

Proposal to City of Peoria

A high-impact, public-private partnership to grow the entrepreneurial ecosystem within the City of Peoria and generate economic development through the launch and growth of investment-grade companies

Arizona State University | Arizona Technology Enterprises

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Executive Summary

In 2012, the City of Peoria made a long-range investment in entrepreneurship and innovation-driven economic development with the launch of the BioInspire incubator/accelerator. As its five-year management contract award for BioInspire nears completion, the City is well-positioned to build on the success of this initiative by thoughtfully evolving its mission and approach.

This overall proposal is a high-impact opportunity to further grow the entrepreneurial ecosystem within the City of Peoria and to generate economic development through the launch and growth of investment-grade companies.

Building on Success

BioInspire launched as a single-vertical incubator to help address the “key issues surrounding the challenge of commercializing medical devices.” The program has since attracted 12 early-stage biomedical device companies to its 7,000 square-foot incubator space. These companies have brought in more than \$14 million in additional funding, which has supported the creation of 45 jobs.

This proposal provides a model for building on that success via close collaboration with Mayo Clinic and Arizona State University that will: 1) serve a far broader range of medical entrepreneurs, 2) add clinical validation of promising new medical device technologies through the Mayo Clinic network, and 3) access the research support, entrepreneurial training, investor connections and commercialization expertise delivered by ASU.

By diversifying the types of inventions and startups that can be served, the new BioInspire will increase the potential for attracting new innovators to participate. However, the City of Peoria’s existing investment in BioInspire has begun developing a local medical device ecosystem, which will serve as a feeder into the new Accelerator and positions this effort for early and sustained success.

Measurable outcomes for Peoria would include entrepreneurial growth in innovation, technology and commercialization activities; enhanced economic development efforts through promoting this locally-available resource backed by ASU and Mayo Clinic; and improved access to talent, capital and management-level executives.

Enhanced Service Offerings



Program Overview

#1 – The Mayo-ASU MedTech Accelerator is a unique accelerator program for companies in the medical device, technology and services space. We will provide to startups that locate in Peoria an unparalleled opportunity that combines the resources and venture expertise of the ASU Venture Development Group and Mayo Clinic Ventures with the clinical brand equity and footprint of the Mayo Clinic – the nation’s most recognized and innovative health care provider.

#2 – The ASU Startup Accelerator @ The Peoria Acceleration Space will assist community-based entrepreneurs with launching their ventures and commercializing new technologies. It will be led by ASU Entrepreneurship + Innovation (E+I), in partnership with Arizona Technology Enterprises. Since 2005, this team has supported over 400 student, faculty, and community-based ventures through various venture acceleration and incubation programs

#3 – Using the model it has developed for university technology commercialization, AzTE will work with City of Peoria companies looking to enter the market or grow their businesses. Technology transfer is a critical pathway for moving new inventions and discoveries into the market to improve lives and accelerate economic growth. The challenge is finding the right partners, strategic investments and experienced entrepreneurial leaders needed to move from idea to venture to success.



Budget and ROI

No angel or seed funding is expected from the city and all company commercialization funding and scale-up funding will be external, attracted through ASU’s existing venture funding networks. Accelerator companies will be featured to potential investors at the Mayo-ASU MedTech Summit, and will be given the opportunity to pitch to the ASU Foundation Angels investor group. ASU, through AzTE, also maintains extensive relationships with investors through Arizona and Northern and Southern California.

By joining this system as the West Valley node, Peoria will be able to parlay its local investment in BioInspire into leveraging the existing ASU and Mayo brand, entrepreneurial infrastructure and networks, as well as investments. More explicitly, the City of Peoria will receive the full benefits of participation in the Mayo-ASU MedTech Accelerator while covering only 10 percent of that program’s costs, amounting to a financial leverage of more than \$3 million over three years.

The Hub for West Valley Entrepreneurship

Participating in the enhanced BioInspire program, in collaboration with ASU and Mayo Clinic, will build on the investment of the last five years to make Peoria *the* West Valley hub for technology, innovation and commercialization of the brightest ideas. It will aid in broader technology company attraction and connect Peoria to the largest and most successful entrepreneurial network and acceleration program in Arizona. It will also provide a home for a multi-city accelerator/co-working space that can generate an additional revenue stream for the city (see budget appendix). **This public-private partnership is resource-smart and brings together the right organizations to make a lasting difference.**

#1 – The Mayo-ASU MedTech Accelerator

The Mayo-ASU MedTech Accelerator is a unique accelerator program for companies in the medical device, technology and services space. We provide an unparalleled opportunity that combines the resources and venture expertise of the ASU Venture Development Group and Mayo Clinic Ventures with the clinical brand equity and footprint of the Mayo Clinic – the nation's most recognized and innovative health care provider.

Clients accepted to participate in the accelerator range from concept-stage ideas emanating from within Mayo and ASU research labs to startups throughout the country with commercially-ready product offerings. The accelerator provides a full suite of services tailored to the unique needs of each company, from assistance with prototyping and proof-of-concept validation for early stage ideas to matching accomplished entrepreneurs with more advanced companies in need of management expertise.

A Preferred Partnership for City of Peoria

With the completion of a five-year management contract with BioAccel, City of Peoria is now poised to leverage its brand identity in the medical device space. Through collaboration with Mayo Clinic and ASU, Peoria can expand its service offering to include enhanced entrepreneurial training and clinical validation of promising new medical device technologies through the Mayo Clinic network.

The Mayo-ASU MedTech Accelerator affords City of Peoria the opportunity to attract new and emerging-growth MedTech companies. These companies will have the opportunity to see their products tested and validated within Mayo Clinic facilities and also receive access to ASU's entrepreneurial platform and investor network.

The Accelerator will give Mayo Clinic visibility into cutting-edge technologies sourced through ASU and Mayo researchers to improve patient healthcare as well as entrepreneurs from throughout the country who will relocate locally if accepted into the Accelerator. Measurable outcomes for Peoria would include entrepreneurial growth in innovation, technology and commercialization activities; enhanced economic development efforts through promoting this locally-available resource backed by ASU and Mayo Clinic; and improved access to talent, capital and management-level executives.

Application and Selection

The application and selection process is highly competitive. Graduates from the accelerator will have received comprehensive product efficacy analysis from leading minds within the medical community at Mayo along with entrepreneurial training provided by ASU, named the most innovative school in the nation by *US News and World Report* in both 2015 and 2016.

The pre-selection team comprises clinicians, technologists and MedTech business leaders who will assess the technical feasibility, commercial viability and clinical need for each candidate technology before an in-person or virtual interview is conducted. The Mayo-ASU MedTech Accelerator is scheduled to announce its first cohort of companies in April 2017.

Pathways of Entry

1. Mayo originated
2. ASU originated
3. Joint Mayo-ASU collaboration
4. External companies located in Arizona and throughout the U.S.

Selection Criteria

1. Stage of company
2. Regulatory requirements – FDA 510K
3. Sector focus and market size
4. Clinical validation and physician interviews
5. Strength of intellectual property
6. Competitive analysis
7. Management team

Differentiation

The Mayo-ASU MedTech Accelerator will diversify the scope of the existing BioInspire incubator by welcoming startups across the healthcare sector, not just in medical devices. The accelerator will consider all types of technology solutions, with a preference for software, data management, analytics, artificial intelligence and devices, to build on the existing Peoria cluster in that space. All of these products have faster time-to-market and revenue potential than items like biologics.

In contrast to other accelerators, the Mayo-ASU Accelerator provides real-world product testing and validation to equip startups with the performance results necessary to gain market entry and traction. Peoria companies in the accelerator will be able to leverage the extensive research capabilities brought to bear by Mayo and ASU.

The Accelerator will partner with other select programs such as City of Peoria's BioInspire, Mayo Clinic's Office of Translation to Practice (OTP) and Mayo's CFI's Garage. The ASU Trailblazer program that connects MBA business school students with technology commercialization initiatives will be absorbed into the Accelerator as a tier of service.

The Accelerator will also look to expand horizontally across different types of entrepreneurs, as identified by Peoria. These could include focus areas like Veterans, underrepresented business owners, and others. The value proposition and business model of the Mayo-ASU MedTech Accelerator is well aligned with Mayo Clinic's interlocking shields: clinical practice, education and research.

Key Constituents

The City of Peoria's existing investment in BioInspire has begun developing a local medical device ecosystem that will serve as a feeder into the new Accelerator. By diversifying the types of inventions and startups that can be served, it will increase the potential for attracting new innovators to participate. We anticipate the Accelerator housing the following types of participants:

- Mayo technologies, ASU technologies and joint Mayo-ASU technologies in need of prototyping, market analysis, product testing/validation and business planning, with connections (or a desire to connect) to the West Valley, e.g., for testbed services at the ASU West campus in Glendale.
- BioInspire and other select partners who serve as company feeders into the accelerator
- New and potential startup businesses with rapid growth potential located within Arizona and throughout the United States
- Venture capitalists and angel investors interested in funding post-Accelerator startups
- Existing companies searching for new products or companies to license/acquire as part of their own business strategies
- Existing pharma, biotech, MedTech and healthcare IT companies searching for partners to conduct clinical trials

Service Offerings

1. Educational Series

- a. Comprehensive educational tracks (e.g. regulatory, supply chain, etc.) delivered through on-line modules and virtual streaming. Provided both to companies within the accelerator as well as outside companies on an executive education fee-based offering
- b. Weeklong in-person workshops featuring subject-matter experts
- c. Opportunity to partners with local organizations and service providers

2. Human Capital

- a. ASU Entrepreneurs-in-Residence
- b. ASU mentors/advisors with relevant business domain experience in med-device
- c. Mayo clinicians and researchers to advice on product feature/benefits and oversee testing protocols

3. Research/Access

- a. Mayo patient use cases/data for validation and prototyping
- b. Mayo physician lead assigned to each company/technology to shepherd through the testing/validation phase
- c. Opportunities to sponsor research at either Mayo or ASU for technologies requiring additional development work

4. Clinical Accelerator

- a. Clinical trial planning, design and feasibility assessment through dedicated and experienced Mayo physicians/clinical investigators from various therapeutic and diagnostic areas

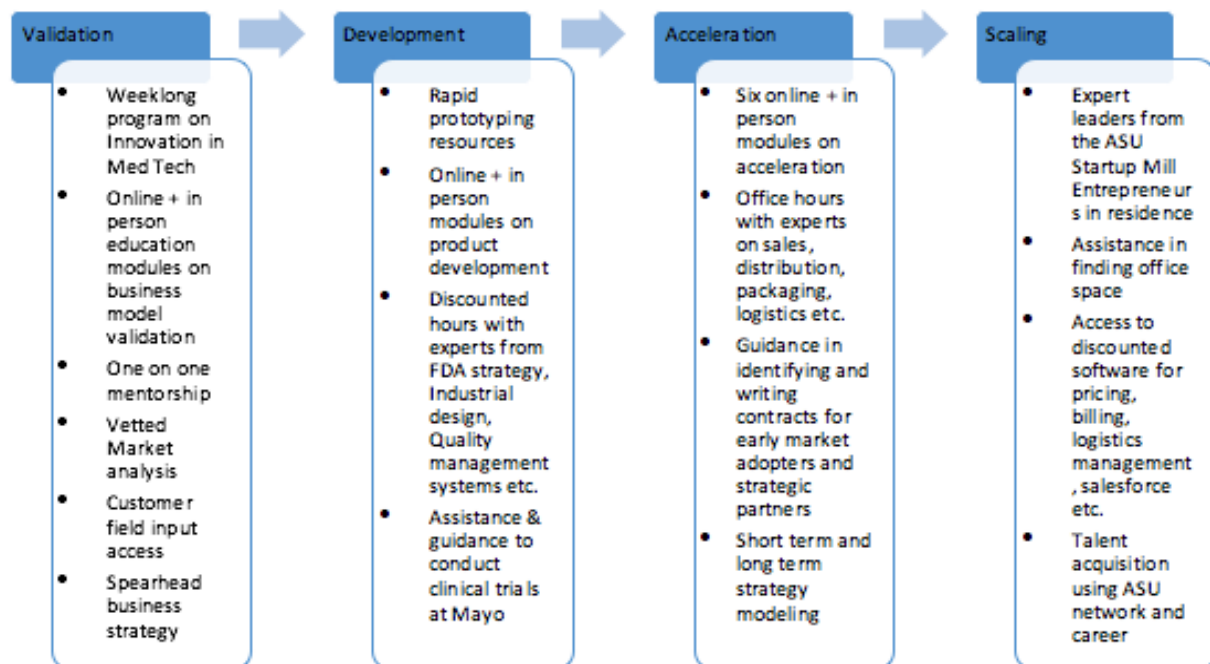
- b. Access to large patient recruiting universe
- c. Efficacy reports and performance analysis

5. Resources

- a. Seed investment of \$____ for teams
 - Angel investors and venture capital funds within ASU network
 - Arizona Commerce Authority (ACA)
 - Economic Development Agency (EDA) - grants
 - Maricopa County Industrial Development Authority (MCIDA) -grants
 - Mayo/ASU
- b. Space in SkySong and BioInspire (City of Peoria)
- c. Demo Days
- d. Clinical Innovation Hour which unites clinicians and scientists to brainstorm ideas for a particular theme in healthcare in just 60 minutes
- e. Networking with Angel, VC and/or Corporate investors
- f. Networking with potential customers and suppliers
- g. Cohort and Alumni networking

How the MedTech Accelerator Works

(Stages 1-4 for Mayo-ASU technologies; Stages 3-4 for external MedTech companies)



Stage 1: Validation

If admitted, companies will receive a unique learning experience tailored to the specific needs of medical ventures. The MedTech Accelerator begins with an immersive executive education training program—Innovation in MedTech: Doing Business in Highly Regulated Markets—delivered by ASU and Mayo Clinic. Upon completion of this executive education program, client companies will have access to virtual seminars and lectures on an on-going basis critical to achieving success in medical markets. Additionally, each company gains access to a diverse group of mentors, advisors and networking opportunities.

Included as part of the service offerings to companies within each cohort, The MedTech Accelerator will help to design a tailored research and testing plan that includes impact, value, and user analyses compiled through clinical review and/or piloting at Mayo. After product validation is completed, the MedTech Accelerator team will produce a report summarizing key findings and product ratings as compiled by the due diligence team.

This report, along with feedback from advisors, will inform the technology readiness to advance to the next stage of product development – or note if further refinement is required. At the end of this stage, companies will have a team that is well-educated for conducting business in the medical industry, product concept validation and the business strategy to pursue commercial success.

Stage 2: Development

After the pathway is defined and confirmation of the target market feasibility is confirmed, companies will receive the necessary resources for product development. This will include in-person and online training modules that begin with rapid prototyping, continue with minimum viable product development, and end with a commercial product development roadmap.

The MedTech accelerator will have a suite of resources consolidated under one roof, including (but not limited to): expert advisors/vetted consultants in FDA pathway, Quality Management systems, regulatory standards, HIPAA regulations, industrial design, product development, project management, medical device sales and marketing, rapid prototyping (3D Printing) and certified manufacturers. At the end of this stage, companies will have a product/prototype with clinical data, potential early market adopters identified and a go-to-market plan.

Stage 3: Acceleration

Once the product/service is built, we will work with entrepreneurs to accelerate the building of the company and execute the go-to-market strategy. Entrepreneurs are trained in the various aspects of acceleration including company formation, legal agreements, IP strategy, branding, financial projections and capital raising through online and in-person training modules.

Companies will be matched with designated business mentors from within the ASU Mentor Network who are seasoned experts in venture acceleration. At the end of this stage, companies will have a defined strategy, a structured and operational company, and strategic partners to help advance into the market.

Stage 4: Scaling

Upon graduation from the Accelerator, companies will be featured at the Mayo-ASU MedTech Summit, which is designed to showcase the product offerings from Accelerator graduates to potential customers and investors. Companies will also be given an invitation to present to the ASU Startup Mill, an exclusive program that provides a connection to a pool of 20-30 skilled entrepreneurs and seasoned executives who can provide interim or a permanent C-level management experience.

Additionally, companies will be provided with the opportunity to pitch to the ASU Foundation Angels, an angel investor group managed by the ASU Foundation that can provide investment seed capital to early-stage companies with an affiliation to ASU.

At the end of this stage, high-potential companies should have the initial resources required to scale and sustain the business model including seed capital and strategic collaborations.

Economics

For external participants, we will develop a flexible, hybrid formula for equity and cash, depending on the participant's position. Some companies will be more mature, having already raised funding. Mayo and ASU will develop a range of equity positions (e.g., a floor of 2% - high of 5% - TBD). A six to seven year *pro forma* will be jointly developed with clear expectations of timing, exits, etc.

Location

In the near term, the Mayo-ASU MedTech Accelerator will be housed at ASU SkySong, with satellite centers at BioInspire in Peoria and Mayo Clinic Scottsdale. The ASU SkySong Innovation Center is home to a global business community that links technology, research, entrepreneurship and capital. In the future, the Mayo-ASU MedTech Accelerator will move to the Arizona Health Solutions Corridor at ASU's Health Solutions Innovation Campus adjacent to the Mayo Clinic Hospital in Phoenix and potentially in to-be-determined space in Peoria as part of the P83 initiative.

This strategically distributed model of multiple locations will not only enhance Mayo Clinic and ASU's ability to foster a culture of entrepreneurship and advance innovation, but will also contribute immensely to the growing ecosystem for the biosciences community in the Peoria-Phoenix-Metro Area.

Outcomes

Mayo Clinic and ASU will be launching the first-of-its-kind medtech accelerator that allows medtech companies accepted into the accelerator to receive clinical validation and physician feedback for their products through Mayo Clinic facilities along with entrepreneurial training and investor access through ASU. During year 1, efforts will be concentrated on achievement of the following key milestones:

- Selection of co-working space at both ASU and Mayo Clinic
- Recruitment of select mentors and entrepreneurs-in-residence (EIR's) for the accelerator
- Engagement of physician advisory council
- Establishment of operating procedures and company selection process
- Review and evaluation of current BioInspire companies and connections made to selected mentors/advisors

For years 2 and 3, the focus is on nationwide rollout:

- Marketing efforts commence within Peoria to attract applicants for BioInspire
- City of Peoria and BioInspire become a feeder to Mayo-ASU accelerator of candidate companies
- Peoria Economic Development group is introduced to Mayo-ASU accelerator companies to present business location opportunities in Peoria
- 7-10 medtech companies are on-boarded into BioInspire to receive the full suite of ASU entrepreneurial services—training, mentoring and investor introduction.
- Angel and mentor network developed in the west valley with Peoria serving as the hub
- 6-8 angel/VC investor events
- Technology showcase demo day at end of each BioInspire cohort (estimated two cohorts / year)

#2 – ASU Startup Accelerator @ The Peoria Acceleration Space

The ASU Startup Accelerator @ The Peoria Acceleration Space (ASA) is designed to assist community-based entrepreneurs with launching their ventures and commercializing new technologies.

The ASU Startup Accelerator will be led by Arizona State University Entrepreneurship + Innovation (E+I), in partnership with Arizona Technology Enterprises. The ASU Startup Accelerator would receive additional support from the City of Peoria, Draper University, and other local, national and global venture development organizations.

Innovation @ ASU

In 2016, ASU was named #1 in Innovation by *U.S. News and World Report* for the second consecutive year, ahead of Stanford, MIT, Duke, Harvard, and Cornell. Additionally, E+I received the prestigious *Entrepreneurial University Award* at the Symposium for Innovation and Entrepreneurship in Higher Education. Moreover, E+I was also recognized for *Outstanding Contributions to Venture Creation* at the annual Global Consortium of Entrepreneurship Centers conference.

As a New American University, ASU is guided by eight design aspirations that influence its growth and transformation. Among these guiding principles is a deep commitment to valuing entrepreneurship in all forms. It is with this mindset, along with an extensive suite of entrepreneurial expertise and resources, that E+I supports in the process of launching and accelerating university-affiliated ventures.

E+I Venture Development

ASU Entrepreneurship + Innovation includes a team of professional faculty and staff who are dedicated to launching and sustaining key venture development programs. Since 2005, this team has supported over 400 student, faculty, and community-based ventures through various venture acceleration and incubation programs. The E+I venture development team serves three key populations of practicing entrepreneurs:

1. Student-led ventures
2. Faculty- and staff-led enterprises
3. Community-based startups

The E+I venture development team supports these founding teams by aligning them with human, physical, and financial capital resources. More specifically, we develop and provide: Entrepreneurial training and venture mentorship; Access to work, prototyping, and lab spaces; and, Alignment with grant and equity funding.

E+I venture development clients are identified and supported when they meet any (or all) of the following developmental criteria:

1. Clear articulation of a product or service in the concept/idea stage (may be pre-revenue)
2. Development of a prototype (renderings, proof-of-concept, or salable)
3. Evidence of marketplace traction, pre-sales, sales, or capital raised.

Venture Development Core Activities

Venture Development facilitates education, mentorship, workspace, and funding allocations to all eligible ASU-affiliated enterprises via bi-annual cohort-based acceleration programs, as well as on-demand services for eligible ventures. E+I venture development aims to streamline and constantly improve venture development service awareness, activation, and efficacy enterprise-wide.

The bi-annual cohort-based acceleration programs comprise the following activities, which are initiated each January and August:

- Continuous promotion of an open call for ventures seeking developmental services
- Management of a ubiquitous rolling support (and possible funding) application portal
- Coordination of eligible client enrollment in ASU venture development course(s)
- Identification of venture team leader's home unit (if applicable)
- Activation of cooperative venture development model with ASU units, clients, and sponsors
- Facilitation of mentor hiring, training, and supervision
- Activation of appropriate mentorship resources (using a 6:1 venture-to-mentor ratio)
- Orientation of venture development course cohort(s)
- Facilitation of venture, mentor, and sponsor matching
- Distribution and oversight of affiliated sub-branded seed funding (if applicable)
- Coordination of enterprise-wide venture development work and meeting spaces
- Oversight of mentor-driven, community-based venture development, evaluation, and referral processes
- Orchestration of cohort demo days and collaborator program/funding referrals

Innovating with Underserved Communities

E+I continues to innovate in creating new programs that allow access and resources to underserved communities. E+I recently announced it received a grant from the Kauffman Foundation to expand the reach to provide women and people of color access to entrepreneurial resources empowering them to launch successful enterprises.

Closing the gaps in entrepreneurship diversity is truly at the heart of E+I. ASU continues to demonstrate the priority it places on creating pathways for underserved communities and the correlating value creation.

How ASA @ Peoria Works

The E+I venture development team forecasts that the ASA @ Peoria initiative will support approximately 20 community-based ventures within the initial fiscal year, scaling rapidly to support approximately 200 client founders within the first three years of operation. (See the attached *pro forma* for details.)

Applicant ventures may apply for admission into the ASU Startup Accelerator at any time. Applications will be considered approximately five times per year. New ASA venture cohorts will be onboarded approximately every seven weeks throughout the ASU fall, spring, and summer academic sessions, coinciding with each session's A and B start dates. Community-based founders who are interested in joining ASA may reference the ASU academic calendar at <https://students.asu.edu/academic-calendar> for exact dates.

Once admitted, ASA community-based ventures will be required to pay \$500 per term. Terms are rolling 15 week periods that begin five times per year in August, October, January, March, and June. This fee offsets university costs associated with professional venture mentorship and development services. ASU affiliates (current students, faculty, and staff) are not required to pay for support within ASA @ Peoria.

Accepted ASA @ Peoria ventures may remain in the accelerator for as many terms as deemed necessary by the management team and their assigned Venture Mentor(s). However, founding teams that remain in ASA after two consecutive years will be subject to quarterly administrative evaluations, which may result in the finalization of the ASA venture development engagement, including all affiliated program features and benefits. Community-based founders who are interested in joining ASA begin the process by applying to ASU Venture Devils: <http://links.asu.edu/GoVentureDevils>.

Implementation Timeline

The inaugural ASA @ Peoria cohort of approximately 10 community-based ventures may be onboarded on Monday, March 13, 2017, in tandem with the ASU Venture Devils Spring B 2017 meta-cohort start date. Other important ramp-up and delivery dates are as follows:

Month (2017)	Activities / Deliverable
January	1. Write and post ASA @ Peoria Community Manager position requisition 2. Call for ASA @ Peoria venture applications 3. Market “Test” and “Build” courses to all eligible participants
February	1. Hire and Train ASA @ Peoria Community Manager 2. Accept ~10 ASA @ Peoria Community Ventures into the Inaugural Cohort 3. Enroll students in “Test” and “Build” courses
March	1. Onboard ~10 ASA @ Peoria Community Ventures into the Inaugural Cohort 2. Collect initial monthly coworking space fees (starting at \$200) 3. Teach “Test” and “Build” courses to all eligible participants (coinciding with the

Month (2017)	Activities / Deliverable
March (cont'd)	ASU Spring B academic session) 4.ASA @ Peoria Venture Mentorship and Development process commences
April	1.All eligible ASA @ Peoria Community Ventures participate in ASU Spark Tank Demo Days and other showcasing events
May	1.Enroll students in “ <i>Train</i> ,” “ <i>Test</i> ” and “ <i>Build</i> ” courses for Summer C session 2.Market Relevate coding bootcamp to all eligible participants
June	1.Onboard ~10 ASA @ Peoria Community Ventures into Cohort 2 2.Teach “ <i>Train</i> ,” “ <i>Test</i> ” and “ <i>Build</i> ” courses to all eligible participants (coinciding with the ASU Summer C academic session) 3.ASA @ Peoria Venture Mentorship and Development process commences 4.Enroll students in Relevate coding bootcamp
July	1.Facilitate Relevate coding bootcamp 2.Accept ~50 ASA @ Peoria Community Ventures into Cohort 3.
August	1.Onboard ~50 ASA @ Peoria Community Ventures into Cohort 3 2.Teach “ <i>Train</i> ,” “ <i>Test</i> ,” “ <i>Build</i> , and “ <i>Scale</i> ”” courses to all eligible participants (coinciding with the ASU Fall A academic session) 3.ASA @ Peoria Venture Mentorship and Development process commences
September	1.Accept ~ 75 ASA @ Peoria Community Ventures into Cohort 4. 2.Enroll students in <i>Train</i> ,” “ <i>Test</i> ,” “ <i>Build</i> , and “ <i>Scale</i> ”” courses for Fall B session
October	1.Onboard ~75 ASA @ Peoria Community Ventures into Cohort 4 2.Teach “ <i>Train</i> ,” “ <i>Test</i> ,” “ <i>Build</i> , and “ <i>Scale</i> ”” courses to all eligible participants (coinciding with the ASU Fall B academic session) 3.ASA @ Peoria Venture Mentorship and Development process commences 4.Facilitate “pitch playoffs” event for all eligible ASA @ Peoria ventures who aim to be showcased at ASU Demo Day or Startup Mill
November	1.Facilitate ASU Demo Days and Startup Mill investor events for all eligible ASA @ Peoria ventures
December	1.Enroll students in <i>Train</i> ,” “ <i>Test</i> ,” “ <i>Build</i> , and “ <i>Scale</i> ”” courses for Spring A session 2.Accept ~100 ASA @ Peoria Community Ventures into Cohort 5.

Outcomes

Year 1:

- Identification of horizontal and vertical accelerators which Peoria elects to pursue in conjunction with the existing medtech vertical through BioInspire
- Site(s) selection for co-working space and accelerators
- Facility prep for occupancy
- Marketing campaign developed for promoting the Peoria-ASU collaboration to Peoria and west valley entrepreneurs
- Recruitment of entrepreneurs, mentors and investors in the west valley begins

Years 2 & 3:

- 75 companies in year 1 and 150 companies in year 2 processed through the Peoria BioInspire Accelerator
- 4 entrepreneurial bootcamps held targeting select audiences as identified by Peoria (students, women, minority, etc.)
- 4 investor demo days held in Peoria linking ASU and Thunderbird Business School angel investors together with Peoria startups

Target Ventures

West Valley community-based startups, as well as management teams seeking to relocate to Arizona, are great candidates for ASA @ Peoria. ASU alumni are also strongly encouraged to apply, but ASU alumni status is not required. All applicants are encouraged to identify how working with the university can add value to their businesses. Regardless of university-affiliation, applicant ventures should have:

- an established management team
- a well-developed web presence
- traction with users and/or payers
- recurring revenue
- a repeatable and scalable business model
- a willingness to experiment, learn, optimize, and grow rapidly

Features + Benefits

The ASU Startup Accelerator (ASA) has supported community-based ventures for nearly a decade. Companies selected for ASA receive access to mentors, collaborative workspace, and the chance for the startup to pitch to private equity investors and venture capitalists. All Arizona-based ventures, including faculty spinouts, alumni ventures and non-ASU startups, are eligible to apply. Since 2011, ASA teams have raised nearly \$2.5 million in external funding.

Ventures that are selected for support within the ASU Startup Accelerator will receive dedicated mentorship from professional Venture Mentors and be recognized as ASU Venture Devils. ASU Startup

Accelerator management teams may also access exclusive ASU perks, Venture Development School courses, and work spaces within ASU-affiliated facilities. Select ASA enterprises may also be strategically connected with ASU Startup Mill and be showcased during ASU Spark Tank demo days and other ASU investment forum events.

The Peoria Acceleration Space

Venture development spaces include a broad network of innovative co-working, dedicated desk spaces, and wet/dry lab facilities with modern amenities and inspiring atmospheres. Specifically, ASA founders in the West Valley will have access to the Peoria Acceleration Space, which comprises 6,800 square feet, divided into four individual laboratories, one large common laboratory that provides shared lab access to tenants, ten offices of various configurations providing for flexibility, a break room, and a shared conference room. In addition to The Peoria Acceleration Space, affiliate locations include ASU SkySong, 1951 @ SkySong, and The Department in PHX.

Prices for all ASU community-facing venture development spaces begin at \$200 per month. Revenues generated from the Peoria space will flow directly to the City of Peoria.

ASU Startup Mill and Demo Days @ The Peoria Acceleration Space

Select ASA @ Peoria ventures may also be showcased at ASU Startup Mill events. ASU Startup Mill matches participating startups with seasoned executives and serial entrepreneurs who may serve in an interim executive or coaching capacity with qualified ventures. Startup Mill EIRs also help to execute high-potential startup growth strategies and successful technology commercialization efforts.

Additionally, ASU Spark Tank demo days are bi-annual pitch events at ASU SkySong that are attended by over 200 mentors, investors, and startup supporters. Beyond demo day events, select ASA @ Peoria founders may also be connected with capital partners, organizations, and investors. Consideration for inclusion within any ASU investor event requires execution of an ASU Services Agreement, pending pre-qualification.

Dedicated ASU Venture Mentorship @ The Peoria Acceleration Space

ASU Venture Mentors aim to foster the entrepreneurial success of founders by providing regular, ongoing support. This key feature of the ASU Startup Accelerator is a part of the larger ASU Mentor Network.

The ASU Mentor Network supports student, faculty, and community entrepreneurs. Ventures may be at a wide range of developmental stages, from ideation through commercialization. The mission of the network is to catalyze the entrepreneurial success of founders by connecting them with volunteer Entrepreneurship Experts who hold office hours and paid Venture Mentors who provide sustained support to founders and their teams.

Entrepreneurs have a lot of big ideas. They also have a lot of creativity and the grit needed to navigate the rough waters of starting a new business. But sometimes, as in many areas of our lives, we don't know what we don't know. That is why our Mentors are such an important part of the startup process. Mentors provide the experience, guidance, and support that can help founders keep moving their idea forward, mitigating risks and leveraging opportunities.

Venture Mentors (VMs) are seasoned entrepreneurs who are hired and paid by ASU. VMs are matched with founders based on their background and areas of expertise. VMs act as both an expert on the process of moving a venture forward, as well as a guide to encourage entrepreneurs to plug into startup resources at ASU. VMs meet with each of their six assigned ventures every other week and are available for interim questions via email and phone. VMs must be serial entrepreneurs or intrapreneurs who have a deep passion for helping others avoid common startup pitfalls. VMs must have a bachelor's degree (or equivalent) and are required to attend ongoing training and development sessions.

ASU Venture Devils @ The Peoria Acceleration Space

Venture Devils is an enterprise-wide startup development cohort that comprises all ASU-affiliated founders who are committed to commercializing an impactful new product or service by launching or growing a for-profit, more-than-profit, or nonprofit enterprise. Launched in the fall of 2016, ASU Venture Devils supports student, faculty and community entrepreneurs who are launching ventures within wide range of developmental stages, from ideation through commercialization.

The Venture Devils program aims to formally engage and educate founders of all statuses and to track the developmental progress of their affiliated ventures. The program pairs participant founders with a dedicated Venture Mentor who will educate and guide the iterative advancement of the founder(s) and their affiliated venture(s). Venture Devils also provides a formal process for participating founders and their affiliated ventures to be continuously evaluated and potentially pre-qualified for ASU funding opportunities and additional support services.

Throughout the Venture Devils program, each participant must demonstrate that they are able to learn, synthesize, and share current methods, tactics, and strategies for launching and developing a new venture, which may include, but will not be limited to: customer discovery, development, and acquisition, product/service development, intellectual property development and protection, entity formation, capitalization, evidence-based pitching, and early-stage growth drivers.

Venture Devils must also iteratively develop and present an evidence-based pitch deck that incorporates the “fact-based” and “data-driven” proof that is now required to ensure transparency, authenticity, and traction for today’s entrepreneurs. Participants also develop professional skills and habits as it relates to working with mentors, partners, and other key members of a venture development network.

ASU Venture Devils Perks

ASU Venture Devils Perks is a curated list of startup service providers that offer special discounts and opportunities exclusively to ASU Venture Devils participants. Specifically, a wide variety of legal, web, and startup operation service perks are available to all accepted ASA @ Peoria founders.

Business partners in this program agree to provide services to ASU ventures at reduced rates, thus helping entrepreneurs grow their businesses at lower operational costs. In exchange, this list of providers are often invited to participate in a number of entrepreneurial programs throughout the university and get to work with some of ASU’s most innovative startup teams.

Venture Devil perk categories include legal resources, web services, logo and web design, printing and shipping services, as well as ASU senior capstone projects.

ASU Venture Development School @ The Peoria Acceleration Space

Venture Development School is designed to iteratively advance all ASU student, faculty, and community-based founders. Available courses and certificates include *Train*, *Test*, *Build*, and *Scale*.

Train

The *Train* curriculum integrates proven methodologies developed by Draper University, which is led by Tim Draper, world-renowned venture capitalist. In tune with ASU's commitment to forging innovative partnerships, E+I and Draper University recently announced a partnership to blend ASU's innovative approach with Draper's expertise in individual-based entrepreneurial training. Draper University was founded in 2012 by Tim Draper, founder of venture capital firm DFJ, who made investments in companies such as Indiegogo and DocuSign. Draper's viral marketing innovations led to the success of Hotmail and Skype.

At the heart of the Draper training model is experiential leadership -- developing the person to become a successful entrepreneur. The Draper model features training on warrior mindset, design thinking, lessons in failure and critical success factors, all of which play key roles in this groundbreaking curriculum to shape the individual. Key aspects of the Draper curriculum include Vision & Future, Creativity, Survival, Speed & Strength, and Special Powers. Beginning with this individually-focused curriculum allows the participant a fantastic foundation to begin the entrepreneurial journey.

Test

The *Test* curriculum features nationally-recognized Lean Launchpad® modules, which have been developed in collaboration with the National Science Foundation, VentureWell, and ASU's I-Corps Site team. The course uses the Business Model Canvas to hypothesize customer segments and calculate value propositions.

Build

The *Build* curriculum features modules that will augment the [ASU Revature](#) coding bootcamp offerings, among many other ASU-affiliated design-build resources. The course prepares founders to set up the legal and corporate structure of the company, setting a solid foundation for the business.

Scale

Finally, the *Scale* course teaches the company how to go from 1 to 10 units to thousands of units and is designed to help founders develop their product development strategies. Topics covered include: Minimum Viable Products, Rapid Prototyping, Product Development Methods, Design and Manufacturing, Regulations and Standards, and Project Management.

Venture Development School class meeting locations include The Peoria Acceleration Space, 1951 @ SkySong, and The Department in Downtown Phoenix. Enrolled founders will also receive discounted memberships at TechShop Chandler. In sum, the primary goal of all venture Development School offerings is to challenge participants to move the needle on their ventures. Moreover, participants will have access to industry experts outside of the sessions for follow up or more in depth counsel.

Tracking and Measurement

The E+I venture development team measures success by tracking and transparently sharing the following metrics on a quarterly basis:

- Number of ventures supported
- Demographics of supported founding team members
- Number of ventures in revenue
- Number of jobs created by supported ventures
- Amount of capital raised by supported ventures
- Number of venture development competitions won by supported enterprises

In addition to tracking quantitative metrics, we collect qualitative data, especially success and failure stories of participants. We also conduct monthly individual check-ins with key stakeholders, along with quarterly written reports and strategic analyses.

In sum, E+I venture development serves to streamline and constantly improve venture development service awareness, activation, and efficacy enterprise- and community-wide.

#3 – Technology Transfer / Commercialization

Technology transfer is a critical pathway for moving new inventions and discoveries into the market to improve lives and accelerate economic growth. The challenge comes with finding the right partners, strategic investments and experienced entrepreneurial leaders needed to move from idea to venture to success.

A New Kind of Technology Transfer Organization

Arizona Science & Technology Enterprises (AzTE) was formed in 2003 as ASU's exclusive intellectual property management and technology transfer organization. Freed from typical institutional constraints within universities, AzTE has worked to evolve and enhance the university technology transfer model, with an emphasis on speed to market, flexibility and deal flow. AzTE has successfully executed on its new model, developing into one of the nation's top-performing technology transfer offices, across a range of industry metrics.

To date, more than 95 startups have been launched based on ASU innovations. These companies and their sub-licensees have attracted more than \$600 million in funding from venture capital firms and other investors.

In FY16 alone, ASU start-up companies, including Fluidic Energy, HealthTell, Heliae and Zero Mass Water, received more than \$96 million in venture capital funding. ASU-linked startups are having an economic impact and currently employ more than 500 people, many in Arizona.

“ASU is absolutely a remarkable school for tech transfer.”

Dr. Stuart Lindsay

Regents Professor, Depts. of Physics and Chemistry and Biochemistry

Beyond Arizona, AzTE maintains a continued physical presence at the ASU California Center in Santa Monica that fosters connections between the Arizona and California innovation ecosystems.

A Partnership with Peoria

AzTE identifies technology that fills market needs to enable the right partners to take these innovations to the marketplace. Our licensing process, which we have refined over the course of a decade as an independent office, is designed to achieve two goals: 1) Offer a straightforward legal mechanism for companies to access inventions, and 2) Facilitate on-going partnerships for future product commercialization.

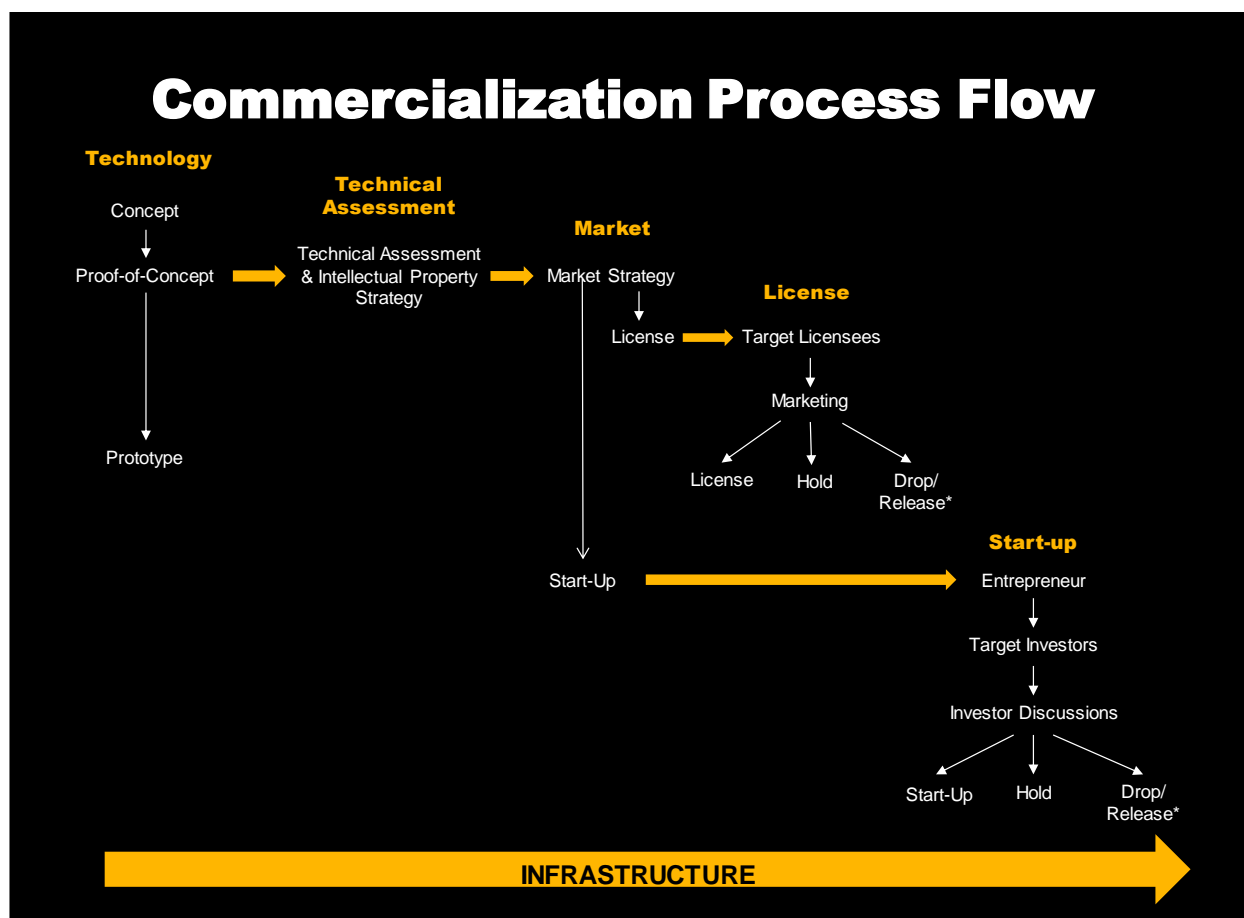
AzTE shares in the development risk by requiring an initial license fee and a royalty that is received only after a product or process is being sold or otherwise used. We understand that direct communication is the quickest and most efficient way to work with our industry partners.

From Idea to Market

Using the model it has developed for university technology commercialization, AzTE will work with City of Peoria companies looking to enter the market or grow their businesses. AzTE's executive team comprises industry and university veterans with years of professional experience in technology evaluation and marketing, product development, intellectual property and startup development. AzTE may also engage industry experts and patent counsel in the evaluation of an invention to provide a more robust view of market needs and patentability.

One of the most critical jobs AzTE performs is managing the components of IP protection. Patenting is the most common way to protect intellectual property, with other methods including non-disclosure agreements, trademarks and copyrights. A patent helps protect the inventor(s) and any commercial partners, who frequently must make sizable investments to bring new technologies to market. We carefully review the commercial potential for an invention before investing in the patent process.

Through its technology marketing activities, AzTE is in contact with thousands of companies each year, across a wide range of industries. This gives our team a broad perspective on both the needs of industry and the desire they have for partnerships.



Bi-Directional Innovation Flow

Charlie Lewis, AzTE's vice president for Venture Development, has an existing relationship with City of Peoria to help spotlight opportunities for city-based businesses to access innovative ASU technologies to meet their specific market needs. This proposal builds on the proximity of the ASU West campus to further develop those university <-> business linkages.

From AzTE's decade-plus experience supporting innovative startups, AzTE has determined that launching, growing and successful exiting a university startup rarely happens without three things:

1. High-potential, well-protected intellectual property.
2. An accomplished and visionary management team.
3. Successful fundraising.

Furthermore, in many cases, #3 is only possible once #2 is in place. That's why AzTE has built its own acceleration initiative – the Startup Mill referenced above – to bring together a group of accomplished entrepreneurs and seasoned executives that can work with current and potential startup founders. This work can range from informal mentoring and advice all the way up to serving as a first-stage CEO.

AzTE's Business Model for Growth

Deal-based decision making.

- More selectivity in patenting activities, but management discretion to make high-risk patent investments for key initiatives, projects and faculty.
- Activities/practices not based on chase for revenue blockbusters or avoidance of missed opportunities.

Less focus on upfront payments.

- Strategic emphasis on potential downstream revenue: long-term bets.
- For startups, no requirement of burdensome upfront licensing fees:
- Modest upfront fee and patent expense reimbursement.
- Diligence milestones and royalty payments, usually set at the lower to mid-range of fair industry value.

Rapid negotiation.

- Seek fair but not necessarily maximum value to facilitate rapid dissemination of ASU inventions and discoveries into the market.
- Speed preferred over "maximizing" dollar value.
- Deal flow preferred over trying to predict winners.

AzTE manages the Startup Mill in partnership with the ASU Office of Knowledge Enterprise Development. Currently there are almost 20 mentors available for collaboration. Collectively, these mentors have broad experience in both the life and physical sciences; many have founded, run and sold successful companies; and others have been on both sides of the venture financing world.

Companies that engage with AzTE through the Peoria Accelerator will have the opportunity to become part of the Startup Mill cohort, when they demonstrate a high-potential for rapid growth.

Appendix: Budget Discussion

The Year 1 budget (Feb-June 2017) reflects the initial expenses associated with launching: 1) ASU Startup Accelerator @ Peoria BioInspire, 2) The Mayo-ASU MedTech Accelerator and 3) AzTE Technology Transfer / Commercialization services for City of Peoria.

Year 2 is the first full year of operations as the ramp up process continues with year 3 reflecting a steady-state at maximum capacity. Each of the three program initiatives involve different resources for execution along with varying capital requirements.

ASA @ Peoria Accelerator Budget

Year 1 Year 2 Year 3

The Accelerator will launch in year one with a right-sized staffing model for the initial five-month ramp-up period. One full-time Program Manager will oversee two quarter-time program staff and a half-time administrator.

In year two, there will be two full-time program managers and two half-time program staff. The administrator will move to full-time. By year three, staffing will be fully built out, with three full-time program managers, one half-time program staff, and a full-time administrative support.

These staff levels are based on projected growth in client ventures from 20 to 75 to 150. Other hard costs will also scale accordingly, as shown below.

Number of Client Ventures	20	75	150
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Personnel

Program Manager Full Time @ \$60K	60,000	120,000	120,000
Program Manager Part Time 25%	20,281	40,562	81,124
Program Manager Part Time 25%	17,500	35,000	35,000
Venture Mentors @ \$4K/per	20,000	48,000	100,000
Administration Part Time 50%	20,000	40,000	40,000
Subtotal	137,781	283,562	376,124

ERE

Program Manager Full Time	22,440	44,880	44,880
Program Manager Part Time 10%	7,585	15,170	30,340
Program Manager Part Time 10%	6,545	13,090	13,090
Venture Mentors	2,000	4,800	10,000
Administration Part Time 50%	7,480	14,960	14,960
Subtotal	46,050	92,900	113,270

ASA @ Peoria Accelerator Budget**Year 1****Year 2****Year 3****Services**

Angel investor events \$2,500/per	5,000	10,000	12,500
E-ship training/Bootcamps Cohort Programming, Venture Mentor Training, Draper University, Test Course, Build Course, Scale Course, Coding/Making Bootcamp	20,000	55,000	75,000
Printing (BMC, Lean Material)	10,000	15,000	20,000
Subtotal	35,000	80,000	107,500

Supplies

Workshop Expenses	15,000	25,000	40,000
Startup Expenses	8,000	0	0
Subtotal	23,000	25,000	40,000

Miscellaneous

Accelerator Expenses	10,000	20,000	30,000
Subtotal	10,000	20,000	30,000

Travel

In State Travel	2,000	5,000	7,500
Subtotal	2,000	5,000	7,500

ASU Overhead 26%

65,996	117,380	175,342
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ASA @ Peoria Accelerator Total

319,827	623,842	957,236
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Innovation Commercialization Services (AzTE)**Year 1****Year 2****Year 3**

Commercialization services, provided by Arizona Technology Enterprises, will scale with the number of companies in the Accelerator, but with a longer lead time that keeps costs flat in year three.

Commercialization Activities	125,000	275,000	275,000
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Legal Affairs

Patent prosecution strategy
Licensing and other legal agreements
Legal and policy compliance

Business Development

Commercial due diligence
Technology marketing
Licensing and commercialization
Corporate research collaborations

Venture Development

Investor relations with VCs and angels
Formation of spin-out companies

ASU Overhead 26%	32,500	71,500	71,500
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Innovation Commercialization Services (AzTE)	157,500	346,500	346,500
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Mayo-ASU Medtech Accelerator Budget**Year 1****Year 2****Year 3**

Peoria will receive the full benefits of participation in the Mayo-ASU MedTech Accelerator while covering only 10 percent of the program's costs, amounting to a financial leverage of more than \$3 million over three years. The budget numbers below reflect that 10 percent cost figure.

Personnel

ASU Program Manager Full Time @ \$60K	6,000	12,000	12,000
Mayo Program Manager Part Time 25%	2,028	4,056	8,112
Mayo Program Manager Part Time 25%	1,750	3,500	3,500
Venture Mentors @ \$4K/per	2,000	2,000	2,000
Administration Part Time 50%	2,000	4,000	4,000
Subtotal	13,778	25,556	29,612

ERE

Program Manager Full Time	2,244	4,488	4,488
Program Manager Part Time 10%	759	1,517	3,034
Program Manager Part Time 10%	655	1,309	1,309
Venture Mentors	200	200	200
Administration Part Time 50%	748	1,496	1,496
Subtotal	4,605	9,010	10,527

Services

Angel/VC investor events \$2,500/per	500	1,000	1,250
Company selection process. 5-10 co's per cohort. Two cohorts per year (\$60K per company)	7,000	42,000	60,000
Recruitment			
Market Analysis			
Intellectual Property Review			
Clinical investigation (Mayo)			
Legal			
Subtotal	7,500	43,000	61,250

Facilities Management

ASU SkySong	4,800	5,500	6,200
Mayo Clinic	4,800	5,500	6,200
Subtotal	9,600	11,000	12,400

Miscellaneous

Accelerator Expenses	1,000	2,000	3,000
Subtotal	1,000	2,000	3,000

ASU Overhead 26%

9,486	23,547	30,365
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Mayo-ASU Medtech Accelerator Total

45,969	114,113	147,155
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Total Budget	Year 1	Year 2	Year 3
ASA @ Peoria Accelerator	319,827	623,842	957,236
Innovation Commercialization Services (AzTE)	157,500	346,500	346,500
Mayo-ASU Medtech Accelerator	45,969	114,113	147,155
Total	523,296	1,084,455	1,450,891

Potential Revenue Discussion

The ASU Startup Accelerator @ The Peoria Acceleration Space will provide a home for a multi-city accelerator/co-working space that can generate an additional revenue stream for the city.

Co-Working Space Potential Revenue	Year 1	Year 2	Year 3
Number of Co-Working Space members	0	100	200
Memberships			
\$200/mo – 50%	0	120,000	240,000
\$300/mo – 25%	0	90,000	180,000
\$400/mo – 25%	0	120,000	240,000
Total		330,000	660,000

Appendix: Additional E+I Programs Background

E+I in the Community

True to our ranking as the most innovative school, E+I has been working to address gaps in our local and national entrepreneurship ecosystem. Toward that end, E+I has launched and sustained the forward-thinking Entrepreneurship Outreach Network and Startup School initiatives.

ASU Entrepreneurship Outreach Network

The Entrepreneurship Outreach Network is a growing, successful network of libraries and local economic development groups that provide entrepreneurship training to their communities. In 2013 E+I received support from the Blackstone Charitable Foundation to create AREA48, an experiment in community coworking spaces. AREA48 mixed students with entrepreneurs from a range of backgrounds, especially retirees, veterans, and unemployed but skilled workers to promote entrepreneurial learning among underserved populations.

The AREA48 project provided critical experience that informed the first iterations of the Entrepreneurship Outreach Network, which was seed funded in 2014 by the Institute of Museum and Library Services. To date, E+I has diligently used end-user feedback to improve the Network. As our IMLS grant continues, we are in a strong position to enhance the Network, increasing impact among underserved communities in particular.

ASU Startup School

ASU Startup School is a free, online entrepreneurship curriculum that is coupled with a series of facilitated workshops wherein entrepreneurs learn what they need to do in order to develop a successful venture.

There are three stages to ASU Startup School. Each stage includes learning objectives, a video introduction from an ASU Startup School instructor, and links to important content from expert entrepreneurs around the world. Each stage dives deep into the topics of developing customers, new enterprises and the startup management team.

E+I in Underserved Communities

Beyond E+I's general embeddedness in the local community, E+I has developed and launched numerous programs designed to support underserved populations including the iDT, SparXX, Poder, and Prepped initiatives.

Innovation Through Design Thinking

E+I's Innovation Through Design Thinking (iDT) initiative trains high school teachers in low income high schools across the U.S. how to incorporate entrepreneurship in their classrooms. The Teaching Innovation Fellows (TIF) program, a key component to the iDT initiative, provides training for high school educators on embedding innovation, entrepreneurship and science, technology, engineering and math (STEM) concepts into curricula through applied community-based projects. The program provides a framework for educators of a variety of disciplines, educational settings and grade levels to learn applied project methodologies. The TIF program uses a blended learning approach, combining face-to-face workshops with virtual learning experiences.

SparXX Initiative

The SparXX Initiative is a series of programs and activities at Arizona State University that focus on supporting women in starting and growing new businesses. SparXX programs and activities are designed for women who are just beginning to explore entrepreneurship and business ownership, as well as women who have been business owners for years and are seeking support to take their businesses to the next level. E+I also co-leads PHXX Forward, an ecosystem-building initiative of women's business organizations in the Phoenix area.

Poder

ASU E+I and the Silicon Valley Community Foundation, in partnership with Cisco, provide comprehensive learning experiences to help underserved youth gain entrepreneurial skills in Arizona community colleges and high schools. ASU Poder (Spanish for "to be able to" and "power") is the central component of the partnership. Poder is designed specifically for underrepresented youths and allows underserved community college students to create solutions to pressing societal problems using digitization skills acquired through Cisco curriculum and a culturally responsive version of ASU Startup School while receiving career and college preparation training to succeed educationally.

The ASU Poder program launched at South Mountain Community College in south Phoenix during spring 2016. During the initial effort, 25 students were selected to participate in the first cohort of ASU Poder, of which 88 percent were ethnic-minorities and 60 percent were women. Moreover, three students won grant awards at the spring 2016 Cisco Innovation Challenge to help them launch or grow their social entrepreneurship projects. Looking ahead, the program is intended to grow to other community colleges in the Phoenix-metropolitan area to train nearly 300 students in three years.

Prepped

E+I unveiled a unique approach to support main street entrepreneurship with the launch of Prepped, a culinary training program targeting low income neighborhoods in the food and beverage industry cultivating lower barrier to entry pathways. Prepped leverages ASU's College of Nursing and Health Innovation, as well as the College of Health Solutions, to provide food preparation facilities, training and support.