

Crowe 2019 audit quality report

Building on Values



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Welcome

How we're building on values

Smart decisions. Lasting value.™

At Crowe, our commitment to delivering exceptional service with independence, objectivity, and professional skepticism is rooted in the firm's core values, and in our responsibility to our stakeholders. Our values are the heart of our firm. Our core purpose of "Building Value with Values™" and our core values – care, share, invest, and grow – are the foundation on which we have built our audit practice and national office.

We are very proud of our strong audit quality as evidenced by information and audit quality indicators included in this report. Crowe is deeply committed to the highest standards of audit quality and regulatory compliance. It is critically important that we uphold those ideals in all that we do.

We understand the essential role of the auditor in establishing confidence in our capital markets. We also understand the need to harness the power of the latest technological advances to reach for new heights.

Our commitment to integrity, quality, and continuous improvement runs deep and sometimes requires that we address difficult issues. In December 2018, the SEC issued an order sanctioning our firm in connection with a 2013 public company financial statement audit – a disappointing first for Crowe. We take this matter very seriously, and have used it to drive further improvements and progress in our audit quality.

With our shared commitment to quality and compliance, we continue to move forward as a better and stronger firm. Our efforts revolve around innovation, talent, and integrity.



Jim Powers, CPA
CEO

A handwritten signature of Jim Powers.

Innovation

Innovation is an integral part of who we are at Crowe. Nourishing a culture of innovation allows us to leverage technology and software solutions that enable more effective audits. Advances in data analytics and other emerging technologies allow us to see more clearly into our clients' businesses and focus on areas of risk.

Talent

We know that attracting and retaining top talent is crucial to delivering audit quality. We invest in our audit professionals and provide opportunities for continuing education, growth, and alternative experiences abroad, as well as within our secondment and rotation programs. These programs help us develop and retain highly trained, highly qualified auditors and broaden the diversity of our teams.

Integrity

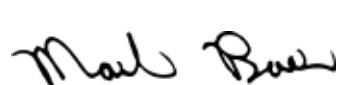
Crowe performs audit work with due professional care and diligence while observing our profession's high standards. We maintain a rigorous independent internal quality control system and are subject to an annual PCAOB inspection. Crowe is dedicated to performing independent, objective audits each and every time to provide assurance and confidence to all stakeholders.

Explore this 2019 report, "Building on Values," to discover how Crowe is committed to advancing the quality of the audit.

Sincerely,



Mark Baer, CPA
Managing Partner, Audit Services

A handwritten signature of Mark Baer.

The purpose of this report

Crowe is a privately held partnership, and we voluntarily publish this report to communicate our commitment to audit quality. This report is designed to provide audit committees, boards of directors, shareholders, regulators, investors, and other capital market stakeholders with an understanding of how Crowe is organized, operated, and monitored with respect to audit quality.

Year in review¹

24 years

Partners' average years of experience*

* Includes audit and national office partners

► Leadership sets the tone for the importance of consistently enhancing audit quality.

Ratio of national office partners and managing directors to audit partners and managing directors

1 to 8

Average retention of audit and national office professionals

87% Senior manager

83% Manager

81% Senior staff and staff

► Recruiting, developing, and retaining professionals is essential to providing audits of consistent quality.

55

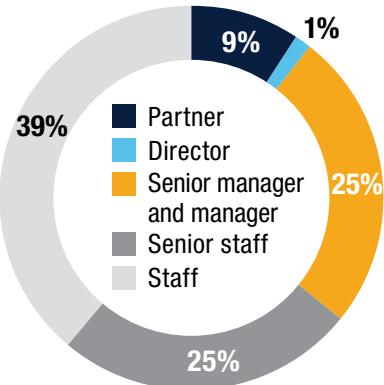
Average training hours completed per audit and national office professional*

* Based on 2018 data

0

Number of reissuance restatements for issuer audit clients between 2016-2018

► Audits of SEC registrants filing on Form 10-K and audits of employee benefit plan issuers filing on Form 11-K



1,261 audit professionals

Ratio of partners and managing directors to audit personnel

1 to 8

► Our average partner-to-staff ratio brings experience and insights to our audits.

2017 PCAOB inspection report²

3

Audits included in Part 1

16

Audits inspected

19%

Part 1 comments*

* Issuers with Part 1 deficiencies as a percentage of total issuers inspected.

► As one of 11 firms that audit more than 100 issuers, Crowe is subject to an annual inspection by the Public Company Accounting Oversight Board (PCAOB).³

Number of audit engagements internally inspected

47



Audit quality

Welcome to a values-driven firm

Headquartered in Chicago, Crowe LLP is one of the largest public accounting, consulting, and technology firms in the United States. Our audit professionals combine deep industry and functional expertise with innovation to deliver professional and responsive service.

“ The audit profession is constantly changing. One thing that doesn't change is our firm's commitment to audit quality.

– Jim Powers, CPA, CEO

Today, more than 1,200 Crowe audit professionals conduct audits for a wide array of public and private companies. Our accomplished auditors perform critical evaluations of the audit evidence and deliver audits based on competence and a comprehensive understanding of the entities' businesses. Every year, in our audit engagements, we demonstrate our commitment to our values, our clients, and to the audit profession.

This commitment to values and audit integrity is fostered by Crowe leadership. By setting the tone and expectations at the top, our partners drive audit quality and help us support the advancement of audit quality throughout the profession. The firm's focus on ethics, independence, and integrity, coupled with our rigorous quality control and oversight, helps us continuously enhance audit quality.

**24
years**

Partners'
average years
of experience*

* Includes audit and national office partners

► For more about our management structure and partner compensation policies, see page 34 and 35.

National office

Crowe has a quality control system led by the assurance professional practice group, which is the firm's national office.

The national office is responsible for matters related to audit quality, inspections and monitoring, accounting, auditing, ethics, and independence, as well as interacting with regulators. To fulfill its goal, the national office has established monitoring policies and procedures to support a system of quality control that is relevant, effective, and consistently applied.

Monitoring policies and procedures are as follows:

- Monitor and evaluate our quality control procedures to determine the appropriateness of the design and the effectiveness of the system's operation, and update as needed.
- Monitor independence compliance.
- Perform an independent preissuance review of selected engagement types. These objective reviews of engagement reports and summary work papers provide additional assurance that reports issued by Crowe are appropriate.
- Annually inspect procedures and documentation for each of the elements of the system of quality control. This includes leadership responsibilities for quality within Crowe, relevant ethics and independence requirements, acceptance and continuance of audit relationships and specific engagements, and engagement performance monitoring.
- Annually inspect a cross-section of assurance engagements based on specific criteria and risks established each year. This inspection includes engagement reports, financial statements, and supporting documentation for selected audit areas.
- Communicate to relevant personnel any deficiencies noted during monitoring processes along with recommendations for appropriate action.

“ Audit quality is a responsibility we take seriously at Crowe. We understand the importance of credible financial reporting for stakeholders and the capital markets.

– Jim Dolinar, Managing Partner,
National Office



The national office is also responsible for responding to questions from engagement teams on consultative matters related to auditing, accounting policies and complex transactions, as well as providing support in managing and communicating independence and ethics directives of

“ We support audit effectiveness and timely resolution by encouraging consultations with the national office to address complex transactions and technical matters.

– Jim Dolinar, Managing Partner, National Office

the firm. This dedicated team consists of highly specialized professionals, including senior-level professionals with U.S. Securities and Exchange Commission (SEC) and PCAOB experience.

The Crowe national office routinely publishes updates and guidance on observations from audit inspections and monitoring, changes to auditing and accounting standards and practices, and important emerging issues. Topics of critical importance, such as auditor objectivity, professional skepticism, and management bias, are incorporated into all levels of communications to promote multifaceted learning and consistent application.

Ratio of national office partners and managing directors to audit partners and managing directors

FY17	1 to 8	FY18	1 to 9	FY19	1 to 8
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► Our national office works closely with audit leadership.

Critical Audit Matters

This year, public company auditors have begun the important required communication of including critical audit matters (CAMs) in 2019 auditor's reports. This is an important responsibility to stakeholders as it provides a window into those matters communicated or required to be communicated to the audit committee and that relate to those accounts or disclosures that are material to the financial statements and involve especially challenging, subjective, or complex auditor judgment.

Disclosure of critical audit matters applies to audits for fiscal years ending on or after June 30, 2019, for large accelerated filers; and for fiscal years ending on or after Dec. 15, 2020, for all other companies, as applicable.

Complaints and allegations

Crowe takes seriously any complaints or allegations related to work being performed or deficiencies in our quality control. We have a process for reporting any concerns involving ethics and independence, conflicts of interest, professional standards noncompliance, or other matters to firm leadership. Anyone who reports a concern in good faith is protected from reprisals or retaliation.

Audit leadership reviews

Each Crowe audit partner, managing director, and senior manager is reviewed annually to evaluate whether he or she is continuing to uphold high standards of audit quality. An evaluation that culminates at the end of each fiscal year, the review informs the performance management process and the personalized development plan for each leader. These development plans help our people continue to grow through assignment of engagements, formal development, and coaching.



Involvement in our profession

With a focus on maintaining audit quality, Crowe professionals are involved with the standard-setters and professional associations, including the American Institute of Certified Public Accountants (AICPA) and the Center for Audit Quality (CAQ), through serving on committees and task forces. We contribute our knowledge and consider how the measures of audit quality put forth by these groups can be used in the firm's continuous audit quality improvement processes.

“ Crowe has long participated in and continues to have leadership roles in serving our profession at the national level.

– Sydney Garmong, Partner, National Office



Involvement in our profession

Crowe has long participated in and continues to have leadership roles in national professional associations and regulatory organizations.

- **Center for Audit Quality**

The CAQ was created in January 2007 to foster public confidence in the audit process by serving investors, public company auditors, and the markets. Crowe has been a member since the CAQ's creation and has a seat on the governing board, which consists of the leaders of many annually inspected accounting firms, a representative from the AICPA, and members from outside the profession. The CAQ provides a means for these accounting firms to collaborate on auditing and other industry issues in order to achieve increased audit quality.

Crowe also supports the CAQ's mission by serving on its standing committees, including the CAQ Advisory Committee, the Professional Practice Executive Committee (PPEC), the SEC Regulations Committee, and the Research Advisory Board (RAB). In addition, we serve on a variety of CAQ task forces relating to enhancing public company auditing. Areas of focus for these task forces include anti-fraud, the role of the auditor, audit quality indicators, critical audit matters, judgment resources, talent initiative, and the auditor's reporting model.

- **PCAOB Standing Advisory Group**

The PCAOB's Standing Advisory Group (SAG) advises the PCAOB on the development of auditing and related professional practice standards. The SAG includes auditors, investors, preparers, audit committee members, academics, and other stakeholders. Two Crowe partners have served on the PCAOB's SAG.

- **AICPA Professional Ethics Executive Committee**

The AICPA's Professional Ethics Executive Committee (PEEC) is a committee focused on the interpretation and enforcement of the AICPA Code of Professional Conduct, as well as the communication, monitoring, and revision of interpretations and rulings. A Crowe partner serves on the AICPA's PEEC and a Crowe partner has served as the chair.

- **AICPA Governmental Audit Quality Center**

Crowe is a member of the AICPA's Governmental Audit Quality Center, which is a firm-based, voluntary membership group designed to help certified public accountants meet the challenges of performing quality single audits in the complex area of governmental auditing. The center's primary purpose is to promote the importance of quality governmental audits and the value of such audits to purchasers of governmental audit services. In addition, the center offers resources to enhance the quality of a firm's governmental audits. A Crowe partner currently serves on the Governmental Audit Quality Executive Committee and two Crowe partners have served on the AICPA's State and Local Governments Expert Panel. An audit manager also currently serves as a fellow with the Governmental Accounting Standards Board..

- **AICPA Employee Benefit Plan Audit Quality Center**

Crowe is a member of the AICPA's Employee Benefit Plan Audit Quality Center, a voluntary membership group for firms that perform or are interested in performing *Employee Retirement Income Security Act* (ERISA) employee benefit plan audits. This center was established to promote the quality of employee benefit plan audits. A Crowe partner currently serves on the Employee Benefit Plan Audit Quality Center Executive Committee and a Crowe partner has served on the AICPA's Employee Benefit Plan Expert Panel.

Quality audit processes

At Crowe, we're committed to constantly assessing and enhancing the quality of audits we conduct. From start to finish of an audit engagement, we work to develop new ways to make practices and processes more effective.

Audit process effectiveness

Designing a quality audit process starts with understanding the company's businesses, trends in the industry, and the issues the company faces. Our process for planning an audit, assessing risk, setting scopes, and designing procedures is highly systematized and responds to the risks and issues of each entity.

Process and procedures

Established firm policies and procedures help to provide assurance that audit, review, compilation, and attestation engagements are conducted consistently and in accordance with professional standards, regulatory and legal requirements, and our own standards of quality. The firm has policies and procedures covering planning, performing, supervising, reviewing, documenting, and communicating throughout the audit.

Engagement-related policies and procedures include:

- Each engagement is planned and performed in accordance with applicable professional standards.
- Proprietary audit methodology, guidance and systems are updated regularly to reflect changes in professional standards.
- Appropriate supervision and review procedures are employed and documented.
- Engagement quality control reviews are applied to appropriate engagements.
- We implement and maintain practices and electronic systems designed to protect the confidentiality and security of client data in our possession.

Our proprietary engagement documentation and management system is designed to maintain the confidentiality of client information and protect the integrity of data. The system allows engagement team members to securely share information without regard to geographic location and is designed to comply with professional record retention requirements.

The importance of data security and privacy

Our firm makes significant and ongoing investments in systems and resources focused on the protection of our client and employee data. We employ a variety of security professionals and technologies as part of our comprehensive security program built on the ISO 27000 series of standards. Crowe has resources focused on security and privacy functions such as information security management, security architecture, security administration, penetration/vulnerability testing, and security awareness and training. We understand our responsibilities regarding client confidentiality, as well as the dynamic nature of security threats and regulations, so our systems and processes are regularly reviewed, updated, and tested to help protect the security and confidentiality of client records and information.



Acceptance and continuance of engagements

At Crowe, rigorous policies and procedures are in place to evaluate the acceptance and continuance of clients and engagements. This allows us to assess our ability to provide quality attestation services.

- We consider the reputation and integrity of the entity's directors, officers, principal shareholders, owners, and/or affiliates.
- We also look at the nature of the entity's operations and related business practices and the client's behavior toward internal control and interpretation of accounting standards.
- Internally, we assess our independence and potential conflicts of interest along with the competency and capabilities of firm personnel, including industry and/or regulatory expertise in relation to the need for specialized knowledge to deliver services.
- We also evaluate timing and other constraints that would affect our ability to comply with professional standards or perform a quality audit.

Consultation policies and procedures

Crowe has instituted formal policies for consultation, including a listing of matters that require formal consultation with our national office. We also provide reference libraries that engagement personnel can access to research assurance matters. These libraries include commercial subscription services, proprietary knowledge databases, and other reference materials.

Engagement team management

Our human resources policies and procedures are established to provide reasonable assurance that the firm has sufficient personnel at each experience level with the necessary capabilities, competence, and commitment. We focus on recruiting and retaining auditors who can perform engagements and issue reports in accordance with professional standards as well as regulatory and legal requirements.

These policies and procedures help us build and develop experienced teams that are committed to audit quality.

Professional development

A career with Crowe is an ongoing learning experience, and continuous enhancement of our professionals' skills helps us to enhance audit quality. Through a combination of formal development plans, coaching and mentoring, point-of-need knowledge banks, and on-the-job experience, we strive to provide our people with the technical skills and knowledge they need while building their capabilities as professionals, including managing and leading others.



Crowe University, the firm's learning portal, helps our people pursue learning experiences that create opportunities to build deep specialization and leadership skills. Our professionals can take advantage of online and in person learning courses, webinars, and other resources.

Leverage ratio of supervisory hours

	FY17	FY18	FY19
Partners and managing directors to senior managers and managers	1 to 3	1 to 4	1 to 4
Senior managers and managers to senior staff and staff	1 to 3	1 to 3	1 to 3

► Low ratios equate to more one-on-one supervision and development.

Licensing

The firm's compliance services department maintains full-time personnel to manage licensing and related continuing professional education (CPE) requirements. Crowe tracks CPA license jurisdictions, license numbers, and expiration dates, and advises staff members on renewals. Crowe professionals who are licensed to practice public accounting have passed the U.S. Uniform CPA Examination and met applicable experience and other certification requirements.

55

Average training hours completed per audit and national office professional*

* Based on 2018 data

► **The firm is committed to ongoing professional development to help continually improve our audit services.**

Ethics and independence

At Crowe, our success as an independent public accounting firm is dependent on our commitment to ethics in all that we do. Our policies and procedures are the foundation for conducting audits with independence, integrity and objectivity.

Crowe policies require that the firm and its partners, principals, management, and engagement team personnel must not have prohibited financial interests in, or prohibited relationships with, organizations

we audit and their affiliates. With respect to matters of independence, the national office establishes and monitors the policies, practices, and controls in place that document compliance with these requirements. This includes documentation of quality control systems, professional development courses, an internal intranet site, and an independence tracking system.

To maintain the utmost integrity, the following are included in the firm's independence processes:

- Ethics and independence training is required at or near each professional staff member's date of initial employment and annually thereafter.
- Independence-related matters are included in standard audit engagement documentation tools.
- A confidential client list is available to all personnel to identify potential independence issues.
- A restricted-entity list is available to personnel, and each professional individual is required to access that list periodically to report any financial interests with an entity listed therein or to ascertain issues in providing a contemplated nonattest service.
- Monitoring rotation of audit personnel is performed when required.
- A consultation process exists for ethics and independence matters.

Our innovation

Innovation is in our DNA

Our firm's success is built on quality, deep specialization, and innovation. Nourishing a culture of innovation allows us to constantly advance our processes and tools to support exceptional service delivery. It also contributes to our ability to attract and retain some of the best and brightest minds in our profession. Crowe delivers the deep industry expertise and functional specialization combined with the ability to drive continuous improvement through technology and innovation.

At Crowe, innovation centers around the client experience, enhancing audit quality and building upon the foundation of our profession – integrity, objectivity, and professional skepticism. It is part of who we are and drives us to reach beyond the status quo.

Insight into what matters

We recognize effective use of data can provide valuable and deeper insight into entities. At Crowe, we are constantly innovating and understand that as new data analysis technologies such as artificial intelligence and machine learning evolve, so will the financial statement audit and the value it provides. We also use and evaluate emerging technologies to benefit the entities we serve and our people.

Of course, innovation is about more than simply using technology. It is a continued investment in people, process, and technology. We invest in new, emerging technologies and analyze them to transform the way we do audits and drive audit quality.

Audit transformation

Modern advancements in cognitive learning, advanced data analytics, continuous auditing, and machine learning capabilities are greatly enhancing audit quality and the processes and methodologies that support the audit.

Our audit professionals understand this and continually work to assess, design, and test emerging technologies that can be incorporated into our audit approach. We have developed proprietary technology that integrates audit methodology and best practices with our firm's industry and functional expertise. Additionally, we take the time to continuously evaluate and optimize our core processes.

Crowe Insight®

Crowe Insight is the center of our audit innovation. This advanced platform focuses on audit quality through all phases of our audit approach, including planning, risk assessment, setting scopes, and designing procedures in a manner that is highly systematized and scalable. It also provides us with the flexibility to integrate modern advancements on a real-time basis to adapt to the ever-changing technology environment.

Crowe Insight sets the stage for:

Methodology

- Focuses on the underlying transaction data that's most important to financial reporting
- Identifies errors, outliers, and areas of risk earlier so they can be addressed sooner

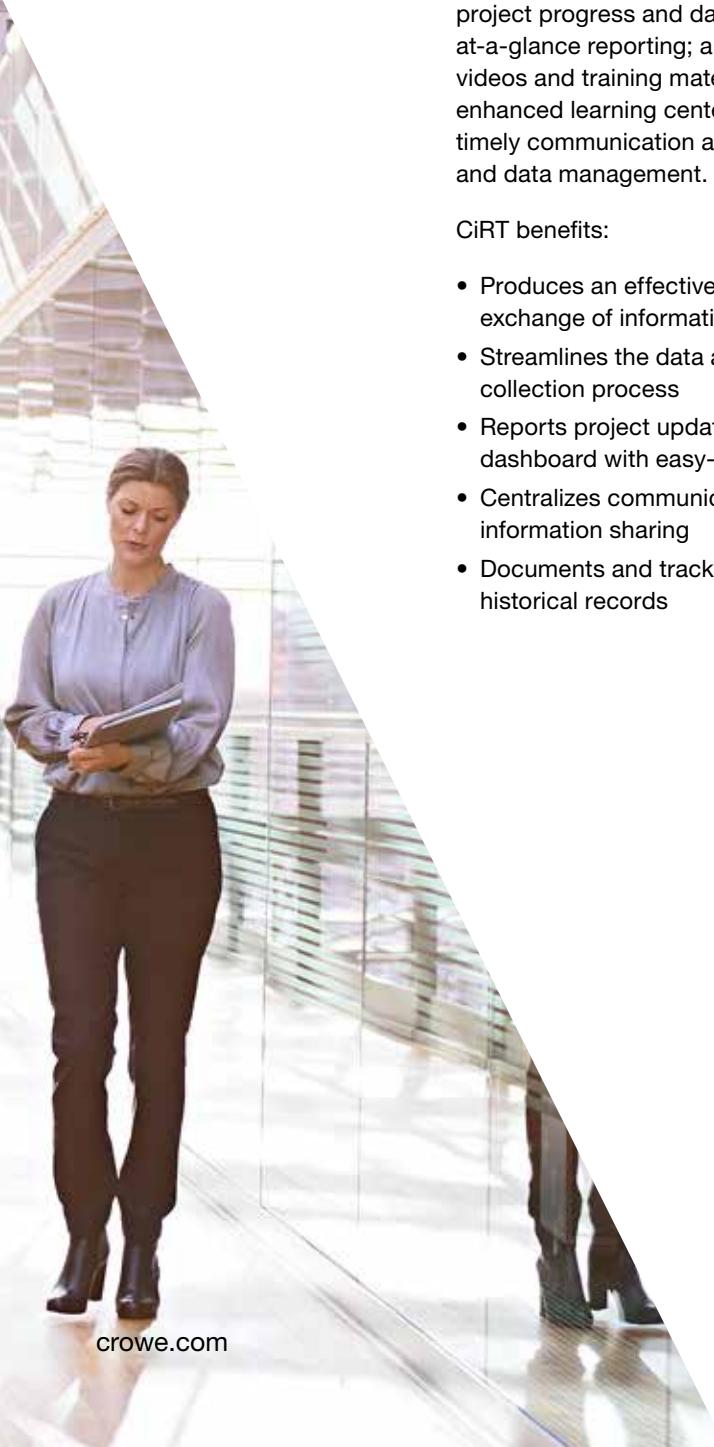
Workflow

- Produces an effective workflow and exchange of information
- Streamlines and enhances the data and document collection process
- Minimizes redundancy and omissions
- Allows greater flexibility of data intake to help minimize disruption of client operations

Communication

- Enhances the audit process through enhanced, centralized communication and information sharing
- Reduces confusion about work-paper requests by creating a smooth exchange and tracking of information between an organization and its Crowe auditors





CiRT® solution

With this secure collaboration technology, auditors and clients can communicate, manage workflow and collect data through an advanced, centralized platform. Individuals can safely access and analyze consolidated data; track project activity with a user-friendly dashboard; quickly view project progress and data insights with at-a-glance reporting; and access how-to videos and training materials through the enhanced learning center. This enables timely communication and effective, project and data management.

CiRT benefits:

- Produces an effective workflow and exchange of information
- Streamlines the data and document collection process
- Reports project updates through a main dashboard with easy-to-use navigation
- Centralizes communication and information sharing
- Documents and tracks requests and historical records

Data analytics

In order to properly assess an organization's financial reporting and the risk of material misstatements, auditors now have the ability to obtain and examine large amounts of data. By incorporating sophisticated data analytics and data visualization tools into our audit approach, our auditors can assess this data faster and identify areas of risk more effectively. Data-centric audits support audit quality by uncovering patterns and variances faster. Our auditors can then focus their time on assessing where risk is present and testing the systems in place to control it. Crowe is currently piloting these tools on certain audit engagements.

Anomaly detection

By using machine learning to assist the auditor in identifying unusual patterns or outliers, anomaly detection has the potential to enhance audit quality in substantial ways. Crowe is currently testing anomaly detection technologies to evaluate how they can help our auditors more quickly identify areas of potentially higher risk.

Continuous audit

Data-centric auditing, including use of data analytics and anomaly detection, enables auditing more frequently than the traditional interim and year-end testing dates. Auditors are able to identify and test outlier transactions and perform other testing throughout the year. This enhances audit quality, as well as the overall audit process. Crowe is actively working to create and implement a continuous audit model.

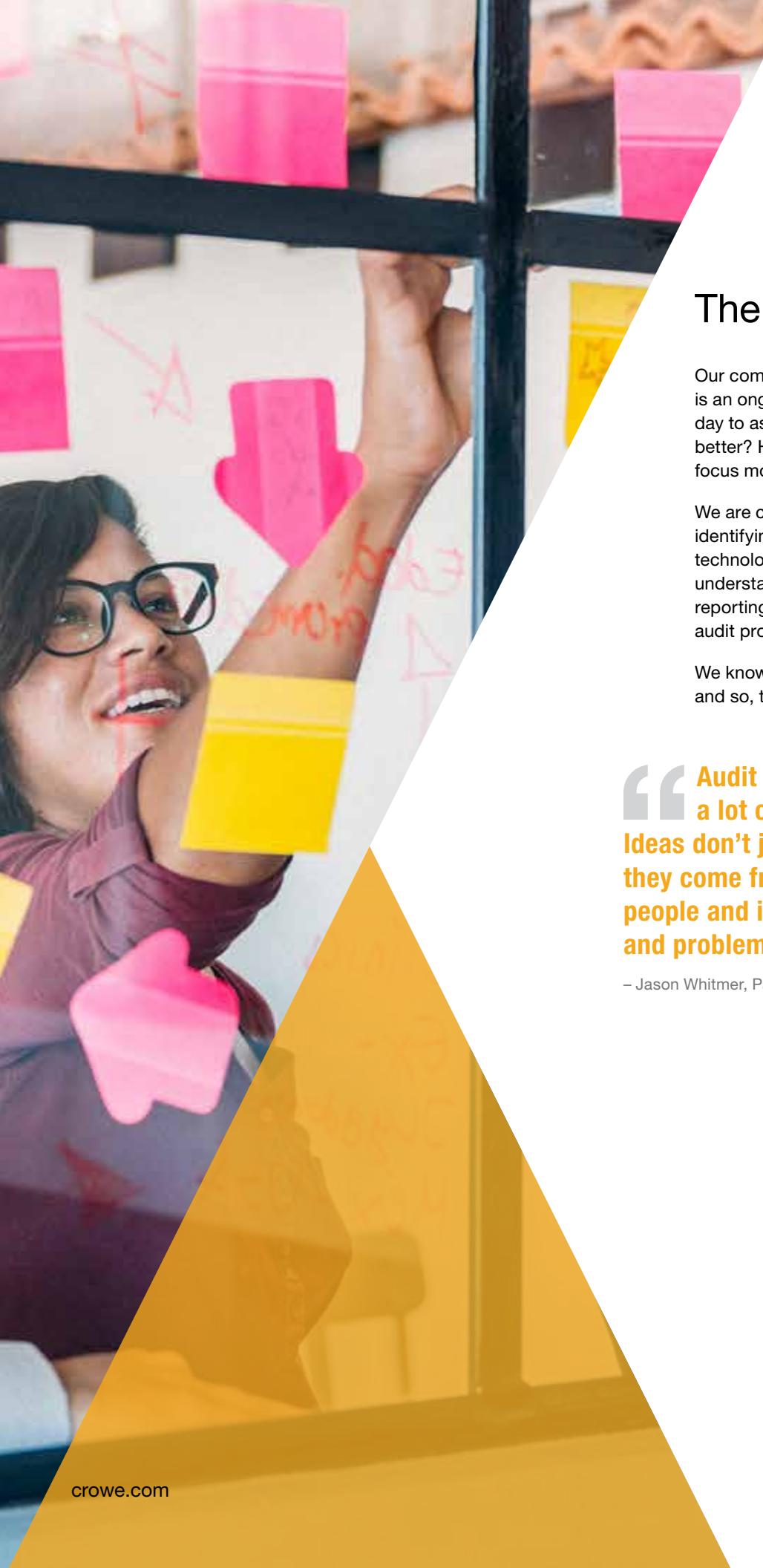
Crowe Account Confirmation

This innovative technology uses robotic process automation and secure, encrypted data transfer to streamline communication, improve information security, and modernize the account confirmation process.

Traditionally, account confirmation has been a paper-based, time-consuming process administered primarily via the mail. Developed by Crowe auditors, Crowe Account Confirmation breaks that tradition allowing users to solicit customer responses either by paper or by electronic portal. This helps expedite the account confirmation process with the effective and safe exchange of sensitive client data, and supports an environmentally friendly, paperless approach. It also reduces the risk of data errors associated with manual entry methods and minimizes disruption to our clients' business, helping us to provide a quality audit and an exceptional client experience.

Crowe Intelligent Document Analyzer

We are developing an advanced solution that leverages machine learning to read complex contracts and incorporating this technology into our audit approach with the goal of further strengthening audit quality, as well as the client experience.



The audit of the future

Our commitment to innovation and audit quality is an ongoing process that challenges us every day to ask ourselves: How can we do it even better? How can we go deeper, do it faster, and focus more on what matters?

We are committed and passionate about identifying new ways to incorporate emerging technology into our audit approach. We understand our role in preserving financial reporting excellence and seek to advance the audit profession.

We know that innovation is an ongoing process and so, too, is our pursuit of it.

“ Audit innovation is a journey of a lot of people coming together. Ideas don’t just come from one person, they come from talking amongst many people and identifying opportunities and problems that need to be solved.

– Jason Whitmer, Partner, Audit Services

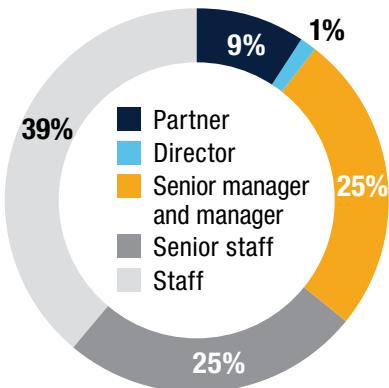
Our people

Professionals who deliver audit quality

“ What drives audit quality at Crowe? Our people. That's why we're dedicated to finding, hiring, and nurturing the talented people who are going to keep enhancing Crowe audit quality.

– Brenda Torres, Partner, Audit Quality and Operations

At Crowe, we have a talented group of people who are committed to providing effective audits. Our professionals work together across functional areas to provide industry specialization as well as functional knowledge and technical skills. By bringing together teams with knowhow and integrity, we work to consistently enhance the quality of the work done by the audit services group.



1,261 audit professionals



Attracting and developing talent at Crowe

Performing quality audits requires auditors with the necessary integrity, professional skills, and experience. We understand the importance of not only recruiting, but also developing, the talent that will drive the continuous improvement of our audit services.

Diversity and inclusion

Crowe promotes and fosters an inclusive work environment where respect, trust, and integrity are valued and all people

are free to reach their full potential. We recognize this goal can only be achieved through collaboratively leveraging the diversity and

perspectives of our people, our clients, and our communities. Accordingly, diversity and inclusion are among the firm's top priorities, integrated into firmwide programs, policies, processes, systems, and day-to-day initiatives.

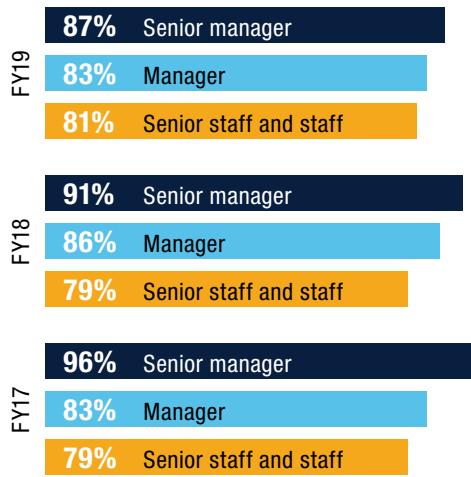
— Brenda Torres, Partner, Audit Quality and Operations

“Diversity builds stronger audit teams, which enable more robust, quality audits.

Future leadership

At Crowe, we believe in identifying and developing strong leaders. Through our leadership development programs and individualized development plans, leadership program participants and those identified as potential future successors to various organizational roles are mentored and challenged to achieve their career goals. Our upstream feedback process serves as a valuable tool by which our leaders, and those who manage others, gain perspective on coaching and developing stronger employees.

Average retention of audit and national office professionals



► Retaining qualified professionals helps us to uphold audit quality.

Assembling engagement teams

Beyond functional knowledge and technical skills, our audit professionals understand the industries in which we conduct audits, helping us provide audit quality. Direct senior-level involvement helps drive audit quality.

Audit leverage ratio

	FY17	FY18	FY19
Partners and managing directors to other audit personnel	1 to 7	1 to 8	1 to 8
Partners, managing directors, and managers to senior staff and staff	1 to 2	1 to 2	1 to 2

Centralized audit services team

To enhance quality and drive standardization among our audits, Crowe uses a centralized audit team. Often aided by innovative Crowe technology, members of this team handle objective assurance tasks, including data extraction and analysis, financial reporting proofing, and mathematical accuracy confirmation. This team works across audit teams, helping to improve consistency in our audit engagements.

Use of industry specialists

Crowe teams across our firm drive service delivery within key industries. Our specialization also includes functional and technology proficiencies in areas such as IT assurance, valuation, tax, and regulatory compliance. This combined expertise facilitates our delivery of objective, independent, quality audit services, and helps us to bring a deeper insight and specialization to our work.

“ We wouldn’t be where we are today without our people. Our experienced professionals provide deep industry and functional expertise to deliver quality, independent, objective audit services.

– Mark Baer, Managing Partner, Audit Services



Best places to work

Throughout the United States, Crowe has been recognized as a great place to work. Accreditations include the FORTUNE 2019 100 Best Companies to Work For^{®4} list, Glassdoor 2019 Best Places to Work, as well as other media outlets and human resource organizations.



Our integrity

Crowe values

Starting with our core purpose of “Building Value with Values,” our values code brings together the guiding principles that all partners, principals, and employees of the firm, regardless of title or position, are expected to use in their interactions with colleagues, with clients, and in the communities and profession in which we work. This core purpose and our core values – care, share, invest, and grow – guide us in exercising professional skepticism, objectivity, and being free of conflicts of interest. They guide our people in acting with the utmost integrity and professionalism in each interaction and provide a solid foundation for enhancing audit quality.

“It’s simple: We build value with values and work hard to do the right thing. Period.

– Mark Baer, Managing Partner, Audit Services

Our values at work

We know that audit integrity is key in establishing confidence in our capital markets. Our experienced auditors perform crucial analyses, drawing on technical expertise and deep industry knowledge to deliver audits. We perform audits with due professional care and diligence while adhering to our profession’s high ethical standards.

Integrity from the inside out

At Crowe, audit quality starts from within. It is embedded in our quality control system and our commitment to independence, objectivity, and integrity. We independently monitor and measure our adherence to regulatory and professional standards from the PCAOB, the SEC, the AICPA, and the International Auditing and Assurance Standards Board (IAASB).

Internal inspection

We begin with high standards and a robust internal inspection process governed by our national office. This annual internal inspection includes a review of selected quality control elements, including independence, engagement acceptance and continuance, personnel matters, and CPE compliance. Internal inspection also includes intensive review of engagements across our audit practice.

Results of the internal inspection process help us maintain audit quality, while also helping us to consistently refine and enhance our audit tools and guidance.

Number of audit engagements internally inspected.⁵

2016	2017	2018
43	47	47

► Internal inspections help us confirm we are adhering to professional standards and are on the right track.

Material misstatements can affect the integrity of financial reporting and undermine investor and stakeholder confidence.

0 Number of reissuance restatements for issuer audit clients between 2016-2018

► Audits of SEC registrants filing on Form 10-K and audits of employee benefit plan issuers filing on Form 11-K

Crowe Global quality assurance review

Crowe is a member of Crowe Global, an international network of accounting firms. Crowe Global conducts a quality assurance review (QAR) process led by the international accounting and audit director. Crowe LLP receives a review of its audit services via the Crowe Global QAR process at least once every three years. No significant matters arose during the most recent QAR of Crowe LLP performed by Crowe Global.

Subject to external inspection

PCAOB inspection

Crowe LLP is inspected annually by the PCAOB, which inspects registered public accounting firms to assess compliance with the *Sarbanes-Oxley Act of 2002* (SOX), the standards and rules of the PCAOB, and the rules of the SEC.

As required by SOX, the PCAOB prepares a written report on each inspection and makes portions of the reports available to the public. The first part includes any comments on audit deficiencies that the PCAOB inspection team considered to be of particular significance in the context of the specific engagement and the current environment.

“ Our inspection processes are a critical component to ensuring continuous improvement in audit quality.

– Mark Baer, Managing Partner, Audit Services

The most recent Crowe LLP PCAOB inspection report, on our 2017 audits dated July 26, 2018, can be found [on the PCAOB website](#).⁶

Number of PCAOB-inspected audits included in Part 1

	2015	2016	2017
Audits included in Part 1	3	5	3
Total audits inspected	14	15	16
Percentage Part 1 comments*	21%	33%	19%

* Issuers with Part 1 deficiencies as a percentage of total issuers inspected.



Crowe takes all PCAOB observations seriously as constructive feedback and believes the PCAOB's comments point to areas where we can improve audit processes and procedures. We have adopted a systemic quality improvement process designed to identify the root causes for issues identified during PCAOB inspections and to find ways to address those issues. Crowe also applies this process to potential deficiencies identified through other quality monitoring such as internal inspection, helping to support continuous audit improvement.

Peer review

Audit firms are subject to a peer review of their accounting and auditing practices for nonissuer clients. Firms that are registered with and inspected by the PCAOB, including Crowe, are required to have their peer review administered by the National Peer Review Committee (NPRC).⁷

Our firm's most recent peer review was performed in 2016. Crowe LLP received the highest rating, a "pass" rating⁸. Our next peer review is currently in process and the results of that review will be issued later this year.

Peer reviews include assessments of specific audit engagements as well as quality control processes to identify any potential deficiencies. The peer review firm performs procedures that provide them with a reasonable basis for expressing an opinion on whether the reviewed firm's system of quality control for its accounting and auditing practice has been designed appropriately and whether the firm is complying with that system.



Crowe structure and governance

Corporate structure

Crowe LLP is a limited liability partnership established under the laws of the state of Indiana. All interests in the firm are held by its partners⁹ and principals, all of whom are individuals active in the firm. The firm is capitalized by contributions by the partners and principals; there were 330 partners as of April 1, 2019. The accounting records of Crowe LLP are prepared on the accrual basis and in a manner that management uses to operate the business. For the fiscal year ending March 31, 2019, Crowe had total revenues of \$951.9 million. Crowe LLP is registered with the PCAOB and is licensed to practice accounting across the country.

The firm is affiliated with Crowe Chizek LLP, which is a limited liability partnership established under the laws of the state of Indiana. Crowe Chizek LLP performs professional services in the state of Arkansas; professional services in all other states are provided by Crowe LLP. All interests in Crowe Chizek LLP are held by the partners of the firm, in the same proportion as Crowe LLP. When used in

this report, "Crowe" and "firm" include both Crowe LLP and Crowe Chizek LLP unless otherwise noted. Both Crowe LLP and Crowe Chizek LLP are registered with the PCAOB and together are licensed to practice public accounting in each of the 50 states and in territories where appropriate.

Crowe Cayman Ltd. is a wholly owned subsidiary of the firm.



Crowe Global

Crowe is an independent member of Crowe Global. Crowe Global includes more than 200 independent accounting and advisory firms in more than 130 countries. The member firms work with respective governments, regulatory bodies, and industry groups to help shape the future of the profession worldwide. This diverse knowledge of business, local laws, and customs provides our clients access to global expertise.

Governance structure

CEO

The CEO is responsible for directing the ongoing management of the firm. The CEO appoints people and committees to assist with firm management and recommends initiatives for strategy and policies. The CEO is elected by the board of directors for a four-year term that can be renewed once for two years with election by the board of directors. Election to a third term requires approval by the partnership. The firm's current CEO, Jim Powers, is a CPA.

Board of directors

Members of the board of directors, which is the Crowe governing body, partners or principals of the firm who serve staggered three-year terms that can be renewed once. The board of directors consists of seven elected members and the firm's CEO, who is a nonvoting member. Presently, all members of the board of directors are partners or principals.

Members as of June 1, 2019:

- Dawnella Johnson, CPA (chair)
- Ray Calvey, CPA
- Michael Giammalvo, CPA
- John Kurkowski, CPA
- Simon Riley
- Michele Sullivan, CPA
- Alex Wodka, CPA

Nonvoting member:

- Jim Powers, CPA, CEO

Management committee

The CEO appoints the management committee, which assists the CEO with discharging the responsibilities of managing the operations of the firm and its components. As of April 1, 2019, 67% of the members of the management committee are CPAs.

Members of the management committee as of April 1, 2019:

- Jim Powers, CPA, CEO (chair)
- Mark Baer, CPA, Managing Partner, Audit Services
- Derek Bang, CPA, Chief Strategy and Innovation Officer
- Fred Bauters, CPA, Chief Risk Officer
- Josh Cole, Managing Principal, Consulting
- Gary Fox, CPA, Managing Partner, Tax Services
- Kevin Hovorka, CPA, Managing Partner, Advisory Services
- Ann Lathrop, CPA, Chief Marketing Officer
- Joe Santucci, Chief Operating Officer
- Steve Strammello, CPA, Global Services Consulting Leader
- Mark Strawmyer, Managing Principal, Applied Technology
- Julie Wood, Chief People Officer



Partner compensation

Rooted in sharing common values and culture, the Crowe partner compensation system reflects a structure that promotes the highest ethical behavior and compliance with professional standards. The system features a unique income allocation method, including a concept of sharing equally in the growth of both firm income and value. This concept supports individual integrity and many of the other aspects of the firm's quality control system, thereby encouraging personal integrity and objectivity rather than the desire for personal reward.

Crowe has a partner evaluation system that reflects the firm's overall structure and size, partner compensation, and core values. Our partner evaluation process uses a broad, holistic approach to determine the value that each partner delivers to the firm. A key element in the evaluation of audit partner performance is consideration of quality, which is incorporated into a proprietary audit quality evaluation system that uses a variety of feedback mechanisms. This process increases the accountability of each audit partner for quality audits and assists the firm in maintaining audit quality.

Each partner contributes capital, and net income is primarily allocated based on the amount of capital held by each partner. Determination of net income to be allocated to an individual is based on the results of the firm as a whole and does not depend directly on the performance of a partner's line of business. Ownership and compensation allocations are not based on short-term metrics. Our methodology allows for individual adjustments during the annual allocation of income. The results of the audit partner evaluation process are used during the annual process to consider adjustments to individual partner compensation.

The firm's partner evaluation system and compensation methodology do not provide individual partner incentives that could be detrimental to audit quality and the use of professional skepticism. This methodology does not directly compensate individual partners for:

- Sales of nonattest services to audit clients
- Sales of new audit services
- The value of accounts serviced, so partners are not penalized when actions taken in the public interest result in loss of firm revenue and income

¹ Unless otherwise noted, statistics shown within the report are for the fiscal year beginning April 1, 2018 and ending March 31, 2019. Numbers and percentages have been rounded to the nearest whole number.

² 2018 inspection work has been completed but we are waiting for report and 2019 inspection is in process.

³ "2018 Annually Inspected Firms," Public Company Accounting Oversight Board, <https://pcaobus.org/Inspections/Pages/InspectedFirms.aspx>, June 1, 2019.

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⁵ Includes both issuer and nonissuer

⁶ Crowe Chizek LLP is subject to triennial inspection by the PCAOB. The 2018 PCAOB Inspection Report dated July 26, 2018, is the most recent report issued for Crowe Chizek LLP and can also be found on the PCAOB website

⁷ Peer review is required on a triennial basis, and Crowe has had a peer review every three years since 1980.

⁸ The possible ratings are "pass," "pass with deficiency" (or deficiencies), or "fail." Peer review requirements mandate that the results of the review be made available in a public file. To view the most recent peer review reports on Crowe LLP and Crowe Chizek LLP, dated Aug. 23, 2016, see https://peerreview.aicpa.org/public_file_search.html and search for Crowe.

⁹ A partner is a certified public accountant (CPA) within a U.S. jurisdiction. A principal may hold another designation but is not a CPA. We refer to partners and principals collectively as "partners" in this report because their rights and privileges as owners of the firm are the same other than as required by law or regulation. Only CPAs may sign audit opinions for an audited organization.

crowe.com

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