Annual Report
2015-2016

LDFA Report – Ann Arbor/Ypsilanti SmartZone

$925K Direct Support *

YOY ▲ $15K

162 Companies Served *

YOY ▲ 37

YOY ▲ 18.5

150.5 Jobs Created *

YOY ▲ 16

37 Companies Created *

YOY ▲ $86.2M

Funds Raised $141.6 M
investments & grants

*These figures are representative of a subset of the work Ann Arbor SPARK does to support the entrepreneurial community; only companies within the LDFA contract service boundaries are included.

Ann Arbor SPARK works to advance the economy of the Ann Arbor region by establishing the area as a desired place for business expansion and location... by identifying and meeting the needs of business at every stage, from those that are established to those working to successfully commercialize innovations.
For more information visit: www.annarborusa.org

SPARK@nn arbor usa

Ann Arbor-Ypsilanti Smart Zone
Local Development Finance Authority

Ann Arbor SPARK Annual Report: July 1, 2015 – June 30, 2016

Contract Period July 1st, 2015 through June 30th, 2016

3.3 The Contractor shall provide a written Final Program Progress Report to the LDFA no later than sixty (60) days after the end of the Project Service Term. The Final Program Progress Report shall disclose: 1) a census of the annual and cumulative number of jobs created within the Service Area (as defined in Attachment A) as of June 30, 2016 (with jobs defined as the incremental increase in the number of Full Time Equivalent employees (FTEs) beginning with the date a Business Accelerator proposal is signed, or a loan is provided, or when a SPARK Central Incubator agreement is first executed, or when participation in a Boot Camp session occurs); 2) a census of the annual and cumulative number of jobs related to Business Accelerator, SPARK Central Incubator, and Boot Camp attendees that have left the Service Area because of relocation, merger, acquisition, or business failure as of June 30, 2016; 3) a census of the number and identity of current and past clients the Contractor deems no longer eligible for LDFA funded services as of June 30, 2016; and 4) a census of the number and identity of clients for which information regarding jobs creation is no longer being collected as of June 30, 2016. The Contractor shall track companies for a period of five years through an annual survey and make efforts to achieve as high a participation rate as possible. The survey will not only include questions that update standard economic development data but also ask companies who leave the area why.

Annual Metrics

This year SPARK served 162 companies with a deliberate, customized combination of accelerator services, incubation, microloans, or scholarship to the Boot Camp course. These companies reported the net addition of 150.5 full-time equivalent employees from the onset of their engagements to the end of contract year.

This year SPARK supported the creation of 37 companies. Through assistance in business model development, management coaching, legal advice, and other critical startup services, SPARK has created strong companies that have the resources and viability to foster our future economy and sustain job growth.

Annual Served
162 Companies
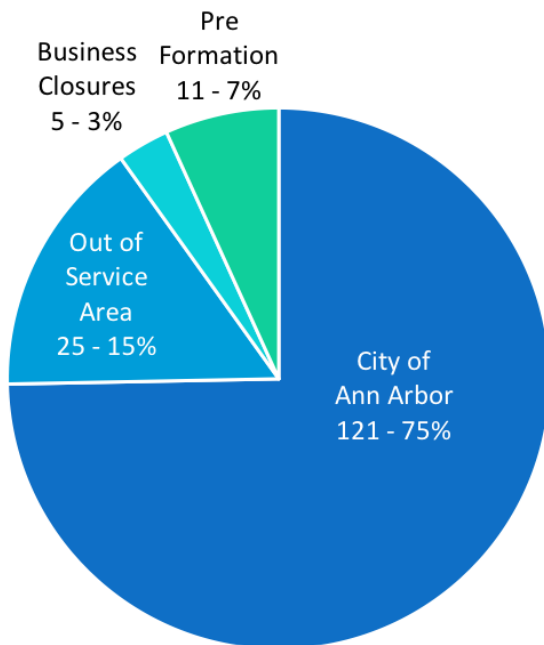
City of Ann Arbor Companies

- 121 companies that worked with SPARK this year are still operating within the City of Ann Arbor.
- These companies reported a net addition of 127 FTEs from the onset of their engagements to the end of contract year.
- Ann Arbor Companies SPARK has worked with over the fiscal year have gained, on average, 1.05 full-time equivalent employees.

Out of Service Area

- Out of the 162 companies that have received LDFA-funded services this year, 25 are now out of the service area representing 80 FTEs. Twenty-one of those companies are still registered in southeast Michigan.
- Six of the 25 are Boot Camp teams initially from outside of Ann Arbor.
- Nineteen of the 25 are Incubator Clients who have not yet changed their registered address to Ann Arbor.

Business Closures

Out of the 162 companies served this year, five have ceased operations. The termination of these five companies represented a decrease of 13 FTEs. The loss of these FTEs due to business closure has already been deducted from the previously stated annual net addition of 150.5 FTEs.
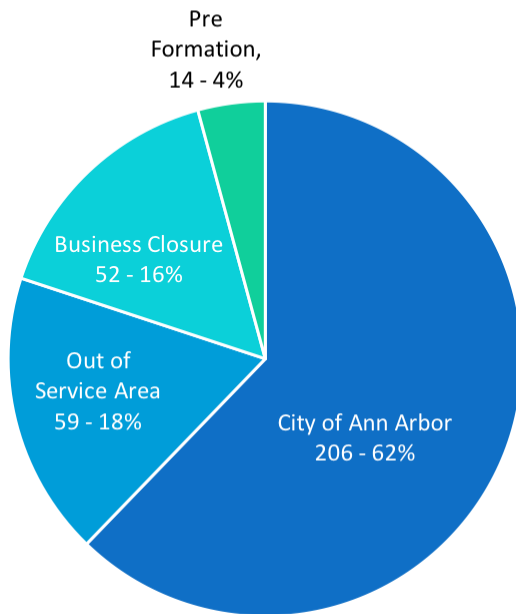
Pre-Formation

Eleven of the companies served this year have not attained legal formation by the time the contract year ended. Entrepreneurial teams at this stage are usually still in their idea stage of growth, focused on validating their business model. The companies in this category are Boot Camp teams from this year's cohorts. SPARK continues to offer them support as they grow.

Cumulative Metrics

Cumulatively, in the last five years, SPARK provided services to 331 unique companies. The subset of these companies who either responded to our survey, or remained in contact with SPARK, reported a net increase of 638 full-time equivalent employees from the onset of their engagements to the end of this contract year.

Cumulative Served
331 Companies

Pre Formation, 14 - 4%

Business Closure 52 - 16%

Out of Service Area 59 - 18%

City of Ann Arbor 206 - 62%

Companies SPARK worked with over the course of this period have gained, on average, 1.9 full-time equivalent employees.

This report of jobs created is the net of reported gains and reductions in staffing for companies that received LDFA-funded services within the time period discussed below, and are still operating inside the service area.

For the purposes of this report, cumulative is defined as the time period including this fiscal year, and extending five years prior to its start. The quality of our data diminishes sharply for companies served before this threshold due to the above mentioned trend in survey responses; we lack sufficient data to accurately account for the success of our former clients as measured by employment.

Jool Health, Inc. Hits Funding and Product Milestones

Jool Health's product helps individuals define their purpose and manage their willpower to change their behavior. In the last year, the company has achieved several key product development and funding milestones. It completed its iOS and Android apps, entered three new early paid pilots, raised additional angel funding, and launched a new website. Soon, the company will release a new customer dashboard, enter into additional pilot relationships, make additional key hires, and raise additional capital.
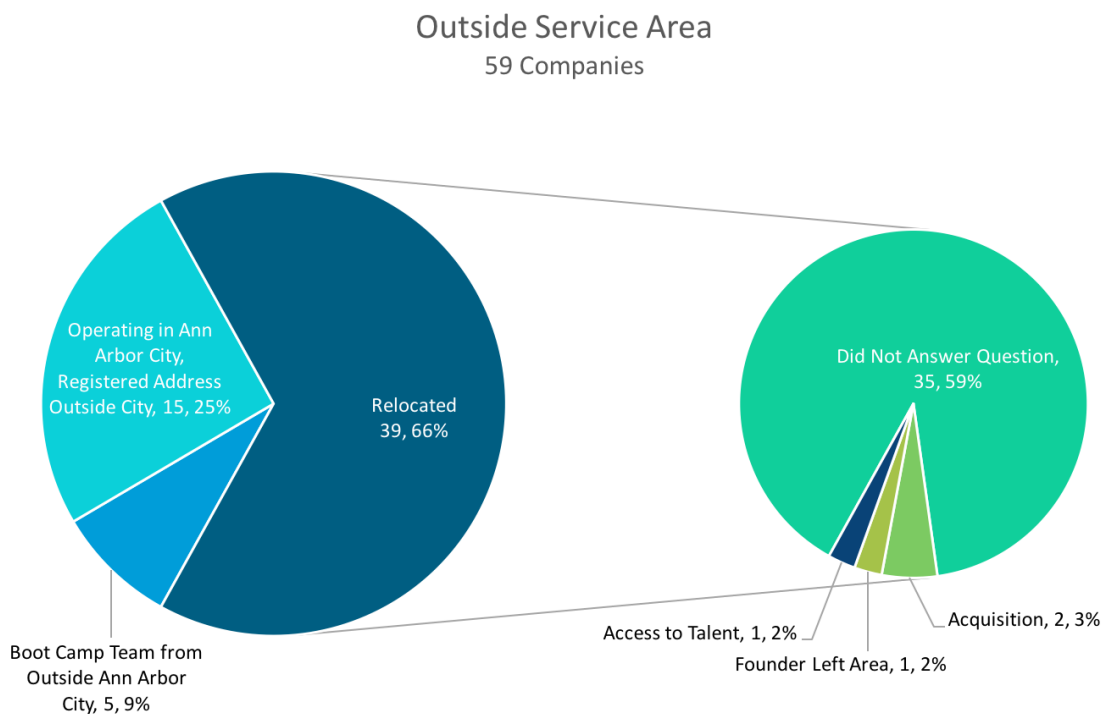
City of Ann Arbor Companies

- 206 companies that worked with SPARK over the past five years are still operating within the City of Ann Arbor.
- Currently these companies employ 996 FTEs.
- These companies reported a net addition of 490 FTEs from the onset of their engagements to the end of contract year.
- 62% of companies served within the last five years continue to operate in Ann Arbor, yet they have created 77% of the new jobs reported in the same time period.

Out of Service Area

- 59 companies representing 280 FTEs are not currently registered in the City of Ann Arbor.
- 15 of the 59 are operating inside Ann Arbor City, but have legal registered addresses outside the City.
- 39 of those companies have moved from the area, four stated a reason on our survey.
- 29 of the 39 relocated companies are located in southeast Michigan.
- 10 of the 29 are located within Washtenaw County.
- Five of the 59 are Boot Camp teams initially from outside of Ann Arbor.

Outside Service Area
59 Companies

Operating in Ann Arbor City, Registered Address Outside City, 15, 25%

Relocated 39, 66%

Boot Camp Team from Outside Ann Arbor City, 5, 9%

Did Not Answer Question, 35, 59%

Access to Talent, 1, 2%

Founder Left Area, 1, 2%

Acquisition, 2, 3%

Pre Legal Formation

Fourteen of the companies served in the last five years have not attained legal formation by the time the contract year ended. These are likely still in their idea stage of growth, focused on validating their business model.

Business Closures

Fifty-two of the companies that received LDFA-funded services in the last five years have reported ceasing operations. It is challenging to generate an accurate figure of the jobs lost by these companies, as they do not report their employment figures at the time of their closure. However, at the time of the initiation of their last engagement, they accounted for 119 FTEs in total.
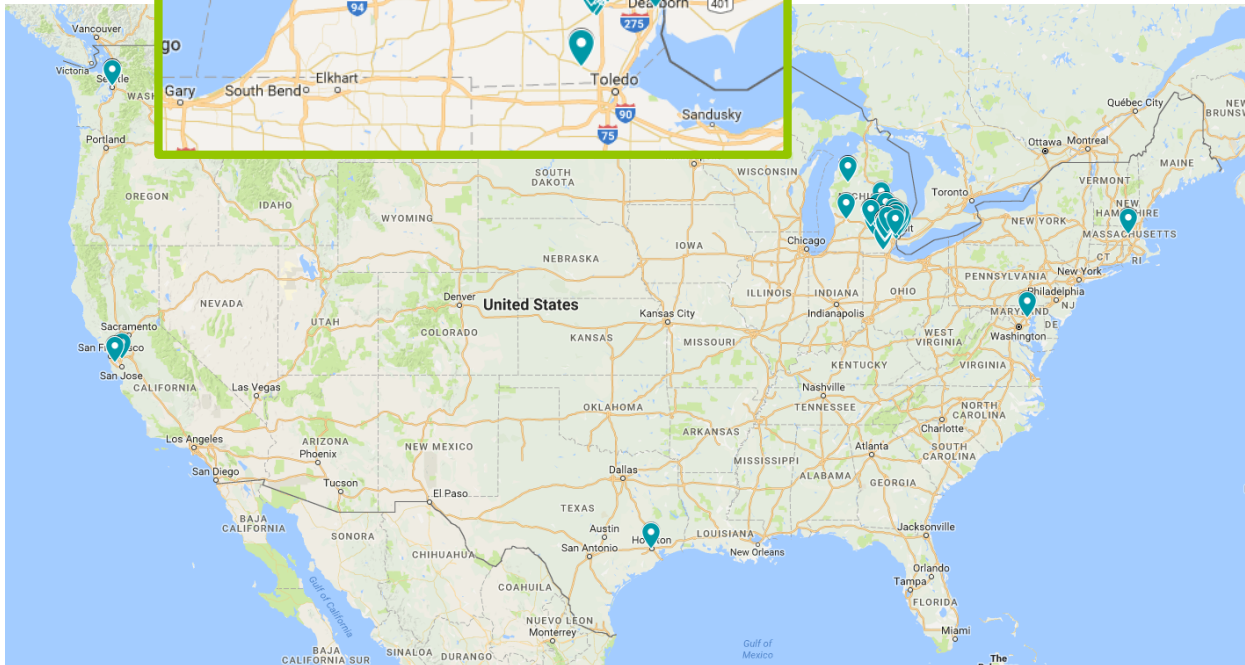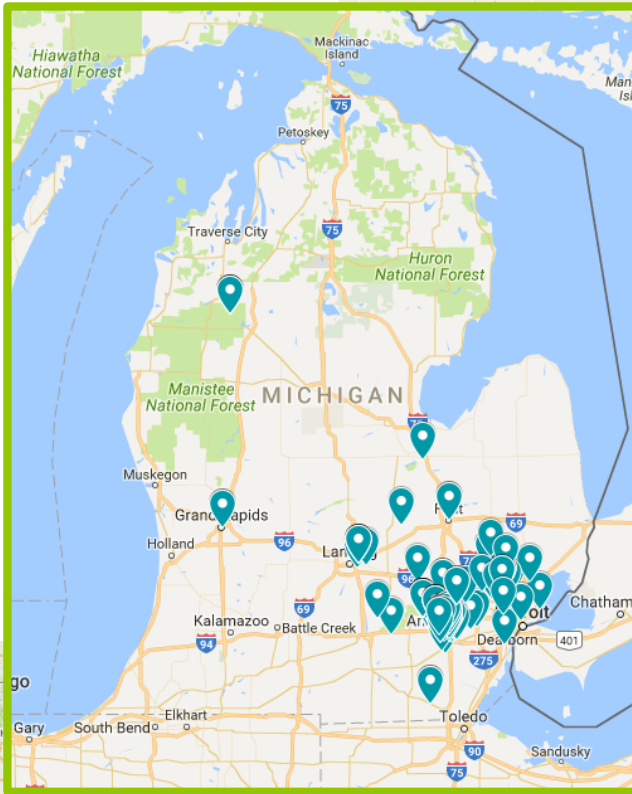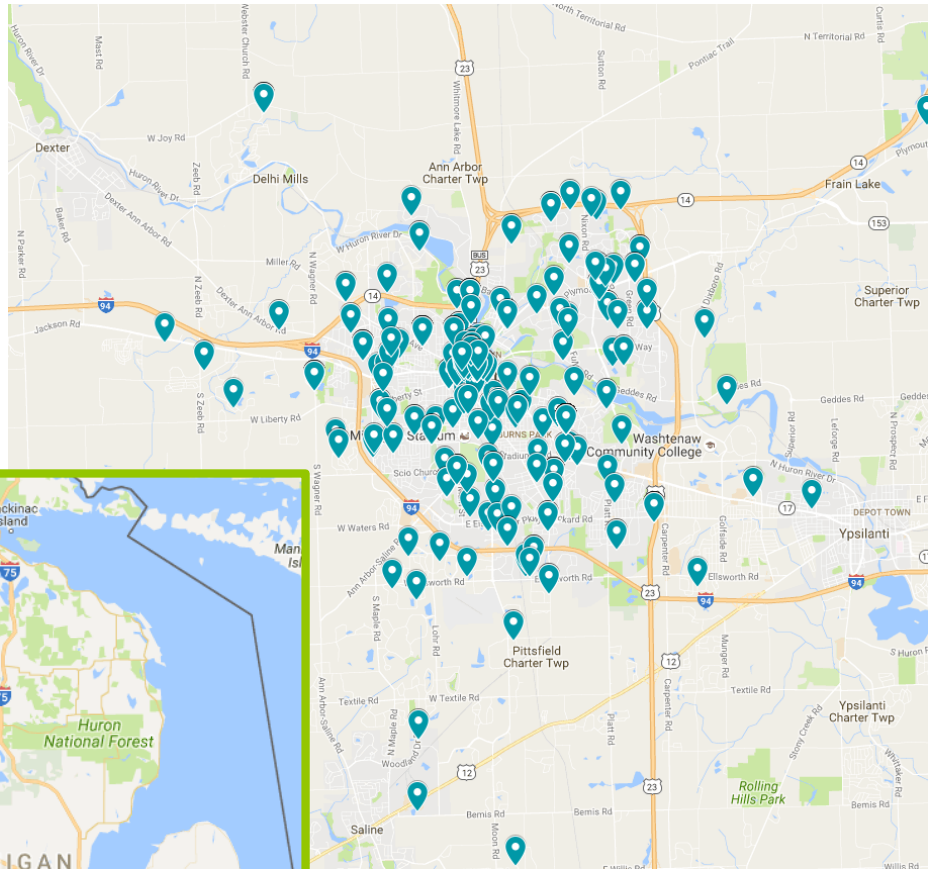
Reasons for Business Closure
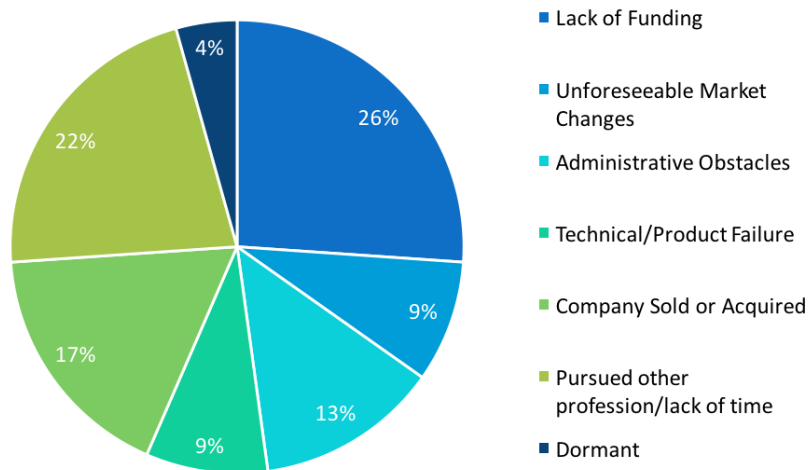
Note: Table data set is only companies that answered a specific question on this year's survey.

Geographical Distribution of Served Companies

These maps show the distribution of the 279 companies served in the last five years that are still in business.

Jobs Created by each LDFA Program

The following tables serve as a breakdown of services provided during the fiscal year, and the associated job creation reported by the participants of each program. It is important to note the substantial overlap of programs serving any given company. Many companies receive a variety of services from SPARK as they grow, and therefore may appear on more than one of the following tables.

Jobs Created by LDFA Program
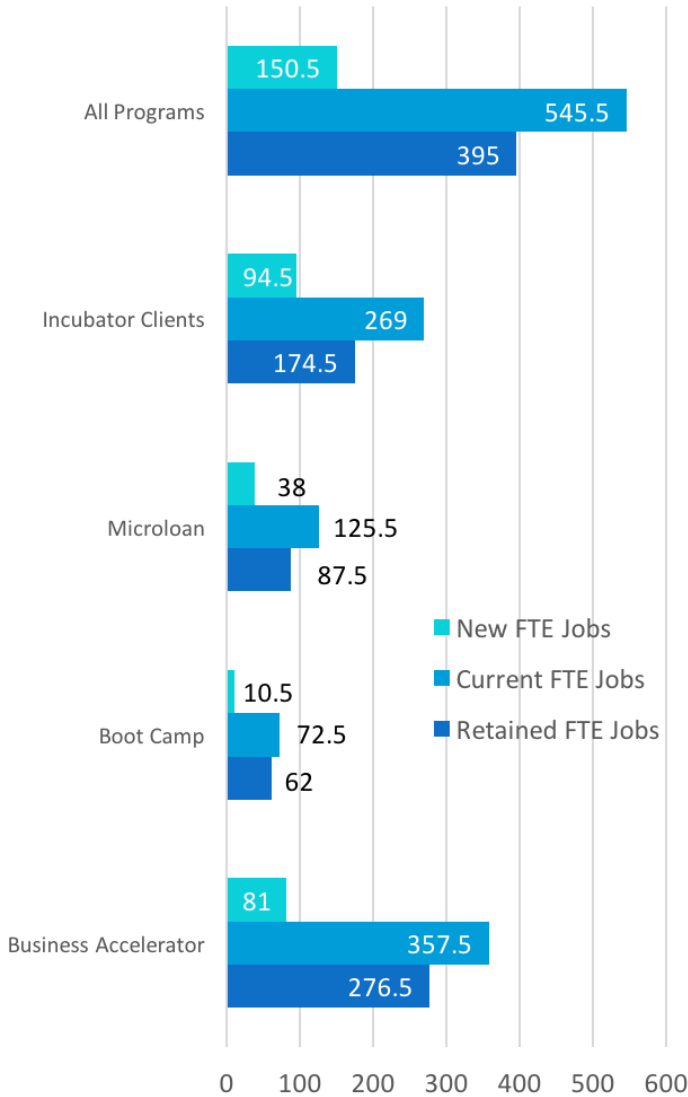
Retained FTEs are those that the company reported at the time of the initial engagement of service. Current FTEs are updated through recent contact with the company or the annual survey conducted in July. New FTEs are the difference between retained and current. FTE, for reporting purposes, means Full Time Equivalents: All W2 employees and founders, plus full-time workers compensated in equity. All part-time employees count as 0.5 FTE. Interns and independent contractors (1099) are not included in this definition.

We also asked companies about the number of independent contractors with whom they engage. Although this figure is not required to be reported by SPARK, we believe it reflects a more accurate economic impact by the startup business.

Boot Camp

The following table lists the 29 teams that attended Boot Camp this fiscal year. Fall Boot Camp was held October 29th and 30th. The spring Boot Camp session was held April 7th and 8th. Nine Boot Camp teams received Business Accelerator services by June 30th. Ten teams were out of the University of Michigan. In all, 21 teams received an LDFA funded scholarship to attend Boot Camp. This year's annual survey had a 76% response rate among these Boot Camp teams.

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7680	Big Data Intelligence-as-a-Service platform built for credit unions & community banks.	1	1	0	0
7254	SaaS offering that formalizes the business impact / risk analysis processes.	4	4	0	3
7666	Platform to provide video conference for patient care by medical providers.	6.5	4.5	-2	2
7694	Automated management of actionable investment ideas.	1	1	0	1
7696	SaaS claim analytics, administrative support and dashboard for retail insurance agents.	1	6.5	5.5	4
4406	Data Science Curation Product - Data Cleaning.	2	3	1	3
7706	Games and apps for children with cognitive and physical disabilities.	1.5	1.5	0	0
7714	Customized Intelligence System - Intelligent Personal Assistants for Custom Application.	2	2	0	0
7715	Viscosity improvement of DME by blending with Glycerol/Glycol mixture - DME fuel with Glycol.	1	1	0	0
7719	Measurement technique for liquid flow waviness on a surface for nuclear, petroleum, chemistry, naval, and marine engineering.	1	1	0	0
7720	Adaptive feedback control - algorithm that allows the control system to learn about the system it is controlling.	2	2	0	0
7440	Joint brace that will lock and emit an electrical shock for use in police and military training.	2	2	0	0
7586	Application to track and coordinate IVF procedures to assist patients.	2	2	0	0
7679	Device to be installed on water pipes that increases nutrient uptake in agriculture.	3	3	0	3
7700	A SaaS platform designed at aligning Company goals with IT opportunities.	3	3	0	0
7816	Application to detect, quantify, and in many cases automatically fix inefficiencies in large-scale, enterprise software systems.	1	1	0	1
7692	Brain-computer interface for cognitive assessment.	2	5.5	3.5	0
7762	Proprietary software that mines social media for intent.	2	2	0	0

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7829	Minimize or eliminate inherent noise in the stock market, allow for truer stock market movements without bias.	4	4	0	0
7889	Tailored slipcovers for furniture.	3	3	0	0
7772	Cloud computing that runs parallel libraries resulting in large speedup.	1	2	1	0
7924	Educational music app for classical musicians that provides the orchestral accompaniment to any solo piece.	2	2	0	0
7927	Mobile platform for connecting people with the same chronic conditions.	2	2	0	2
7928	Real estate platform that leverages lifestyle-based considerations into the search process.	3	3	0	1
7938	Decision-making software that helps users make decisions in a structured, systematic, and dynamic way.	1	1.5	0.5	1
7939	Hands-on maker space for kids.	4	4	0	0
7940	Engine technology uses a helical drive to convert the linear motion of a piston into rotary motion.	2	2	0	0
7943	COPPA-compliant family organization and security application for families with children under age 13.	1	1	0	2
7605	Software solutions for third party logistics providers, to enable better coordination between customers and suppliers.	1	2	1	1
	Totals (29 Teams)	**62**	**72.5**	**10.5**	**24**

Groundspeed Attends Boot Camp, Grows Team in Incubator

Groundspeed is a SaaS claim analytics, administrative support, and dashboard for retail insurance agents. The Boot Camp graduate company, located in the SPARK Central Innovation Center office, has attracted key talent to help it continue to grow and further refine its business and sales plans. Groundspeed has added five-and-one-half full time equivilents since Boot Camp.

Business Accelerator

The following table lists the 102 companies that had Business Accelerator engagements this year; this list comprises Phases II, III, and IV support along with the Executive in Residence and Internship programs.

Out of the companies that had Business Accelerator engagements this year, 83% responded to our Annual Survey.

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
4519	Platform giving independent app publishers technology for customized native ads and access to advertisers.	7	7	0	3
7275	Online personal family assistant and organization / coordination tool.	3	4.5	1.5	3
4803	An intuitive integrated display that retrieves medical data.	4	3	-1	2
4132	A medical device for the field of histology that automates a process used in tissue diagnostics.	2	3.5	1.5	9
7762	Proprietary software that mines social media for intent.	2	2	0	0
7374	Augmented reality app for immersive digital experiences based on children's books.	1	1	0	9
7129	Natural science education through mobile field guides, digital materials, and print-on-demand services.	3	1.5	-1.5	0
7614	Patient transfer chair with a built in lateral system to move the patient from chair to bed without strain on hospital staff.	1	3	2	3
6545	Software platform applies predictive analytics to strategic decisions regarding IP management.	1	2	1	3
3476	Solid state lighting combining organic and inorganic materials, that mimics sunlight; less costly than other LEDs.	4	5	1	15
7440	Joint brace that will lock and emit an electrical shock for use in police and military training.	2	2	0	0
1646	Software integrating patient data for billing and quality management; and a system to manage the use of drugs in patients.	2.5	2	-0.5	1
2752	Entry-level neurophysiology (brain signal recording) kits for students to learn about the brain.	12	10	-2	8
7570	Battery research and development firm with proprietary intellectual property of a lithium ion battery with a carbonless cathode.	2	2.5	0.5	1
1282	Technologies for integrated & standardized assessments of blood damage/red blood cells.	4.5	4	-0.5	0
3151	Wireless sensing, analysis, and optimization of residential and commercial electricity use.	2	3	1	0

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7656	Platform matching corporations and law firms with vendors who provide ancillary legal services.	1	2	1	5
7714	Customized intelligence system - Intelligent personal assistants for custom application.	2	2	0	0
6775	Student loan marketplace and clearinghouse for best deals.	2.5	2.5	0	0
7362	Digital content marketplace and book-sourced content provider.	2	8	6	4
6522	Development and implementation of online negotiation systems for courts and constituents.	6	6	0	4
6894	Rental housing marketplace and payment aggregation platform for college students.	5.5	5	-0.5	1
7371	Football coaching tool with automated play timer and pass clock.	1.5	1.5	0	0
7938	Decision making software that helps users make decisions in a structured, systematic, and dynamic way.	1	1.5	0.5	1
6867	Waste grinder and high-pressure waste micronizer, reducing the particle size of food waste making it highly digestible to bacteria.	2	3	1	0
7651	Services to help students take action on their passions and interests.	1	1	0	0
7886	Career management and recruitment SaaS platform for professionals within the diversity community.	1	3.5	2.5	1
3987	Software for the debt collection industry and large companies with delinquent accounts.	3	3	0	2
659	Software and cloud based application for computational biology.	5.5	6	0.5	3
7728	Motion-based simulator products, including racing and flight simulators.	1	4	3	7
7975	Smartphone case with built-in wireless earbuds and 80% extra battery life.	1	1	0	1
7202	Sports fandom competition, tracking, and social media integration smart phone app.	3	4	1	2
7694	Automated management of actionable investment ideas.	1	1	0	1
7997	Water bottle that can flip inside out.	2	2	0	2
7117	Data processing algorithms and curated genetic database software as a service.	1	1	0	2
7696	SaaS claim analytics, administrative support, and dashboard for retail insurance agents.	1	6.5	5.5	4
7885	Mobile and web-based applications providing on-demand lawn care and snow removal services.	4	8	4	0
4228	Advanced gamma ray detection and imaging devices based on wide band gap semiconductor materials.	9	15	6	1

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7444	Online marketplace for pollination services.	1	1	0	0
7940	Engine technology uses a helical drive to convert the linear motion of a piston into rotary motion.	1	2	1	0
7466	App for helping millennials create savings plans with banks.	1	6	5	3
7983	Dementia-friendly public transportation services.	2	2	0	0
7336	Supply chain software.	4.5	9	4.5	2
7699	Automates data science for business decisions through source connectivity capabilities and a business data marketplace.	2	2	0	0
2897	Social networking SaaS for internal communities such as companies.	1	1	0	0
5640	Interactive tablet menu for restaurants.	2	2.5	0.5	1
7493	HCIT product to help individuals define their purpose and manage their willpower to change their behavior.	7	10.5	3.5	3
6230	Bar-code surgical instruments and sponges.	2	2	0	1
7255	Symport healthcare data management program.	5.5	6.5	1	0
4471	Software that optimizes reward program participants' behaviors.	1	7	6	2
7484	Products serving the legal eco-system.	6	6	0	22
7531	Lactation simulation model and a breastfeeding education app.	1	5	4	5
3045	Software and business management services connecting buyers and sellers with shorter, transparent supply chains.	7.5	7	-0.5	3
7917	Secure and private social media and communications platform.	2	4	2	3
4791	Consolidated event planning and management software platform.	5	6.5	1.5	3
7681	High-purity silica from biogenic waste streams.	3	4	1	2
7201	Provides quality analytics and initiative programs for improved compliance to accepted standards of clinical care.	2	1.5	-0.5	1
7763	Break pad technology for light commercial applications.	1	1	0	0
6977	Human capital management software optimizing hiring, evaluations, and workflows for education and healthcare.	4	5	1	0
7538	Clock generator technology for the microprocessor market.	5	5	0	3
7375	Mobile app for tracking and analyzing pain data.	1	2	1	0
3577	Alliance with Promega in Madison WI, mass spectrometry services provider.	4	4	0	0
5634	Multi-sided reviews platform that allows users and restaurants to discover and engage each other.	3	3	0	1

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7692	Brain-computer interface for cognitive assessment.	5	5.5	0.5	0
7929	Platform to enable people with dietary restrictions to discover places, recipes, and products that fit their lifestyle.	2	5	3	1
7066	Platform to accept and manage concussion-tracking data collected from helmet sensors.	0.5	0.5	0	0
6518	Creator of an eye drop assist device.	1	2	1	0
7441	Educational gaming using 3D Virtual World platform.	1	2.5	1.5	0
4076	Ophthalmic pharmaceuticals for vision loss due to photoreceptor cell death.	1.5	2.5	1	8
8041	Proprietary process for joining of dissimilar materials (aluminum-to-advanced high strength steel).	3	3	0	1
7625	An enzyme-linked immunosorbent assay (ELISA) used in technology for biological/biomedical research, pharmaceuticals, and clinics.	1	2	1	1
5091	Field survey and data collection software.	7	0	-7	0
7772	Cloud computing that runs parallel libraries resulting in large speedup.	2	2	0	0
7176	Stair climbing wheelchair.	1.5	1.5	0	0
6287	Quantitative multiplexed protein biomarker analysis kits and services.	3.5	3.5	0	1
6680	Digital entertainment company, focused on creating dynamic stories with an emphasis on female characters.	1	1	0	0
6800	Smart Bike providing bike sharing solutions to communities.	2	2	0	0
7815	Online learning platform for contract lawyers.	1	1	0	0
7954	Diagnostic platform that measures a patient's immune function in less than 30 min. from one blood drop.	3	3	0	0
7074	Risk assessment and communication app for surgeons, and pre-surgical intervention programs.	2.5	5.5	3	0
4984	Mobile app for local retailers to prevent customers trying out products in their store, then buying online.	1.5	1	-0.5	5
7376	Novel integration technology with EHR systems.	5	7	2	1
3637	Therapeutic for treatment of retinal diseases.	1	4	3	8
7957	Video on demand service for local sports.	1	1	0	0
6778	Network that allows startups to access crowd-sourced Product-Market Fit Solutions.	1	2	1	6
7888	Device which clips onto strength training equipment and captures and interprets strength training data in real-time.	2	2	0	2

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
2821	Firmware app for collecting/analyzing multiple patient parameters in a real time ICU.	2	3	1	3
6535	Solar energy customized solutions.	2	2	0	5
7777	SaaS enabled ride-sharing platform.	1	3	2	10
6804	Supply Chain Decision Making platform that can visualize and compare supply chain ideas in real-time.	2	1	-1	3
4522	Tissue engineered ligament replacement for dogs.	1	2	1	1
7749	Visualization and marketing platform for the event industry.	1	2	1	5
7349	Medical device integrator that is developing solutions to improve surgical safety and productivity.	1	1	0	1
4965	Vaccination awareness activities for children museums.	4	4	0	1
7038	Automotive in vehicle cybersecurity software.	1	1	0	4
6834	Developer and manufacturer of high-resolution sensors used for near real-time diagnostics in food pathogen testing.	4	4	0	3
7070	Web/mobile platform allowing individuals to find their impact on public health outcomes from fossil fuel pollution.	2	2	0	1
4432	Life Science research recruiting software.	2	2	0	0
4586	Heat technology generates nonelectric, reusable heat on demand.	6	7	1	1
1796	Internet-based medical records service.	4	2	-2	4
7448	Private interactive 24-hour assistance to those with substance abuse disorders.	2	5	3	4
7612	Animal health solutions for the companion animal markets and the veterinarians that provide care to these markets.	7	8	1	18
	Totals (102 Companies)	**276.5**	**357.5**	**81**	**251**

Business Accelerator FY 16-17 Program Billing Status:

Contract Line	Total Contract Value of Projects in Process	Amount Billed as of 8/26/16	Amount Outstanding
Business Accelerator Phase 2 & 3	$376,750	$164,414	$212,336
Internship & Entrepreneur in Residence	$120,000	$39,754	$80,246

Note: Contracts commonly do not bill out to their full value.

Incubator Clients

The following table lists the 76 companies that are or were Incubator clients this year. Virtual clients, and clients seated on the first, third, and fourth floors are reported together. Of this year's clients, 62% responded to our annual survey.

Last fiscal year, SPARK renovated the first floor of the SPARK Central Innovation Center's incubator space. Our renovations converted this space into a modern and collaborative office and doubled the capacity. To date, clients have been very pleased with the updates. Twenty of the 24 seats are filled as of June 30, 2016.

This year, SPARK identified and took action to meet the need in the startup community for flexibly structured, competitively priced office space in downtown Ann Arbor: We expanded our incubation service portfolio to include more than 6000 square feet of work space in the top floor of SPARK Central. This space is ideal for growth stage companies that are either homegrown, or moving to the area. At full capacity, this new workspace could seat over 60 people. As of June 30, 2016, 37 seats have been filled.

SPARK Central graduates for this fiscal year include AMF-Nano Corporation, ContentOro, Inc., Digested Organics LLC, and Workit Health, Inc. All four companies are still located in the City of Ann Arbor.

Workit Health, Inc. Continues to Grow at SPARK Central Innocation Center

Workit Health provides 24-hour interactive assistance online to those with substance abuse. The graduate of the SPARK Central Innovation Center has used many of SPARK's LDFA services on its path to success. This past year, Workit Health has raised $1.3 million in capital and an additional $130,000 in grant funding. It closed a clinical trial with Beaumont Hospital and expanded its leadership team to five. In the coming year, Workit Health will release a direct to consumer version of its product, close $250,000 in business-to-business sales, and hire a chief technology officer.

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
6635	A VIP lead generation service for the disaster restoration industry.	3	3	0	3
4519	Platform giving independent app publishers technology for customized native ads and access to advertisers.	5	7	2	3
7275	Online personal family assistant and organization / coordination tool.	2	4.5	2.5	3
7143	Games to discover the rules of organic chemistry.	1	1	0	0
7750	On-demand building of communication skills through virtual reality simulations.	3	3	0	3
4803	An intuitive integrated display that retrieves medical data.	3	3	0	2
7374	Augmented reality app for immersive digital experiences based on children's books.	2	1	-1	9
4547	Advanced nanofabrication methods and a novel three dimensional (3D) approach to sensor assembly.	2	5	3	7
6545	Software platform applies predictive analytics to strategic decisions regarding IP management.	1	2	1	3
7667	Precise gene editing for the development of human disease models, as well as regenerative medicine.	2	2	0	0
8035	IT/SW company combining VR and Platform-agnostic AV for commercial, industrial and military applications with precision payloads.	4	4	0	4
7241	Legal e-billing and matter management system.	1	1	0	0
1282	Technologies for integrated & standardized assessments of blood damage/red blood cells.	1	4	3	0
7656	Platform matching corporations and law firms with vendors who provide ancillary legal services.	1	2	1	5
7943	COPPA compliant family organization and security application for families with children under age 13.	1	1	0	2
7830	Promotes employment and social enterprise in the state's most distressed urban areas.	1	1	0	0
7362	Digital content marketplace and book sourced content provider.	2.5	8	5.5	4
7560	Platform that combines social networking with SaaS cloud technologies for startups.	1	1	0	0
7297	Patient data management.	2	2	0	0
6867	Waste grinder and high-pressure waste micronizer, reducing the particle size of food waste making it highly digestible to bacteria.	2	3	1	0
338	Information and news aggregator and filter.	1	1	0	0
7651	Services to help students take action on their passions and interests.	1	1	0	0
7886	Career management and recruitment SaaS platform for professionals within the diversity community.	1	3.5	2.5	1

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7988	Mobile app that facilitates trucking pick-ups and deliveries by allowing facility access.	1	3	2	2
7341	Conversational IVR platform that combines voice, mobile messaging, and location-based services.	2	2	0	0
7046	Electronics based metering and power line communication.	1	1	0	0
7728	Motion based simulator products, including racing and flight simulators.	4	4	0	7
7975	Smartphone case with built-in wireless earbuds and 80% extra battery life.	1	1	0	1
7694	Automated management of actionable investment ideas.	1	1	0	1
2679	Development of therapies for treatment of bone-related conditions in animals.	2	3	1	2
6356	A new marketing-based, platform-agnostic, real-time media alert solution.	1	1	0	0
7796	Mobile game developer.	5	3	-2	1
7713	High accuracy high precision maps of road networks for use in autonomous driving vehicles.	1	1	0	0
7696	SaaS claim analytics, administrative support and dashboard for retail insurance agents.	1	6.5	5.5	4
7940	Engine technology uses a helical drive to convert the linear motion of a piston into rotary motion.	2	2	0	0
7466	App for helping millennials create savings plans with banks.	1	6	5	3
3221	Advanced software solutions for sewer modeling to municipalities and engineering consultants.	3	4	1	0
7983	Dementia-friendly public transportation services.	1	2	1	0
7666	Platform to provide video conference for patient care by medical providers.	6.5	4.5	-2	2
7336	Supply chain software.	1	9	8	2
7699	Automates data science for business decisions through source connectivity capabilities and a business data marketplace.	2	2	0	0
6338	Software and consulting services for OEM, Tier I & II manufacturing companies.	5	5	0	2
8026	Ebates with discount at point of purchase.	1	2	1	0
4791	Consolidated event planning and management software platform.	4	6.5	2.5	3
7476	Machine vision to capture high quality images of the eye.	2	3	1	2
7692	Brain-computer interface for cognitive assessment.	5	5.5	0.5	0
7153	Brain imaging service for development of medications or devices for the central nervous system.	1	1	0	0

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7747	Help experts with differentiated value proposition to commercialize and monetize their IP.	1	1	0	0
7748	Proprietary Web-based reporting platform to build analytical, predictive reporting tools.	1	1	0	1
6835	Combustion cycle and injection technology.	6	9	3	3
7594	Publisher of TV entertainment and listings magazines.	1	1	0	30
7441	Educational gaming using 3D Virtual World platform.	1	2.5	1.5	0
5557	Digital Marketing Intelligence.	1	4	3	5
8007	Bamboo composite materials.	3	3	0	1
5601	Digital content aggregation and distribution.	1	1	0	0
4227	Engineering services, including advanced FEA, CAD, and high-end design solutions.	1	2.5	1.5	2
6600	Medical device for vision enhancement in persons with partial loss of sight.	1	2	1	1
3637	Therapeutic for treatment of retinal diseases.	2	4	2	8
4115	Predictive logistics and transportation algorithm company developing SaaS products and integral web services.	2	2	0	1
1496	Consulting IT services.	6	6	0	0
6816	Cloud-based SaaS that provides hourly operational instructions to energy system operators.	7	7	0	3
7754	Sensors and measurement devices for electromagnetic radiation enabling essential technologies.	1	1	0	1
6778	Network that allows startups to access crowd-sourced Product-Market Fit Solutions.	1	2	1	6
4472	An online platform that empowers college students to showcase their work and skills to startups.	8	13	5	2
3568	Software that monitors camera system performance on assembly lines.	9	26	17	0
2821	Firmware app for collecting/analyzing multiple patient parameters in a real time ICU.	2	3	1	3
7254	SaaS offering that formalizes the business impact / risk analysis processes.	2.5	4	1.5	3
7480	Social network for parents who have children age 6 or under.	1	1	0	2
6285	Autonomous aerial vehicle software.	7	12	5	2
7752	SMB Analytics and Innovative Mobile Consumer/Business Interaction.	3	3	0	0
7924	Educational music app for classical musicians; providing the orchestral accompaniment to any solo piece.	1	2	1	0
7777	SaaS enabled ride-sharing platform.	1	3	2	10

Uniq ID	Company Description	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7749	Visualization and marketing platform for the event industry.	2	2	0	5
7070	Web/mobile platform allowing individuals to find their impact on public health outcomes from fossil fuel pollution.	1	2	1	1
7680	Big Data Intelligence-as-a-Service platform built for credit unions & community banks.	1	1	0	0
7448	Private interactive 24-hour assistance to those with substance abuse disorders.	2	5	3	4
	Totals (76 Companies)	**174.5**	**269**	**94.5**	**175**

SpellBound Continues to Grow at SPARK Central Innovation Center

SpellBound brings books to life. It uses people's mobile devices to create 3-D adventures from children's print materials, creating a whole new imaginative world that's truly magical. The SPARK Central Innovation Center company, which was awarded "People's Choice" at the 2016 A2 Tech Trek, has had an exciting year, including benefiting from the LDFA-funded internship program and making several key new hires. Going forward, SpellBound has a solid pipeline for new business and is in strategic partnership negotiations with a national firm.

Microloan

The following table lists all companies that received a Microloan from the start of the program through June 30, 2016. During the fiscal year, three new loans were issued in amounts ranging from $25,000 to $50,000, totaling $80,000. The total principal of all loans provided to date is $1,373,460. The total repayments during the fiscal year were $109,420. Five companies went out of business necessitating a write off of their principal.

Out of the 37 companies that have received a microloan, 13 are now out of business. Of the 24 remaining companies, 63% responded to the annual survey.

Civionics, Inc. Achives First Commercial Sales

Civionics offers wireless sensing, analysis, and optimization of residential and commercial electricity use. It used a LDFA-funded microloan to achieve key sales and marketing objectives, and achieved first customer sales this year.

Uniq ID	Company Description	Date of Initial Investment	Debt at Cost	Return	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
338	Information and news aggregator and filter.	6/17/10	$29,000	-	1	1	0	0
1585	Educational software engines.	4/27/10	$20,000	-	4	5	1	0
1585	Educational software engines.	9/8/09	$30,000	-				
1885	Commercializing dental appliance - mouth guard.	5/27/10	$15,000	$17,195	1	17	16	10
1982	Web site design and social media.	11/9/09	$50,000	$65,958	5	12	7	5
2153	Designer, manufacturer, sales, and marketer of specialized video equipment for shooting sports and outdoors industry.	4/13/10	$25,000	$17,300	2	0	-2	0

Uniq ID	Company Description	Date of Initial Investment	Debt at Cost	Return	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
2181	Web-based marketing services for education organizations and related non-profit and government entities.	12/14/09	$25,000	$0	1	0	-1	0
2578	Manufactures and develops solid-state lighting systems for commercial and industrial applications.	5/9/11	$25,000	-	3	0	-3	0
2610	Online management system for automotive incentives.	3/16/11	$25,000	$0	3	0	-3	0
2679	Development of therapies for treatment of bone-related conditions in animals.	8/31/11	$28,000	$6,720	3	3	0	2
2804	Assessment tool for determining a corporation's capability to be successful in strategic partnering with another organization.	10/22/09	$10,000	-	1	1	0	0
2838	Software for tracking vehicles using mobile phone GIS.	11/1/10	$45,000	$57,600	2	0	-2	0
2868	Online community that sells access to musicians in the form of virtual shares.	8/13/10	$45,000	$0	3	0	-3	0
2880	SaaS for independently practicing therapists.	2/24/11	$47,000	$37,000	3	3	0	6
3010	Faster and more effective Integrated Circuit (IC) design quality control software.	10/12/11	$45,000	$155	3	8	5	2
3045	Software and business management services connecting buyers and sellers with shorter, transparent supply chains.	7/20/10	$40,000	$50,906	2	7	5	3
3045	Software and business management services connecting buyers and sellers with shorter, transparent supply chains.	1/8/10	$10,000	$13,326				
3105	Electrical test and measurement instrumentation.	1/28/11	$15,000	-	2	0	-2	0
3105	Electrical test and	3/4/10	$35,000	$18,400				

Uniq ID	Company Description	Date of Initial Investment	Debt at Cost	Return	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
	measurement instrumentation.							
3151	Wireless sensing, analysis, and optimization of residential and commercial electricity use.	9/10/15	$25,000	-	2	3	1	0
3176	Web-based system that measures the confidence behind what students learn to increase knowledge retention.	6/22/10	$25,000	-	1	0	-1	0
3418	Children's financial learning program.	9/15/10	$50,000	-	2	0	-2	0
3476	Solid-state lighting combining organic and inorganic materials, that mimics sunlight; less costly than other LEDs.	10/22/14	$50,000	$31,750	2	5	3	15
3600	A web-based, toll-free superhighway for the multidirectional exchange of Intellectual Property, technology and products.	12/20/10	$25,000	$15,841	2	3	1	4
4141	Creator of online portal to connect care consumers and care providers.	12/15/11	$9,223	-	4	0	-4	0
4141	Creator of online portal to connect care consumers and care providers.	10/10/11	$10,237	$3,718				
4425	Mobile loyalty system for quick service restaurants which creates a cross promotional platform with customized deals.	1/19/12	$40,000	-	1	10.5	9.5	2
4472	An online platform that empowers college students to showcase their work and skills to startups.	6/11/12	$50,000	$61,448	7	13	6	2
4519	Platform giving independent app publishers technology for customized native ads and access to advertisers.	7/26/13	$50,000	$11,766	2	7	5	3

Uniq ID	Company Description	Date of Initial Investment	Debt at Cost	Return	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
4552	Child care facility backend and customer facing software.	9/10/12	$25,000	-	3	3	0	0
4591	Web-based and mobile attendee matchmaking software and mobile conference guide for professional events.	11/6/12	$50,000	$6,000	1	1	0	0
4791	Consolidated event planning and management software platform.	4/18/14	$50,000	-	2	6.5	4.5	3
5091	Field survey and data collection software.	7/23/13	$50,000	$2,000	2	0	-2	0
6287	Quantitative multiplexed protein biomarker analysis kits and services.	3/10/16	$30,000	-	4.5	3.5	-1	1
6358	Developer of a smart phone case that retracts and stores a user's headphones/earbuds within a slim profile case.	10/29/14	$20,000	-	3	1	-2	0
6358	Developer of a smart phone case that retracts and stores a user's headphones/earbuds within a slim profile case.	4/18/14	$30,000	-				
6680	Digital entertainment company, focused on creating dynamic stories with an emphasis on female characters.	11/21/14	$25,000	-	1	1	0	0
6680	Digital entertainment company, focused on creating dynamic stories with an emphasis on female characters.	2/19/14	$25,000	-				
6778	Network that allows startups to access crowd-sourced Product-Market Fit Solutions.	4/9/14	$15,000	-	2	2	0	6
6800	Smart Bike providing bike sharing solutions to communities.	6/9/14	$50,000	$5,000	2	2	0	0
6804	Supply chain decision making platform that can visualize and compare supply chain ideas in real-time.	3/3/15	$40,000	$4,800	2	1	-1	3

Uniq ID	Company Description	Date of Initial Investment	Debt at Cost	Return	Retained FTE Jobs	Current FTE Jobs	New FTE Jobs	Independent Contractors
7349	Medical device integrator that is developing solutions to improve surgical safety and productivity.	5/27/15	$40,000	$43,653	1	1	0	1
7448	Private interactive 24-hour assistance to those with substance abuse disorders.	6/1/16	$25,000	-	2	5	3	4
	Totals (37 Companies)		**$1,373,460**	**$470,536**	**87.5**	**125.5**	**38**	**72**

Sight Machine, LLC. Moves Team to Ann Arbor

Sight Machine has developed software that monitors camera system performance on assembly lines. The company is catalyzing a cluster of big data companies on the fourth floor of the SPARK Central Innovation Center. Its recent successes include a successful $15 million Series B raise that included three Ann Arbor venture capital firms. Sight Machine is attracting global brands as customers and continues to grow.

Marketing

Annual goals were met or exceeded demonstrating effective use of marketing tactics and budget to achieve substantive results as measured below:

Metric	Actual	Goal	Percent	Rationale for Annual Goal (Three-year plan with annually increasing goals. Metric baseline set FY 13-14)
Average Newsletter Open Rate*	23.6%	20%	118%	Beat industry standard (18%) by 2%. *Not cumulative
Entrepreneurial Services Webpage Views	226,050	56,211	402%	Increase Page Views to ES by 3,000 annually above 2013-2014 fiscal year.
Webpage Visits by Ann Arbor Residents	61,853	69,072	90%	Increase visits to the website from Ann Arbor overall by 5,000 annually over 2013-2014 fiscal year.
Social Media Referrals	3,465	3,797	91%	Increase visits from Ann Arbor to website from social media by 500 visits above 2013-2014 fiscal year.
Video Views	6,072	5,006	121.3%	Increase video plays from Michigan by 500 annually above 2013-2014 fiscal year.
PR Placements	24,881	25,000	100%	Increased mentions of Ann Arbor startups in local, regional, and national news publications.

Software

2.3 Licensed Software. Contractor may obtain licensed software products or services that allows for improved data collection or metric reporting, and/or offer clients improved productivity tools. Contractor shall submit invoices for actual cost to the LDFA on a monthly basis with the annual expense not to exceed a gross amount of $20,000. Contractor shall report the program or service acquired in the next following quarterly report including the type and purpose. A summary of usage shall be included in the Final Program Progress Report consistent with Article 3.3 of the agreement.

Usage

The software line in our budget was used to support ongoing operations, and improvements to data collection and storage infrastructure as detailed below.

1. **Clicktools**: Online survey creation and distribution apparatus which automatically inputs responses into our CRM. We use this instrument to conduct the annual survey.

2. **In4Grants**: Grant research, application, and coordination platform available to clients.

3. **DocuSign**: document and signature management software to expedite operations.

## ClariLegal, Inc. Receives Grant Funding and Continues to Grow

ClariLegal's platform matches corporations and law firms with vendors who provide ancillary legal services. The company has used business accelerator grants this year to validate its business concept, conduct product development, market testing and validation, and successful launch. The company plans to add to its team and further expand its product this year, and also attract new investment to support sales and marketing.

Annual Census

The online survey functions as a way of demonstrating programmatic efficacy. The survey produces evidence of job creation and retention, business activity status, as well as company location by capturing employment data through FTE counts and updates on basic profile information. In addition, the survey retrieves insightful explanations and comments regarding these topics.

Annual Survey Response Rate by Program
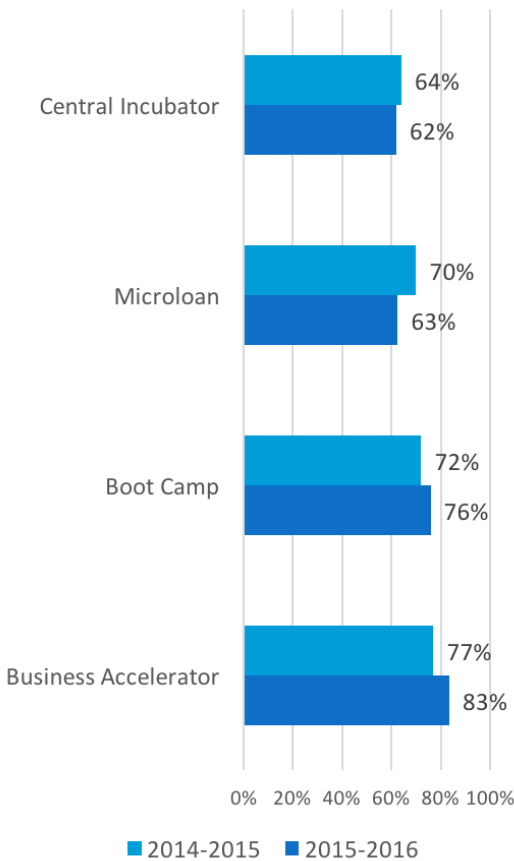
The 2015-2016 survey was the most successful census in SPARK history in terms of response rate. This year, we achieved an overall response rate of 57.1%. This represents a 10.4% increase in response rate from last year, which was the previous record. We attained this increase by building off the success of last year's survey changes that included research-based survey language improvements, pre-populated fields, and a follow-up call program.

In addition, the amount of companies served this contract year increased 29.6% from last year. A reverse correlation is apparent between the response rate and the length of time since the company's receipt of service. The increase in recently served companies attributed to the increase in response rate. Companies served this year responded at a rate between 62% and 83% by program, significantly higher than the average response rate for all time companies served. A full description of the methodology utilized in conducting the census is included in the next section of this report.

Historical Response Rate
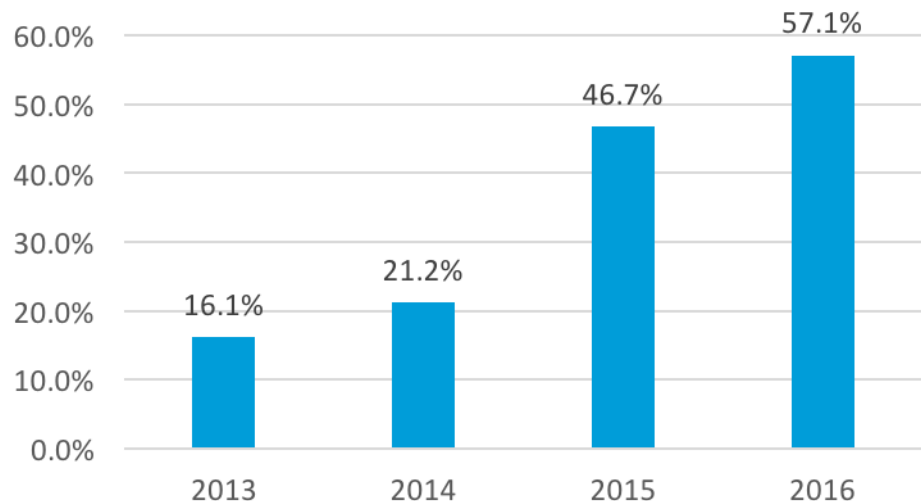
Census Methodology

Ann Arbor SPARK collects and reports data from its clients over and above what is required by the contract. Salesforce.com is employed as our Customer Relationship Management system to record company data. Information about all companies is gathered through several methods as described below. Ann Arbor SPARK continues to refine procedures to capture, store, and report data more efficiently, accurately and timely.

Initial Data Entry

A procedure was implemented in late 2008 requiring all entrepreneurs requesting assistance of Ann Arbor SPARK for Business Acceleration services, Incubator space or Boot Camp to fill out an online form which could be accessed through the SPARK website. Basic information including name, address, phone, email and brief description of company are required. This information is automatically fed into Salesforce. An effort is made to connect with all inquiries within 48 hours. In an initial communication, additional data gathered by SPARK personnel determines if the entrepreneur meets minimum criteria to warrant further discussion and assistance. At that time, a better description of the applicant's needs are captured and input.

Retained FTEs

We capture the number of FTEs that a company had at the start of an engagement of any kind. This number becomes our retained jobs number and is not altered. However, for reporting purposes it is possible the retained jobs number can change for a company if that company takes advantage of multiple services and their FTE count changes between those services. For example, when a team attends Boot Camp there may be only one FTE - the entrepreneur. When that team returns for Business Accelerator services there may be additional FTEs - co-founders or initial hires. When reports are generated on Boot Camp attendees, the team's retained FTE number would be one. When reporting on Business Accelerator clients, the retained FTEs would be more than one.

Current FTEs

Throughout the year 'current jobs' is collected from entrepreneurs through three methods. When SPARK staff meets with entrepreneurs, FTE updates are gathered and recorded in the CRM system. Starting midway through this contract year, written documentation is being obtained from every company at the start of each engagement. This document is attached to their file to corroborate the FTE count listed as start of engagement.

Annual Survey

All current and former clients are surveyed annually using Clicktools, an online survey tool that synchronizes with Salesforce. Our survey asks for data including current employment and other vital company information. Unfortunately, the response to our surveys has been less than 100%. The response rates for each of the four areas are listed in each section. If an entrepreneur sends SPARK data via the survey that does not pass a visual inspection they are contacted and asked to verify the data. If an adjustment is made to the CRM data, written documentation from the entrepreneur is attached to the file.

Glossary

In an effort to reduce unnecessary complication, SPARK and the LDFA keep definitions of terms consistent with MEDC. Included for reference are applicable definitions provided by the MEDC:

Companies Served

The number of tech companies that contractor provided services to; including accelerator grants, incubator space, mentoring, consulting, training, etc.

Full-Time Equivalent

All W2 employees and full time workers compensated in equity. All part time employees count as 0.5 FTE. Interns and independent contractors (1099) are not included in this definition.

Jobs Created

Number of jobs created by the companies that contractor served or are incubator clients; does not include contract positions, only full-time equivalents.

Jobs Retained

Number of jobs retained by the companies that contractor served or are incubator clients; does not include contract positions. Basically includes the number of positions or employees at the companies that have been retained because of the funding from the incubator or because of the services that the incubator provided.

New Companies Created

Number of new companies created as a result of contractor's involvement. Companies can be defined as sole proprietorship, LLC, Corp, etc. Involvement can mean: 1) contractor provided services or funding to the company, 2) the company is located in contractor's incubator, 3) the company is a university spin-out, 4) contractor spoke with the newly formed company and provided them help with the next steps in building his/her company for example other resources, training classes, etc., or 5) contractor spoke with the CEO/CTO prior to the company formation. A company is only counted as 'new' if it is incorporated within the subsequent 12 months of the service provided.

Tech Company

A business in which research and development brings forth an innovative product or process. The innovation typically involves intellectual property that contributes to a strong competitive advantage in the marketplace, and serves as a foundation for a high rate of growth.