

**THURSDAY, FEBRUARY 21, 2019
AUDIT AND COMPLIANCE COMMITTEE MEETING**

John W. Zeiger
Timothy P. Smucker
Brent R. Porteus
Hiroyuki Fujita
Lewis Von Thaer
Janice M. Bonsu
James D. Klingbeil
Amy Chronis
Craig S. Morford
Michael J. Gasser (*ex officio*)

Location: Longaberger Alumni House
Sanders Grand Lounge

Time: 10:00-11:30am

ITEMS FOR DISCUSSION

1. *Time and Change Strategic Plan Update - Mr. Zeiger, Mr. Culley* 10:00-10:15am
2. *External Audit Update - Ms. Dewire* 10:15-10:20am
3. *Compliance and Integrity Program Report - Mr. Culley, Mr. Garrity-Rokous* 10:20-10:40am
4. *Office of Institutional Equity Report - Dr. Schmiesing, Ms. Schimmer* 10:40-10:55am

Written Reports (Background Only) – Public

a. Audit and Compliance Committee Scorecard

Executive Session

10:55-11:30am

OHIO STATE'S STRATEGIC PLAN

TIME AND CHANGE

Enable, Empower and Inspire

To make the next bold leap in Ohio State's land-grant history of excellence and impact, we aspire to be a leading national flagship public research university.

AUDIT AND COMPLIANCE

Overseeing and monitoring the university's financial reporting process, the system of internal control, audit process, and compliance with ethical, legal and regulatory requirements

Impact of the Strategic Plan

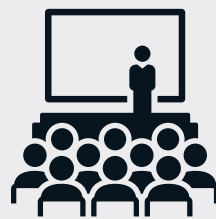
Through the Enterprise Project, the university is **transforming business processes** and implementing modern technology.

The university is positioned as a **national thought leader in research integrity**, hosting the **first ever** and nationally recognized **Research Integrity Summit** with attendees from 69 universities, government agencies and other professional organizations.

The university is fostering **greater accountability and rigor in research** through mandatory **Responsible Conduct of Research training** for all researchers; 15,123 individuals have taken the training over the past year.

Ohio State has implemented a **centralized report-and-response office for responding to sexual- and gender-based harassment, violence and other forms of discrimination** for our entire community as part of the university's continuing efforts to build a best-in-class model Title IX program.

New educational requirements to help prevent sexual misconduct



were introduced across our community, with broad support from the faculty, staff and student leadership groups. **More than 36,000 faculty,**

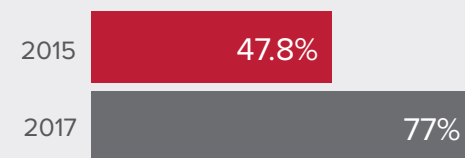
students and staff have completed the training.

Internal audits have examined key business processes and **identified inefficiencies that have led to meaningful cost savings** for units across the institution.

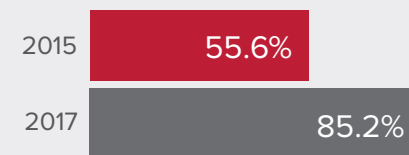


Outcomes

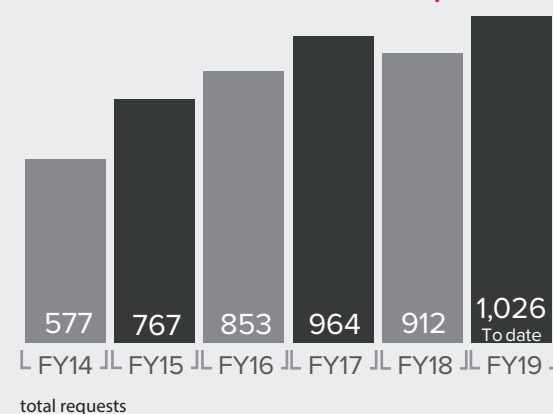
Percent of students knowledgeable about where to make a report of sexual assault or misconduct at Ohio State



Percent of students knowledgeable about where to get help at Ohio State if they are a victim of sexual assault or misconduct



Number of Public Records Requests



Highlights

Global One Health Initiative

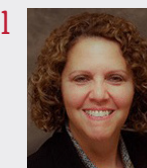
The university's newest affiliated entity facilitates efforts to establish and expand systems, policies and practices for prevention, detection and response activities associated with emerging and endemic zoonotic disease threats in Ethiopia as part of a broader coordinated multidisciplinary health initiative connecting Ohio State to countries across the globe.



Wondwossen A. Gebreyes, DVM, PhD
Executive Director

Quick Profile: Susan Garfinkel

Susan Garfinkel, PhD joined Ohio State in December 2017 and serves as a key leader in the university's Research Integrity efforts. She is responsible for developing, implementing and leading programs and policies to ensure the university is compliant with federal, state and private sponsor requirements as well as university policies to support and promote ethical research practices. She previously served as director of the Division of Investigative Oversight (DIO) at the U.S. Department of Health and Human Services Office of Research Integrity.



Future Actions

The Ohio State has established an **Office of Institutional Equity** to centralize the university's response efforts to sexual and gender-based harassment and violence. A national search for a leader of that office is underway.

The Ohio State is launching an **initiative to energize its commitment to university values**

and reinforce its ethical culture through structured and integrated education and communication efforts that will advance the university's mission.



Following the its inaugural Research Integrity Summit, Ohio State was asked to **join an international working group for the Committee of Publication Ethics** and is leading conversation about how integrity in research leads to reliable and verifiable scientific outcomes.

TIME AND CHANGE

Enable, Empower and Inspire

THE OHIO STATE UNIVERSITY STRATEGIC GOALS

Ohio State is building upon our recognition as a leading flagship public research university. The university's strategic plan, "Time and Change: Enable, Empower and Inspire," has five areas of focus.

- I Teaching and Learning**
Ohio State will be an exemplar of the best teaching, demonstrating leadership by adopting innovative, at-scale approaches to teaching and learning to improve student outcomes.
- II Access, Affordability and Excellence**
Ohio State will further our position as a leading public university offering an excellent, affordable education and promoting economic diversity.
- III Research and Creative Expression**
Ohio State will enhance our position among the top national and international public universities in research and creative expression, both across the institution and in targeted fields — driving significant advances for critical societal challenges.
- IV Academic Health Care**
The Ohio State University Wexner Medical Center will continue our ascent as a leading academic medical center, pioneering breakthrough healthcare solutions and improving people's lives.
- V Operational Excellence and Resource Stewardship**
Ohio State will be an exemplar of best practices in resource stewardship, operational effectiveness, and efficiency and innovation.

OHIO STATE'S STRATEGIC PLAN

TIME AND CHANGE

Enable, Empower and Inspire

AUDIT AND COMPLIANCE

2018-19 Update



THE OHIO STATE UNIVERSITY



Date: January 28, 2019
To: The Ohio State University Audit & Compliance Committee
From: Christa Dewire, Audit Partner
Subject: External Audit Update

Purpose

To report to the Committee on the status of the external audit of the University's financial statements and other related deliverables.

Committee Action

No action needed.

Executive Summary

Our report to the Committee provides for a brief update as to the status of our fiscal 2018 external audit deliverables, as well as the timing of our fiscal 2019 audit planning procedures. We will share our detailed 2019 audit plan with the Committee during the May meeting.

The Appendix to our materials includes PwC's 2018 Audit Quality Report, which describes how our culture, values, people and processes come together to help us achieve our audit quality objectives.

The Ohio State University
External Audit Update for
the Audit and Compliance
Committee of the Board of
Trustees

February 21, 2019



External Audit Update (as of January 28, 2019)

Fiscal 2018 status of audit and attest deliverables:

- All fiscal 2018 audit and attest deliverables have been completed, submitted to and approved by the Auditor of State.
- Of note to the Committee, we issued an unqualified Report on Compliance with Requirements that could have a Direct and Material Effect on Each Major Program and on Internal Control over Compliance with the OMB Uniform Guidance.
 - There were no material instances of noncompliance nor were there any reportable findings identified.

Status of Planning for fiscal 2019 Audits:

- Our planning process will commence in the near-term and will include discussions with management for areas of improvement, as well as considerations regarding staffing, risk assessment/ scoping and accounting changes.
- PwC's Audit Plan for fiscal 2019 will be presented at the next Committee meeting.

Appendix:

- The following appendix has been included for the Committee's information reflective of past discussions and areas of interest. We would be happy to discuss in more detail at the Committee's request:
 - PwC's 2018 Audit Quality Report

PwC's 2018 Audit Quality Report

Our focus on
audit quality

2018

[Explore here >](#)



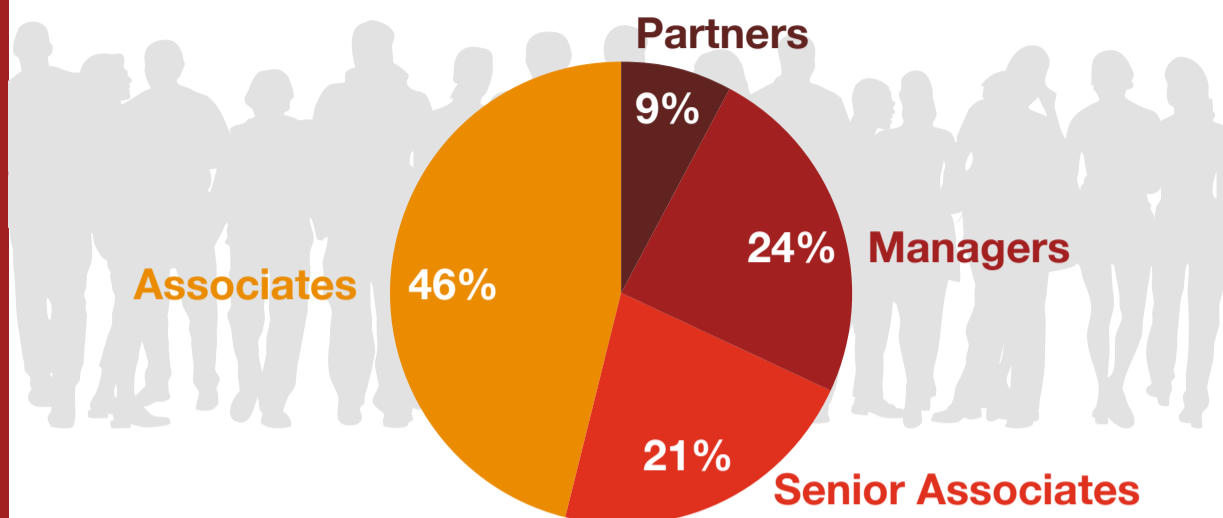
2018 year in review

Assurance professionals surveyed who report:

receiving consistent messaging on the importance of audit quality **98%**

understanding the firm's audit quality objectives **97%**

10,834 audit professionals



Average voluntary turnover rate

Managers

13.1%

Senior Associates

25.6%

Associates

18.7%

Total

19.0%

Average annual hours worked in excess of 40 hours per week

410

Partners

281

Managers

239

Senior Associates

214

Associates

2016 PCAOB inspection report

11 Audits included in Part 1
56 Audits inspected

Leverage ratio of audit team member hours

Partner to Manager **1 to 4.0**

Manager to Staff **1 to 3.9**

Partner to Staff **1 to 19.7**

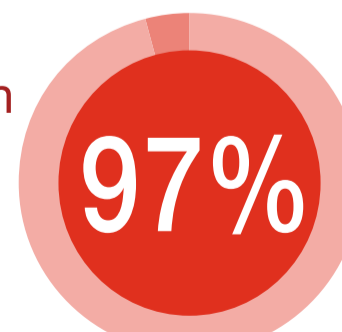
Number of issuer audit engagements subject to internal inspections

142



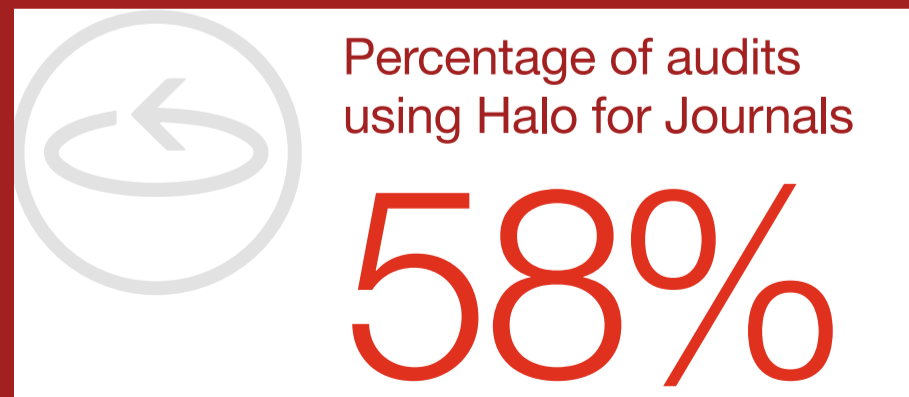
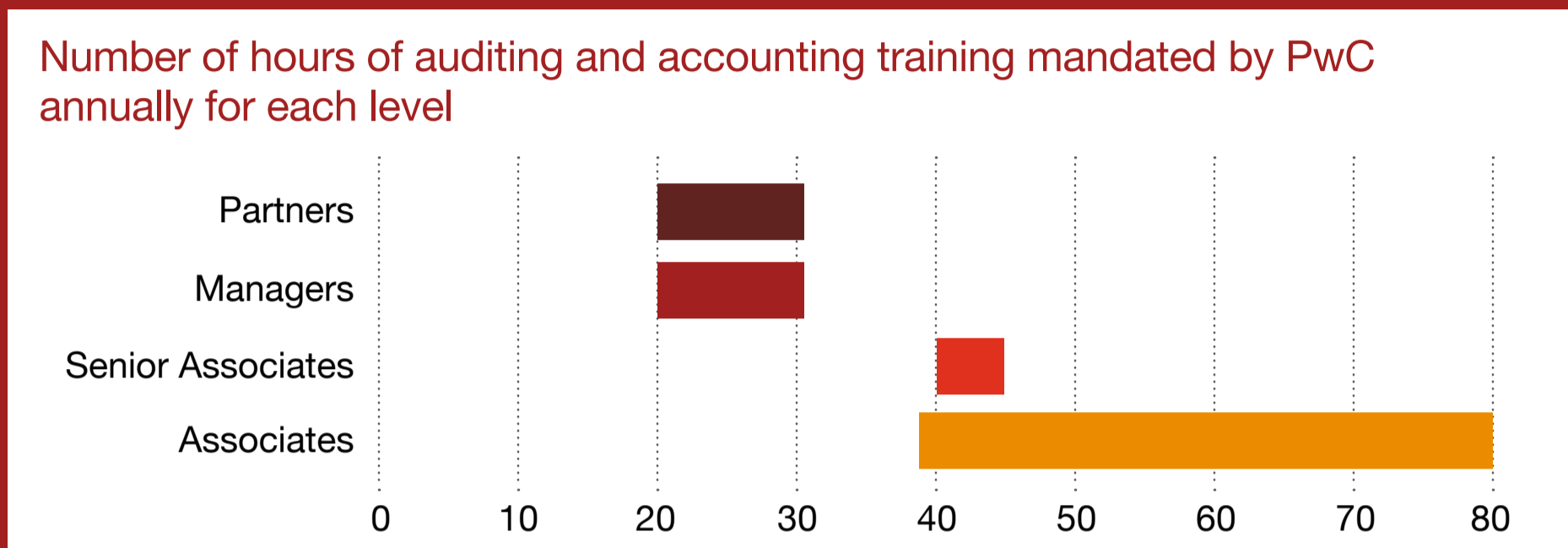
Compliance rate of issuer audit engagements selected for internal inspection

97%



Please see the full report for additional information regarding the data points shown. Electronic users may click on the data points to navigate to additional information.

2018 year in review



Please see the full report for additional information regarding the data points shown. Electronic users may click on the data points to navigate to additional information.

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Welcome to our 2018 Audit Quality Report

To our stakeholders

At PwC, our purpose statement is to *build trust in society and solve important problems*. To us, these are not just words. Rather, our purpose statement serves as our guiding principle to align the focus of our people and direct the decisions we make and actions we take. It is reflected in our governance structure and embraced throughout our firm (and the PwC Global Network). It drives the clients and work our firm accepts and the quality we deliver across our Advisory, Assurance, and Tax lines of service.

What does our purpose statement mean for our Assurance practice?

We believe that auditing is a noble profession, underpinned by the need for trust in the capital markets and in the quality of our audits. We approach our profession as “One Firm,” enabling us to use the resources and technologies from our non-audit disciplines to benefit audit quality. Our Advisory and Tax lines support our audits in areas such as information systems, cybersecurity threats, valuations, and complex tax matters. As “One Firm,” we bring our full capabilities and insights to our audits when and where they are needed and appropriate.

Our role in the financial reporting ecosystem

In the US, the capital markets and auditing profession benefit from a robust regulatory environment, which includes the SEC and the PCAOB, an independent accounting standard setter, and strong corporate governance. Strength across the entire ecosystem—including quality, independent audits—is necessary to provide a credible foundation for confidence in the financial reporting system and the capital markets. This is one of the reasons why we consistently make significant investments in

continuing to evolve and enhance our audits, as well as support continuous improvement of the broader financial reporting ecosystem. Examples of this include our outreach to the investment community and corporate director continuing education programs, as well as supporting both SEC and FASB fellowships.

Our people, our technology, & our tomorrow

To sustain quality audits, we need to attract and retain talented professionals. To attract top talent, we focus on recruiting, internships, and creating an inclusive environment. We develop our people through technical training, professional development, and encouraging behaviors that lead to greater well-being. We also continue to invest in tech-enabling our audit and increasing our people’s technology and data analytics skills.

Our ongoing commitment

While we are proud of the progress we have made, we recognize we must continue to identify opportunities for enhancement. In this 2018 edition of our Audit Quality Report, we provide insight into how we deliver on our audit quality objectives and summarize actions we have taken to address recent standard setting, regulatory developments, and emerging technologies. We also discuss how we utilize a continuous improvement cycle to identify attributes of quality audits to implement enhancements across our practice. For us, audit quality starts and ends with our purpose statement.

Thank you for engaging with us on these topics, and for your interest in our progress.



A handwritten signature in black ink that reads "Tim Ryan".

Tim Ryan
US Chairman and
Senior Partner



A handwritten signature in black ink that reads "Maria".

Maria Castañón Moats
US Assurance Leader

Our culture and values



Tone at the top

Our purpose is to build trust in society and solve important problems. We build trust by delivering on our commitment to quality. This means that performing quality audits is job #1 for our Assurance practice. Our focus on quality drives our actions with clients, colleagues, and other stakeholders and guides our decision-making.

We expect our partners¹ and staff to exhibit the core values underlying our purpose:



Key messages are communicated to our firm² by our Senior Partner and our leadership team and are reinforced by engagement partners. These communications focus on what we do well and actions we can take to make enhancements. We track whether our people believe that our leaders' messaging conveys the importance of quality to the success of our firm. Based on this tracking, we are confident our people understand our audit quality objectives.

Percentage of Assurance professionals surveyed who report:



At PwC, “audit quality” means that we consistently:



Our audit quality principles are achieved through our audit quality practices and mean that we:



Accountability

Partners receive a share of the firm's profits based on their level of responsibility, the firm's performance, and the partner's performance. Our audit partners are not evaluated or compensated for selling non-audit services to their audit clients. Partners are evaluated based on their contributions to people, quality, and profitable growth. Partner accomplishments are measured based on the partner's relative performance against established goals.

Non-partner professionals are assessed against the dimensions of the PwC Professional framework, discussed on page 10. They participate in a performance bonus plan based, in part, on the achievement of quality goals and objectives.

Leadership holds our professionals accountable for performing quality audits.

In cases that require it, partners and managers are required to implement a responsive action plan to address quality issues. Implementation of the plan is monitored by leaders.

Ethics, independence, and objectivity

Ethics

Ethical behavior is the foundation for building trust. We have a code of conduct and supporting policies that describe expected behaviors. We also provide multiple ways for our people to ask questions and obtain policy guidance or voice concerns about possible policy violations, including an anonymous ethics helpline.

Protecting client confidentiality and preserving necessary records are key components of our ethics policies. These policies are included as part of our new-hire training and reinforced during mandated annual independence, ethics, and compliance training and in a required annual compliance confirmation.

Independence and objectivity

As auditors, we are required to be independent from our audit clients. Independence, in fact and appearance, sets the foundation for us to exercise professional skepticism and make objective conclusions without being affected by influences that could compromise our professional judgment.

Our independence policy is based on the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants and is supplemented to comply with the requirements of US standard setters and regulators. We support our people in maintaining independence by providing systems and processes that:

- identify the entities requiring independence;
- enable assessments and documentation of approval for providing permissible non-audit services;
- facilitate the assessment and monitoring of joint business relationships;
- support consultation with our experts;
- evaluate, pre-approve, and monitor securities and other financial arrangements held by partners, managers, and others to whom independence rules apply;
- allow many brokerage firms to record security transactions on behalf of our people;
- assess and document our professionals' annual confirmation of compliance with our independence policies and other compliance topics; and
- send engagement independence confirmations and generate the documentation necessary to evidence the confirmation process.

A team of dedicated professionals (**15** partners and **239** staff);



maintains our independence policies, processes, and systems;

develops our annual independence training;

and serves as a resource for our people when questions arise.

In FY18, this team engaged in approximately **37,000** independence-related consultations.

We have disciplinary procedures in place to promote compliance with our independence policies. Independence policies require that we report independence rule exceptions to those charged with governance at our clients so that they can be addressed promptly.

Partner rotation

SEC rules require public company lead audit partners and quality review partners to rotate off engagements every five years. We also have rotation policies for auxiliary partners and partners on audit engagements not subject to the SEC rotation requirements. Partner rotation strikes a balance between bringing “fresh eyes” to the audit and maintaining a deep understanding of the client’s operations, in part, through continuity of other team members. Our practice leaders use systems and processes to manage current and successor partners’ portfolios, including understanding their skills and capacity to maintain consistent audit quality.

Considerations in undertaking an audit engagement

We have approval processes for the acceptance of new audit clients and annual continuance of existing audit clients. For the acceptance of new audit clients, our process requires approvals by risk management partners and market leadership. For existing client continuance assessments, the extent and level of approvals depend on the nature of the client and results of a required risk assessment.



“At PwC, the culture of quality and excellence is the bedrock of how we work every day.”

Tim Ryan, US Chairman and Senior Partner

Key to making these approval decisions is whether we have people with the right skills, experience, and capacity to perform a quality audit. We also consider if the audit fees are commensurate with the level of effort needed to perform a quality audit. We only accept and continue to perform audit engagements when we believe our audit procedures can satisfactorily address the risk of material financial statement misstatement. Our client acceptance and continuance procedures consider whether:

- 1** the engagement is allowable under professional and regulatory standards and is within our professional competence and capabilities;
- 2** key management, board members, and significant shareholders are people of integrity and good repute;
- 3** the entity’s operations are governed by acceptable standards of behavior;
- 4** there are any unresolved issues involving independence, conflicts of interest, or relationships with other entities that may have a bearing on whether, and on what conditions, we undertake an audit engagement; and
- 5** there are any unreasonable timing or resource constraints that would affect our ability to comply with applicable standards.

Multiple lines of service

Continuing to invest in and leverage resources and technology from our non-audit practices benefits audit quality. Our non-audit professionals' deep technical knowledge supports our audit teams in understanding and evaluating the risks that may affect our audit clients' financial statements—for example, the potential impact of cybersecurity threats; valuation processes related to the use of fair value in financial reporting; forensic investigations; complex income tax matters; and information technology innovations. Non-audit professionals also develop and use technologies that may have an application in our audits. These technologies are important to attracting and retaining top talent.

We are focused on maintaining audit quality, professional skepticism, objectivity, and transparency regarding non-audit services. Our independence protocols and monitoring processes are designed to address risks presented by having multiple lines of service. The majority of our non-audit revenue comes from clients with whom we have no auditing relationship. We only perform non-audit services for audit clients when, before any services are provided, it is determined that such services are appropriate in the circumstances, it is permitted by applicable independence rules and, if required, the audit committee agrees that such services will not impair our independence before any services are provided.

Percentage of audit hours provided by specialists

10.8%



Our people



The PwC Professional

Our people strategy is to be a world class developer of talent. We hire candidates who have diverse backgrounds and appropriate skills; have a questioning mindset and intellectual curiosity; and demonstrate courage and integrity.


Our reputation depends on our people. Our hiring standards include assessing academic records and conducting background checks. In FY18, we hired more than **2,100** entry-level audit professionals and **1,800** audit interns.


Number of audit professionals⁴ by level


	<i>FY18</i>	<i>FY17</i>	<i>FY16</i>
Partners	950	969	944
Managers	2,587	2,820	2,916
Senior Associates	2,309	2,666	2,635
Associates	4,988	5,525	5,488
Total	10,834	11,980	11,983

The decrease in our number of audit professionals in the US from FY17 to FY18 is driven by our planned reduction in hiring and higher voluntary turnover. The reduction in our US hiring is a result of our strategy to use offshore resources at Service Delivery Centers and Centers of Excellence, (see page 20 for further discussion). Voluntary turnover can fluctuate based on a variety of factors, including market demand for talent.

Our One Firm “Your Tomorrow” people strategy is how we are investing to create the PwC of the future; we are responding to the expectations of the market to deliver a different, more digital experience to our clients, and to develop our people to reach their potential in a world that isn’t slowing down. There are three elements to this strategy:

 **Be well, work well**—given the pace and complexity of change we are all experiencing, the firm is putting the power of its resources toward supporting our people’s journey to greater well-being.

 **Digital Fitness**—certain of our staff are enhancing their innovation and technology skills through our Digital Accelerator program and all our professionals have access to our digital upskilling curriculum available on an app, which creates a tailored learning plan based on their personal digital fitness score.

 **Skills for society**—a powerful way to develop our people while making a meaningful impact in our communities. It enables our people to use their skills in an impactful way through participation in Access Your Potential® or volunteering at nonprofit organizations (see page 12 for further discussion).



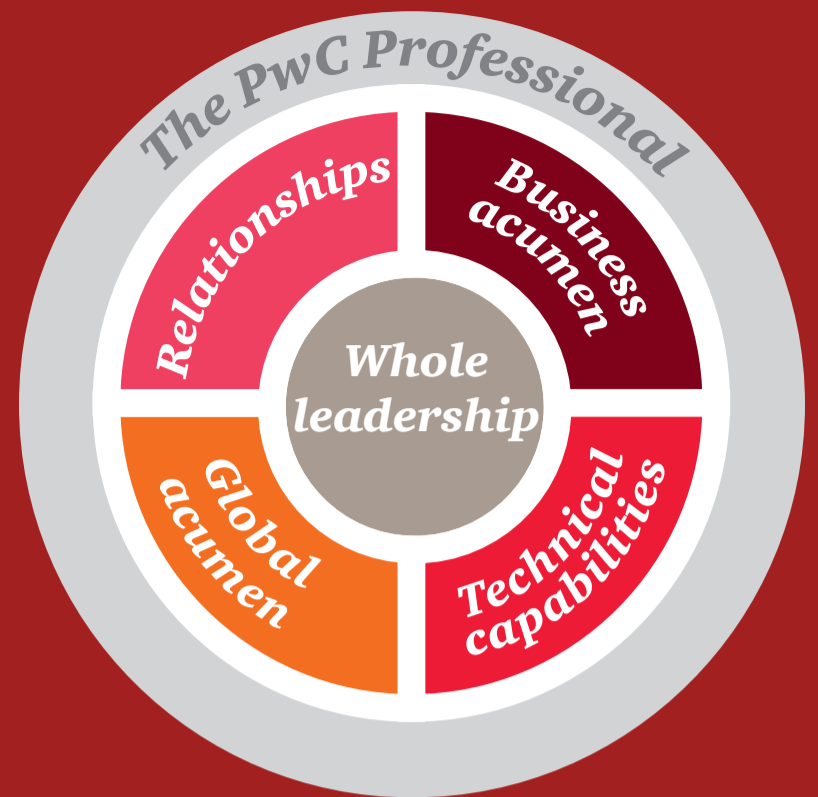
“We’re committed to creating and sustaining a great firm— one where we can attract, develop, and promote the best people.”

Maria Castañón Moats, US Assurance Leader



The PwC Professional is our global leadership development framework, which provides a single set of expectations across our lines of service, geographies, and roles. It provides transparency on the skills our staff need to stay relevant and deliver quality to our clients.

The framework includes assurance quality dimensions to guide our staff in building critical skills and behaviors related to delivering audit quality, such as professional skepticism, review and supervision, auditing skills, issues management, and technical knowledge.



Professional development

We are committed to putting the right people in the right place at the right time. One way we do this is by using TalentLink, our talent sourcing platform. This tool gives us visibility into our people's experiences and interests so that we can efficiently and appropriately staff client engagements.

Throughout our people's careers, they are presented with career development opportunities, classroom and on-demand learning, and on-the-job real time coaching/development. Our on-demand learning portfolio facilitates personalized learning with access to CPE and non-CPE educational materials, including webcasts, podcasts, articles, videos, and courses.

Becoming a CPA is an important part of our audit professionals' career progression and is a prerequisite for promotion to audit senior associate. In 2018, 12 of the 58 individuals recognized by the AICPA for achieving exceptional results on the CPA exam were from our firm, the highest percentage among all public accounting firms.



Becoming a CPA is an important part of our audit professionals' career progression and is a prerequisite for promotion to audit senior associate.

Retention

Turnover rates in the public accounting profession are generally high because as accounting standards and regulations change, accountants are in demand and the training and experience we provide make our staff highly sought after.

Our voluntary turnover rate fluctuates based on many factors, including the overall market demand for talent. Retaining our professionals is important to us. To that end, we are dedicated to listening to our people and enhancing their experience.

Providing our people with an ability to meet their professional and personal obligations is also an important component of our retention strategy. In addition to our formal flexibility

options (e.g., reduced schedules, remote working arrangements), we encourage teams to have informal discussions about what flexibility means for each team member, particularly during peak periods of the audit. This flexibility energizes and rewards our people, which can enhance our retention rates and in turn promote enhanced audit quality.

Our firm-wide effort, *Be well, work well*, empowers our people to manage their well-being through the four dimensions of energy: physical, emotional, mental, and spiritual. *Be well, work well* is more than hitting the gym and healthy eating. We encourage our people to prioritize their well-being and provide them with the tools that can help them do this.

Average annual voluntary turnover rate by staff level

	<i>FY18</i>	<i>FY17</i>	<i>FY16</i>
Managers	13.1%	9.1%	11.1%
Senior Associates	25.6%	19.0%	20.0%
Associates	18.7%	12.8%	14.8%
Total	19.0%	13.4%	15.2%

Average annual hours worked in excess of 40 hours per week by level

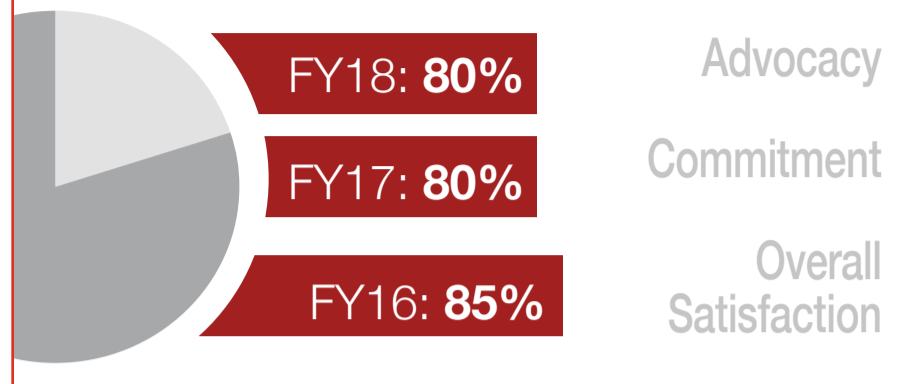
	<i>FY18</i>	<i>FY17</i>	<i>FY16</i>
Partners	410	404	418
Managers	281	273	301
Senior Associates	239	228	270
Associates	214	198	225

We encourage our partners and staff to participate in Access Your Potential®, our commitment to equipping young people from disadvantaged communities with the financial, technology, and career-selection skills they need to change the trajectory of their lives. This includes offering our partners and staff time to volunteer in support of causes that are important to them, such as teaching our financial literacy and technology skills curriculum to students in their community. These efforts positively impact local communities and support retention of our purpose-driven staff. For example, the turnover rate for our core Assurance staff who participate in corporate responsibility-related activities is seven percentage points lower than for those who do not participate.

We periodically measure the pride, advocacy, commitment, and overall satisfaction of our people. We call this measurement our Engagement Index.

Many internal and external factors have the potential to impact our Engagement Index. The compensation and benefits programs we offer compared to other employers and market demand for talent are two examples that impact the commitment and overall satisfaction of our people. Our Engagement Index serves as one tool we use to determine our people initiatives.

Engagement index (US Assurance):



Our diversity and inclusion strategy

We respect and value differences. We know that when people from different backgrounds and points of view work together, we create the most value—for our clients, our people, and society. Our core values of caring and working together guide us to recognize the contributions of each individual and develop a workplace with a range of people, perspectives, and ideas.

PwC is focused on diversity and sustaining an inclusive environment in which our people are comfortable bringing their whole selves to work and feel that they belong and are valued.



Our programs help our people succeed by focusing on three main areas:



Early success: Our Start internship provides high-performing minority college students an opportunity to learn about our firm and to participate in a client service shadowing experience, which prepares them for our client service internships. We also offer new hires programs like Vanguard—a year-long onboarding program designed to support the success of Black/African-American new hires.



Leadership development: We offer several leadership development programs. The Diamond program provides coaching to top-performing minority senior managers and directors. Accelerate is a leadership development program designed for Asian/Pacific Islander experienced associates. Our Breakthrough Leadership program coaches experienced high-performing women, and Select Senior works to develop our high-performing diverse senior associates.



Inclusion: We offer our people opportunities to raise their diversity awareness through a variety of programs, including:

Our **“Blind Spots”** program, which is required for all new hires and promotees and helps individuals gain awareness of unconscious biases and their potential consequences. This training is available at www.pwc.com/us/blindspots.

Inclusion Networks for Black/African-Americans, Asians/Pacific Islanders, Latinos/Hispanics, women, working parents, veterans, people with disabilities, and LGBT professionals.

Outsmarting Human Minds, which is another opportunity to learn about blind spots through a series of podcasts, videos, and other materials. The series was developed by Harvard University with a grant from PwC and is available at www.pwc.com/humanminds.

Our **Color Brave™** series of conversations about race has helped break down barriers, challenge conventional thinking, broaden our perspectives, and inspire the best in all of us.



“When you include a diversity of minds in the decision-making process, you inevitably have a better and stronger result.”

Tim Ryan, US Chairman and Senior Partner

As a result of our efforts to promote diversity and sustain an inclusive environment, women and minorities comprise 46% and 33% of our firm, respectively, and the diversity of our partners has gone from 17% women and 6% minorities in 2008 to 22% women and 14% minorities in 2018. Another testament of our progress is our 2018 new partner class with 43% women and minorities.

While we are proud of the progress we have made, there is still more we want to do to enhance our inclusive culture so that we can continue to attract talented people who have unique skills, experiences, and ambitions. For example, as a global champion of the United Nations HeForShe gender equality movement and a founding signatory of the CEO Action For Diversity & Inclusion,TM we have demonstrated our commitment to being a firm where everyone has an opportunity to reach their full potential.

More than 450 CEOs have signed the CEO Action for Diversity & InclusionTM corporate pledge, which includes committing to three initial goals:

- 1**
to create or continue to make our workplaces trusting places for dialogue about diversity and inclusion
- 2**
to offer or expand unconscious bias education
- 3**
to share best practices and practices that aren't working so others can learn from them

To learn more about PwC's diversity and inclusion strategy, as well as the awards and recognition we have received for our achievements in this area, please visit www.pwc.com/diversity.

Learning and development

The composition of our audit teams provides our less experienced professionals the opportunity to work with more seasoned professionals, which promotes meaningful on-the-job training. Judgment is honed by witnessing how seasoned auditors approach issue identification, management, and resolution.


Partners' average years of experience at PwC:


	FY18: 23
	FY17: 23
	FY16: 23


Leverage ratio of audit-related hours for audit team members

			FY18			FY17			FY16		
Partner	to	Manager	1	to	4.0	1	to	4.0	1	to	3.9
Manager	to	Staff	1	to	3.9	1	to	4.1	1	to	4.2
Partner	to	Staff	1	to	19.7	1	to	20.3	1	to	20.4

Learning that occurs through on-the-job supervision, review, and mentoring is supplemented through participation in classroom and on-demand training programs. Our National Assurance Learning Team is dedicated to developing course content and updating our training curriculum based on feedback obtained from our:

 internal inspections process;

 observations from the PCAOB and peer reviews; and

 surveys, focus groups, and post-course learning assessments.

Our National Assurance learning team collaborates closely with firm leadership so that training is responsive to changes in the Assurance practice. We require our audit professionals to attend training courses that integrate auditing and accounting concepts and we use simulation-based elements for a more effective learning experience. Our managers and partners also receive industry-specific training, including related to new accounting standards, when applicable. All mandated auditing and accounting training courses include a learning assessment, which requires the participant to earn a passing score to be granted credit for course completion. In addition, we offer our professionals non-technical training on topics such as project management, issues management, and business communications.

Number of hours of auditing and accounting training mandated by PwC annually for each level

	<i>FY18</i>	<i>FY17</i>	<i>FY16</i>
Partners	20 to 31	20 to 36	22 to 30
Managers	20 to 31	20 to 38	22 to 26
Senior Associates	40 to 45	39 to 45	48
Associates	38 to 80	41 to 80	40 to 80

Attendance at mandated training courses is a component of an individual's performance. Completion of mandated auditing, accounting, and new-hire and annual independence, ethics, and compliance trainings are included in this individual performance component. Failure to complete mandated training or to achieve the minimum number of auditing, accounting, and ethics training hours for licensure can impact an audit professional's performance evaluation and compensation.

Average training hours completed per audit professional:

74	82	99
FY18	FY17	FY16



The number of hours of auditing and accounting training mandated annually can increase or decrease from year to year based on a variety of factors, including the issuance of new accounting and auditing standards, the frequency and timing of leadership conferences, and the impact of our ongoing course redesign, which includes the use of digital tools to deliver training more efficiently.

Our approach

Audit methodology and processes

Performing audits in accordance with professional standards is an important way that we fulfill our purpose to build trust in society and solve important problems. Each year we issue audit reports regarding thousands of public and non-public companies. We conduct our audits following applicable auditing standards in order to obtain reasonable assurance regarding whether the financial statements are presented fairly, in all material respects.

Although reasonable assurance is a high level of assurance, it is not a guarantee. An audit involves examining the underlying audit evidence, including information and reports provided by the company, on a test basis. In some circumstances, we also rely on—and for many companies, test and opine on—a company’s internal control over financial reporting, which due to inherent limitations may or may not prevent or detect misstatements. We are proud of the important role that audit opinions play in the capital markets, and how they help us to fulfill our broader purpose as a firm.

We innovate our audit process by standardizing, simplifying, and automating our work to promote doing the right work at the right time. This supports consistency in the execution of our procedures, promotes adherence to professional auditing standards, and improves the experience for our clients through earlier identification and resolution of potential issues.



Foundational to our methodology is the assessment of risk. Our audit risk assessment begins in the planning phase of the audit and continues through the issuance of our report. After we gain an understanding of the client’s business processes and consider the impact of changing conditions, we identify and evaluate the risks within the processes and develop audit procedures responsive to the client’s circumstances. We reinforce the importance of appropriate planning and phasing of audit work by setting realistic audit planning deadlines. Further, the timely engagement of audit partners and managers during planning facilitates the appropriate consideration of audit risk and the planned response.

In the interest of continuous improvement, over the past year we have:

transformed our public and nonpublic audit policy and methodology guides to make them easier and more effective for engagement teams to use;

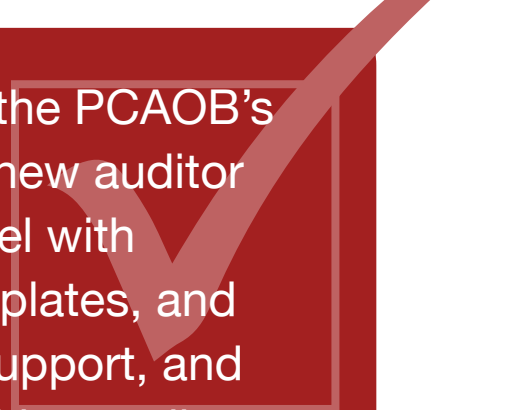
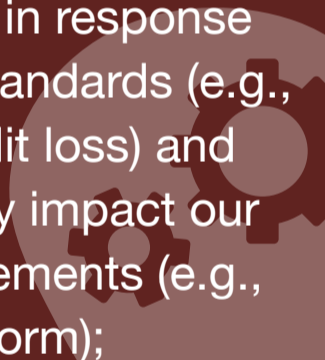


introduced customizable cloud-based disclosure checklists;




expanded our use of data auditing tools;

enhanced our methodology, training, and audit performance and documentation tools in response to new accounting standards (e.g., revenue, leases, credit loss) and other events that may impact our clients' financial statements (e.g., cybersecurity, tax reform);



responded to the PCAOB's adoption of a new auditor reporting model with guidance, templates, and consultation support, and are working with our clients to implement the new requirements related to Critical Audit Matters; and



increased leverage of our Service Delivery Centers and additional resource pools and introduced Centers of Excellence in certain audit areas to leverage our tech-enabled audit solutions.

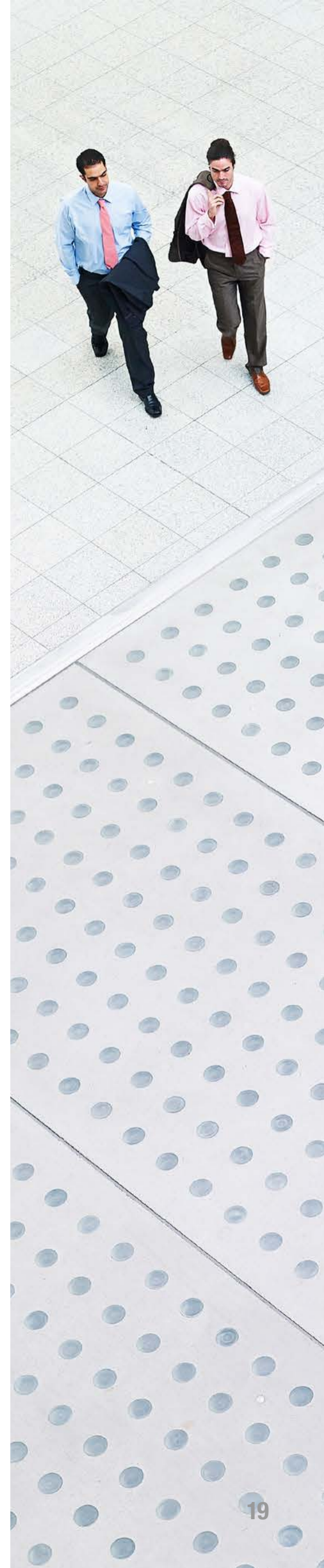
Audit committee communications

Audit committee oversight of auditors is another key element of audit quality. Through timely, meaningful exchanges, we obtain the audit committee's perspectives and fulfill our professional responsibilities to communicate certain items to them. Required communications include discussions about our independence, our role, and the roles of management and the audit committee, among others. For public company audits, our communications occur at least quarterly. Examples of other topics we may discuss include perspectives on:



These are just some of the topics we cover. We also encourage audit committees to ask us candid questions and engage in an open dialogue with us to help foster an environment of accountability.

We have also made enhancements to the content, templates, and technology our people use to report to audit committees. These updates drive consistency across engagement teams and are focused on highlighting meaningful insights, such as emerging risks and trending topics related to governance and the client's industry.



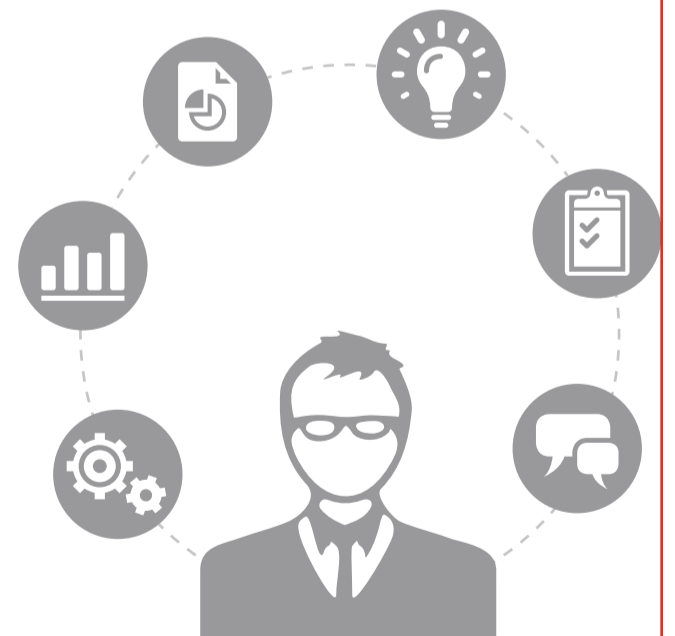
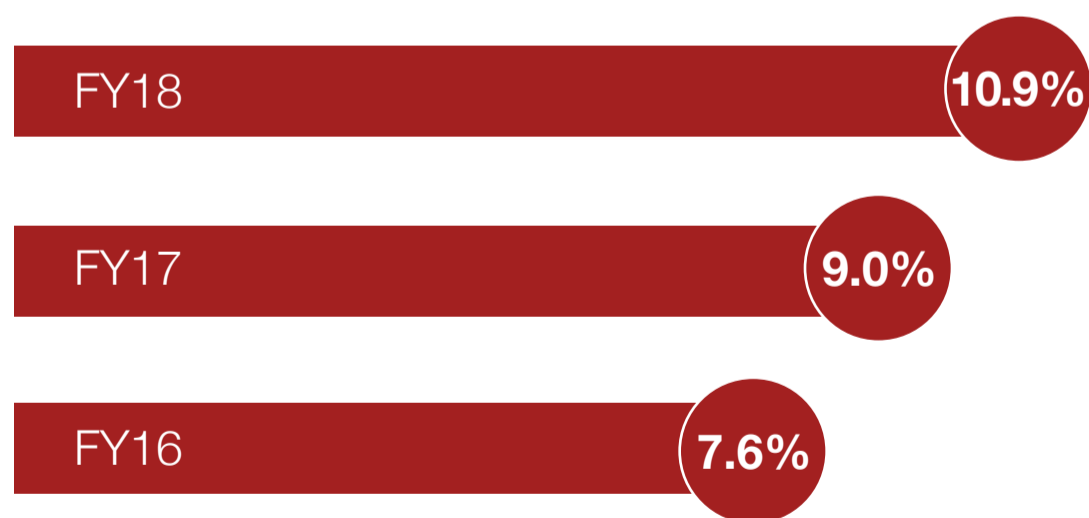
Resource management

We continue to enhance the quality and efficiency of our audits by leveraging our Service Delivery Centers (SDCs) to perform standardized audit and administrative procedures. Utilization of these centers allows engagement teams to focus on the more judgmental aspects of the audit, thereby enhancing audit quality and improving project management. SDC staff receive relevant training and are subject to independence policies. Supervision and reviews of SDC staff work are comparable to supervision and reviews of our practice staff work.

We're also looking at how we can continue to innovate the end-to-end audit process beyond the use of SDCs. Specifically, we're further

streamlining, standardizing, automating, and centralizing pieces of the audit in Centers of Excellence. Our goal: to continue to enhance quality through consistency and improve the experience of our clients and teams by tech-enabling the audit. This past year, we piloted these concepts on specific financial statement line items and saw the benefits of standardization and consistency in approach. Looking ahead, we plan to continue to expand the rollout of this initiative across the Assurance practice. This initiative includes the creation of dedicated tech applications that will maximize how we leverage emerging technology over time, such as robotic and intelligent process automation, natural language processing, optical character recognition, and machine learning.

Percentage of audit hours performed by Service Delivery Centers



Consultation process and use of specialists

As part of our collaborative culture, engagement teams have access to specialists from our multiple lines of service and the firm's quality support network. This network includes our National Office, Assurance Quality Management, and Chief Auditor Network.

Our engagement teams utilize firm specialists (e.g., valuation, tax, information technology) to support various accounting and auditing areas depending on the circumstances of the engagement.

Percentage of audit engagement hours provided by specialists

10.8%	11.5%	11.6%
FY18	FY17	FY16



National Office

Through presentations, client interactions, publications, podcasts, videos, and webcasts, the National Office also keeps our audit teams, clients, and other stakeholders informed of standard-setting activity and regulatory matters. Please see cfodirect.com for our publicly-available National Office content.

Ratio of partners serving in technical support roles to the number of audit partners



National Office

Our National Office is comprised of technical accounting, auditing, and financial reporting specialists. These specialists play a vital role in keeping our policies and guidance in these areas current. Our policies identify matters that require National Office consultation. Additionally, partners and staff can voluntarily consult on any matter and are encouraged to do so when engagement-specific facts and circumstances warrant a consultation. In the event an audit partner initially has a different viewpoint than our National Office, a resolution process provides guidance for elevating the discussion until agreement can be reached.

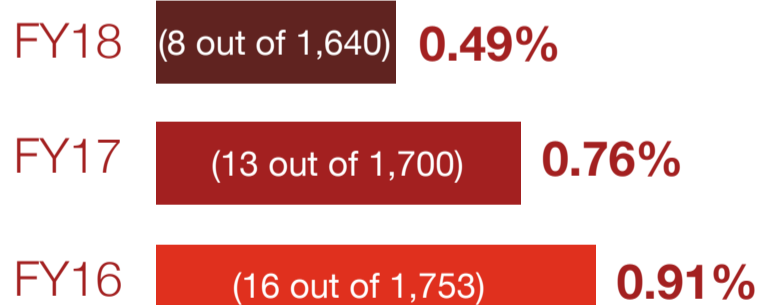
Our ratio of partners serving in technical support roles to the total number of audit partners fluctuates based on our periodic evaluation of our technical support resource needs and leverage model, which includes the use of managing directors, to ensure sufficient, high-quality technical resources are available for our audit teams. For example, the ratio may change based on the resources needed to prepare guidance, policies, and publications as a result of new accounting and auditing standards.

Assurance Quality Management

Our Assurance Quality Management network includes experienced audit partners who serve in national, regional, and local roles. Quality Management professionals are responsible for the design, development, and implementation of our assurance quality management policies.

Quality Management partners support audit teams in assessing risks (such as whether to undertake or continue an audit engagement) and applying the firm's quality management policies. Audit teams are required to consult with a Quality Management partner on specific issues (e.g., principal auditor considerations, going concern matters, and misstatement evaluations). In addition to required consultations, audit teams are encouraged to consult with Quality Management whenever they believe they could benefit from their insights.

Number of restatements of financial statements as a percentage of issuer⁵ audit clients



Chief Auditor Network

Our Chief Auditor Network comprises partners and professionals who help audit teams design effective and efficient audit approaches and reinforce key learning points from audit training and guidance. Our chief auditors contribute to market and industry group meetings focused on audit quality topics and serve as instructors for many of our audit-related training courses. Chief auditors also provide advice on auditing matters through review of certain aspects of selected audit engagements before those audits are completed (see page 27 for further discussion of pre-issuance reviews). Through these activities, the Chief Auditor Network is able to provide leaders with insights on overall audit quality trends.

Quality Review Partners

Quality Review Partners (QRPs) and QRP assistants are a component of our quality control system. Individuals serving in these roles must have the requisite technical knowledge, training, experience, and time to perform the role effectively. All QRPs and QRP assistants are required to take training before assuming their role.

QRPs and QRP assistants are involved in the most important aspects of the audit, including reviewing the audit plan, considering the firm's independence, discussing the significant risks of material misstatement in the financial statements and our responses to those risks, and reviewing certain accounting, auditing, and financial reporting and disclosure matters.

Global network

PwC is a member of PricewaterhouseCoopers International Limited (PwCIL), a UK private company limited by guarantee. Member firms of PwCIL form a network of separate legal entities providing professional services under the “PwC” brand.⁶ Members of the PwC Network share knowledge, skills, and resources. This membership facilitates PwC Network firms working together on a global scale to provide quality services to large multinational clients, while retaining the advantages of being local businesses knowledgeable about local laws, regulations, standards, and practices.

Quality across the network

Quality audits across the PwC Network are vital to the US firm’s brand. We continue to assist PwC Network member firms in enhancing their quality-focused infrastructure and processes, which includes providing materials for annual update trainings in certain territories on US accounting and auditing standards. Our US firm leadership also meets periodically with leaders from other member firms to share learnings and best practices on quality.

Each member firm is responsible for monitoring its own quality control system, including reviewing the quality of its management-level controls and the audit work it has performed. A PwC Network-led team inspects member firms’ reviews of their quality control systems. When areas needing improvement are identified in their reviews, the member firm prepares a remediation plan and the PwC Network monitors its implementation.

Each PwC Network member firm is responsible for completing inspections to assess whether engagements selected for review were performed in compliance with applicable professional standards and policies. The results of these inspections inform the actions taken by the member firm to continue to enhance audit quality. Individual member firms’ quality results are considered by US firm partners in planning their audits, where applicable. We continually refine how we use the work of non-US PwC Network firms so that all components of our audits meet US standards (when applicable) and satisfy our own quality expectations.



Our technology

The PwC Network is making significant investments in technology to provide member firm engagement teams with tools to support them throughout the audit. These tools help teams identify and address risks and issues earlier in the audit process, as well as improve project management and the phasing of our work. Some of the key tools are discussed below.

Aura

Aura, the PwC Network's global audit platform, is used by more than **100,000 auditors** worldwide across the Network, driving quality and consistency on a global basis. Aura enables sequential and intuitive audit plan development. It enables risk assessment through each phase of the audit, leveraging embedded industry-specific content that drives consistency in execution and assists teams in documenting and evaluating IT dependencies. The PwC Network continues to make incremental enhancements to Aura that further drive quality and standardization, support improved project management, and facilitate timely execution and review.

Connect

Connect is the PwC Network's collaborative workflow tool that allows fast, secure sharing of audit documents and deliverables with clients. PwC member firm staff and clients can easily review the status of information requests with this web-enabled tool. The Network is also introducing a new engagement team collaboration tool that provides for secure document exchange, enhanced status tracking, and issue management capabilities between group and component audit teams.

Count

Count is the PwC Network's global tool for performing and documenting inventory observations.

PwC's Confirmation System

PwC's Confirmation System is the PwC Network's web-based application that facilitates an automated and standardized process for requesting and receiving external confirmations.

Disclosure Checklist

We recently transformed our Disclosure Checklist. The new version of this tool is cloud based and further streamlines checklist preparation and review for financial statement disclosures.

Halo/data auditing

Halo, the PwC Network's award-winning data extraction, visualization, and auditing platform, is designed to enhance our risk assessment process and facilitate automated testing and data validation in a number of audit areas.

Halo for Journals helps audit teams identify journal entries to test as part of the procedures performed to address the risk of fraud.

Percentage of audit clients for which we utilized Halo for Journals

FY18: **58%** FY17: **59%** FY16: **37%**



Audit360 is a data auditing tool used for asset management clients. It extracts and processes data and facilitates automated testing of certain accounts and aspects of financial statement presentation through direct data feeds from the clients' service providers or through reports uploaded by engagement teams. Audit360 was used in FY18 for more than **4,500** funds across **265** of our clients.

Halo for Investments helps audit teams analyze investment portfolio data and price testing results.

Halo for Multilocation Audits Scoping is a new tool that helps audit teams visualize the impact of judgments made in the multilocation audit scoping process.

PwC Extract is a tool that standardizes the way engagement teams request, extract, and protect client data.

For more information on ways the firm is tech-enabling the audit, including videos about Aura, Connect, and Halo, see pwc.com.

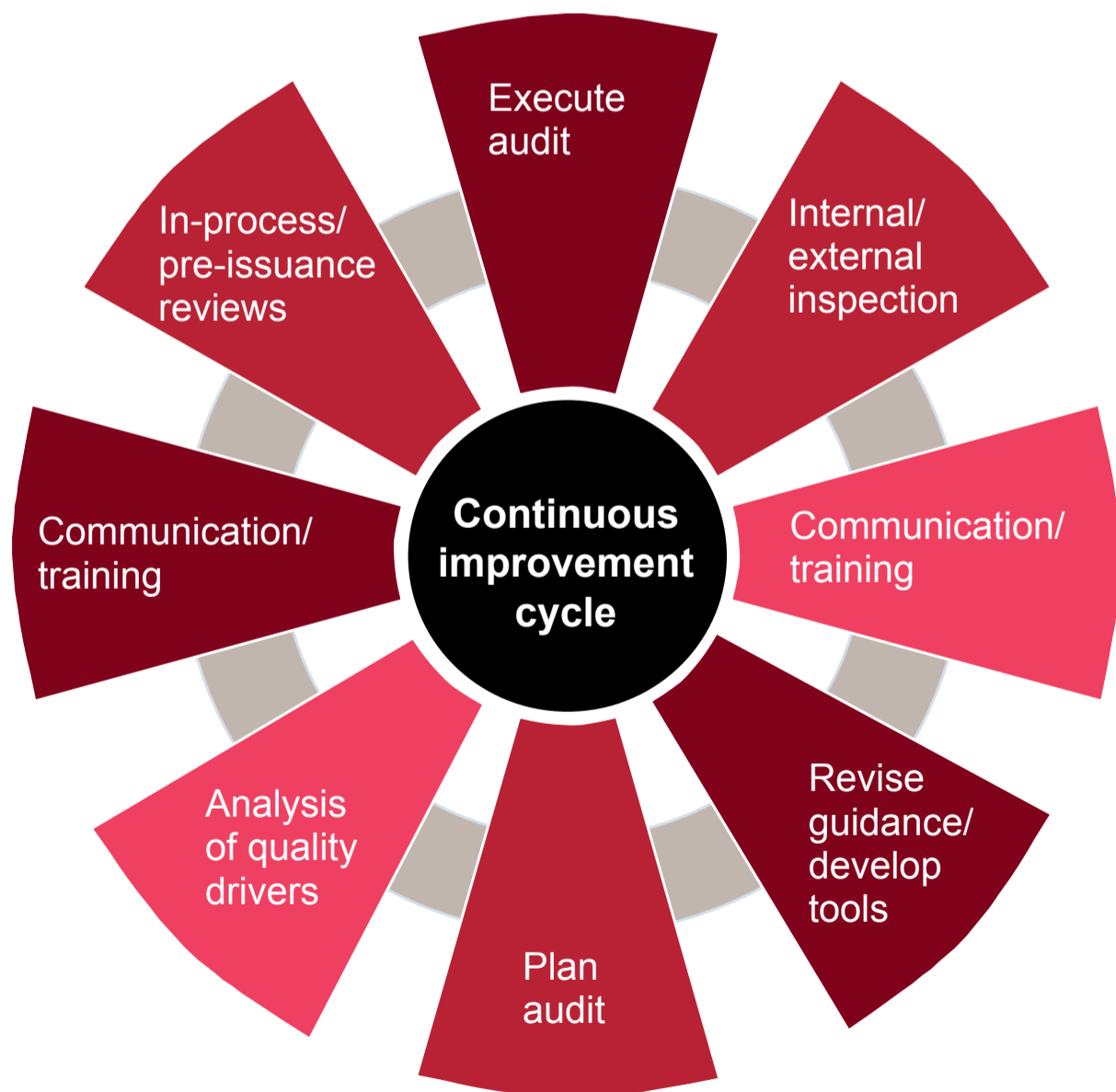
Looking to the future

We continue to make significant investments in our tools and technology. This includes continued investments in our existing tools as well as the creation of new platforms and applications that incorporate leading edge technologies such as machine learning and robotic process automation. More information is available at pwc.com.

Our monitoring

Continuous improvement cycle

One driver of quality is our ability to identify opportunities for enhancement and quickly respond. The graphic below illustrates our continuous improvement process. We use the results of pre-issuance reviews and internal and external inspections to identify opportunities to enhance quality.



Pre-issuance reviews

One way we monitor quality is to review audit work on certain audit engagements prior to the issuance of their respective audit report. Each year we reassess the scope and areas of focus of these reviews, taking into consideration recent inspection results and knowledge gained by our Chief Auditors in supporting engagement teams.

Our pre-issuance reviews provide engagement teams with timely feedback, which can be incorporated into their audit prior to the completion of fieldwork. These reviews primarily focus on the implementation of new standards and policies, audit methodology enhancements, and matters noted during inspections cycles.

In FY18, our Inspections Group and Chief Auditor Network combined performed over 100 pre-issuance reviews.

Internal inspections

Our internal inspections program assesses audit engagements' compliance with firm policies, procedures, and applicable professional and regulatory standards.

Under the firm's internal inspections program, audit engagement partners are generally selected for inspection at least once every four years. Overall, the engagement selection process results in a sample of audit engagements that is representative of our audit practice (e.g., sector, geography, size) and meets or exceeds the requirements set forth in the applicable quality control professional standards.

Number of issuer audit engagements subject to internal inspections

FY18: **142⁷**

FY17: **135⁸**

FY16: **144**



Our Inspections Group oversees all aspects of the internal inspections program, including its design and execution. The group monitors audit quality, drives consistency in our inspections process, and delivers insights into areas for continued focus. This group, along with support from Assurance personnel with relevant industry or technical expertise (e.g., tax, valuation, actuarial), executes the annual inspections. Approximately 800 partners and professional staff will participate as reviewers in the 2018 internal inspections of 2017 audit engagements.

The Inspections Group communicates inspections observations and results to the Assurance practice. Further, the Inspections Group works with other groups in the National Office, Learning and Development, and firm leadership to identify actions we could take to continue to enhance quality. For example, additional guidance or training, audit methodology modifications, or targeted messaging from leadership are ways we can sustain and improve audit quality.

Based on our 2017 inspection results, we continue to focus on specific aspects of:

- substantive and control testing over revenue;
- the evaluation of the design and operating effectiveness of controls;
- the auditing of estimates;
- the testing of journal entries; and
- complying with independence pre-approval and documentation processes and report issuance policies.

A detailed analysis of our 2018 inspections is currently in progress and is expected to be completed in September.

Compliance rate of issuer audit engagements selected for internal inspection

FY18:	FY17:	FY16:
97%⁹	96%	97%

The Inspections Group annually evaluates the firm's system of quality control over our audit practice. Our quality control system includes:



Our system of quality control is also subject to annual review by professionals from the PwC Network. Our most recent annual evaluation confirmed that our system of quality control over our audit practice is designed appropriately and functioning effectively.

External inspections

PCAOB inspections of our public company audit practice provide a data point for audit quality and represent an important check on our internal monitoring and assessment processes.

The PCAOB reviews a relatively small percentage of our issuer audit clients annually, using a largely risk-based approach. This risk-based approach is designed to target particularly complex audit areas, industries, and clients. There are inherent differences in the method used by the PCAOB to select audits for inspection compared to that used for our internal inspections.

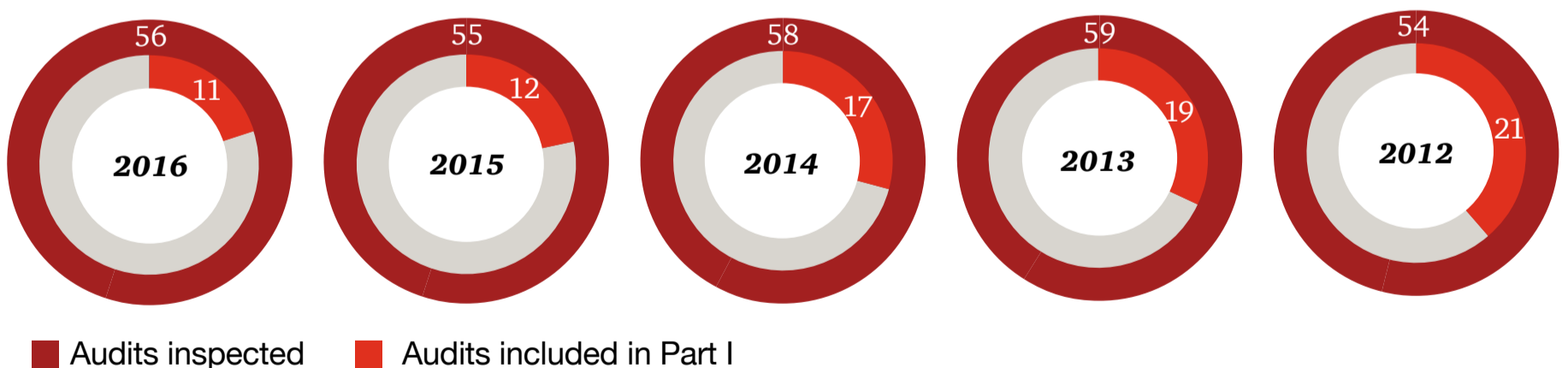
The most recent inspection report on our audit practice is dated December 19, 2017 (the “2016 Inspection Report”), and describes the results of the PCAOB’s 2016 inspection of 56 (or approximately 3%) of our 2015 year-end public company audits.

Part I of the PCAOB Report

Part I, which is the public portion of the PCAOB inspection report, contains an overview of the inspections procedures and observations on the engagements inspected. Partly in response to that report, we continue to focus on the following areas.

- Auditing internal control over financial reporting, specifically the design and operating effectiveness testing of controls involving management review of financial information or accounting analyses
- Sufficiency of evaluation and corroboration of management’s key assumptions, including information that may contradict those assumptions or related management judgments, and testing of key data inputs used in impairment assessments and business combination valuations.

Number of PCAOB-inspected audits included in Part I



Part II of the PCAOB Report

Part II of the inspection report reflects observations identified during the PCAOB's review of certain practices, policies, and processes related to our system of quality control, including observations developed from the engagement-specific findings reported in Part I. The Sarbanes-Oxley Act mandates that Part II not be made public if a firm addresses the quality control observations to the PCAOB's satisfaction within 12 months of the date of the inspection report. In July 2018, the PCAOB informed us that it is satisfied with how we addressed observations contained in Part II of our 2015 inspection report (which covered our 2014 year-end audits). The 12-month period for us to address the comments made in Part II of our 2016 Inspection Report expires on December 18, 2018.



“When I think about what our clients and our stakeholders expect of us, and what we expect of ourselves—it all begins with quality.”

Jorge Milo, National Quality Organization Leader

Analyses of quality drivers

We perform analyses of audits with and without deficiencies identified through internal and external inspections. A team of reviewers that is independent from the engagement team identifies and considers factors relevant to technical knowledge, supervision and review, professional skepticism, engagement resources, and training, among others. These potential causal factors are identified by evaluating engagement information, performing interviews, and reviewing audit working papers.

We compare and contrast the data for audits with and without deficiencies to identify whether certain factors appear to correlate to audit quality. Examples of this data include the hours incurred on the audit, whether key engagement team members are in the same geography as the client, the number of years that key engagement team members have been on the engagement, the number of other audits the engagement partners are involved in, whether the engagement was subject to a pre-issuance review, and the timing of when the audit work was planned and performed.

Our goal is to understand how quality audits may differ from those with deficiencies, and to use those observations to identify enhancements that may be useful to implement across the practice. We believe these analyses contribute to our quality controls.

Stakeholder engagement



The mission of our Governance Insights Center is to share perspectives with directors to help them execute their oversight roles and to enhance the financial reporting acumen of investment professionals. While our work encompasses various governance activities, we place a significant focus on the audit committee because the audit committee has the primary responsibility for an issuer's financial statements and oversight of the external auditor.

We share perspectives and insights with directors and investment professionals through various events and other mediums. For example, we provide directors with trainings, videos, and publications that enhance their skill sets and technical knowledge. Over the past year, we organized three corporate director conferences for more than 300 directors; presented at nearly 500 client meetings or other events; hosted small group meetings; and issued publications on important governance matters, including the results of our annual survey of corporate directors.

Our interactions with directors and the investment community allow us to hear stakeholders' perspectives on financial reporting matters, utilize their insights to help inform our points of view, and share perspectives with them about new and emerging financial reporting matters and accounting standards. We add value by sharing our insights and educational materials with stakeholders. Our work helps enhance stakeholder's understanding of the role and responsibilities of the auditor. For more information, see the Governance Insights Center section on [pwc.com](https://www.pwc.com).

Professional and regulatory landscape

In the US, the capital markets and the auditing profession benefit from a strong regulatory environment, which includes the SEC and the PCAOB, both of which have investor protection as part of their mission. We believe a strong audit profession and regulatory environment facilitate confidence in the capital markets. The execution of quality, independent audits is an important component in building that confidence. To fully earn that confidence—and to remain relevant to our stakeholders—we must react to a dynamic environment. We do this by making significant investments in continuing to evolve and enhance our audits. For example, in recent years, in part based on PCAOB inspection observations, we have made investments in our learning and development programs, partner management and accountability processes, partner review policies, pre-issuance reviews and other monitoring activities, and quality driver analyses.

The dynamic environment in which we operate includes new accounting and auditing standards and an evolving regulatory landscape in which actions taken by regulators in one part of the world continue to influence the views and behaviors of regulators in other parts of the world. The auditing profession and auditing standards are at the heart of this—for example, the auditor’s reporting model, auditor transparency, and audit quality indicators are just three examples that have been debated in the US and abroad. We have played an active role in these debates, both as an individual firm and in collaboration with others in the profession by working with the Center for Audit Quality (CAQ).

We have the privilege of engaging with a wide array of stakeholders. Those interactions include dialogue around new and emerging accounting and auditing standards and regulatory and profession-wide topics, such as how to attract a sufficient pipeline of talent with appropriate skills into the profession. We are proactive in providing feedback on these topics to the relevant regulators and standard setters. These efforts maximize the value we can provide to companies and the capital markets.

Our US Chairman and Senior Partner, Tim Ryan, represents PwC on the CAQ’s Governing Board. Maria Castañón Moats, US Assurance Leader, Jorge Milo, US National Office Leader, and Roz Brooks, US Public Policy Leader, are members of the CAQ’s Advisory Council. Jorge Milo is also a member of the CAQ’s Professional Practice Executive Committee.

Legal and governance structure



Legal structure and ownership of the firm

The firm is a limited liability partnership established under the laws of the State of Delaware. All interests in the firm are held by its partners and principals.

Governance structure of the firm

The firm's Senior Partner serves as Chairman and Chief Executive Officer and manages the firm pursuant to the powers delegated to him by the firm's partners.

To assist in discharging his responsibilities, the Senior Partner has appointed a Leadership Team to work with him to manage the firm. The responsibilities of the Senior Partner and the Leadership Team include establishing and determining the effectiveness of the firm's system of internal control, including controls relating to the quality of the firm's audit services. Changes to the Leadership Team are determined by the Senior Partner. The Senior Partner is elected by a partner vote for a four-year term. The Senior Partner may be re-elected for a second and a third term, unless limited by age according to the partnership agreement and, with respect to any third term, subject to the Board of Partners and Principals approving the individual's nomination.

Leadership Team Members



US Chairman and Senior Partner
Tim Ryan



Vice Chairman and US Managing Partner
Jim Flanagan



Chief Digital Officer
Joe Atkinson



Advisory Leader
Mohamed Kande



Public Policy
Roz Brooks



Communications and Change Management
Christine Lattanzio



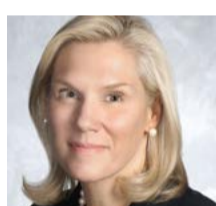
General Counsel
Caroline Cheng



Vice Chairman and US Managing Partner
Mark Mendola



Chief Financial Officer
Martyn Curragh



Chief Clients Officer
Amity Millhiser



Chief Diversity & Inclusion Officer
Mike Dillon



Assurance Leader
Maria Castañón Moats



Network Leader
Suneeet Dua



Partner Affairs Leader and Chief Administrative Officer
Gary Price



New Business & Innovation Leader
Vicki Huff Eckert



Chief Commercial Officer
Reggie Walker



Global and Asia Pacific Americas Advisory Leader
Miles Everson



Tax Leader
Roy Weathers



Chief People Officer
Mike Fenlon



Mexico Country Senior Partner
Mauricio Hurtado

Board of Partners and Principals

Authority

The Board is responsible for overseeing the overall strategic direction of the firm. It oversees long-range strategies and business plans, and approves major transactions that could significantly affect the firm's business. Its authority also includes the approval of the firm's capital policies, the manner in which partners participate in firm profits, and the admission of new partners.

It approves the compensation of the Senior Partner and members of the Leadership Team as a group, after review and recommendation by a committee of the Board. All candidates proposed by the Senior Partner Nominating Committee to stand for election as Senior Partner must also be approved by the Board.

Composition

The Board consists of partners and principals of the firm who have been elected for staggered terms of approximately four years, as well as two external directors, each of whom also has a term of approximately four years. Our external directors meet our rigorous independence requirements to protect our reputation, objectivity, and integrity. They bring additional insights, expertise, and objective perspectives into our governance process as we consider the firm's strategy, growth, and service offerings.

The Board is chaired by a Lead Director, who is elected by the members of the Board other than the Senior Partner. As of July 2018, there are 20 members of the Board in addition to the firm's Senior Partner:

Members of the Board of Partners and Principals

Tim Ryan
US Chairman and Senior Partner

Alan Page
Lead Director

Thomas Archer

Mark Borden

Len Combs

Brian Cullinan

Brendan Dougher

Carrie Duarte

John Farina

Scott Gehsmann

Carlos Gutierrez, External Director

Dave Hoffman

Paul Kepple

James Kolar

Paula Loop

Brian Meighan

Carol Pottenger, External Director

Michael Quinlan

Lisa Sawicki

Deidre Schiela

Jose Ignacio Toussaint

Committees

The Board is assisted by various committees that help to carry out its role. The Risk and Quality (R&Q) Committee provides oversight and monitors the appropriate policies, processes, and procedures for managing and minimizing risks of the firm. The R&Q Committee also comprises the Accounting and Auditing Practice Committee, which provides oversight of the accounting and audit practice of the firm.

As requested by the Board, the R&Q Committee reviews regulatory matters that affect the firm and, as appropriate, other parts of the PwC Network. Such matters may include accounting licensing and professional standards issues, internal and external quality inspection results, and global regulatory trends.

The Technology & People Committee provides oversight and makes recommendations to the Board concerning the firm's technology and innovation strategies and initiatives and their interaction with human capital strategies and initiatives.

Board member selection process

The partner vote for selecting Board members who are partners of the firm is on a headcount basis. Partners vote by ranking the candidates for the Board. The candidates with the most votes are elected. Board elections are supervised by an independent election teller.

External Directors are elected to the Board by the affirmative vote of two-thirds of the members of the Board voting thereon.

Endnotes

1. A partner is a certified public accountant (CPA) while a principal is not. Only CPAs may sign an audit opinion or perform any other function reserved by law or by the firm solely to CPAs. Partners and principals are alike in most other aspects of the partnership.
2. References to *firm*, *our*, *we*, and *PwC* in this document relate to PricewaterhouseCoopers LLP or PwC US.
3. Our fiscal year ends June 30th.
4. "Audit professionals" refers to our core audit partners and staff (i.e., specialists, including risk assurance, are excluded). "Managers" includes managers, senior managers, directors, and managing directors.
5. Issuer audit clients comprise SEC registrants and mutual funds.
6. Please see www.pwc.com/structure for further details.
7. The amount includes inspections completed as of June 30, 2018 and an estimate of the number of inspections to be completed during the remainder of the 2018 internal inspection cycle.
8. The estimated amount presented in the 2017 Quality Report has been updated for the actual amount.
9. The 2018 compliance rate is for internal inspections completed as of June 30, 2018.





THE OHIO STATE
UNIVERSITY

Compliance Report

Board of Trustees

Audit and Compliance Committee

Compliance and Integrity Program

Office of University Compliance and Integrity

February 21, 2019



Executive Summary

Committee Action: *For information and discussion. No vote is required.*

1. Information Security Initiatives

2. Conflicts of Interest

Overview of conflicts of interest issue at Memorial Sloan Kettering Cancer Center (MSK). In September 2018, The New York Times and ProPublica reported that Dr. José Baselga, MSK's Physician-in-Chief and Chief Medical Officer, failed to disclose millions of dollars in payments from drug and health care companies in dozens of research articles he authored in medical journals.

3. Marching Band: Integrity and Culture Update

The Marching Band has made significant cultural strides off the field, while continuing its excellence on the field. Improvements to Band policies, procedures, traditions, and compliance and life skills education have created a positive, respectful atmosphere within the Band. Any individual misbehaviors and violations by students, staff, or volunteers are handled swiftly, appropriately, and transparently by Band staff in consultation with the School of Music and other key university stakeholders.

4. Resolution Agreement with Office for Civil Rights (OCR) [Title IX]

Our status remains unchanged:

- The university has made no submission to OCR since the last Board meeting.
- The OCR responded on December 19, 2018 to our June 23, 2017 and August 30, 2018 submissions.
 - OCR requested additional documents concerning the Sexual Civility and Empowerment (SCE) office (which closed on June 19, 2018) and information about specific cases.
 - OCR determined that the university has appropriately implemented all remaining items to date.

1. INFORMATION SECURITY

Establish a common risk and security framework, to include accepted standards and clarified ownership and responsibilities, to control risk of breach.

Overview

In 2013, the university established the Information Security Framework, and conducted the first university-wide Survey to assess compliance of all colleges/units. Initial scoring was low. Colleges/Units were asked to create a compliance strategy, and the result was a five-year plan to get to “Three and Green by FY18”. In 2018, the sixth survey reveals continued progress – overall score is “3.7” and 5 of 30 Risk areas are “Green” – with 46% of units achieving the target. Other units continue to work to achieve the target.

The Information Security Framework covers university-owned systems housing university-owned information. Therefore, there are some areas out of scope of the governance of this Risk item. Devices commonly known as the “Internet of Things” which may reside at the university, but do not store or transmit data; associated earnings affiliates, who may partner with the university; and research activity conducted at the university and owned by a third party are not explicitly governed by the Framework.

Strategic Risk Mitigation Status: Scorecard

Risk	Cabinet Owner(s) L=Lead	Committee Reporter	Mitigation Status Score	Financial Barrier Score	Reputational Risk Score	Control Score	Summary Score	Mitigation Effectiveness Trend	Last Board Report Date
Information Security	McPheron (L); McPheron	Hofherr	2	5	5	4	4	↔	4/6/2017

Information Security will always maintain an inherently high risk score, even as the risk is being fully managed.

Mitigation Status:

Ohio State’s award winning Security Framework continues to be recognized as a leading innovation in security governance. Reaching a maturity score of “3.7” in six years, with 40% of units achieving the “Green” target is a significant achievement. Further progress for remaining units towards the target continues.

Financial Barrier Status:

Financial commitment to Security continues to increase across the university, and will need to be maintained and increased as an ongoing operational expense. Gartner predicts all industries will continue to increase security funding by 14% in the next year.

Reputational Risk and Regulatory Change Status:

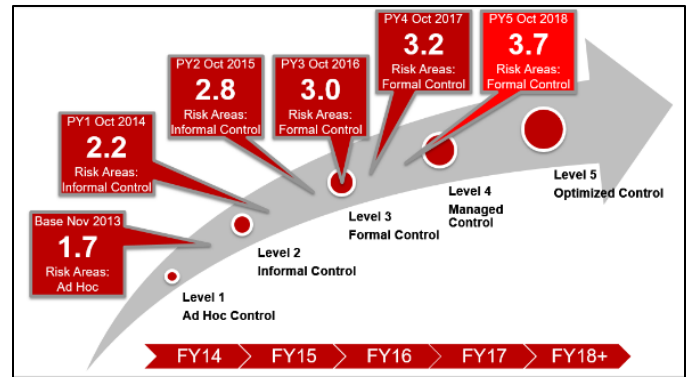
The introduction of new standards by the US Federal Agencies (DFARS/FARS 800-171), combined with ongoing attention by all regulatory agencies requires enhanced security controls across the university. This will improve the security posture of the university, and will require increased leadership attention to security issues.

Control Findings Status:

Internal Security investigations occur on 2-4 incidents per month, most without requiring reporting. Internal audit continues to find unmanaged information risk conditions in colleges/units, and remediation of findings is often lengthy.

FY2019 Year-to-Date Metrics

The university has moved from “Ad Hoc Control” to the target of “Formal/Managed Control” in six years. This is a significant accomplishment for an organization of this size and complexity.



Risk Area	Description	2013	2014	2015	2016	2017	2018	Improvement since	
		2013	2014	2015	2016	2017	2018	2013	2017
MGT1	Information risk management	1.2	3.6	3.9	3.8	4.0	4.0	233%	--
MGT3	Compliance management	3.3	2.2	3.0	3.2	3.6	3.9	18%	8%
DAT1	Institutional data-related risk	0.7	0.8	1.8	2.1	2.4	3.4	385%	42%
DAT2	Info access control-related risk	1.9	2.4	3.1	3.2	3.4	3.8	100%	12%
IT1	Disaster-related risk	0.6	1.5	1.9	2.5	3.1	3.8	533%	18%
IT2	Infrastructure-related risk	2.1	2.4	3.0	3.1	3.5	3.9	86%	11%
IT3	Network-related risk	0.6	2.3	2.8	3.0	3.1	3.7	517%	19%
IT4	Server-related risk	1.1	1.6	2.4	2.6	3.1	3.6	227%	16%
IT5	Identity-related risk	2.4	2.3	2.8	2.8	3.0	3.8	583%	27%
IT6	Malicious software risk	3.5	3.4	3.4	3.5	3.9	4.0	14%	3%
IT7	Application dev-related risk	1.8	1.9	2.7	3.0	3.2	3.7	117%	16%

Of the 30 Risk Areas in the Framework, 11 are considered “Critical” (P1) Risk, reflecting the typical threats facing the university.

The goal is to achieve a score of “4: Managed/Measured Control” by the end of FY18. 40% of the 83 reporting units have achieved this target

The target of “Green” reflects the requirement that Critical (P1) risk areas achieve a score of “4” in order to be considered managed at an acceptable low risk level.

Priority Level	CMM Score					
	0	1	2	3	4	5
P1	H	H	H	M	L	L
P2	H	H	M	L	L	L
P3	H	M	L	L	L	L

2. CONFLICTS OF INTEREST: MEMORIAL SLOAN KETTERING

Conflicts of interest within research and academic institutions have featured prominently in the news media in recent months, sparked by a controversy at Memorial Sloan Kettering Cancer Center (MSK). In September 2018, The New York Times and ProPublica reported that Dr. José Baselga, MSK's Physician-in-Chief and Chief Medical Officer, failed to disclose millions of dollars in payments from drug and health care companies in dozens of research articles he authored in medical journals. Since he started at MSK in 2013, Dr. Baselga has had fiduciary or advisory board positions and consulted with dozens of established and startup companies involved with cancer treatments.

MSK first defended Dr. Baselga by stating that he properly informed the hospital of his outside work with these companies and he promised to amend some of the journal articles with proper disclosures. Yet less than a week later, Dr. Baselga resigned his positions with MSK. Dr. Craig Thompson, MSK's President and Chief Executive Officer, subsequently resigned his positions on the boards of Merck and Charles River Laboratories. In the middle of that controversy, The New York Times and ProPublica also reported on the financial ties that MSK senior leaders and board members have to a new MSK startup, which raised further questions about transparency and potential conflicts of interest based on the commercialization of notes and patient tissue slides that MSK gathered over decades.

On January 10, 2019, based on recommendations from an internal Conflict of Interest task force, MSK announced new rules that, among other things:

1. prohibit senior executive officers from serving on boards of for-profit healthcare or science-related entities; and
2. restrict the ability by MSK Board members to invest in spin-off companies and serve on their boards.

MSK's task force has also engaged Ropes & Gray to conduct a comprehensive benchmarking analysis of 20 leading academic medical centers across America, including hospitals and research institutes; hired Deloitte to assess MSK's COI program and processes; and engaged Debevoise & Plimpton to conduct a focused review of a series of anonymous allegations concerning COI issues.

After a series of scandals in academic medicine ten years ago, the federal government created the "Open Payments" system in 2013. Administered by the Centers for Medicare & Medicaid Services (CMS), Open Payments is a national transparency program that collects and publishes information about financial relationships between the health care industry (i.e. drug and device companies) and providers (i.e. physicians and teaching hospitals). These relationships may involve payments to providers for things such as research, meals, travel, gifts, or speaking fees. This Open Payments database enabled The New York Times and ProPublica to report on Dr. Baselga and MSK's issues.

The university addresses these issues through a Conflicts of Interest Policy and process that applies across the university. Over the past five years, we have worked to simplify and integrate disclosure reporting, review, and management planning. This process integrates CMS' Open Payments system reporting, enabling early identification and review of potential issues.

3. MARCHING BAND: INTEGRITY AND CULTURE UPDATE

Overview

Over the past four seasons, the Marching Band has made significant cultural strides off the field, while continuing its excellence on the field. Improvements to Band policies, procedures, traditions, and compliance and life skills education have created a positive, respectful atmosphere within the Band. Any individual misbehaviors and violations by students, staff, or volunteers are handled swiftly, appropriately, and transparently by Band staff in consultation with the School of Music and other key university stakeholders.

Office for Civil Rights Resolution Agreement (Section VII pertains to Marching Band)

- On April 14, 2017, OCR determined that the university had satisfied section VII.B of the Resolution Agreement, but still needed to provide evidence of climate assessment and implementation of controls as required by VII.A.4. In June 2017, the university provided the requested information.
- On December 19, 2018, OCR confirmed that the university has appropriately implemented Section VII.

Governance and University Oversight

- Band leaders continue to govern themselves according to a clear set of cultural values grounded in extraordinary respect, an attitude of gratitude, and performance excellence.
- The Band Coordinating Committee continues to provide helpful guidance and assistance, and the Band Director works effectively with its members.
- To maintain university oversight of significant Band decisions, an approved consultation and decision-making framework is followed by Band leaders and the Coordinating Committee.

Band Culture

- Significant improvements over the past four seasons to Band policies, procedures, traditions, compliance/life skills education programming, student leadership training, staff training, and student wellness continue to strengthen the Band's culture.
 - **Student Education**
 - Band-wide: Title IX, health and wellness, alcohol, bystander intervention, social media management (prepared by campus partners in consultation with student leaders)
 - Student leaders: leadership principles, soft skills, stakeholder awareness, working with minors
 - First-year band members: orientation session introducing Band culture and key logistics
 - **Staff Education**
 - Title IX, hazing, university oversight, working with minors
 - Staff engagement educating students on issues (e.g., alcohol use, social media, conflict management)
 - **Controls on External Influences**
 - Volunteers, athletic trainers, vendors educated with Band staff on Title IX and hazing
 - All part-time staff and volunteers sign agreements mandating compliance with the Band's cultural blueprint and reporting of student misbehavior
 - **Student-Led Initiatives**
 - Community service events (e.g., food drive)
 - Creation of affinity groups (e.g., board game club, ice cream club, faith-based groups)
 - Bringing in presenters for optional life skills/wellness sessions
- In 2018, the Band's Director, Assistant Director, and Compliance & Life Skills Coordinator presented at the annual conference of the College Band Directors National Association. The presentation focused on cultivating a positive band culture, developing a life skills education program for students, and fostering transparency and open communication.

4. RESOLUTION AGREEMENT WITH OFFICE FOR CIVIL RIGHTS (OCR) [TITLE IX]: STATUS

Activity	Steps	Status				
		2014-15	2015-16	2016-17	2017-18	
Title IX Coordinator	<ul style="list-style-type: none"> ✓ Published detailed statement outlining the roles and responsibilities of Ohio State's Title IX Coordinator (11/15/14) 	Complete	Complete	Complete	Complete	<ul style="list-style-type: none"> • All requirements met.
Document Maintenance	<ul style="list-style-type: none"> ✓ Created a coordinated document management process for all Title IX complaints (12/15/14) 	Complete	Complete	Complete	Complete	<ul style="list-style-type: none"> • All requirements met.
Policies	<ul style="list-style-type: none"> ✓ Revised Notice of Nondiscrimination and post online as appropriate (10/15/14) ✓ Revised "Reporting Sexual Assault" link on Campus Police website (10/15/14) ✓ Reviewed and revised all sexual harassment policies for consistency (10/15/14) ✓ Sexual Misconduct policy taken from interim to final status (effective 8/23/16 per President's Cabinet). Revised the Code of Student Conduct consistent with the revised Sexual Misconduct policy, BOT approved 4/8/16 ✓ Submitted evidence of policy communications in nineteenth progress report (10/15/16) ✓ Submitted annual information on complaints during academic year to OCR (6/10/16) ✓ Submitted annual information on complaints during academic year to OCR (6/15/17) 	Complete	Complete	On Track	On Track	<ul style="list-style-type: none"> • Submitted revised Code of Student Conduct and final Sexual Misconduct policy to OCR in 8/5/16 status report. Submitted proof of how updated policy was communicated to Ohio State community in 10/15/16 status report. • Submitted information on AY 2015-2016 complaints to OCR in 6/10/16 status report; appropriately implemented per OCR 12/19/18. • Submitted information on AY 2016-2017 complaints to OCR in 6/15/17 status report; awaiting OCR feedback.
Training	<ul style="list-style-type: none"> ✓ Reviewed Student Wellness Center programming to ensure consistency with Resolution Agreement standards (12/15/14) ✓ Developed Title IX Coordinator and investigator training (12/15/14) ✓ Identified Title IX training module for employees (12/15/14) ✓ Reviewed and revised orientation program and materials for incoming students (12/15/14) ✓ Verified annual Title IX training conducted during previous calendar year (6/10/16) ✓ Provide training to specific groups identified in climate survey (annual) 	Complete	Complete	Complete	Complete	<ul style="list-style-type: none"> • Training for 2016-17 and 2017-18 submitted and approved by OCR in 12/19/18 response. • Notified OCR of online training for AY 2018-19

Activity	Steps	Status				
		2014-15	2015-16	2016-17	2017-18	
Climate Assessment and Response	<ul style="list-style-type: none"> ✓ Added OHR representative to Sexual Violence Consultation Team (1/15/15) ✓ Established campus working group on Title IX and climate survey (9/30/14) ✓ Reviewed last 2 years of sexual harassment complaints (12/15/14) ✓ Developed recommended actions as appropriate based on review (12/15/14) ✓ Developed and conducted annual climate survey (3/23-4/22/16) ✓ Developed and conducted annual climate survey (2/5-3/10/17) ✓ Analyze survey results to identify need for additional actions and training as appropriate (annual) 	Complete	Complete	Complete	Complete	<ul style="list-style-type: none"> • Submitted results of AY15-16 climate survey and written recommendations based on results in 1/15/17 status report. • Developed/disseminated AY16-17 climate survey. As noted in 1/15/17 report, written recommendations submitted before January 2018. • Submitted proof of AY16-17 climate survey dissemination in 6/15/2017 status report. • Results of the AY16-17 climate survey and recommendations sent to OCR in 1/31/18 status report.
Student-Focused Remedies	<ul style="list-style-type: none"> ✓ Reviewed last 3 years of sexual harassment complaints for prompt and equitable investigation (1/15/15) ✓ Take appropriate action to address identified problems (within 30 days of OCR approval) 	Complete	Complete	N/A	N/A	<ul style="list-style-type: none"> • Reported findings to OCR in 2/27/15 status report and 9/15/15 addendum; submitted documentation of identified "process improvements" to address issues in the addendum in 8/5/16 status report. Approved by OCR in their response on 4/14/17.
Marching Band Investigation	<ul style="list-style-type: none"> ✓ Developed timetable for corrective actions (11/1/14) ✓ Submit quarterly progress report to OCR (beginning 10/15/14) 	Complete	Complete	Complete	On Track	<ul style="list-style-type: none"> • Continuing implementation. • 6/15/2017 status report included documentation addressing ongoing climate surveys with respect to the marching band; appropriately implemented to date per OCR 12/19/18

AUDIT AND COMPLIANCE COMMITTEE		2015-16	2016-17	2017-18	Current Status
A. Strategic Risk Mitigation Effectiveness					
1. Education (risks related to decrease in academic standing; harm in ability to attract faculty/students)		↔	↑	↔	↔
2. Scholarship (challenges to ability to perform significant academic or scientific research)		↓	↑	↔	↔
3. Information Technology (inability to store, develop, transmit, or protect data)		↔	↔	↑	↔
4. Student Life (inability to maintain an environment conducive to student life)		↔	↔	↔	↔
5. Athletics (risk of disruption to Athletics operations, including significant NCAA violation)		↔	↔	↑	↔
6. Medical (significant reduction in performance of the health system and related colleges)		↑	↔	↑	↔
7. Financial (inability to reach capital, revenue, or cost containment objectives)		↔	↔	↔	↔
8. Physical Environment (loss of infrastructure; major event impacting ongoing operations, including campus safety)		↔	↔	↑	↑
9. Government, Community and Affiliates (failure to monitor and develop government, community, or affiliate relationships)		↓	↑	↓	↔
10. Talent and Culture (failure to attract, develop, or retain talent)		↔	↔	↔	↔
11. Advancement (events impacting Ohio State brand, alumni relationships, or advancement objectives)		↓	↔	↑	↑
12. Compliance (failure to meet regulatory, legal, or policy requirements not captured in above categories)		↔	↑	↑	↔
	2014-15	2015-16	2016-17	2017-18	2018-19 ¹
B. Public Records²					
1. Number of records requests closed (3-year average: 899)	769	842	964	890	809
2. Average days to fill all records requests	21	15	16	20.7	22.0
C. Internal Investigations (rated 4 or 5)					
1. Number of investigations opened in the fiscal year	20	17	17	26	5
2. Number of investigations closed in the fiscal year	16	19	15	21	5
3. Percent of closed investigations with findings	31%	52%	27%	21%	17%
D. Regulatory Actions³ (rated 4 or 5)					
1. Number of current regulatory actions	7	10	12	11	13
E. Internal Audit					
1. Number of audits cleared at second follow-up during the fiscal year		11	9	11	4
2. Number of audits open after second follow-up or cleared at third follow-up or later during the fiscal year		2	4	14	14

COMMENTS & FOOTNOTES
¹Includes data from 7/1/18 through 1/15/19

²Processed by Public Records Office only

³Includes audits, fines, probations, sanctions, warnings, or other similar actions

Mitigation Effectiveness Rating

- Meets or Exceeds Goal
- Caution
- Below Goal - Action Needed

Trend

- ↑ Environment/Performance Improving
- ↔ No Significant Change/On Track
- ↓ Environment/Performance Worsening