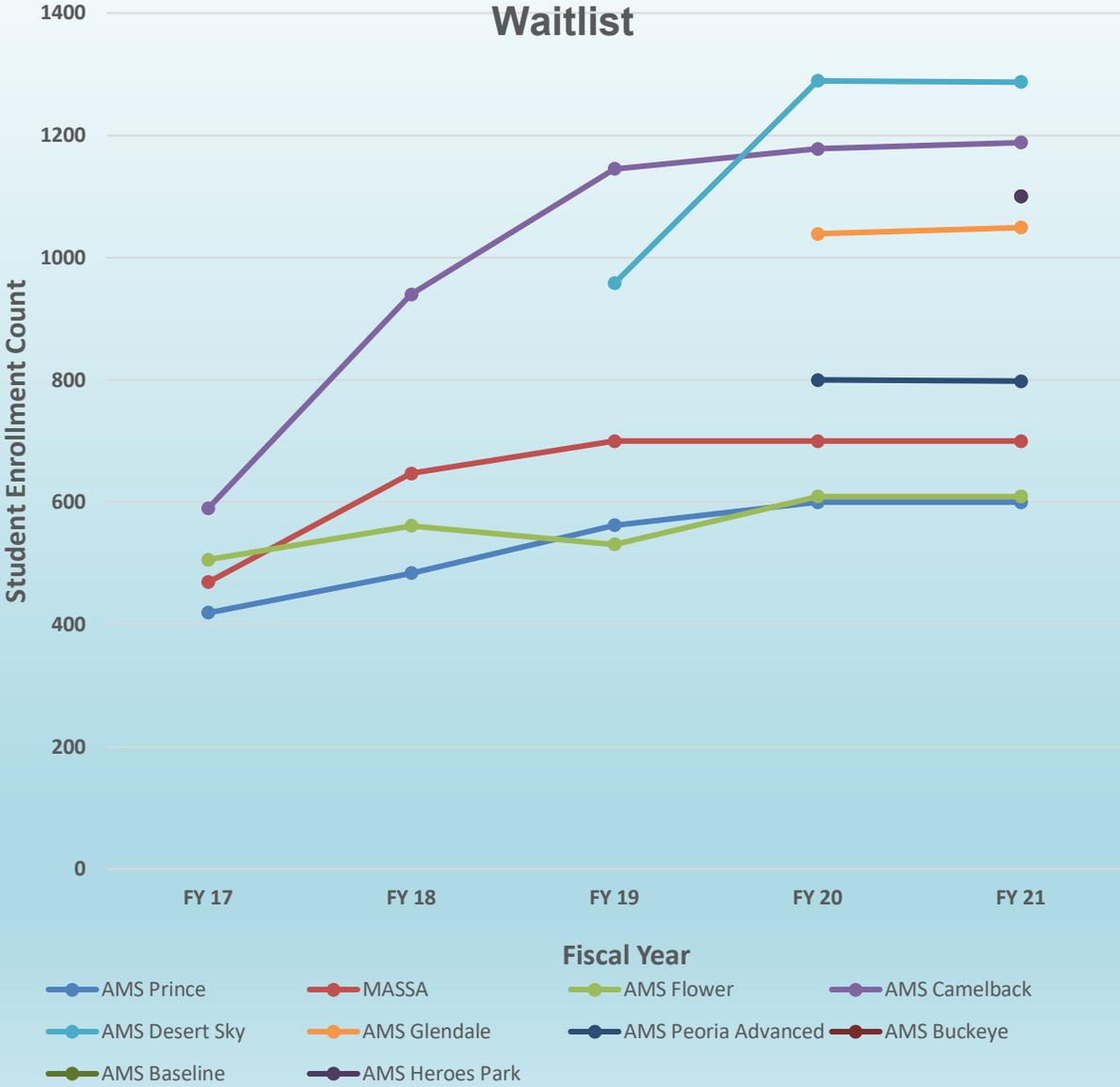
Mr. Louth is a lifelong constructional professional with more than 30 years of experience having managed approximately \$500 million in construction projects during his career. He has previously served as a Bond Projects Manager with Amphitheater Public Schools managing \$180 million in voter referendum bonds including primarily new build projects. He has previous experience managing both back office and construction staff serving in multiple capacities including owner and operator of a general contracting company, site superintendent across a wide variety of projects in commercial, housing and industrial, and has also lead sales teams in the construction industry. Mr. Louth is a licensed real estate agent and has studied engineering at Alfred University and also Construction Management at Pima Community College.

## APPENDIX: Enrollment

The charts below document the steady growth of AMS network enrollment as well as our waiting lists.



# Individual School Enrollments & Network Waitlist





# Arizona State Board for Charter Schools

## Enrollment Matrix

Complete the table to provide the current and target enrollment, indicating the proposed timeline for implementing the request.

Directions\*:

- In each box under the “Number of Students” columns, identify the number of students served per grade for the current and upcoming three fiscal years.
- In the “Total Enrollment” row, provide the total enrollment for each fiscal year.
- Copy and paste the chart for each school operated by the Charter Holder.

School Name:				
Math and Science Success Academy				
Number of Students				
Grade Level	Current -FY <sup>19</sup>	Target -FY <sup>20</sup>	Target -FY <sup>21</sup>	Target -FY <sup>22</sup>
Kindergarten	74.0	50.0	50.0	50.0
1 <sup>st</sup> Grade	87.0	87.0	58.0	87.0
2 <sup>nd</sup> Grade	87.0	84.0	87.0	58.0
3 <sup>rd</sup> Grade	87.0	84.0	84.0	87.0
4 <sup>th</sup> Grade	87.0	84.0	84.0	84.0
5 <sup>th</sup> Grade	81.0	84.0	84.0	84.0
6 <sup>th</sup> Grade	81.0	84.0	84.0	84.0
7 <sup>th</sup> Grade	58.0	84.0	84.0	84.0
8 <sup>th</sup> Grade	58.0	59.0	84.0	82.0
9 <sup>th</sup> Grade				
10 <sup>th</sup> Grade				
11 <sup>th</sup> Grade				
12 <sup>th</sup> Grade				
<b>Total Enrollment</b>	<b>700</b>	<b>700</b>	<b>699</b>	<b>700</b>

\*To view an example of a completed Enrollment Matrix, please see The Guide (*Attachment Guidelines*).

School Name:				
Academy of Math and Science Glendale				
Number of Students				
Grade Level	Current -FY <sup>19</sup>	Target-FY <sup>20</sup>	Target-FY <sup>21</sup>	Target-FY <sup>22</sup>
Kindergarten		155.0	88.0	62.0
1 <sup>st</sup> Grade		136.0	155.0	88.0
2 <sup>nd</sup> Grade		136.0	136.0	155.0
3 <sup>rd</sup> Grade		136.0	136.0	136.0
4 <sup>th</sup> Grade		136.0	136.0	136.0
5 <sup>th</sup> Grade		136.0	136.0	136.0
6 <sup>th</sup> Grade		68.0	133.0	136.0
7 <sup>th</sup> Grade		68.0	65.0	133.0
8 <sup>th</sup> Grade		68.0	64.0	65.0
9 <sup>th</sup> Grade				
10 <sup>th</sup> Grade				
11 <sup>th</sup> Grade				
12 <sup>th</sup> Grade				
<b>Total Enrollment</b>		<b>1039</b>	<b>1049</b>	<b>1047</b>

School Name:				
Academy of Math and Science Peoria Advanced				
Number of Students				
Grade Level	Current -FY <sup>19</sup>	Target-FY <sup>20</sup>	Target-FY <sup>21</sup>	Target-FY <sup>22</sup>
Kindergarten		124.0	62.0	62.0
1 <sup>st</sup> Grade		102.0	124.0	68.0
2 <sup>nd</sup> Grade		102.0	102.0	124.0
3 <sup>rd</sup> Grade		102.0	102.0	102.0
4 <sup>th</sup> Grade		102.0	102.0	102.0
5 <sup>th</sup> Grade		68.0	102.0	102.0
6 <sup>th</sup> Grade		68.0	68.0	102.0
7 <sup>th</sup> Grade		68.0	68.0	68.0
8 <sup>th</sup> Grade		64.0	68.0	68.0
9 <sup>th</sup> Grade				
10 <sup>th</sup> Grade				
11 <sup>th</sup> Grade				
12 <sup>th</sup> Grade				
<b>Total Enrollment</b>		<b>800</b>	<b>798</b>	<b>798</b>

School Name:				
Academy of Math and Science Heroes Park				
Number of Students				
Grade Level	Current -FY <sup>19</sup>	Target-FY <sup>20</sup>	Target-FY <sup>21</sup>	Target-FY <sup>22</sup>
Kindergarten			186.0	62.0
1 <sup>st</sup> Grade			170.0	186.0
2 <sup>nd</sup> Grade			136.0	170.0
3 <sup>rd</sup> Grade			136.0	136.0
4 <sup>th</sup> Grade			136.0	136.0
5 <sup>th</sup> Grade			136.0	136.0
6 <sup>th</sup> Grade			68.0	136.0
7 <sup>th</sup> Grade			68.0	68.0
8 <sup>th</sup> Grade			64.0	68.0
9 <sup>th</sup> Grade				
10 <sup>th</sup> Grade				
11 <sup>th</sup> Grade				
12 <sup>th</sup> Grade				
<b>Total Enrollment</b>			<b>1100</b>	<b>1098</b>

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# Arizona State Board for Charter Schools

## Staffing Chart

Complete the table to provide the current and anticipated staffing for the school(s) operated by the Charter Holder. Include staff members needed if the request is granted.

Directions\*: In each box under the “Number of Staff Members” columns, identify the number of staff members for each position/category for the current and upcoming three fiscal years. Copy and paste the chart for each school operated by the Charter Holder.

School Name:				
<b>Math and Science Success Academy</b>				
Number of Staff Members				
Position	Current—FY19	Anticipated—FY20	Anticipated—FY21	Anticipated—FY22
Administration	4.5	4.5	4.5	4.5
Teachers/Instructional Staff				
Kindergarten	3.0	2.0	2.0	2.0
1st	3.0	3.0	2.0	3.0
2nd	3.0	3.0	3.0	2.0
3rd	3.0	3.0	3.0	3.0
4th	3.0	3.0	3.0	3.0
5th	3.0	3.0	3.0	3.0
6th	3.0	3.33	3.33	3.33
7th	2.0	3.33	3.33	3.33
8th	2.0	2.33	3.33	3.33
9th				
10th				
11th				
12th				
Specialty Staff (Music, Art, PE, etc.)	7.5	7.5	7.5	7.5
Special Education	2.5	2.5	2.5	2.5
Paraprofessional	8.0	7.5	7.5	7.5
Additional Staff				
List title: _Maintenance_	2.3	2.3	2.3	2.3
List title: _Front Office_	2.0	2.0	2.0	2.0
List title:				
List title:				
<b>Total Number of Staff Members</b>	<b>51.8</b>	<b>52.3</b>	<b>52.3</b>	<b>52.3</b>

School Name:				
<b>Academy of Math and Science Glendale</b>				
<b>Number of Staff Members</b>				
<b>Position</b>	<b>Current—FY19</b>	<b>Anticipated—FY20</b>	<b>Anticipated—FY21</b>	<b>Anticipated—FY22</b>
Administration	1.0	6.0	6.0	6.0
<b>Teachers/Instructional Staff</b>				
Kindergarten	-	5.0	3.0	2.0
1st	-	4.0	5.0	3.0
2nd	-	4.0	4.0	5.0
3rd	-	4.0	4.0	4.0
4th	-	4.0	4.0	4.0
5th		4.0	4.0	4.0
6th		2.33	4.33	4.33
7th		2.33	2.33	4.33
8th		2.33	2.33	2.33
9th				
10th				
11th				
12th				
Specialty Staff (Music, Art, PE, etc.)	-	12.0	12.0	12.0
Special Education		6.0	6.0	7.0
Paraprofessional		14.6	14.6	14.6
<b>Additional Staff</b>				
List title: _Maintenance_____	-	2.0	2.0	2.0
List title: _Front Office__	5.0	3.0	3.0	3.0
List title: _____				
<b>Total Number of Staff Members</b>	6.0	75.6	76.6	77.6

School Name:

### Academy of Math and Science Peoria Advanced

Number of Staff Members				
Position	Current—FY19	Anticipated—FY20	Anticipated—FY21	Anticipated—FY22
Administration	1.0	4.0	4.0	4.0
Teachers/Instructional Staff				
Kindergarten	-	4.0	2.0	2.0
1st	-	3.0	4.0	2.0
2nd	-	3.0	3.0	4.0
3rd	-	3.0	3.0	3.0
4th	-	3.0	3.0	3.0
5th		2.0	3.0	3.0
6th		2.33	2.33	4.33
7th		2.33	2.33	2.33
8th		2.33	2.33	2.33
9th				
10th				
11th				
12th				
Specialty Staff (Music, Art, PE, etc.)	-	9.0	9.0	9.0
Special Education		4.8	4.8	4.8
Paraprofessional		11.3	11.3	11.3
Additional Staff				
List title: _Maintenance_____	-	1.0	1.0	1.0
List title: _Front Office_	4.0	3.0	3.0	3.0
List title:				
<b>Total Number of Staff Members</b>	<b>5.0</b>	<b>58.0</b>	<b>58.0</b>	<b>59.0</b>

School Name:				
<b>Academy of Math and Science Heroes Park</b>				
Number of Staff Members				
Position	Current— FY19	Anticipated— FY20	Anticipated— FY21	Anticipated— FY22
Administration		1.0	5.0	5.0
Teachers/Instructional Staff				
Kindergarten	-	-	6.0	2.0
1st	-	-	5.0	6.0
2nd	-	-	4.0	5.0
3rd	-	-	4.0	4.0
4th	-	-	4.0	4.0
5th		-	4.0	4.0
6th			2.3	4.3
7th			2.3	2.3
8th			2.3	2.3
9th				
10th				
11th				
12th				
Specialty Staff (Music, Art, PE, etc.)	-	-	12.0	12.0
Special Education		-	6.5	6.5
Paraprofessional		-	15.0	15.0
Additional Staff				
List title: _Maintenance_____	-	-	3.0	3.0
List title: _Front Office_		5.0	4.0	4.0
List title: _____				
<b>Total Number of Staff Members</b>	-	6.0	79.5	79.5

## Leadership Staffing Chart

Complete the table below to provide current and anticipated leadership for the school(s) operated by the Charter Holder.

Directions:

- In the “Title” column, list the title of each leadership position at the school. Consider all individuals who are part of the leadership team (e.g. principal, instructional coach, lead teacher, etc.).
- In the “Current” and “Anticipated” columns, list the **names** of the individuals that will hold each of the leadership positions during the current and upcoming three fiscal years. If an existing staff member will not hold the position in the projected year, write “New Hire” or “TBD” (to be determined) in the box for that position.
- Copy and paste the chart for each school operated by the Charter Holder.

School Name:				
<b>Math and Science Success Academy</b>				
Leadership Team				
Title	Current— FY19	Anticipated— FY20	Anticipated— FY21	Anticipated— FY22
Principal	Norma Derby	Norma Derby	Norma Derby	Norma Derby
Assistant Principal	Alicia Morris	Alicia Morris	Alicia Morris	Alicia Morris
Dean of Students	Shannon Hunt	Shannon Hunt	Shannon Hunt	Shannon Hunt
Instructional Coach	Dana Rones	Dana Rones	Dana Rones	Dana Rones
Instructional Coach	Gavin Roddy .5 FTE			

School Name:				
<b>Academy of Math and Science Peoria Glendale</b>				
Leadership Team				
Title	Current— FY19	Anticipated— FY20	Anticipated— FY21	Anticipated— FY22
Principal	Jack Chang	Jack Chang	Jack Chang	Jack Chang
Principal		Ashley Kane	Ashley Kane	Ashley Kane
Assistant Principal		Melisa Thalacker	Melisa Thalacker	Melisa Thalacker
Dean of Students		TBD	TBD	TBD
Instructional Coach		Leanne McKanna	Leanne McKanna	Leanne McKanna
Instructional Coach		TBD	TBD	TBD

School Name:				
<b>Academy of Math and Science Peoria Advanced</b>				
Leadership Team				
Title	Current— FY19	Anticipated— FY20	Anticipated— FY21	Anticipated— FY22
Principal	Ashlynn Johnson	Ashlynn Johnson	Ashlynn Johnson	Ashlynn Johnson
Assistant Principal		Barbara Asaro	Barbara Asaro	Barbara Asaro
Dean of Students		Sunday Coronado	Sunday Coronado	Sunday Coronado
Instructional Coach		TBD	TBD	TBD

School Name:

**Academy of Math and Science Heroes Park**

**Leadership Team**

<b>Title</b>	<b>Current—FY19</b>	<b>Anticipated—FY20</b>	<b>Anticipated—FY21</b>	<b>Anticipated—FY22</b>
Principal		Curtis Walker	Curtis Walker	Curtis Walker
Assistant Principal			TBD	TBD
Assistant Principal			TBD	TBD
Dean of Students			TBD	TBD
Instructional Coach			TBD	TBD

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