



August 2020

INTELLECTUAL PROPERTY

Additional Agency Actions Can Improve Assistance to Small Businesses and Inventors

GAO Highlights

Highlights of [GAO-20-556](#), a report to the Ranking Member of the Committee on Small Business, House of Representatives

Why GAO Did This Study

Small businesses employ about half of the U.S. private workforce and create approximately two-thirds of the nation's jobs. For many small businesses, intellectual property aids in building market share and creating jobs. Among the federal agencies assisting small businesses with intellectual property are USPTO, which grants patents and registers trademarks, and SBA, which assists small businesses on a variety of business development issues, including intellectual property.

GAO was asked to review resources available to help small businesses and inventors protect intellectual property, and their effectiveness. This report examines, among other things, (1) the extent to which USPTO evaluates the effectiveness of its efforts to assist small businesses and (2) SBA's coordination with USPTO to assist small businesses. GAO analyzed agency documents and interviewed officials who train and assist small businesses. GAO also interviewed stakeholders, including small businesses, and, among other things, reviewed federal internal control standards and selected leading practices for enhancing interagency collaboration.

What GAO Recommends

GAO is making four recommendations, including that USPTO develop an agency-wide approach to evaluate the effectiveness of its efforts to help small businesses and inventors, and that SBA document its partnership agreement with USPTO and clarify roles and responsibilities for coordinating with USPTO to provide training. Both agencies agreed with GAO's recommendations.

View [GAO-20-556](#). For more information, contact John Neumann, (202) 512-6888, NeumannJ@gao.gov.

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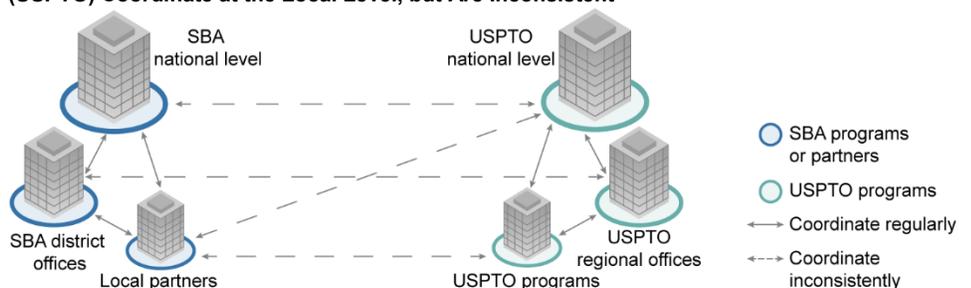
Additional Agency Actions Can Improve Assistance to Small Businesses and Inventors

What GAO Found

The U.S. Patent and Trademark Office (USPTO) offers multiple programs that help small businesses and inventors with acquiring intellectual property protections, which can help protect creative works or ideas. These programs, such as the Inventors Assistance Center, are aimed at assisting the public, especially small businesses and inventors, with intellectual property protections. Several stakeholders GAO interviewed said that USPTO programs have been helpful, but they were also not aware of some USPTO programs. Although these programs individually evaluate how they help small businesses and inventors, the agency does not collect and evaluate overall information on whether these programs are effectively reaching out to and meeting the needs of these groups. Under federal internal control standards, an agency should use quality information to achieve its objectives. Without an agency-wide approach to collect information to help evaluate the extent to which its programs serve small businesses and inventors, USPTO may not have the quality information needed to fully evaluate the effectiveness of its outreach and assistance for these groups and thus make improvements where necessary.

Although the Small Business Administration (SBA) coordinates with USPTO through targeted efforts to provide intellectual property training to small businesses, it has not fully implemented some statutory requirements that can further enhance this coordination. While SBA and the Small Business Development Centers (SBDCs) coordinate with USPTO programs at the local level to train small businesses on intellectual property protection (see figure), this coordination is inconsistent. For example, two of the 12 SBDCs that GAO interviewed reported working primarily with USPTO to help small businesses protect their intellectual property, but the other 10 did not. The Small Business Innovation Protection Act of 2017 requires SBA and USPTO to coordinate and build on existing intellectual property training programs, and requires that SBA's local partners, specifically the SBDCs, provide intellectual property training, in coordination with USPTO. SBA officials reported that they are in the process of implementing requirements of this act. Incorporating selected leading practices for collaboration, such as documenting the partnership agreement and clarifying roles and responsibilities, could help SBA and USPTO fully and consistently communicate their existing resources to their partners and programs, enabling them to refer these resources to small businesses and inventors.

Figure: The Small Business Administration (SBA) and the U.S. Patent and Trademark Office (USPTO) Coordinate at the Local Level, but Are Inconsistent



Source: GAO analysis of agency documents and interviews. | GAO-20-556

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Abbreviations

AAU	Application Assistance Unit
AIPLA	American Intellectual Property Law Association
CARES Act	Coronavirus Aid, Relief, and Economic Security (CARES) Act
Commerce	Department of Commerce
EBC	Patent Electronic Business Center
GIPA	Global Intellectual Property Academy
GPRA	Government Performance and Results Act of 1993
GPRAMA	GPRA Modernization Act of 2010
IAC	Inventors Assistance Center
IP	intellectual property
MOU	memorandum of understanding
PTRC	Patent and Trademark Resource Center
SBA	Small Business Administration
SBDC	Small Business Development Center
SBIR	Small Business Innovation Research Program
STTR	Small Business Technology Transfer Program
TAC	Trademark Assistance Center
USPTO	U.S. Patent and Trademark Office

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August 27, 2020

The Honorable Steve Chabot
Ranking Member
Committee on Small Business
House of Representatives

Dear Mr. Chabot:

In 2016, small businesses in the United States employed 47.3 percent of the nation’s private workforce and, from 2010 to 2018, created about two-thirds of net jobs, according to the Congressional Research Service.¹ In addition, the Small Business Administration (SBA) estimates that small businesses account for 99.9 percent of businesses in the United States. For many small businesses and inventors, protecting their intellectual property—creative works or ideas that can be shared, re-created, emulated, or manufactured—can prevent competitors from copying or using their innovations without their consent. Intellectual property also aids in attracting investor capital needed to grow, build market share, and create jobs. Intellectual property can assist small businesses and inventors in almost every aspect of business development and competitive strategy. For example, intellectual property can help small businesses differentiate their products or services, create a loyal clientele, implement a diversified marketing strategy to various target groups, or market products or services overseas. Small businesses can also sell, license, or use intellectual property as collateral or security for debt finance. They can use intellectual property as an additional basis for seeking equity from investors.

Small businesses and inventors can face challenges, however, in securing adequate intellectual property protections. For example, they may not be aware of differences among types of intellectual property or the process to acquire protection, potentially leaving them vulnerable to

¹Robert Jay Dilger, *Small Business Administration and Job Creation*, Congressional Research Service. (Sept. 11, 2019). Small businesses in this Congressional Research Service study are defined as businesses with average employment of fewer than 500 employees. Net jobs in this Congressional Research Service study refer to employment gains related to business start-ups and expansions minus employment losses related to business closures and contractions.

false information. They may also lack the financial resources necessary for some forms of intellectual property protections.

The U.S. government provides protection for three major forms of intellectual property—patents, trademarks, and copyrights—through two different agencies.² The U.S. Patent and Trademark Office (USPTO) under the Department of Commerce (Commerce) grants patents after examining patent applications, publishes and disseminates patent information, records issued patents, and maintains searchable files of U.S. and foreign patents. USPTO also administers trademark registration. While an owner of a trademark does not have to register it with USPTO, registering the trademark confers certain advantages, such as an evidentiary presumption of validity and ownership of the trademark, along with a nationwide right of priority in the trademark. Similarly, the U.S. Copyright Office administers copyright registration. As with trademarks, an owner of a copyright does not have to register it with the U.S. Copyright Office. However, doing so also provides an evidentiary presumption of validity and ownership, and it allows the owner to sue for infringement of the copyright.

SBA is responsible for counseling, assisting, and protecting the interests of small businesses and individual inventors. Among other efforts, it delivers counseling and training services in communities across the country through local partners, such as the Small Business Development Centers (SBDCs). These local partners are to assist and train small businesses on general business considerations such as financing, marketing, and production, as well as intellectual property. SBA defines a small business using size standards that vary by industry. When determining size standards, SBA considers industry factors such as degree of competition, average firm size, start-up costs and entry barriers, and technological changes.³

²Another form of intellectual property is trade secrets. Trade secrets can include information such as a formula, pattern, compilation, program, device, method, technique, or process.

³13 C.F.R. § 121.102. SBA also requires the businesses it serves to (1) be a for-profit business of any legal structure, (2) be independently owned and operated, (3) not be nationally dominant in its field, and (4) be physically located and operate in the United States or its territories. Businesses outside the United States may still be counted as small businesses if they have an operation in the United States that makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials, or labor.

In October 2018, Congress passed and the President signed the Small Business Innovation Protection Act of 2017. The act provides that SBA and USPTO are positioned to build upon several successful intellectual property and training programs aimed at small businesses. The act also directs SBA and USPTO to increase the availability of and the participation in such programs across the United States and that any education and training program administered by USPTO and SBA be scalable so that such programs are able to reach more small businesses.⁴

You asked us to review the federal and nonfederal resources available to help small businesses and inventors acquire intellectual property protection and the effectiveness of the federal resources. This report examines (1) the challenges that small businesses and inventors face when seeking intellectual property protection, (2) the extent to which USPTO evaluates the effectiveness of its programs, and (3) SBA's coordination with USPTO to assist small businesses.

To answer all three objectives, we interviewed agency officials and reviewed agency documents, including strategic plans, performance reports, and partnership agreements from SBA and USPTO. We also interviewed representatives from a non-generalizable sample of 29 nonfederal stakeholders such as small businesses, trade organizations that serve small businesses and inventors, technology transfer organizations, and business accelerators, as well as selected USPTO program partners and SBA local partners. We selected these stakeholders through purposeful sampling and sampling based on referrals from prior GAO engagements and from agency officials and other stakeholders we interviewed.⁵ In particular, we selected representatives of USPTO programs and SBA local partners to reflect a range of geographic locations and characteristics and reviewed annual economic data on business patterns within the United States. During these interviews, we asked about, among other things, any challenges that small businesses and inventors faced when acquiring intellectual property protection and their awareness of federal programs. For

⁴Small Business Innovation Protection Act of 2017, Pub. L. No. 115-259, § 3, 132 Stat. 3664, 3664 (2018).

⁵Purposeful sampling involves a relatively small number of selected cases used to illustrate, for instance, program operations under a variety of conditions.

reporting purposes, we developed the following series of indefinite quantifiers to describe stakeholders' responses:

- 2 to 3 is described as “a few.”
- 4 to 6 is described as “some.”
- 7 or more is described as “several.”

For the first objective, we analyzed information on legal costs associated with intellectual property protections. To answer our second and third objectives, we reviewed best practices in planning and performance management—in particular, the practices of aligning agency-wide goals, objectives, and measures to encourage greater use of performance information and reinforce the connection between goals and day-to-day activities—identified in prior GAO reports and based on the Government Performance and Results Act of 1993 (GPRA), as updated by the GPRA Modernization Act of 2010 (GPRAMA).⁶ In particular, for the second objective, we compared USPTO's efforts to assist small businesses and inventors against these best practices by interviewing program officials and reviewing documentation from USPTO's programs and the agency's Fiscal Year 2019 Performance and Accountability Report.⁷ For the second and third objectives, we also reviewed federal internal control standards.⁸ For the third objective, based on agency documentation, reports, and interviews, we compared SBA's oversight of SBDCs' day-to-day activities and USPTO's evaluation methods of program outcomes against these best practices. In addition, we interviewed officials from these agencies who oversee programs that train and assist small

⁶GPRA, Pub. L. No. 103-62, 107 Stat. 285 (1993); GPRAMA, Pub. L. No. 111-352, 124 Stat. 3866 (2011) (updating GPRA). Based on the requirements of GPRA/GPRAMA, we have previously reported that best practices in planning and performance management include aligning agency-wide goals and objectives to ensure they are contributing to the achievement of goals and objectives throughout the organization, and that program performance measures are also aligned at each operating level with those goals and objectives. See also GAO, *Managing for Results: Enhancing Agency Use of Performance Information for Management Decision Making*, [GAO-05-927](#) (Washington, D.C.: Sept. 9, 2005); and GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, [GAO/GGD-96-118](#) (Washington, D.C.: June 1, 1996).

⁷USPTO, *Fiscal Year 2019 Performance and Accountability Report*.

⁸GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

businesses in intellectual property protections, as identified by the agencies and through our review.

To further answer our third objective, we also compared current SBA and USPTO coordinated policies and efforts with provisions outlined in the Small Business Innovation Protection Act of 2017 (the act) as well as selected leading practices for enhancing interagency collaboration identified in prior GAO reports.⁹ Specifically, to determine the extent of SBA and USPTO collaboration and whether those practices could help SBA fulfill the requirements of the act, we compared agencies' collaboration efforts against leading practices for enhancing interagency collaboration.¹⁰ For more information about our objectives, scope, and methodology, see appendix I.

We conducted this performance audit from March 2019 to August 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

This section provides an overview of (1) types of intellectual property, (2) USPTO programs to help small businesses with intellectual property protections, (3) SBA's efforts to help small businesses and inventors with intellectual property, and (4) other federal efforts to help small businesses and inventors with intellectual property.

Types of Intellectual Property

Patents, trademarks, copyrights, and trade secrets are forms of intellectual property protection.

⁹Pub. L. No. 115-259, 132 Stat. 3664 (2018). GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#) (Washington, D.C.: Sept. 27, 2012).

¹⁰[GAO-12-1022](#). For the purposes of this report, we use the terms collaboration and coordination interchangeably.

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- **Patents.** A patent protects an invention by giving the owner of the patent the right to exclude others from making, using, or distributing that invention over a specific period of time.¹¹
 - **Trademarks.** A trademark is generally a word, phrase, symbol, design, or a combination of these elements, used by manufacturers or merchants to identify their goods and distinguish them from others.
 - **Copyrights.** A copyright provides protection for original works in a tangible medium such as literary works, musical compositions, works of art, and computer software.
 - **Trade secrets.** A trade secret is a commercially valuable piece of information not generally known or readily ascertainable to the public that is subject to reasonable measures to maintain confidentiality.¹²

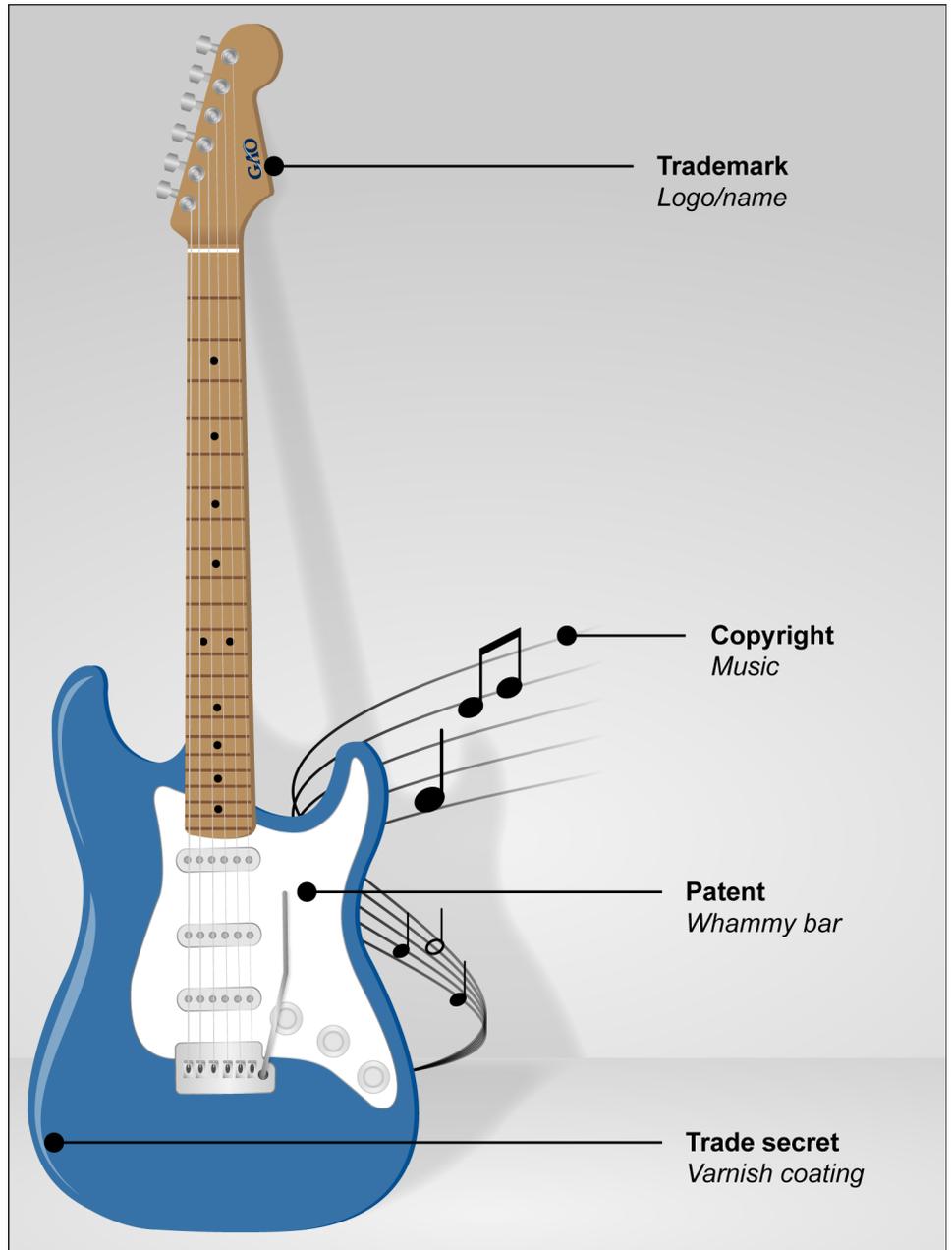
Other types of intellectual property include geographical indications.¹³ As illustrated in figure 1, examples of intellectual property can be found in familiar objects.

¹¹Patents typically fall into one of three categories: (1) utility—for useful inventions, such as processes, machines, articles of manufacture, or composition of matter; (2) design—for changes in configuration, shape, or surface ornamentation that do not involve changes in function; or (3) plant—for asexually-reproducible plants. Generally, the term of a new utility or plant patent is 20 years from the date when the application for the patent was filed with USPTO. The term for design patents is 15 years from the date of patent grant.

¹²The Defend Trade Secrets Act of 2016 established a federal private civil cause of action for the misappropriation of a trade secret. Pub. L. No. 114-153, 130 Stat. 376 (2016). In general, trade secrets are also protected by state law in all 50 states.

¹³In general, geographical indications are indications that identify a good as originating in the territory of a member of the World Trade Organization, or a region or locality in that territory, where a given quality, reputation, or other characteristic of the good is essentially attributable to its geographical origin. Examples of geographical indications from the United States include “FLORIDA” for oranges; “IDAHO” for potatoes; “VIDALIA” for onions; and “WASHINGTON STATE” for apples.

Figure 1: Examples of Intellectual Property Rights Contained in a Guitar



Source: GAO. | GAO-20-556

USPTO Programs

USPTO helps small businesses and inventors with intellectual property issues through a variety of programs that provide information about patents and trademarks, help with the application process, and offer free—known as pro bono—legal assistance with patent applications and trademark registrations. USPTO highlighted the following eight programs in its Fiscal Year 2019 Performance and Accountability Report. That report cites these programs as contributing to USPTO’s Mission Support Goal to enhance the agency’s interactions with stakeholders—particularly small businesses and inventors—and to help them acquire intellectual property protections (see fig. 2).¹⁴

¹⁴USPTO, *Fiscal Year 2019 Performance and Accountability Report*. The eight programs support the fourth objective of the Mission Support Goal. The other three objectives are (1) enhancing human capital management and fostering employee engagement; (2) optimizing speed, quality, and cost-effectiveness of information technology delivery to achieve business value; and (3) ensuring financial stability to facilitate effective USPTO operations. The Mission Support Goal is one of four goals outlined in USPTO’s 2018-2022 Strategic Plan and enables the three primary strategic goals for patent, trademark, and policy and international affairs.

Figure 2: U.S. Patent and Trademark Office (USPTO) Programs That Focus on Small Businesses and Inventors Support the Agency’s Goal of Delivering Organizational Excellence



Source: GAO analyses of USPTO's 2018-2022 Strategic Plan, Fiscal Year 2019 Performance and Accountability Report, and information from USPTO officials. | GAO-20-556

The eight programs as described by USTPO are:

- Global Intellectual Property Academy.** The Global Intellectual Property Academy (GIPA) provides intellectual property educational and training programming to improve intellectual property laws and their administration around the world and to enhance intellectual property awareness and technical capacity for small businesses and inventors, among others.

-
- **Intellectual Property Attaché Program.** The Intellectual Property (IP) Attaché Program operates in foreign markets to help U.S. businesses, including inventors and small businesses, and other U.S. stakeholders navigate issues related to intellectual property protection, use, ownership, and enforcement.
 - **Inventors Assistance Center.** The Inventors Assistance Center (IAC) provides patent information and services by telephone to the public, including entrepreneurs, small businesses, and inventors. The IAC is staffed by former USPTO officials who answer general questions concerning patent-examining policy and procedure.
 - **Law School Clinic Certification Program.** Under the Law School Clinic Certification Program, students from 59 law schools across the United States provide pro bono legal services to individuals and small businesses throughout the country and represent them during the patent and trademark application process with USPTO.
 - **Patent and Trademark Resource Centers.** Patent and Trademark Resource Centers (PTRCs) are a nationwide network of 83 public, state, and academic libraries designated by USPTO to disseminate patent and trademark information and support the intellectual property needs of the public.¹⁵ PTRC library staff are trained on how to use search tools to access patent and trademark information.
 - **Patent Pro Bono Program.** The Patent Pro Bono program is a nationwide network of 22 independently operated, not-for-profit regional programs that match volunteer patent professionals with financially under-resourced small businesses to help them acquire patents.
 - **Pro Se Assistance Program.** The Pro Se Assistance Program helps small businesses and inventors file patent applications without the assistance of a registered patent attorney or agent. (This process is also known as pro se filing.) Most of the assistance is provided by telephone.
 - **Trademark Assistance Center.** The Trademark Assistance Center (TAC) provides information and support, primarily by telephone, on topics such as trademark registration, the application process, and use of electronic forms.

Besides these eight programs that are discussed in the agency's Fiscal Year 2019 Performance and Accountability Report, USPTO officials

¹⁵Two of the 83 PTRCs are located in the U.S. territory of Puerto Rico, and one PTRC is located in the District of Columbia.

described several related outreach efforts that are to help inform small businesses and inventors about intellectual property, including:

- **USPTO’s website.** USPTO officials described adding a “New to IP?” link in May 2019 to USPTO’s website homepage, which guides users to information about patents and trademarks and a map of local resources such as the PTRC or Patent Pro Bono programs.
- **Public engagement.** USPTO engages with the public at various events, including Invention-Con, which is held annually at USPTO headquarters and where the public can network with other inventors and business owners and learn about intellectual property and USPTO resources. USPTO also engages with the public at conferences such as the annual Consumer Electronics Show and the South by Southwest Conference.
- **Regional offices.** USPTO’s four regional offices—in Dallas, Texas; Denver, Colorado; Detroit, Michigan; and San Jose, California—can help small businesses and inventors with intellectual property protections, primarily through in-person educational events and partnering with other agencies, including SBA.

USPTO engages with the public during in-person events throughout the year. Figure 3 shows some examples of USPTO outreach activities. See appendix II for more information on these and other similar USPTO programs and efforts.

Figure 3: U.S. Patent and Trademark Office (USPTO) Outreach Activities

Clockwise from upper left: 2019 South by Southwest Conference in Austin, Texas; Class on Intellectual Property at the USPTO Regional Office in San Jose, California; Patent and Trademark Resource Center Office in Sacramento, California; and USPTO Panel Discussion at Invention-Con 2019 in Alexandria, Virginia.



Source: USPTO (top left) and GAO (top right, bottom left, and bottom right). | GAO-20-556

SBA Efforts through Networks of Local Resources

SBA counsels and trains small businesses on intellectual property issues through a network of local resources operated by local partners, district offices, and other entities. Grant-funded local partners are to counsel and train small businesses on topics such as business planning, accessing capital, and marketing, as well as intellectual property. This support is

provided partly by building connections with and referring small businesses to local resources in these areas, according to SBA's Fiscal Year 2018-2022 Strategic Plan. The largest of these grant-funded local partners is the Small Business Development Center (SBDC) program, which has 62 "lead centers."¹⁶ These centers, which are generally hosted by institutions of higher education, are located across the United States and its territories and manage a network of service centers within their area or jurisdiction, such as in a U.S. state or territory. In fiscal year 2019, SBA received an appropriation of about \$130 million for the SBDC program.¹⁷ In addition, 20 SBDC networks have acquired supplemental accreditation for technology commercialization services.¹⁸ SBA also works with other local partners such as SCORE, a nonprofit mentoring organization, as well as partners that target services to veterans and women who are entrepreneurs. These other programs may also help small businesses with intellectual property issues. For example, a SCORE program official stated that they have 294 volunteer mentors who can help clients on intellectual property issues. In fiscal year 2019, the funding for the SCORE, Veterans Outreach, and Women's Business Centers programs totaled about \$40 million.¹⁹

SBA's Office of Field Operations, which operates a network of local resources on behalf of most SBA programs and services, manages 68 district offices.²⁰ Some types of district office staff interact with lenders and small business groups for the purposes of delivering SBA loan programs—some of which can help pay for the costs of protecting

¹⁶For the purposes of this report, we describe "lead centers" as the 62 SBDC centers that receive SBA funding to help operate a network of SBDCs in each state, the District of Columbia, and four U.S. territories (Puerto Rico, the U.S. Virgin Islands, Guam, and American Samoa). Of those, eight are hosted by state government agencies. Approximately 800 SBDC satellite locations operate on a full- or part-time basis under the direct management of an SBDC lead center.

¹⁷Pub. L. No. 116-6, 133 Stat. 13, 178 (2019).

¹⁸The number of SBDC networks that have supplemental accreditation for technology commercialization services is as of December 2019 when we obtained this data from the trade organization representing SBDCs. According to the trade organization, these SBDCs are reassessed every five years to ensure they continue to meet accreditation standards.

¹⁹This number is based on SBA's fiscal year 2021 congressional budget justification.

²⁰Regional offices, also under SBA's Office of Field Operations, oversee district offices but do not work directly with SBA offices that assist small businesses with intellectual property protections.

intellectual property—and conducting training for small businesses within the district.²¹ Other types of district staff recruit and educate small businesses interested in SBA’s Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, through which federal agencies fund small business research and development and may help them protect their intellectual property, if necessary. Moreover, some district office staff help SBA’s local partners train small businesses with intellectual property by hosting training at the district office or by finding speakers for the training, according to our prior report and SBA and SBDC officials.²²

Other SBA regional staff, such as those in SBA’s Office of International Trade, participate in outreach efforts led by other entities such as the International Trade Administration’s STOPfakes.gov Roadshow to let the public know about SBA financing options for providing financial support to help meet the costs of pursuing intellectual property overseas.

Other Federal Agency Efforts

Other federal agencies also help small businesses and inventors with intellectual property training and assistance, but their assistance is generally more narrowly focused. These other federal agency efforts include:

- **U.S. Copyright Office.** To provide up-to-date and authoritative information to a general audience, the U.S. Copyright Office offers downloadable documents on its website about copyright issues ranging from copyright basics to copyrights in specific categories of works such as photographs and music. U.S. Copyright Office officials stated that they are using a variety of different approaches to reach out to the public, including updating the website with additional information and educational materials such as online videos, offering tutorials and webinars, and reaching out to specific communities such as software creators and photographers. U.S. Copyright Office officials also stated that they try to raise awareness about copyright

²¹SBA’s loan guaranty programs, such as its 7(a) loan program, provide access to capital for small businesses that cannot obtain it conventionally. SBA officials told us that, although small businesses may use capital provided by SBA’s 7(a) loan program, particularly the 7(a) international loan program, to pay for intellectual property protections, it is unlikely that many small businesses actually do so. They said that, to qualify for a 7(a) loan, the borrower must be a for-profit company that is generating income and that such companies are likely mature companies that have already protected their intellectual property in the United States.

²²GAO, *Small Business Administration: Leadership Attention Needed to Overcome Management Challenges*, [GAO-15-347](#) (Washington, D.C.: Sept. 22, 2015).

issues with specific industry groups through efforts such as providing information at photography tradeshow.

- **The International Trade Administration.** The International Trade Administration manages the STOPfakes initiative and operates the website STOPfakes.gov to help U.S. businesses protect and enforce their intellectual property rights against counterfeits and pirated goods in the global marketplace. To educate and assist businesses and consumers about intellectual property rights, STOPfakes.gov provides resources such as its China intellectual property rights webinars and consolidates information and resources from various federal agencies such as USPTO, U.S. Copyright Office, SBA, U.S. Customs and Border Protection, and the Federal Bureau of Investigation. The International Trade Administration also conducts the STOPfakes Roadshows, which they held in 11 cities across the United States in fiscal year 2019. At these roadshows, representatives from these agencies provide information about how to acquire and enforce intellectual property rights and offer one-on-one consultations.²³

Appendix III contains information about some nonfederal efforts that also help small businesses and inventors with intellectual property training and assistance.

Small Businesses and Inventors Reported Challenges Acquiring Intellectual Property Protections, with Costs Cited the Most

Through our interviews with stakeholders, including small businesses, trade organizations, SBDCs, and USPTO affiliates, we identified various challenges that small businesses and inventors reported facing when seeking intellectual property protections. These challenges include (1) the cost of acquiring intellectual property protections, (2) fully understanding the process of acquiring intellectual property protections, (3) becoming aware of ways to leverage such protections for one's business needs, and (4) knowing how and where to get help from experienced professionals.²⁴

Several stakeholders we interviewed cited the cost of acquiring intellectual property protections as a challenge, with some describing patent costs—especially legal fees—as a major obstacle. Table 1 shows our summary of the general fee range associated with acquiring copyright, trademark, and patent protections, based on our analysis of

²³Other participating agencies include the Export-Import Bank of the United States, U.S. Department of State, and Minority Business Development Agency.

²⁴Other topics not related to seeking intellectual property protection that stakeholders identified as challenges include recent changes in existing patent laws and enforcement of intellectual property protections, which were beyond the scope of this engagement.

USPTO and U.S. Copyright Office documents and results of a cost survey by an intellectual property law association.

Table 1: General Fee Range Associated with Obtaining U.S. Intellectual Property Protections for Small Businesses and Inventors

	Copyright	Trademark	Patent ^a
Agency registration and application fees ^b	\$45 – \$65	\$225 – \$275	\$680 – \$1,360
Legal fees ^c	\$350 – \$500	\$2,500 – \$5,500	\$6,000 – \$14,375 ^d

Source: GAO analysis of U.S. Copyright Office and U.S. Patent and Trademark Office (USPTO) website information and survey data by the American Intellectual Property Law Association (AIPLA) | GAO-20-556

^aThe fee range is for a utility patent. Utility patents are for useful inventions, such as processes, machines, articles of manufacture, or composition of matter. The range for patent application fees account for discounted fees for micro-entities and small entities, which can include small businesses and inventors. USPTO uses the terms “micro, small, and large entities” when describing organizations, businesses, and inventors that pay fees for filing patent applications, among other applicable fees.

^bFees include typical minimum fees associated with electronic registration and application filing for a single product through issuance of intellectual property protections. Applicants who file by paper incur higher agency registration and application fees.

^cFees reflect a portion of what AIPLA members surveyed said were expected fees in 2018 for legal assistance with no unusual complications. The lower and upper bounds represent the first quartile, or 25th percentile, and third quartile, or 75th percentile, respectively, of reported fees from the AIPLA survey. For example, for reported fee values listed from lowest to highest, approximately 25 percent of data points would be at or below the first quartile, and approximately 75 percent of data points would be at or below the third quartile. App. I contains more information about our use of the AIPLA survey.

^dThe lower and upper bounds represent the first and third quartile range of preparation and filing fees for a utility patent, based on the AIPLA survey. The lower end corresponds to a utility patent of minimal complexity and the upper end corresponds to a relatively complex biotech/chemical utility patent.

In particular, legal costs can come as a surprise to some small businesses and inventors, according to stakeholders we interviewed. For instance, one small business owner explained that a patent generally costs around \$1,000, but legal assistance adds another eight to ten times that cost and involves a lot of paperwork. Also, an SBDC representative we interviewed said several clients initially requested help with intellectual property but then decided not to pursue protection because of the costs involved. Further, one business incubator we interviewed said that, even though hiring a patent attorney can be very expensive, investors who want to support a business may have concerns about the strength of a patent if it was acquired without professional legal assistance.

Acquiring patents is costlier than acquiring trademarks and copyrights because of the legal and technical complexities involved in the patent application process. For example, according to USPTO’s website,

acquiring a patent requires understanding patent law and rules, understanding the scientific or technical matters involved in the particular invention, ensuring that the invention meets the USPTO criteria of being new, useful, and nonobvious, and completing the patent application, as required by USPTO, while adhering to strict USPTO deadlines and procedures. For these reasons, USPTO's advice to prospective patent applicants on its website is for them to retain the services of a registered patent attorney or patent agent, which increases the cost of acquiring patents.²⁵

In contrast, fees are lower for acquiring trademark and copyright protections. According to USPTO's website, registering a trademark is legally less complex than applying for patent protection. Registering a trademark requires knowing whether the proposed trademark meets the requirements to be legally protected, doing a search to check whether the trademark is available, and preparing and filing a trademark application that accurately describes the goods and services for the trademark. Applying for copyright registration only requires that the author, owner of an exclusive right in a work, or agent on behalf of the owner or author, file the copyright application and a "deposit copy" of the work being registered.²⁶ The U.S. Copyright Office is responsible for examining applications and accompanying copies of the work to determine whether they satisfy statutory requirements.

Applying for intellectual property protections overseas is generally more expensive than domestic intellectual property protections. In most cases, intellectual property protections are territorial, and small businesses must protect their intellectual property overseas on a country-by-country basis.²⁷ A 2012 USPTO report cited official fees, translation costs, and outside counsel as major factors for the high cost of seeking intellectual

²⁵According to USPTO officials, only registered patent practitioners are qualified to prosecute patent applications before USPTO.

²⁶Generally, a copyright applicant must supply copies representing the entire work being registered.

²⁷Patents and trademarks are territorial and must be registered in each country where protection is sought. A U.S. patent or trademark does not afford protection in another country. Copyrights are also territorial. A number of countries, including the United States, require copyright registration in order to reap the maximum level of benefits for copyrighted works, such as enhanced damages. However, many countries, including the United States, do not require copyright registration as a condition for basic copyright protection.

property protection overseas.²⁸ In 2002, we estimated that a U.S. company could spend \$160,000 to \$330,000 to acquire patent protections in Japan, Canada, South Korea, and the European Patent Office.²⁹ A representative of a small business trade organization we interviewed stated that seeking overseas patent protections could take 5 years to complete and cost upwards of \$500,000.

In addition to cost, the stakeholders we interviewed also cited the following challenges faced by small businesses and inventors regarding intellectual property:

- **Understanding the process of acquiring intellectual property protections.** Several stakeholders we interviewed, including SBDCs, explained that small businesses and inventors often do not fully understand the process and length of time involved in getting intellectual property protections. For instance, one SBDC representative stated that getting intellectual property protections requires expertise and understanding the steps required to successfully acquire the protections. One small business owner stated that most small businesses do not understand the process of acquiring a patent. In addition, according to a PTRC librarian we interviewed, the main challenge most people face when coming to the center is understanding how they can determine whether a piece of intellectual property already exists, and that conducting such searches is not easy, especially if the person has a new idea or something that is difficult to describe. Another PTRC librarian stated that some people who come into the center need the entire process of acquiring intellectual property protection explained to them. Some stakeholders we interviewed also noted challenges of filing for international intellectual property protections, such as the need to obtain expert guidance because requirements for filing differ by country.³⁰
- **Becoming aware of ways to leverage such protections for one's business needs.** Several stakeholders we interviewed noted that

²⁸USPTO, *Report to Congress: International Patent Protections for Small Businesses* (Alexandria, Va.: Jan. 2012).

²⁹GAO, *International Trade: Federal Action Needed to Help Small Businesses Address Foreign Patent Challenges*, [GAO-02-789](#) (Washington, D.C.: July 17, 2002).

³⁰To streamline the patent application process between participating countries, the Patent Prosecution Highway is a program that enables an applicant who receives a positive ruling on patent claims from one participating office to request accelerated prosecution of corresponding claims in another participating office. This allows the applicant to obtain a patentability decision in the second office more quickly.

small businesses and inventors often do not know how to leverage intellectual property to help their businesses. For example, a representative from one small business stated that many companies are not aware of or do not know how to leverage different types of intellectual property, such as patents, trademarks, and trade secrets for their businesses. One SBDC official stated that many clients have come into the center not knowing what to do with the patents they have—a situation the center could have resolved, with help from law school students, by conducting an analysis for them prior to their filing a patent application. Another SBDC official stated that sometimes companies mistakenly think they have to acquire patents in every country when, in reality, they only need to acquire patents in the country in which they conduct business. One SBDC representative we interviewed stated that the main challenge clients face regarding patents is understanding what is needed for their business rather than just focusing on paying for the patent.

- **Knowing how and where to get help from experienced professionals who offer legitimate support.** Some stakeholders we interviewed noted that invention promotion companies can pose a challenge for small businesses and inventors who do not know where to turn for help with intellectual property issues. Some stakeholders explained that not knowing where to get professional help may lead some small businesses and inventors to seek help from invention promotion companies that sell unnecessary or fake services. For example, a small business owner described illegitimate invention promotion companies as a problem because businesses could pay a lot for their services but not receive their money's worth in return. In addition, one PTRC librarian stated that he had to inform a patron that a document the patron had paid for was not an official trademark document but was actually a fake. Officials from one SBDC stated that they discourage clients from paying for third-party services that USPTO and SBA provide for free.

USPTO Has Provided Assistance with Intellectual Property Protections to Small Businesses and Inventors but Does Not Evaluate Overall Effectiveness of Its Programs

USPTO's multiple programs have assisted small businesses and inventors with the challenges of getting intellectual property protections, according to stakeholders. However, USPTO does not collect and evaluate information on whether these programs are overall effectively reaching out to and meeting the needs of these groups.

Stakeholders Reported that USPTO Programs and Related Efforts Have Been Helpful, but Several Also Were Not Aware of Other Programs and Efforts

Several stakeholders reported that USPTO programs have helped small businesses and inventors acquire intellectual property protections. For example, a few trade organizations that assist small businesses and inventors singled out the agency's Patent Pro Bono Program as helping small businesses and inventors with the cost and complex process of acquiring patents. One trade organization described USPTO's Patent Pro Bono Program as helpful for finding the relevant expertise to assist small businesses and inventors with preparing and filing patent applications, while another described the programs that USPTO offers, including the Patent Pro Bono Program, as helpful overall and lauded the agency's management. Some stakeholders noted that USPTO's website offered helpful information to assist small businesses and inventors in finding appropriate resources, including how and where to get help. For example, one small business told us that USPTO's website contained useful information for the public located in areas without access to universities or other resources that help with intellectual property protections. In addition, according to a representative of the Law School Clinic Certification Program, clients find out about the program through USPTO's website, which provides email addresses of participating law schools.

However, several of the same stakeholders we interviewed had not heard of some USPTO programs that help small businesses and inventors with challenges they may face in getting intellectual property protections. In addition, a few reported having had no contact with the agency, and some stated that it was difficult to find the information they needed on USPTO's website. For example, representatives from one small business with plans to file patents in several countries stated that they were unaware of USPTO's Intellectual Property Attaché Program and the research services offered by the agency's PTRCs. Several SBDCs were also

unaware of some USPTO programs and related efforts. In addition, some USPTO stakeholders described how difficult it was to navigate USPTO's website to find useful information. For example, one small business found the information on patents on the agency's website difficult to follow.

USPTO Does Not Collect Information to Help Evaluate Overall Outreach Efforts and Effectiveness in Assisting Small Businesses and Inventors

USPTO does not collect information to help evaluate overall outreach efforts and effectiveness of programs that assist small businesses and inventors. Specifically, the eight programs aimed at enhancing the agency's interactions with stakeholders—particularly small businesses and inventors—under the agency's Mission Support Goal track these groups differently, with few tracking, to a limited extent, small businesses and inventors that use their services, and each having its own outreach efforts and measures of progress. For example, the Law School Clinic Certification Program and the Patent Pro Bono Program track information such as the number of clients helped and the number of applications filed. The Global Intellectual Property Academy tracks educational programs for those seeking international intellectual property protections and conducts surveys to gauge participants' feedback.³¹ Officials also said they target small businesses with in-person programs at USPTO headquarters, via webcasts, or at special events like the International Trade Administration's STOPfakes Roadshow, but do not specifically keep track of whether small businesses are using these programs. Other programs with call centers, such as the Inventors Assistance Center and the Trademark Assistance Center, supplement their call metrics data with a voluntary follow-up customer satisfaction survey, which tracks, to a limited extent, whether customers they have helped are businesses or inventors. Some PTRCs hold, for example, free workshops for the public and collect information such as the number of individuals assisted and the number of training classes held, but USPTO officials said they do not collect demographic information about the clients served. A USPTO program official explained that clients like to keep their ideas confidential, and collecting such information may discourage clients from seeking assistance at the PTRCs. In addition, the official explained that the 83 libraries that host PTRCs have differing privacy policies and to coordinate these policies would be a burden for USPTO to manage.

As mentioned above, USPTO's multiple programs have been helpful to small businesses and inventors, with each conducting its own outreach and having different measures of progress. Having multiple programs can be a benefit, because no one program can meet the various needs of all

³¹For more information on the numbers of clients served by these programs, see app. II.

small businesses and inventors seeking intellectual property protection programs. Yet, because USPTO does not consistently track how small businesses and inventors use its many services, the agency may not be able to fully target outreach efforts to these groups and evaluate whether the programs are meeting their needs. Not tracking such information has also affected the agency's research on underrepresented groups. For instance, a senior USPTO official stated that the agency's lack of demographic data about its applicants is a major challenge to understanding the issues faced by patent applicants and trademark registrants. According to the senior official, because USPTO does not collect information on the gender of patent applicants, USPTO staff had to use software to analyze applicants' names to identify the gender of patent applicants for its report on the trends and characteristics of women inventors.³² Moreover, a 2019 USPTO report to Congress, *Study of Underrepresented Classes: Chasing Engineering and Science Success*, included a recommendation that Congress authorize a mechanism for USPTO to conduct a voluntary survey of patent applicants to help address limited information on the participation of women, minorities, and veterans who are granted patents as inventors.³³

USPTO stated that it uses a variety of channels and takes a variety of actions, such as conducting surveys, to determine whether the agency is meeting stakeholder needs, but these channels and actions do not target small businesses and inventors.³⁴ For example, to assess its overall performance in serving its customers through the patent examination process, USPTO conducts a semiannual voluntary customer satisfaction

³²USPTO, *Progress and Potential: A Profile of Women Inventors on U.S. Patents*, Feb. 11, 2019.

³³Study of Underrepresented Classes Chasing Engineering and Science Success Act of 2018 (SUCCESS Act) required USPTO, in consultation with SBA, to study and provide recommendations "to promote the participation of women, minorities, and veterans in entrepreneurship activities and the patent system." Pub. L. No. 115-273, 132 Stat. 4158 (2018). The act also extended USPTO's authority to set fees it charges for a period of 8 years. In 2019, USPTO's report to Congress found there is a limited amount of publicly available information regarding the participation rates of women, minorities, and veterans in the patent system. The report recommended, among other things, that Congress enhance USPTO's authority to gather information.

³⁴According to USPTO, its regional offices use post-event surveys to identify the type of attendee at each regional office event—such as whether the attendee is an independent inventor, patent practitioner, small business owner, educator, or student. In addition to tracking attendees, USPTO regional offices track the event location information, such as city and state, for each event.

survey of 3,000 randomly selected customers who frequently file for intellectual property protections. Yet a similar survey of first-time patent and trademark filers, for instance, could provide information on whether they are small businesses and inventors, their experiences with the filing process, and their experiences, if any, with USPTO's programs aimed at helping them with intellectual property, including how they found out about the programs. Such information about first-time filers could provide useful information for USPTO to target their outreach efforts.

Federal internal control standards provide that management should use quality information to achieve the entity's objectives.³⁵ This would involve, for instance, obtaining relevant data from reliable external sources and processing the obtained data and then evaluating the processed information so that it is quality information. We have also previously reported that best practices in planning and performance management include aligning agency-wide goals, objectives, and measures to ensure they are contributing to day-to-day activities and the achievement of agency goals.³⁶ In addition, we have previously reported that, although requirements of the Government Performance and Results Act of 1993 (GPRA), as updated by the GPRA Modernization Act of 2010 (GPRAMA), apply to departments, including Commerce, such requirements can serve as leading practices at other organizational levels, such as component agencies—in this case, USPTO.³⁷

By having an agency-wide approach to collect quality information used to evaluate outreach efforts and the effectiveness of its programs, USPTO may be in a better position to fully determine whether the needs of small businesses and inventors are being met. Having such information on the experiences small businesses and inventors have with its programs would help ensure that USPTO is able to fully assess the extent to which it has reached out and helped its stakeholders understand and acquire intellectual property protections—and, based on that information, make

³⁵GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014). See Principle 13, "Use Quality Information."

³⁶[GAO-05-927](#); [GAO/GGD-96-118](#).

³⁷See generally Government Performance and Results Act of 1993, Pub. L. No. 103-62, 107 Stat. 285 (1993) (GPRA); GPRA Modernization Act of 2010, Pub. L. No. 111-352, 124 Stat. 3866 (2011) (updating GPRA); GAO, *Motor Carriers: Better Information Needed to Assess Effectiveness and Efficiency of Safety Interventions*, [GAO-17-49](#) (Washington, D.C.: Oct. 27, 2016); GAO, *Environmental Justice: EPA Needs to Take Additional Actions to Help Ensure Effective Implementation*, [GAO-12-77](#) (Washington, D.C.: Oct. 6, 2011).

improvements to those programs where necessary, including additional outreach.

SBA Coordinates with USPTO through Targeted Efforts but Has Not Fully Implemented Some Statutory Requirements to Enhance This Coordination

We found many examples of SBA and USPTO working together to help small businesses on intellectual property issues, but SBA has not fully implemented requirements of the Small Business Innovation Protection Act of 2017 (the act) that could enhance this relationship.³⁸ In particular, SBA and USPTO coordinate at the local level, but coordination is not centralized and therefore conducted independently among SBA and USPTO programs and partners. While SBA has begun to implement provisions of the act to enhance this coordination, it has not (1) documented its coordination with USPTO in an agreement, (2) developed ways to track SBDC implementation of intellectual property training with USPTO, or (3) clarified roles and responsibilities in helping SBDCs provide such training with USPTO.

SBA Coordinates with USPTO through Targeted Efforts and As Needed Locally

Officials representing SBA and USPTO described working together to help small businesses on intellectual property, particularly to help them become aware of ways to leverage intellectual property protections for one's business needs, through (1) targeted efforts between programs and (2) at the local level as needed to help small businesses protect their intellectual property.

Examples of the targeted efforts that officials described where SBA has coordinated with USPTO to help small businesses with intellectual property include:

- **SBIR/STTR program.** SBA posts USPTO's Global Intellectual Property Academy's quarterly webinars on protecting intellectual property overseas on the SBIR/STTR website. SBA also advertises these webinars, along with other USPTO trainings, in its newsletters to the SBDCs and to SBIR/STTR participating agencies. USPTO has also participated in the SBIR Road Tour to increase small businesses' awareness of USPTO programs.³⁹

³⁸Pub. L. No. 115-259, 132 Stat. 3664 (2018).

³⁹SBA officials stated that the SBIR Road Tour presents to over 8,000 attendees in over 48 events across the United States and offers one-on-one consultations to small businesses.

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- **Other grant programs that support SBIR/STTR.** According to SBA officials, grantees of these programs are supposed to leverage the resources of existing federal agencies, such as USPTO.⁴⁰
 - **Conferences.** USPTO has participated in the SBDC program's annual conference to let counselors to small businesses learn more about intellectual property, and SBA has participated in USPTO conferences like the China Intellectual Property Road Show to enhance awareness of SBA programs.

SBA and USPTO officials provided a number of examples on how they work together at the local level to help small businesses on intellectual property issues. Officials from SBA's Office of Field Operations cited instances where SBA district offices provided or helped SBDCs provide trainings on intellectual property protections in coordination with USPTO regional offices and PTRCs. For example, they provided flyers for three workshops in which SBA's Los Angeles district office and the Los Angeles PTRC coordinated in 2019 to explain services available to assist small businesses with intellectual property protections. SBA's local partners, like its SBDCs, have also coordinated with USPTO's PTRC librarians. Officials from the SBDC in Washington, D.C., described having a close working relationship with a nearby USPTO PTRC, located a short walking distance away. Also, USPTO officials representing headquarters programs cited instances where regional office officials introduced them to local resources, including SBA district offices, when these officials visited the region. For example, USPTO officials provided an agenda used when officials from USPTO's Intellectual Property Attaché Program visited USPTO's regional office in Denver in 2016. During this trip, USPTO's regional office officials facilitated a meeting between local SBA officials and the visitors to discuss opportunities for cooperation. USPTO program officials have also coordinated with SBA's local partners, such as the SBDCs. For example, SBA officials provided documentation showing that in August 2019, officials from USPTO's Patent Pro Bono Program and Law School Clinic Certification Program emailed the SBDCs to let them know about the programs' services.

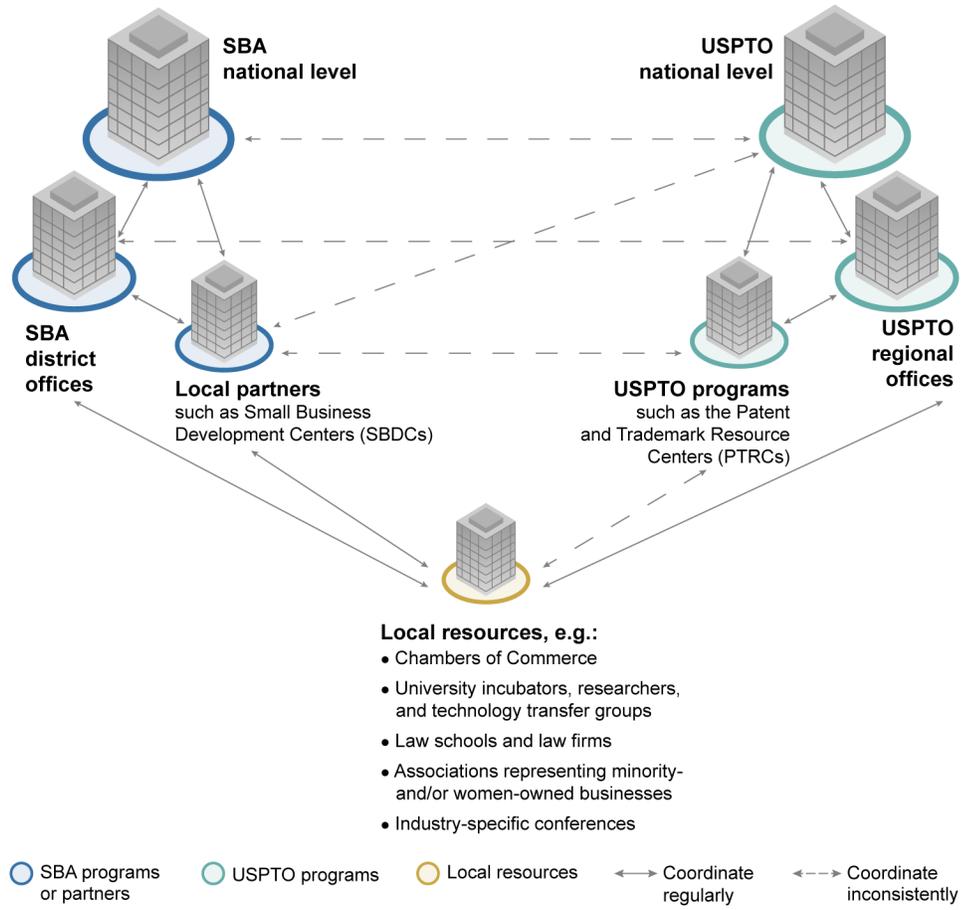
Despite these examples of ongoing SBA and USPTO's coordination efforts, we found that the coordination between the two agencies was not consistent across local partners and programs, and some SBDCs did not

⁴⁰An example of a grant program that supports SBIR/STTR is the Federal and State Technology Partnership Program, which provides one-year funding to organizations to execute state or regional programs that increase the number of SBIR/STTR proposals.

interact with USPTO or PTRCs (see fig. 4). For example, when we asked 12 SBDCs how their networks interacted with USPTO, nine of them stated that they referred clients to USPTO, held programs with USPTO officials, or had made contact with a USPTO representative. However, three SBDCs stated that they did not interact with USPTO at all.⁴¹ Further, our review of PTRC and SBDC documents and interviews found that, although some PTRCs and SBDCs near one another coordinate by communicating about one another's services, holding workshops for small businesses together, and referring clients to one another, we found that other PTRCs and SBDCs located near one another do not work together or do not know of the other's existence. For example, of the 12 SBDCs we interviewed, three SBDCs worked with the nearby PTRC. Officials from one of these SBDCs stated that they participate in USPTO outreach events through the PTRC and refer more than half their clients to the PTRC, through which clients may be referred to other USPTO programs. Furthermore, they said this partnership has provided small businesses with better access to information and created more awareness about SBA and USPTO programs that can help them protect their intellectual property. In our analysis of the locations of the 83 PTRCs and the 62 lead SBDCs and approximately 800 service centers, we found about 40 percent of the PTRCs are located within 1 mile of an SBDC, and about an additional 25 percent of PTRCs are located between 1 and 3 miles of an SBDC. This suggests that partnership opportunities such as the one cited above between the SBDC and PTRC may exist for other SBDCs and PTRCs.

⁴¹We selected the 12 of 62 lead SBDC centers to reflect a variety of industries, business sizes, and locations around the United States. For more information, see app. I, Objectives, Scope and Methodology. We asked the SBDCs about the eight USPTO programs that contribute to USPTO's Mission Support Goal to enhance USPTO's interactions with stakeholders—particularly small businesses and inventors—as highlighted in USPTO's Fiscal Year 2019 Performance and Accountability Report. For more information on these programs, see Background.

Figure 4: The Small Business Administration (SBA) and the U.S. Patent and Trademark Office (USPTO) Coordinate at the Local Level, but Are Inconsistent



Source: GAO analysis of agency documents and interviews. | GAO-20-556

SBA Has Not Documented Its Coordination with USPTO in an Agreement

SBA is developing a partnership agreement with USPTO that could enhance existing coordination between the two agencies. The Small Business Innovation Protection Act of 2017 calls on SBA to work with USPTO to help small businesses with intellectual property.⁴² Section 4 of the act requires SBA to develop partnership agreements in consultation with USPTO by April 7, 2019. According to the act, the partnership

⁴²Pub. L. No. 115-259, § 4(a), 132 Stat. 3664, 3664-65 (2018).

agreements should provide for how SBA and USPTO, among other things,

- leverage existing training materials for the education of inventors and small business concerns and
- develop high-quality training, including in-person or modular training sessions, for small business concerns relating to domestic and international protection of intellectual property.⁴³

SBA missed the April 2019 deadline to develop the partnership agreement with USPTO. Although USPTO officials stated that the act does not necessarily require a written agreement, USPTO officials drafted a memorandum of understanding (MOU) and sent it to SBA to review in 2018 before the act had been signed into law, and sent another draft MOU to SBA in October 2019 following a meeting between the two agencies to discuss the MOU. However, SBA officials stated that they missed the deadline for implementing the act's requirements because they were working on several mandates with the same deadlines and fell behind. Also, they paused efforts to develop a partnership agreement with USPTO when the Office of Small Business Development Centers, the SBA office directly overseeing SBDCs, changed leadership in May 2018 and in April 2019. In 2020, SBA officials began efforts to partner with USPTO as required by the act by, among other things, leveraging existing resources. SBA officials met with USPTO officials in February 2020 to discuss how to leverage existing training materials. SBA officials plan to expand on these efforts, stating, for instance, that they are creating an online curriculum of existing USPTO courses and linking these courses to the SBA website, and that they plan to invite officials from USPTO regional offices to more intellectual-property-related events overseen by SBA district offices. However, SBA officials do not have clear plans to document these efforts in an agreement with USPTO.

According to leading practices for enhancing interagency coordination, agencies can enhance and sustain their collaborative efforts not only by leveraging resources, but also by articulating the coordination agreement

⁴³Section 4 of the act also specifies that this training should be through electronic resources, including internet-based webinars; and at physical locations, including at an SBDC or USPTO headquarters or a regional office of USPTO.

in formal documents, such as an MOU.⁴⁴ Having a documented partnership agreement for how SBA and USPTO are to coordinate could help them fully and consistently communicate their existing resources to each other's partners and programs. Further, with a documented partnership agreement between SBA and USPTO, SBDCs would be better positioned to leverage USPTO's existing intellectual property protection training, and USPTO programs and partners can better leverage SBA's business connections to broaden outreach to more small businesses. Lastly, documenting how SBA and USPTO are to coordinate can also help SBA and USPTO fulfill the act's requirements to develop a partnership agreement.

SBA Has Not Developed Ways to Track SBDC Implementation of Intellectual Property Training with USPTO

Section 5 of the act requires SBDCs to provide intellectual property training in conjunction with USPTO.⁴⁵ SBA's 2020 cooperative agreements with the SBDCs include a number of provisions related to the act, such as requiring the SBDCs to assist and train small businesses with intellectual property protections and to leverage existing resources by coordinating with federal, state, local, and tribal agencies, among other agencies. However, the cooperative agreements do not require the SBDCs to provide intellectual property training in conjunction with USPTO. SBA officials stated that they have not required SBDCs to provide intellectual property training with USPTO because they believe SBDCs should tailor their training based on the needs of local small businesses. SBA officials stated that this decentralized approach can be more effective than a top-down approach because small business needs differ in each region and SBDCs are most familiar with the needs in their regions. Also, SBA officials stated that they were not aware until January 2020 that the act requires SBDCs to provide intellectual property training with USPTO, but once they became aware, they made plans to include the requirement in the 2021 cooperative agreements. As one step toward implementing these requirements, SBA officials began efforts in February 2020 to convene an intellectual property working group consisting of members of the SBDC advisory board and directors from SBDCs that have supplemental accreditation for technology commercialization

⁴⁴GAO-12-1022. We also reported that written agreements are most effective when they are regularly updated and monitored. See also GAO, *Natural Resource Management: Opportunities Exist to Enhance Federal Participation in Collaborative Efforts to Reduce Conflicts and Improve Natural Resource Conditions*, GAO-08-262 (Washington, D.C.: Feb. 12, 2008); and GAO, *Rural Economic Development: Collaboration between SBA and USDA Could Be Improved*, GAO-08-1123 (Washington, D.C.: Sept. 18, 2008).

⁴⁵Pub. L. No. 115-259, § 5, 132 Stat. at 3665 (amending 15 U.S.C. § 648).

services. SBA officials stated they plan to include USPTO, but have yet to do so.

However, SBA does not have the means to track the extent to which SBDCs provide intellectual property training and therefore may not know whether or not SBDCs are following the act. In general, SBA tracks SBDC performance through the performance goals it has set for the SBDCs. In particular, SBA's four performance goals for the SBDCs are measured by the (1) number of unique clients served, (2) number of new business starts, (3) number of jobs supported, and (4) dollar amount of capital infusion. SBA tracks the SBDCs' progress for the four performance goals by requiring SBDCs to collect client counseling and training data and uploading the data quarterly into SBA's data management system. SBA only collects data from the SBDCs that directly address the four performance goals, but officials stated that they also monitor SBDC activities through weekly status reports submitted by SBDCs' state directors.

While SBA currently does not require the SBDCs to report on intellectual property training with USPTO, it has taken steps to include this requirement in future agreements. In April 2020, in response to the Coronavirus Aid, Relief, and Economic Security (CARES) Act, SBA released a funding opportunity announcement that requires SBDCs to, among other provisions, submit quarterly reports that address the SBDCs' progress and related outcomes on helping small business affected by Coronavirus Disease 2019 protect their intellectual property.⁴⁶ However, SBDCs currently do not have the means to readily submit such data to SBA because SBA's counseling and training data input forms do not contain fields specifying whether the SBDCs trained or counseled small businesses on intellectual property protections.⁴⁷ In addition, SBA officials told us that its current data management system is outdated and that they are in the process of securing funding to upgrade the system. SBA officials said that, until the system is replaced, it would be difficult to evaluate additional training data submitted by the SBDCs. As a result, even after SBA includes a requirement in the 2021 cooperative

⁴⁶Coronavirus Aid, Relief, and Economic Security (CARES) Act, Pub. L. No. 116-136, 134 Stat. 281 (2020).

⁴⁷In May 2020, SBA officials stated that they have begun the process to add an "intellectual property" field to the counseling and training forms, which could help SBA track the extent to which SBDCs provide counselling and training related to intellectual property.

agreements for SBDCs to provide intellectual property training with USPTO, SBA may not have the means to readily track SBDC implementation of the requirement.⁴⁸

While SBA collects data from SBDCs related to their performance goals, they do not collect data relating to SBDCs' day-to-day activities such as providing intellectual property training. We reported in 2005 that aligning goals, objectives, and measures can reinforce the connection between goals and day-to-day activities.⁴⁹ Also, federal internal controls state that agencies should define objectives (e.g. what is to be achieved, who is to achieve it, how it will be achieved) to assess risks and make improvements where necessary.⁵⁰ Without developing a way to track SBDC implementation of intellectual property training with USPTO, SBA may not be able to determine the extent to which SBDCs are providing such training as required by the act, the effectiveness of any training provided, or the extent to which small businesses successfully receive the assistance needed to protect their intellectual property.

SBA Has Not Clarified Roles and Responsibilities in Helping SBDCs Provide Intellectual Property Training with USPTO

As previously mentioned, Section 5 of the Small Business Innovation Protection Act of 2017 requires the SBDCs to provide intellectual property training in conjunction with USPTO.⁵¹ Some SBDCs already provide intellectual property training and assistance, although this training may or may not be in coordination with USPTO. All 12 SBDCs we spoke to stated that SBDCs in their network counsel or train clients on intellectual property issues to different extents, although far less often than on other business issues. However, of these 12 SBDCs, two said that their networks primarily work with USPTO to assist small businesses with intellectual property. The other 10 stated that their networks primarily work with local resources such as universities or local law firms instead of USPTO. As USPTO is the authoritative source for patents and trademarks within the United States, SBDCs can benefit from the agency's expertise in providing small businesses with information on

⁴⁸SBA also contracts with the trade organization representing the SBDCs to review programs at each SBDC network every 5 years to ensure that SBDCs have met their standards for accreditation. The accreditation team evaluates SBDCs based on dimensions such as leadership qualities and the capability to utilize resources and implement programs. However, the performance reviews are not detailed enough to track (1) topics of training SBDCs provide or (2) who they work with to provide that training.

⁴⁹[GAO-05-927](#); [GAO/GGD-96-118](#).

⁵⁰[GAO-14-704G](#). See, for example, Principle 6, "Define Objectives and Risk Tolerances."

⁵¹Pub. L. No. 115-259, § 5, 132 Stat. at 3665 (amending 15 U.S.C. § 648).

these types of intellectual property by providing this assistance in conjunction with USPTO.

We found that SBA has not clarified roles and responsibilities in helping SBDCs provide intellectual property training with USPTO. In some instances, SBA has taken the lead in coordinating with USPTO and sharing USPTO resources with the SBDCs. For example, SBA has advertised USPTO resources in their weekly newsletters to SBDCs, and have invited USPTO officials representing multiple programs to the monthly SBDC directors' meeting to train SBDC directors on existing USPTO resources. In other instances, SBA officials stated that SBDCs can determine their own training topics and with whom they will coordinate. SBA officials stated that it is more effective to allow SBDCs to determine coordination activities in their network since the SBDCs are more aware of business needs in their regions than SBA officials are. However, without SBA clarifying what role it will take, if any, in helping SBDCs coordinate with USPTO, SBDCs may find it difficult to leverage USPTO resources when their regions have such needs, as demonstrated in the few SBDCs we interviewed that primarily work with USPTO to assist small businesses with intellectual property. Also, it may create inefficiencies meeting the requirements of the act if SBA does not lead efforts of all 62 SBDC networks to coordinate with USPTO.

We reported in 2012 that it is important for parties collaborating to define and agree on their respective roles and responsibilities and to identify sources of leadership for the collaborative effort.⁵² While SBA has facilitated information sharing between USPTO programs and the SBDCs, it has done so without clarifying its role in helping SBDCs provide intellectual property training in conjunction with USPTO. Without clarifying whether SBA or the SBDCs are to lead coordination efforts with USPTO, the quality of intellectual property assistance to small businesses remains largely dependent on resources available and the willingness of officials working in each region. As a result, access to assistance and training may vary and small businesses in regions without this coordination and awareness may not be able to access the help they need to protect their intellectual property.

Conclusions

With small businesses creating about two-thirds of the jobs in the United States, it is important for small businesses and inventors to have access to robust intellectual property assistance. USPTO and SBA both offer

⁵²[GAO-12-1022](#).

programs that can help small businesses overcome the challenges of gaining intellectual property protections.

USPTO has made a concerted effort to help small businesses and inventors with intellectual property by offering various programs that serve a variety of needs. Several small businesses and trade organizations told us that these programs, such as its pro bono legal services, have been helpful. However, we also found that some of these small businesses, trade organizations, and other entities we interviewed that assist small businesses and inventors were not aware of other helpful USPTO programs. Each of these programs conducts outreach individually and has different measures of progress, which do not necessarily involve collecting information on small businesses and inventors. As a result, USPTO does not have an agency-wide view of how it is helping small businesses and inventors. Without agency-level information on how it is serving small businesses and inventors, USPTO cannot fully determine whether the needs of small businesses and inventors are being met and, based on that information, where it can make improvements to its programs or better target outreach efforts.

SBA helps small businesses in hundreds of communities across the United States and its territories through a network of resources operated by local partners, such as SBDCs. While we found examples of SBA and USPTO working together on intellectual property issues through targeted efforts among programs and at the local level, SBDCs we spoke with mostly worked with resources other than USPTO to assist small businesses with intellectual property. As a result, some small businesses working through those SBDCs may not be aware of USPTO programs that can help them protect their intellectual property. Furthermore, SBA missed the deadline for implementing requirements of the Small Business Innovation Protection Act of 2017 to develop a partnership agreement with USPTO, and it has not developed a way to track SBDCs' implementations of intellectual property training with USPTO. By documenting how SBA and USPTO are to collaborate, developing ways to track SBDCs' implementations of intellectual property training with USPTO, and clarifying roles and responsibilities, SBA can leverage existing USPTO efforts to assist small businesses with intellectual property protection and meet the requirements of the act. In addition, implementing these leading collaboration practices with USPTO can also help SBA provide small businesses with access to appropriate resources to acquire intellectual property protection and therefore access capital, build market share, and create jobs.

Recommendations for Executive Action

We are making a total of four recommendations, one to USPTO and three to SBA. Specifically:

The Director of USPTO should develop an agency-wide approach to collect information to help evaluate outreach efforts and overall effectiveness of USPTO services aimed at assisting small businesses and inventors that seek to obtain intellectual property protections. (Recommendation 1)

As SBA develops the partnership agreement as required by the Small Business Innovation Protection Act of 2017, the Associate Administrator for SBA's Office of Entrepreneurial Development should document how SBA and USPTO will coordinate and leverage existing resources. (Recommendation 2)

As SBA develops the partnership agreement as required by the Small Business Innovation Protection Act of 2017, the Associate Administrator for SBA's Office of Entrepreneurial Development should develop ways to track SBDC implementation of intellectual property training with USPTO. (Recommendation 3)

As SBA develops the partnership agreement as required by the Small Business Innovation Protection Act of 2017, the Associate Administrator for SBA's Office of Entrepreneurial Development should clarify the office's roles and responsibilities in helping SBDCs provide intellectual property training with USPTO. (Recommendation 4)

Agency Comments

We provided a draft of this report to Commerce and SBA for review and comment. We received written comments from Commerce and SBA, which are reprinted in appendices IV and V and summarized below. In addition, USPTO provided technical comments, which we integrated into the report as appropriate.

In Commerce's written comments, reproduced in appendix IV, the department stated that it concurs with the recommendation directed to the Director of USPTO. In an enclosure to the letter, USPTO also said that it concurred with the recommendation. Specifically, USPTO stated that it will consider new approaches to help the agency better assess the overall effectiveness of its outreach programs for small businesses and inventors. In the letter, USPTO also highlighted its current use of customer satisfaction surveys to help evaluate the quality of services, but added that it always looks for ways to improve its processes to drive the best outcomes for its stakeholders.

In SBA's written comments, reproduced in appendix V, the agency agreed with all three recommendations directed to SBA's Office of Entrepreneurial Development. SBA said that our review will help the agency leverage existing intellectual property training programs aimed at small business and strengthen its coordination with USPTO.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the appropriate congressional committees, the Secretary of Commerce, the Administrator of the Small Business Administration, and other interested parties. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-6888 or neumannj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix VI.

Sincerely yours,

A handwritten signature in black ink, appearing to read "John Neumann", with a long horizontal flourish extending to the right.

John Neumann
Managing Director, Science, Technology Assessment, and Analytics

Appendix I: Objectives, Scope, and Methodology

This report examines (1) challenges, if any, that small businesses and inventors face when seeking intellectual property protection, (2) the extent to which U.S. Patent and Trademark Office (USPTO) evaluates the effectiveness of its programs, and (3) the Small Business Administration's (SBA's) coordination with USPTO to assist small businesses.

For all three objectives, we interviewed agency officials and reviewed agency documents, including strategic plans, performance reports, and partnership agreements from SBA and USPTO. We also reviewed training materials from agency programs on intellectual property protections and reviewed data from other related federal efforts. In addition, we reviewed statutes and regulations applicable to domestic and international patents and other forms of intellectual property protections, including trademark and copyright protections.

For the first objective, we analyzed information on legal costs associated with intellectual property protections published by the American Intellectual Property Law Association (AIPLA), which conducted a 2019 survey of members to examine, among other things, the economics of intellectual property law practice, including the cost of acquiring intellectual property protections.¹ We reviewed the scope and methodology used in the AIPLA survey, including sampling size and response rate, and found the scope and methodology sufficient for our purposes to provide illustrative examples of legal costs charged by professionals. The legal costs to acquire U.S. copyright, trademark, and patent protections reflect what 961 respondents to AIPLA's 2019 survey of 8,619 members reported that they charged or expected to charge in 2018 for a typical case with no unusual complications. Respondents were asked to report charges for legal services only, which included search fees, but not copy costs, drawing fees, or government fees.² In many cases, respondents did not answer every survey question. Total sample sizes on which estimated legal costs were calculated varied from 157 to 427, depending on the question. Legal costs include fees associated with preparing and filing the application. For patents and trademarks, these costs include fees associated with the search but do not include fees associated with appeals.

¹AIPLA, *Report of the Economic Survey 2019*, prepared by Association Research, Inc. (Arlington, Va.: AIPLA, 2019).

²USPTO patent and trademark applications require clear drawings of the invention to be patented or of the mark to be trademarked.

For the second and third objectives, we reviewed best practices in planning and performance management—in particular, the practices of aligning agency-wide goals, objectives, and measures to encourage greater use of performance information and reinforce the connection between goals and day-to-day activities—identified in prior GAO reports and based on the Government Performance and Results Act of 1993 (GPRA), as updated by the GPRA Modernization Act of 2010 (GPRAMA).³ In particular, for the second objective, we compared USPTO’s efforts to assist small businesses and inventors against these best practices by interviewing program officials and reviewing documentation from USPTO’s programs and the agency’s Fiscal Year 2019 Performance and Accountability Report.⁴ For the third objective, based on agency documentation, reports, and interviews, we compared SBA’s oversight of SBDCs’ day-to-day activities and USPTO’s evaluation methods of program outcomes against these best practices. Further, we interviewed officials from these agencies who oversee programs that train and assist small businesses in intellectual property protections, as identified by the agencies and through our review. In addition, to answer the second and third objectives, we also reviewed federal internal control standards.⁵

For the third objective, we reviewed selected leading practices for enhancing interagency collaboration identified in prior GAO reports.⁶ We

³GPRA, Pub. L. No. 103-62, 107 Stat. 285 (1993); GPRAMA, Pub. L. No. 111-352, 124 Stat. 3866 (2011) (updating GPRA). Based on the requirements of GPRA/GPRAMA, we have previously reported that best practices in planning and performance management include aligning agency-wide goals and objectives to ensure they are contributing to the achievement of goals and objectives throughout the organization, and that program performance measures are also aligned at each operating level with those goals and objectives. See also GAO, *Managing for Results: Enhancing Agency Use of Performance Information for Management Decision Making*, [GAO-05-927](#) (Washington, D.C.: Sept. 9, 2005); and GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, [GAO/GGD-96-118](#) (Washington, D.C.: June 1, 1996).

⁴USPTO, *Fiscal Year 2019 Performance and Accountability Report*.

⁵GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

⁶GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#) (Washington, D.C.: Sept. 27, 2012). See also GAO, *Natural Resource Management: Opportunities Exist to Enhance Federal Participation in Collaborative Efforts to Reduce Conflicts and Improve Natural Resource Conditions*, [GAO-08-262](#) (Washington, D.C.: Feb. 12, 2008); and GAO, *Rural Economic Development: Collaboration between SBA and USDA Could Be Improved*, [GAO-08-1123](#) (Washington, D.C.: Sept. 18, 2008).

also compared current SBA and USPTO coordinated policies and efforts with provisions outlined in the Small Business Innovation Act of 2017 (the act).⁷ Specifically, to determine the extent of SBA and USPTO collaboration and whether those practices could help SBA fulfill the requirements of the act, we compared agencies' collaboration efforts against leading practices for enhancing interagency collaboration.⁸

To identify challenges faced by small businesses and inventors and awareness of USPTO programs, initiatives, and efforts to assist them, we interviewed a non-generalizable sample of 29 nonfederal stakeholders using semi-structured questions. We selected these stakeholders through purposeful sampling and sampling based on referrals from prior GAO engagements and from agency officials and other stakeholders we interviewed.⁹ For reporting purposes, we developed the following series of indefinite quantifiers to describe stakeholders' responses:

- 2 to 3 is described as "a few."
- 4 to 6 is described as "some."
- 7 or more is described as "several."

During these interviews, we asked about, among other things, any challenges small businesses and inventors face when acquiring intellectual property protections and their awareness of federal programs to assist them. The stakeholders included small businesses, trade organizations that serve small businesses and inventors, technology transfer organizations, and business accelerators. The stakeholders also included selected USPTO partners: four Patent and Trademark Resource Centers (PTRCs) and two law school clinics under the agency's Law School Clinic Certification Program. To solicit various perspectives from USPTO partners, we selected them to reflect a range of geographic locations and characteristics, including whether they represented public or private institutions and were located at academic institutions or public libraries.

⁷Pub. L. No. 115-259, 132 Stat. 3664 (2018).

⁸[GAO-12-1022](#).

⁹Purposeful sampling involves a relatively small number of selected cases used to illustrate, for instance, program operations under a variety of conditions.

The non-generalizable sample of 29 stakeholders also included 12 of 62 lead Small Business Development Centers (SBDCs) that serve as local partners under SBA.¹⁰ To obtain industry perspectives on the various clients the SBDCs serve, we selected the centers based on annual economic survey data on business patterns within U.S. counties from the U.S. Census Bureau.¹¹ Of the 12 lead SBDCs, four had supplemental accreditation for providing technology commercialization services to clients.

To explore the potential for further coordination between SBA and USPTO at the local level, we obtained lists of SBDC and PTRC physical addresses in the United States and its territories from SBA and USPTO, respectively, and analyzed their distances from one another using statistical techniques.¹²

We conducted this performance audit from March 2019 to August 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹⁰The lead SBDCs are generally hosted by institutions of higher education and manage a network of service centers, including satellite locations, which are located in each state, the District of Columbia, and four U.S. territories (Puerto Rico, the U.S. Virgin Islands, Guam, and American Samoa). According to SBA officials, the number of service centers (including satellite locations) fluctuates from year to year.

¹¹U.S. Census Bureau, *Geography Area Series: County Business Patterns by Employment Size Class and Legal Form of Organization: 2016*. The survey captured information of U.S. county business patterns by employment size class and legal form of organization.

¹²As of October 2019, America's SBDC, a trade organization representing SBDCs, reported 863 service centers, and USPTO reported 83 PTRCs.

Appendix II: List of USPTO Programs That Help Small Businesses and Inventors with Intellectual Property Protections

Table 2: Description of Selected U.S. Patent and Trademark Office (USPTO) Programs and Efforts That Help Small Businesses and Inventors with Intellectual Property Protections, Including Fiscal Year 2018 Direct Costs^a

USPTO Office and Program or Effort	Description
Office of the General Counsel	
Law School Clinic Certification Program	Under the Law School Clinic Certification Program, law school students provide pro bono legal services to their clients, that is, individuals and small businesses throughout the country, and represent them in the prosecution of patent and trademark applications before USPTO. Currently, 59 law school clinics participate in this program. Between July 2018 and June 2019, participating law schools reported filing 173 patent applications and 642 trademark applications on behalf of their clients. In total, participating law school clinics represented approximately 2,300 clients during this period. USPTO reported that fiscal year 2018 direct costs of the program totaled \$174,473.
Patent Pro Bono Program	The Patent Pro Bono Program is a nationwide network of 22 independently operated not-for-profit regional programs that match volunteer patent professionals with financially under-resourced small businesses for the purpose of securing patent protection. In 2019, there were over 2,046 registered patent practitioners signed up to volunteer with the Patent Pro Bono Program, and they helped over 500 inventors or small businesses with their patent matters. USPTO reported that fiscal year 2018 direct costs of the program totaled \$936,359.
Office of Policy and International Affairs	
Global Intellectual Property Academy	The Global Intellectual Property Academy (GIPA) provides intellectual property educational and training programming to improve intellectual property laws and their administration around the world and to enhance intellectual property awareness and technical capacity, which includes educational programming for U.S. small businesses and inventors about the importance of intellectual property and about foreign intellectual property systems. In fiscal year 2019, GIPA conducted over 140 activities serving over 9,500 individuals, of which about 45 percent were domestic intellectual property rights owners and users. USPTO reported that fiscal year 2018 direct costs of the program totaled \$2,808,040.
Intellectual Property Attaché Program	The Intellectual Property (IP) Attaché Program operates in foreign markets to help U.S. businesses—including inventors and small businesses—and other U.S. stakeholders navigate issues related to intellectual property protection, ownership, use, and enforcement. The program consists of 13 IP attachés (with additional support from intellectual property specialists and staff) posted to U.S. embassies, consulates, and missions throughout the world. In fiscal year 2019, the IP Attaché Program assisted 5,037 U.S. stakeholders, conducted 54 training programs for 2,050 participants, and conducted 37 public awareness programs for 4,683 participants. USPTO reported that fiscal year 2018 direct costs of the program totaled \$11,080,366.
Office of the Chief Information Officer	
Patent and Trademark Resource Centers	Patent and Trademark Resource Centers (PTRCs) are a nationwide network of 83 public, state, and academic libraries that are designated by USPTO to disseminate patent and trademark information and to support the intellectual property needs of the public. The PTRC library staff are information experts trained on how to use search tools to access patent and trademark information. In fiscal year 2019, PTRCs assisted 13,253 individuals and held training classes attended by 18,396. USPTO reported that fiscal year 2018 direct costs of the program totaled \$604,370.
Office of the Commissioner for Patents	
Application Assistance Unit	The Application Assistance Unit (AAU) helps applicants by telephone to assist with a broad range of questions and issues pertaining to pre-examination processing of patent applications by the Office of Patent Application Processing and the post-examination processing of patent applications by the Office of Data Management. They can assist with questions about the status of an application in the pre-examining or post-examining phase, filing receipts, changes of address, or withdrawal or change of attorneys. AAU officials reported that their staff of 17 usually field about 9,000 calls per month. USPTO reported that direct costs in fiscal year 2018 totaled \$1,681,694.

Appendix II: List of USPTO Programs That Help Small Businesses and Inventors with Intellectual Property Protections

USPTO Office and Program or Effort	Description
Inventors Assistance Center	The Inventors Assistance Center (IAC) provides patent information and services to the public, including small businesses and inventors. The IAC answers questions concerning necessary formats and items needed for a patent application; provides assistance on filling out patent application forms; provides general information concerning patent examining rules, procedures, and fees; and directs callers to appropriate USPTO personnel or resources, as necessary. The IAC is staffed by approximately 25 former USPTO officials who answer general questions concerning patent examining policy and procedure. The IAC receives approximately 36,000 calls per year. USPTO reported that fiscal year 2018 direct costs of the program totaled \$1,168,858.
IP Awareness Assessment Tool	USPTO and the National Institute of Standards and Technology developed the IP Awareness Assessment Tool in 2012 to help entrepreneurs realize their creation of potentially valuable intellectual property assets, increase their knowledge about intellectual property, and obtain an awareness of the need to protect and keep their intellectual property from being exploited or appropriated by competitors. This tool is web-based and free of charge, and USPTO does not store or monitor information received from the assessments taken online. A USPTO analyst monitors the IP Awareness Assessment Tool mailbox to collect feedback and forward or respond to inquiries regarding the tool. ^b
Pro Se Assistance Program	The Pro Se Assistance Program assists inventors who wish to file patent applications without the assistance of a registered patent attorney or agent (also known as pro se filing). The Pro Se Assistance Program offers phone, email, in-person (unscheduled and scheduled), and video conferencing (virtual assistance) to customers at the pre-filing stage. During fiscal year 2019, the Pro Se Assistance Program received 6,993 phone inquiries, 793 email inquiries, 312 in-person visits (scheduled and unscheduled), and 36 virtual assistance appointments. USPTO reported that fiscal year 2018 direct costs of the program totaled \$631,419.
Patent Electronic Business Center	The Patent Electronic Business Center (EBC) is a call center that services patent applicants, including entrepreneurs, small businesses, and independent inventors, by providing logistical support in electronically filing, viewing, and managing their applications. EBC call agents provide one-on-one technical support and instructional materials throughout the submission process. The program has 30 call agents that handle 7,000 to 9,000 calls and emails per month. USPTO reported that fiscal year 2018 direct costs of the program totaled \$5,328,550.
Office of the Commissioner for Trademarks	
Trademark Assistance Center	The Trademark Assistance Center (TAC) is the main support center for all trademark customers. The TAC is staffed with 25 federal government employees: 20 trademark information specialists, four team leads, and one manager. During fiscal year 2019, the TAC assisted over 150,000 customers, of which about 70 percent were small business owners and entrepreneurs. USPTO reported that fiscal year 2018 direct costs of the program totaled \$3,402,361.

Source: GAO analysis of USPTO documentation and information. | GAO-20-556

^aDirect costs are associated with direct support to a specific mission, such as paying for labor to answer questions over the phone or online from the public about intellectual property protections.

^bUSPTO officials stated that the National Institute of Standards and Technology provided the funding for most of the IP Awareness Assessment Tool in 2012. Officials also added that USPTO has not recently updated the tool, and they did not have direct costs for fiscal year 2018.

Appendix III: Nonfederal Resources That Help Small Businesses with Intellectual Property Issues

There are various nonfederal resources that can help small businesses with intellectual property issues. For example:

- **Technology transfer offices.** Technology transfer offices and organizations facilitate the process of transferring scientific findings from one organization to another for the purpose of further development. We spoke to representatives from a university-based technology transfer office, and they described having in-house attorneys that help researchers through various stages of the patent process, including filing provisional patent applications and working with outside legal counsel when converting provisional patents to non-provisional patents.¹ They also explained that the university pays for the cost of patents and recuperates the cost through future licensing fees. Representatives from a state-funded technology transfer office stated that they provide funds to help commercialize ideas coming out of universities and federal laboratories. They also stated that although they do not provide legal advice, the early stage companies they help can use their grants as they wish, such as to protect intellectual property or to fund further research.
- **Business incubators and accelerators.** Similar to technology transfer offices, business incubators and accelerators also seek to help small businesses commercialize ideas. These entities help small businesses and inventors by providing assistance like training or counseling, financial support, or shared access to workspaces. We spoke to representatives of a business incubator funded by a research university that provides laboratory spaces for information technology, robotics, and the life sciences. They said these spaces currently serve over 90 start-up companies. A representative from a start-up accelerator in the San Francisco Bay area described how they select start-up companies on a competitive basis to participate in their 6-month “accelerator” program that provides training, mentorship, connection to investors, and other resources. The representative explained that their goal is to allow the companies they select to be better positioned to grow their business and solicit funding from investors. In return for the help, this accelerator provides a small

¹Provisional patent applications allow an applicant to file without filing a formal patent claim, oath or declaration, or any information disclosure (prior art) statement. See 35 U.S.C. § 111(b). As a result, a provisional application gives an applicant an additional year to file for a non-provisional patent under 35 U.S.C. § 111, during which the applicant can perfect an invention, find financial backers, and find interested parties for licensing, among other activities.

amount of “seed” funding, and it typically asks for about a 5 percent equity share of the start-up company.

- **Inventor clubs.** National and local inventor clubs provide a forum for small businesses and independent inventors to network and learn about intellectual property issues. For example, some inventor clubs invite guest speakers to talk about issues such as patents and trademarks, business planning, and marketing. Other inventor clubs partner with federal agencies like USPTO and SBA. For instance, the executive director of a national inventor club told us that he has recently organized an event with USPTO. He also said some of his local clubs meet at SBA’s Small Business Development Centers (SBDCs).
- **State and local governments.** State and local government economic development agencies can partner with SBA to provide intellectual property information and assistance to small businesses. For example, state and local governments that participate in SBA’s Federal and State Technology Partnership Program seek to help small businesses win Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) awards by providing training, outreach, mentoring, and technical assistance. Also, the District of Columbia Department of Consumer and Regulatory Affairs provides the District of Columbia SBDC (which is located at Howard University) with two computers, an office for confidential counseling, and a conference room for workshops, among other resources, according to a District of Columbia SBDC official.

Appendix IV: Comments from the Department of Commerce



UNITED STATES DEPARTMENT OF COMMERCE
Chief Financial Officer and
Assistant Secretary for Administration
Washington, D.C. 20230

July 31, 2020

Mr. John Neumann
Managing Director
Science, Technology Assessment, and Analytics
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Neumann:

Thank you for the opportunity to review and provide comments on the Government Accountability Office's (GAO) draft report entitled *Intellectual Property: Additional Agency Actions Can Improve Assistance to Small Businesses and Inventors* (GAO-20-556).

On behalf of the Department of Commerce, I have enclosed our comments to the draft report. We concur with the recommendation to develop a USPTO-wide approach to collecting information to help evaluate outreach efforts aimed at assisting small businesses and inventors who seek to obtain intellectual property protections.

Should you have any questions, please contact Branden Ritchie, Director, Office of Government Affairs and Oversight at the United States Patent and Trademark Office, at (571) 272-4842 or Branden.Ritchie@uspto.gov.

Sincerely,

WYNN
COGGINS

Wynn Coggins
Deputy Assistant Secretary
for Administration

Digitally signed by WYNN
COGGINS
Date: 2020.07.31 12:56:13
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Enclosure

**Department of Commerce
Office of the Secretary**

***Intellectual Property: Additional Agency Actions Can Improve Assistance to Small
Businesses and Inventors (GAO-20-556)***

We appreciate the effort you and your staff made in reviewing the United States Patent and Trademark Office's (USPTO) small business and inventor assistance programs. After careful consideration, we concur with the recommendation made in the report for the USPTO. Our response to that recommendation is discussed below. The USPTO is providing the GAO additional technical comments regarding the report under separate cover.

Response to Recommendations

GAO Recommended Action:

The Director of USPTO should develop an agency-wide approach to collect information to help evaluate outreach efforts and overall effectiveness of its services aimed at assisting small businesses and inventors that seek to obtain intellectual property protections.

USPTO Response:

The USPTO concurs with this recommendation and will consider new tools to enable the agency to better assess the overall effectiveness of its outreach programs for small business owners and independent inventors.

As noted in the report, the USPTO utilizes post-presentation and customer satisfaction survey instruments that evaluate the quality of our services and identify areas for program improvement. Nevertheless, we are always looking to improve our processes and drive the best outcomes on behalf of our stakeholders. The GAO's recommendation will help us achieve this goal, and we look forward to working with your office in the future as we continue our efforts to improve our public outreach programs for small businesses and inventors.

Appendix V: Comments from the U.S. Small Business Administration



U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

July 17, 2020

John Neumann
Managing Director
Science, Technology Assessment, and Analytics Team
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Director Neumann:

Thank you for providing the U. S. Small Business Administration (SBA) with a copy of the Government Accountability Office's (GAO) draft report titled, "Additional Agency Actions Can Improve Assistance to Small Businesses and Inventors" GAO-20-556 (104340). This report examines resources available to help small businesses and inventors protect intellectual property, and their effectiveness. It also examines the extent to which SBA coordinates with the U.S. Patent and Trademark Office (USPTO) to assist small businesses.

As the Associate Administrator for the SBA Office of Entrepreneurial Development (OED), it is my responsibility to administer programs and initiatives that provide technical assistance, primarily counseling and training, to small business entrepreneurs. These programs, also known as Resource Partners, include the Small Business Development Centers (SBDC) and Women's Business Centers (WBCs) programs and SCORE.

The Office of Small Business Development Centers (OSBDC), which bears responsibility for administering and overseeing the SBDC Program, provides assistance to the small business community by linking the resources of Federal, state and local governments with the resources of the educational community and the private sector. GAO's review of federal and non-federal resources available to help small businesses acquire intellectual property protections will help SBA build on several existing intellectual property training programs aimed at small business and strengthen our coordination with USPTO.

Further, the SBA has reviewed and agrees with the three recommendations for SBA identified in the draft report. Additional details are provided below:

Recommendation (1): As SBA develops the partnership agreement as required by the Small Business Innovation Protection Act of 2017, the Associate Administrator for SBA's Office of Entrepreneurial Development should document how SBA and USPTO will coordinate and leverage existing resources.

SBA Response: Concur.

**Appendix V: Comments from the U.S. Small
Business Administration**

John Neumann, Managing Director, GAO
Science, Technology Assessment, and Analytics Team
Page 2

Recommendation (2): As SBA develops the partnership agreement as required by the Small Business Innovation Protection Act of 2017, the Associate Administrator for SBA's Office of Entrepreneurial Development should develop ways to track SBDC implementation of intellectual property training with USPTO.

SBA Response: Concur.

Recommendation (3): As SBA develops the partnership agreement as required by the Small Business Innovation Protection Act of 2017, the Associate Administrator for SBA's Office of Entrepreneurial Development should clarify its roles and responsibilities in helping SBDCs provide intellectual property training with USPTO.

SBA Response: Concur.

Thank you for the opportunity to comment on this draft report. SBA appreciates GAO's consideration of our comments prior to publishing the final report.

Sincerely,



Allen Gutierrez
Associate Administrator
Office of Entrepreneurial Development
U.S. Small Business Administration

Appendix VI: GAO Contact and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

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