

**Unit** College of Geosciences  
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**Instructions:** The purpose of this report is to assess the continuing progress towards diversity at the unit level. Please review your unit’s strategic plans, diversity plans, and assessment plans for goals addressing diversity, recruitment, retention, climate, and equity. Where appropriate, use specific examples from individual departments in your unit to provide evidence for your narrative regarding progress towards Texas A&M University’ Diversity Plan goals: Accountability, Climate, and Equity.

**Formatting:** Use portrait orientation and 12 point font or larger for the narrative, tables, and figures. Word limits are provided for each of the six sections. Please note: References, graphics, and demographic data are not included in the word count.

**1. Introduction (200-word limit):** Describe your unit (campus location, 2018 demographics of students/faculty/staff, departments, etc.) and its general mission. Describe the writing and review process for this report: For example, was your unit’s diversity council included in the writing or review? Was this report reviewed by unit leadership?

Geoscientists are at the center of solving society's grand challenges – climate change, air and water quality, and adequate energy and food supplies. The College of Geosciences (CoG) serves as a national leader offering a comprehensive program in geoscience research, education and engagement. Diversity, equity, and accountability are central to our leadership role. To this end, the CoG has established a broad array of integrated strategies targeting all facets of the college to enhance diversity, improve climate, and increase equity, and retention. This work is enabled and enhanced by the small college feel of the CoG where connections across role and discipline flourish. The student, faculty, and staff highlighted in Table 1 support the Colleges four departments<sup>1</sup>, and seven centers. Consistent over the past two years, 28% of our undergraduates and 12 % of our faculty and staff identify as underrepresented minorities.

Population	2018 Profile
Undergraduate Students	1027
Graduate Students	360
Staff	233
Lecturer/Instructor	13
Faculty	100

The Report was drafted by the Assistant Dean for Diversity and Climate. The Assistant Dean was aided by the newly launched CoG Diversity Committee who contributed their thoughts as well.

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<sup>1</sup> The College of Geosciences at Texas A&M University is comprised of the following four departments: Atmospheric Science, Geography, Geology and Geophysics, and Oceanography and seven centers.

**Recruitment (500-word limit):** As informed by two or more years of assessment data, describe your unit’s goals, measures, and progress on student/faculty/staff recruitment. If goals, measures, or data are not available, describe plans to develop and assess goals for student/faculty/staff recruitment.

**Undergraduate & Graduate Students**

*Goal:* To increase awareness of the Geosciences among underrepresented populations. Attracting and enrolling a diverse student population at both the undergraduate and graduate levels, both across the college and within respective majors.

*Measures & Progress:*

- Continued to offer robust programming and student engagement through programs such as GeoX<sup>2</sup>.
- Maintain, through targeted recruitment efforts, a diverse enrollment in the CoG.

*Undergraduate Students:* GeoX continues to be one of our flagship recruitment programs. As highlighted in Table 2, in 2018 we doubled the number of participants from 30 to 60, something we will continue in 2019. Over the past two years, at least a quarter of the

students identify as underrepresented minorities (URM), and half are women. Success from this program is evidenced by the high rates of application to the geosciences at TAMU<sup>3</sup>. Our traditional recruitment efforts continue to yield a diverse pool of applicants, admits, and enrolled students (Table 3). A review of our enrolled students disaggregated by major highlights bright spots- racial diversity in ENGS and ENST and areas for growth- gender representation in GIST and GEOP (Tables 4 and 5).

Program Year	2017	2018
Total Cohort	30	60
Breakdown of Race		
% White	65.5	52.5
% Hispanic	13.8	28.8
% Asian American	10.3	8.5
% Other/Not Specified	6.9	1.7
% African American	3.4	8.5
% Female	50	50
% First Generation	3.4	22

<sup>2</sup> Launched in 2011 GeoX is an intensive, on-campus experience intended to build awareness and interest in the geosciences.

<sup>3</sup> See Houser, Garcia, Torres (2015) for findings from GeoX program assessment.

<b>Table 3. 2017 and 2016 Recruitment Trends</b>						
	<b>2017</b>			<b>2016</b>		
	Completed	Admits	Enrolled	Completed	Admits	Enrolled
Total Population	448	327	205	496	367	220
% Hispanic	26%	23.5%	23.4%	24%	24.8%	24.5%
% Black & Multi w/Black	3%	3.1%	2.4%	4%	3.5%	3.2%
% Asian	4%	3.4%	1.5%	7%	7.6%	5.9%
% White	60%	63.0%	68.8%	56%	53.7%	59.5%
% Multi w/o Black	3%	3.1%	2.9%	2%	3.0%	2.7%
% International	4%	4.0%	1.0%	6%	7.1%	4.1%

<b>Table 4. First Time in College student profile, Fall 2017, College of Geosciences</b>							
	ENGS	ENST	GIST	GEOL	GEOP	METR	OCNG
Headcount	19	20	5	40	11	33	N/A*
% female	78.9	80	20	47.5	27.3	51.5	
% Hispanic	42.1	30	0	17.5	27.3	9.1	
% Black	0	0	0	0	0	9.1	
ENGS=B.S. Environmental Geosciences; ENST=B.S. Environmental Studies; GIST=B.S. Geographic Information Science and Technology; GEOL=B.A., B.S. Geology; GEOP= B.S. Geophysics; OCNG=B.S. Oceanography; METR=B.S. Meteorology *The OCNG B.S. launched in 2018							

<b>Table 5. First Time in College student profile, Fall 2018, College of Geosciences</b>							
	ENGS	ENST	GIST	GEOL	GEOP	METR	OCNG
Headcount	31	19	7	19	6	27	6
% female	61.3	73.7	42.9	47.3	50.0	29.6	50.0
% Hispanic	38.7	36.8	0	21.1	33.3	18.5	0
% Black	6.5	5.2	0	0	0	11.1	0

*Graduate Students:* Our graduate population is small (Table 6) thus making small shifts in enrollment more exaggerated. We have sustained our engagement with the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) which is the premier conference for students from all underrepresented backgrounds interested in the sciences. In 2018, we combined our efforts with OGAPS to enhance our reach to the over 3,000 students and faculty who attend SACNAS. Additionally, the College’s graduate curriculum committee, we are working with faculty understand the attributes of a successful University Diversity Fellowships application and supporting efforts to ensure these highly qualified applicants chose to enroll at TAMU.

	2017	2018
Total Cohort	340	360
<b>Breakdown of Race</b>		
% White	46.2	46.4
% Hispanic	7.9	10.3
% Asian American	2.9	3.3
% Other/Not Specified	2.6	2.8
% Black	1.5	1.7
% Multiracial	1.8	2.2
% International	37.1	33.1
% Female	42	39.2

**Staff & Faculty**

*Goals:* Establish and maintain a culture in all four departments that embraces an inclusive and equitable hiring process to attract a diverse pool of candidates. Furthermore, it is our goal that all staff and faculty have exposure to the training and resources necessary to engage in an inclusive and intentional search process.

*Measures & Progress:*

- Provide faculty and staff with training and resources to support the hiring process.
- Institutionalize equitable and inclusive processes across the job descriptions, resume reviews, candidate interviews, and Dean’s office screening.

We have institutionalized policies among our faculty searches including mandatory participation in stride or search committee training, broad job posting, and recruitment, reviewing job descriptions for inclusion language, and requiring that all finalist pools are reviewed by the Assistant Dean for Diversity and Climate. Our staff hiring leverages best practices from Human Resources yet also presents an opportunity for growth. In Spring 2019, we will be to review existing hiring procedures for staff and advise on best practices to ensure that future searches include the same level of diversity and inclusion efforts.

**2. Retention (500-word limit):** As informed by two or more years of assessment data, describe your unit’s goals, measures, and progress on student/faculty/staff retention. If data are not available, describe plans to develop and assess goals for student/faculty/staff retention.

**Undergraduate & Graduate Students**

*Goal:* Increased levels of retention with a focus on equitable outcomes for underrepresented groups. Provide students with access to the faculty support, resources, and peer networks necessary to be successful in their respective disciplines.

*Measures & Progress:*

- 1-year, 4-year, and 6-year retention data for undergraduates.
- Maintain levels of engagement with the availability of tools, training, and resources to support success.
- Increased levels of graduate student sense of belonging, both within their department and across the college.

*Undergraduate Students:* The College's disaggregated retention (Table 7) provides a view of our success and opportunity for growth. This is complemented by our preliminary audit of retention program where we identified the need to support URM students further. Thus, we have submitted a proposal through the National Science Foundation that would facilitate the development of a college-wide peer mentoring program. Although targeting minoritized students, this program will be open to all Geosciences students to dovetail with broader Student Success Initiatives.

<b>Table 7. Retention Data</b>					
<b>1-year Retained</b>					
<b>Year</b>	<b>Overall (%)</b>	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>First Gen</b>
2015	88.7%	92.7%	73.3%	85.3%	84.8%
2016	94.5%	95.1%	100.0%	95.0%	94.0%
2017	96.4%	98.0%	80.0%	92.7%	97.9%
<b>4-years Graduation Rates</b>					
<b>Year</b>	<b>Overall (%)</b>	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>First Gen</b>
2012	67.8%	67.50%	60%	70.30%	74.10%
2013	59.0%	61.50%	18.20%	63.80%	61.80%
2014	58.4%	64.90%	36.40%	51.60%	52.90%
<b>6-years Graduation Rates</b>					
<b>Year</b>	<b>Overall (%)</b>	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>First Gen</b>
2010	84.0%	84.60%	80%	76%	76.90%
2011	84.0%	89.70%	100%	67.90%	77.60%
2012	85.5%	84.80%	80%	89.20%	85.20%

*Graduate Students:* Our existing college climate data (discussed below) is our primary mechanism for tracking graduate student engagement with the college. To support retention efforts, several departments are taking innovative strides to ensure all graduate

students are positioned for success. The Oceanography department has implemented required programming, which includes tools for engaging faculty/research supervisors and transitions to graduate education, to aid graduate students. This program serves to model best practices which may be replicated across the college.

**Faculty & Staff:**

*Goal:* To provide all faculty and staff with the opportunity to engage in mentoring, professional development, and positive, productive relationships to ensure continued interest in working at TAMU.

*Measures & Progress:*

- Faculty and staff opportunities to engage in mentoring, professional development or other growth opportunities.
- Increased levels of engagement and connectivity across all groups, as measured by the climate assessment data.

This year, the college ran a 3-day leadership development program (program goals below) bringing together a cohort of 25 department leaders, faculty, and staff that allowed for best-practice sharing, critical self-reflection, and planning. This complements our “sandpaper conversations” initiative which provided faculty with tools to navigate challenging conversations personally and professionally we have continued our faculty training. The College has also established an Early Career Agency Engagement Research Development Program to provide early career faculty with the knowledge and tools to effectively engage program managers from a variety of agencies concerning possible research opportunities and culminates in a visit to Washington. Over the past two years, 15 faculty members have participated (5 women and 3 URM) representing over 50% of our Assistant Professors. Participants build cross-departmental connections and foster community. It is augmented by department level efforts such as our Department of Geography mentoring program. Conversations are also underway to consider programming that targets our tenured faculty.

Staff retention efforts have been more targeted based on individual needs, identifying professional development opportunities on and off campus. In Spring 2019 we will be launching several climate and retention programs (further outlined below), several of which explicitly targeting our staff.

**Climate (500-word limit):** As informed by two or more years of assessment data, describe your unit’s goals, measures, and progress on unit/campus climate issues. If data are not available, describe plans to develop and assess climate-related goals.

In 2016, the CoG undertook our second college-wide workplace climate survey as part of an ongoing effort to measure and improve working conditions. The goal of this large-scale effort is to understand, assess and improve the campus climate for diversity and inclusion. While the initial analysis was conducted by the former Associate Dean for Diversity and Climate, Eric Riggs, it was decided that Workplace Climate Task Force, representative of the breadth and depth of the College be convened to support the independent interpretation of these data. The

group met during the 2017/2018 academic year and supported the release of the Climate data in Spring 2018.

Several areas of concern had emerged in our 2011 survey, including areas such as Distributive Justice, Interpersonal Conflict, Psychological Empowerment in the Workplace, Structural Facilitation of Teamwork, and Climate for Diversity related to Rank. Given the goal of fostering a college climate where all employees, regardless of social identity, experience, or role have the opportunity to thrive, the Workplace Climate Task Force paid particular attention to these areas. The research showed generally positive trends, with continued concern in two significant areas: task conflict- the disagreement coworkers have over how to complete their tasks and Interpersonal Conflict- the amount of personal or emotional conflict that exists within a work unit.

Four recommendations were drawn from this work. These include qualitative data collection to examine areas of concern further, reaffirming the significant effort that has been invested in departmental governance, faculty and staff search and promotion processes, staff empowerment and team organization, equity salary increases, where possible focus further on disaggregated data, and contextualize within additional university climate assessment data. Consequently, while these data provide a valuable benchmark for our work, there is still additional data required to take positive action in enhancing the climate.

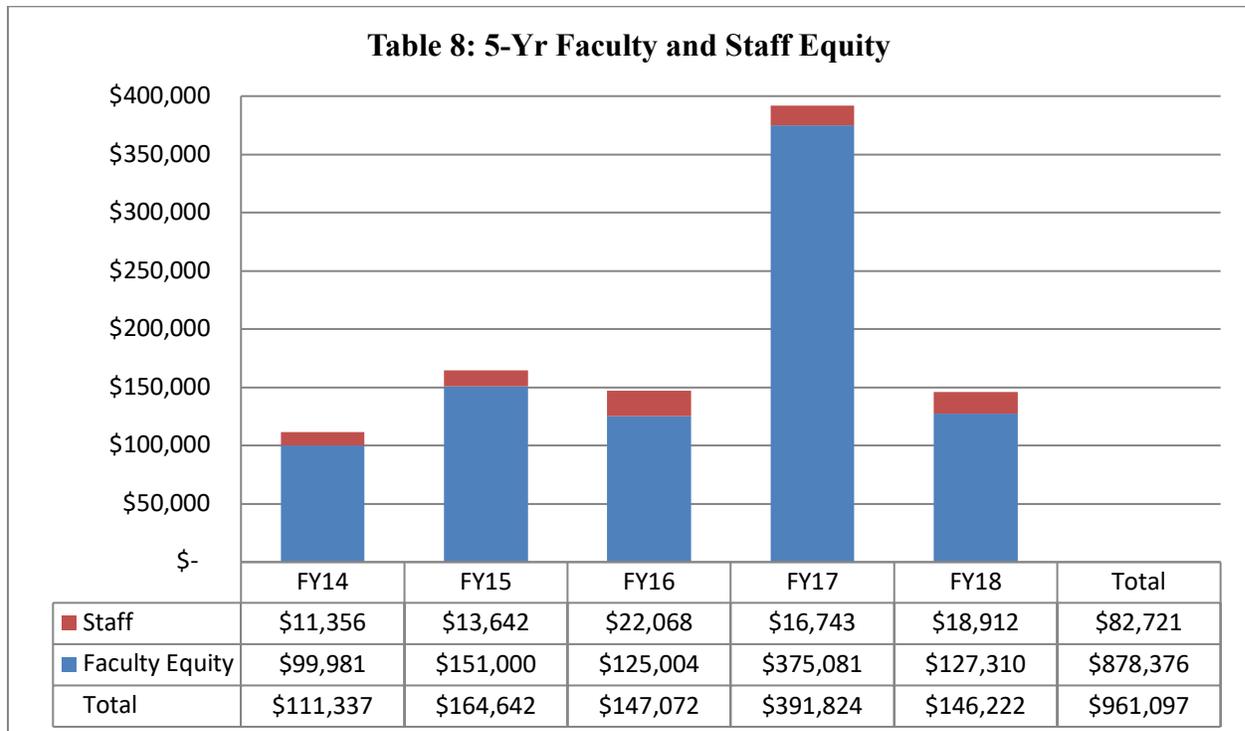
To support these efforts, for the first time the College has established a Diversity and Climate Committee. This follows on the best practices by many in the University- College of Architecture, College of Medicine, Liberal Arts, etc. This committee, comprised of faculty, staff, and students from the college will be working to guide the diversity and climate efforts of the college. Thus far, the group has identified three priorities moving forward:

- Conduct qualitative data collection to get an updated and nuanced perspective on the experiences of the faculty and staff experiences related to the significant areas of concern outlined in the college climate assessment.
- Establish a professional development program related to diversity and inclusion to be exposing members of the college to the wealth of resources and knowledge available across the campus. The programming will include: staff lunch and learns- an opportunity for staff members to understand how their work directly supports the research and teaching of the college and diversity and inclusion training- opportunities that will be available to faculty and staff such as presentations from the Department of Disability Services: Facilitating Access.
- Identify examples of department-level efforts that may be scaled or replicated across departments.

**3. Equity (500-word limit):** As informed by two or more years of assessment data, describe your unit's goals, measures, and progress on equity-related goals (e.g., advancement, promotion, development, salaries, graduation rates, etc.) If data are not available, describe plans to develop and assess equity-related goals.

Over the past several years, our primary equity initiative has been focused on staff-faculty salary equity. Based on national salary survey data, a study of competitive offers and internal

analysis of salary gaps we have strategically addressed salary gaps. Table 8 highlights the efforts over the past five years. While anecdotal evidence illustrates that these efforts have had a positive effect on morale yet there is still a communications gap regarding these efforts. At the recommendation of the Diversity Committee, we will continue to identify mechanisms to ensure greater awareness of this and other diversity efforts. To this end, will launch in Spring 2019 with our first Diversity- State of the College, which will include a review of existing efforts and laying the foundation for the future. This will be followed up by department level engagement to underscore further the importance and urgency of this work is communicated.



As outlined above, we have also identified the need for a peer mentoring program aimed at addressing some of the retention and completion equity gaps outlined above. Modeled on best practices related to asset-based mentoring, this new program would over time become a flagship program of the college and allow us to directly address some of the gaps in engagement and participation that we have identified. Initial efforts in this area have begun this fall with a deepened engagement with the LSAMP programming. We have doubled our cohort of students participating in undergraduate research and aim to sustain the number of students participating in the Merida, Mexico study abroad partnership with Engineering. From this work, we are establishing best-practices for ensuring engagement among CoG undergraduates from diverse identities. These programs and others also have the opportunity to extend existing programs such as GeoX to support students through the duration of their college experience.

The strategies outlined above present the opportunity to increase the equity emphasis across the college.

**4. Reflection (800-word limit):** This section provides you with an opportunity to outline your 2019 unit presentation for the Council on Climate and Diversity. Related to diversity, accountability, recruitment, retention, climate, and equity:

- a) Describe how your unit is “moving the needle” (e.g., changing numbers/composition, awards, recognition, grants, funding, etc.).

The CoG has made significant efforts in relation to faculty across two fronts. First, there has been a concerted effort to ensure that our awards and recognition efforts elevate the status of high-performing faculty within the College. This has included the recognition of female Presidential Impact Fellows, two consecutive years in a row (Sarah Brooks and Kathleen O’Reilly). Additionally, the CoG has seen two additional female faculty recognized for their efforts including, Regents professor (Lisa Campbell) and an endowed professor. Finally, one of our female faculty (Wendy Jepson) was named at AAAS Leshner Fellow.

Second, in light of the Provosts reinvestment plan, the CoG engaged reflection and discussion regarding prospective faculty candidates, particularly those from underrepresented groups within their disciplines. This sparked valuable conversations about individuals whose skills and experience would contribute to the diversity of the College. This mindset will be institutionalized for all searches to prioritize diversity as a major dimension of excellence.

- b) What challenges has your unit faced? What plans are in place to address the challenges  
The current challenges faced by the CoG are clustered around four key areas, faculty hiring and retention, staff training, climate, and equity inquiry.

*Faculty:* The CoG has been challenged by the compression of faculty numbers to mitigate cuts to the recurring budget. These cuts have hindered our ability to hire and diversify our faculty. To address this, moving forward, all searches will be used to enhance the diversity of our faculty. Additionally, discussions are underway to launch a competitive post-doc program that would connect these emerging scholars with associate professors to work with these faculty in their research trajectories post-tenure.

*Staff Training:* CoG has lacked a broad training or professional development program which support our staff retention and climate goals. We have begun to address this with the 3-day leadership training offered this summer, which we will host again in 2019. This will be augmented by the 2019 training series outlined above.

*Climate:* As outlined in the climate section, there are two primary areas of concern but given the small size of the CoG, disaggregating this data in actionable ways has proven challenging. Thus, in Spring 2019 we will engage in some qualitative data collection to further understand the challenge and propose solutions to enhance the College climate.

*Equity:* While we have committed a significant amount of resources and effort to address staff and faculty salary equity issues, the broad awareness of this continues to be limited. To combat this communication challenge, we will be hosting a college forum and directly

engage with departments. Finally, our lack of a College data analyst has limited our capacity to undertake a comprehensive equity center inquiry into our student, faculty, and staff efforts. We have begun to undertake this work and will continue to engage in this examination in the coming months.

- c) What innovative strategies have been implemented in your unit that might be useful to other units?

*GeoX:* First launched in 2011, GeoX is a 1-week program targeting rising high school seniors. The program was designed to enhance awareness of the geosciences among high-school students from around the state of Texas. The three primary goals include (1) introduce talented students, and particularly those within underrepresented groups, to geosciences, (2) allowing students access to the college and professional experiences of the geosciences, and (3) building a community to young learners interested in careers and research connected to the field. This program has successfully engaged a diverse cadre of students as well as yielded applicants and students to the CoG.

*Leadership training:* In August 2018 the CoG engaged Dr. Walter Natemeyer in a 3-day leadership training. The goals of the program were to (1) increase insight into critical management issues (2) to increase understanding of employees' needs and satisfaction, (3) gain insight into their leadership style and management practices, (4) increase participants' leadership/managerial effectiveness, and (5) to increase team and organizational effectiveness within the CoG. The inaugural cohort of 25 agree to the value of this program, and it will be replicated in 2019.

- d) Describe how funding from the Diversity Plan awards has been used (or will be used) to support and advance your unit's recruitment, retention, climate, and/or equity goals.

*Recruitment and retention:* The funds were used to support our continued participation in SACNAS as well as to support the engagement of graduate student participation at the conference. Additionally, we have hired an undergraduate researcher and administrative support student to aid in research related to equity and to support our engagement with URM students.

*Climate:* We will be using the funds to support the implementation of the diversity and inclusion training series outlined above. This will reflect a first of its kind initiative within the college addressing topics like inclusive teaching, disability awareness, and connect with University-wide programming such as the visit of Claude Steele.

*Equity:* Some of our funds will go to complement existing LSAMP funding to support our engagement of additional URM students to in undergraduate research and study abroad. Additionally, these funds support LSAMP cohort activities and convenings to increase the sense of community among these students.