North Dakota State University Department of Architecture and Landscape Architecture Architecture Program

Architecture Program Report for 2018 NAAB Visit for Continuing Accreditation

Master of Architecture [prerequisite + 32 graduate credits]

Year of the Previous Visit: 2012 Current Term of Accreditation: 6

Submitted to: The National Architectural Accrediting Board

Date: October 2017

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Table of Contents

<u>Section</u>		<u>Page</u>
Section 1.	Program Description	5
I.1.1	History and Mission	5
I.1.2	Learning Culture	9
I.1.3	Social Equity	11
I.1.4	Defining Perspectives	13
I.1.5	Long Range Planning	17
I.1.6	Assessment	18
Section 2.	Progress since the Previous Visit	21
Progra	m Response to Conditions Not Met	
	m Response to Causes of Concern	
Progra	m Response to Change in Conditions (if applicable)	
Section 3	Compliance with the Conditions for Accreditation	25
1.2.1	Human Resources and Human Resource Development	25
1.2.2	Physical Resources	29
1.2.3	Financial Resources	33
1.2.4	Information Resources	36
1.2.5	Administrative Structure & Governance	39
II.1.1	Student Performance Criteria	40
II.2.1	Institutional Accreditation	42
II.2.2	Professional Degrees & Curriculum	44
II.3	Evaluation of Preparatory Education	44
II.4	Public Information	45
III.1.1	Annual Statistical Reports	47
III.1.2	Interim Progress Reports	47
Section 4	Supplemental Material	47

SECTION 1. PROGRAM DESCRIPTION (LIMIT 15 PAGES)

I.1.1 HISTORY/MISSION

History and Description of the Institution

North Dakota State University (NDSU) is distinctive as a *student-focused, land-grant, research university*, that provides affordable access to an excellent education at a top-ranked institution that combines teaching and research in a rich learning environment, with a history of educating future leaders who will create solutions to national and global challenges that will shape a better world.

Located in Fargo, North Dakota State University was established as North Dakota Agricultural College (NDAC: the state's Land Grant College) in 1890, one year after North Dakota gained statehood. Under the Morrill Land-grant Act, the institution was given the mission of providing education, research and service to the people of the northern Great Plains. The school's first courses were in the areas of Agriculture, Engineering/Mechanic Arts and Home Economics. A program in Pharmacy was soon added and, in 1914, courses in architecture began under the Mechanic Arts program. In 1960 an amendment to the State's constitution changed the official name of the school to North Dakota State University.

The University is governed by the State Board of Higher Education (SBHE) and by the Chancellor of the North Dakota University System (NDUS). The system includes eleven institutions throughout the state. NDSU's current enrollment exceeds 14,300 undergraduate and graduate students from 47 states and 79 countries, with 595 ranked faculty, 81 full-time instructors and lecturers, and 100 part-time faculty. NDSU employs 84 administrators, and 1,486 full-time staff members. NDSU's overall student to faculty ratio is 19/1, with 70% of classes having 40 or fewer students. NDSU offers 149 undergraduate degree programs and 138 graduate programs of study, with degrees awarded at the doctoral, master's, professional, and baccalaureate levels. Various undergraduate minors and certificate programs are also available. The university provides the largest and most diverse student learning environment in the NDUS system. NDSU is an R2, Division 1 university, the highest ranked in the state, and is listed in the ranks of the National Science Foundation's top 100 research universities (#83 among public institutions, #120 among all institutions in FY15), with more than \$156.3 million in annual research activity reported for FY15).

In May of 2010, <u>Dr. Dean L. Bresciani</u>, formerly the vice president for student affairs at Texas A&M University, was named North Dakota State University's 14th president by the State Board of Higher Education. Throughout his career, Bresciani had "gained an extensive background in strategic planning, enrollment management, facilities design and financing, auxiliary enterprises operation and the implementation of business operation efficiencies and revenue enhancement measures. A focus of his work is enhancing the accessibility and quality of campus programs while improving the sense of welcome, support and achievement for all members of the university and surrounding communities." <u>Dr. Beth Ingram</u> was appointed Provost in 2014, with a background in macroeconomics and econometrics. The North Dakota University System has faced serious economic challenges during the past two years and President Bresciani and Dr. Ingram have brought impressive skills to those challenges, which have included 17% budget cuts for the current biennium.

NDSU's Mission and Vision focus on the role of the land-grant university in a changing world. The more defined language of its Core Values additionally emphasize people, scholarship, teaching and learning, ethics, culture, and accountability, all closely aligned with the goals of the architecture program at NDSU.

Institution in the Context of 21st Century Higher Education

In his annual State of the University speeches, President Bresciani touches on NDSU's role and accomplishments as a 21st institution of higher education:

- Faculty, staff and students conduct research in critical areas such as cancer treatment, drug
 delivery and testing, crop productivity and disease resistance, cyber security, bullying, eating
 disorders, disease diagnosis, the use of organic materials in paints and products, the use of
 sensors to monitor floods and droughts, and many other issues that face our society.
- Nearly 80 percent of our North Dakota students take their first jobs in North Dakota, and about 40 percent of out of state graduates stay in North Dakota for their first jobs
- Measures of student caliber and retention continue to improve. The most recent cohort of students had a first-year retention rate of nearly 80 percent. Our four-year graduation rate has gone up 7% in just a few years, and those students find well-paying jobs upon graduation.
- While the national default rate on school loans at public institutions is more than 11 percent, ours is 3.2 percent and has dropped steadily over the past three years.
- Without any state funding, over \$78 million in construction is underway or about to commence.
- During FY16, the NDSU Foundation and Alumni Association has received over \$52 million in new fundraising production. Never before have we experienced such success in a 12-month period of time. This support has come from philanthropists, businesses, charitable foundations and the State of North Dakota through its matching challenge program.

How the Institution Benefits the Program

In significant ways, the University has provided critical support to the Department outside of the normal framework of program and curricular support and faculty-line infill, including these recent major changes:

- Providing support for moving the Department from the College of Engineering to the College of Arts, Humanities and Social Sciences.
- Our Department was 1 of 3 units selected by President Bresciani to receive State matching funds for external fund raising; we had \$450,000 matched.
- Providing support for administrative and faculty-line additions during times of financial upheaval in the University.
- Providing support for a facility move from campus to downtown Fargo. The program has benefited in ways that can't be measured by our relocation to two first-class facilities in the downtown area. These high-profile facilities make a fine impression on prospective students, and allow our students to work and study in spaces that support and enhance their efforts as future professionals and design-thinkers.
- Through numerous opportunities and programs, the University provides both <u>faculty</u> and <u>student</u> support for individual and collective development and success.

History and Description of the Program

In 1914, the first courses related to architecture at North Dakota Agricultural College were offered in the Department of Civil Engineering and Mechanic Arts. In 1922, this institution granted its first Bachelor of Architectural Engineering degree. From its beginning until World War II, the architectural program maintained a strong engineering bias.

In 1969, the department invited a visiting committee from the NAAB to tour the school, resulting in initial accreditation of the five-year Bachelor of Architecture degree in 1971. The program has received continued re-accreditation since that time. In 2014, the Department celebrated the 100th anniversary of the offering of its first courses.

Establishment of a degree program in Landscape Architecture in 1983 determined the current structure of the Department of Architecture and Landscape Architecture. The Landscape Architecture program at North Dakota State University began as a joint venture between the Departments of Horticulture and Architecture between 1970 and 1980. As the program grew and the profession of landscape architecture matured, NDSU offered a full degree, the Bachelor of Landscape Architecture, in 1983. The program graduated its first class of four students in 1988. The Landscape Architecture program is currently moving toward offering a five-year MLA degree.

Moving into the 21st century, the NDSU Architecture and Landscape Architecture programs have made significant advances. The most significant challenges the Department faced in the late 1990's involved lack of space and inadequate operational funding. The 12,000-sq.ft. Ehly Hall addition was completed in the fall of 1999, adding substantial accessible space to the department for design studios and library space, alleviating the severest space problems.

In 2004 and 2008, NDSU launched a major expansion into the downtown area of Fargo with Renaissance Hall and Klai Hall, home of the Department of Architecture and Landscape Architecture and the Department of Visual Arts, and Barry Hall, home of the College of Business. This mini-campus started in 2004 with the purchase and renovation of the Northern School Supply building (now Renaissance Hall) at NP Avenue and 8th Street north in downtown Fargo. The building initially served as the home of NDSU's visual arts program and half of the architecture and landscape architecture programs (with the other half remaining in the Architecture Building and Ehly Hall on campus). In 2006, the NDSU Development Foundation purchased the Pioneer Mutual Life Insurance Building and Lincoln Mutual Life & Casualty Insurance Building, two blocks north of Renaissance Hall. These buildings and subsequent additions house the College of Business (in Barry Hall) and the remainder of the architecture and landscape architecture programs (in Klai Hall). The area surrounding these buildings was developed into a "minicampus" with large grass areas, trees, and other amenities. Purchase and renovation of Renaissance Hall, Klai Hall, and Barry Hall were funded by alumni donations.

In 2004, the State Board of Higher Education granted the department a substantial increase in student program fees to help fund educational excellence beyond the capacity of state and university funding. A program fee of \$150 per semester had been charged to students since 1995, primarily for computer support. Since this fee had become inadequate, the increased fee was raised in 2004 to 1/3 of in-state tuition. After 2012, the fee was relabeled as Differential Tuition and set at the same 1/3 additional rate but tied to a student's state-of-residence tuition. This fee has allowed the architecture program to fund personnel and student support that are vital to educational excellence. Currently, the department has a total of 21 faculty FTEs and a full-time academic advisor for a student enrollment of over 400 students. In the year 2000 the department reconstituted its Advisory Council into two Advisory Boards, one for architecture and one for landscape architecture. In 2009 the two boards were re-combined, with a total membership of 23 alumni and affiliated supporters of the department.

In 2005 the department initiated a request to replace the Bachelor of Architecture degree with a Master of Architecture degree. This new degree program was approved by the NAAB as the accredited professional degree offered by the department in 2006, with the first NDSU MArch graduates receiving their degrees in the spring of 2007. The department currently offers two undergraduate degrees – the Bachelor of Science in Architecture (for architecture students) and the Bachelor of Science in Environmental Design (for landscape architecture students – and two professional degrees, the Master of Architecture and the Bachelor of Landscape Architecture degree. In 2008, the architecture program was listed by Design Intelligence as the 17th top ranked five-year Bachelor's degree program in Architecture in the country.

In 2012, during an extended period of campus-wide hiring freezes, the University provided financial support for the recruitment of a permanent Chair, after a five-year period of interim leadership, as well as additional program administration and faculty-line funding for Landscape Architecture. In 2013, the University facilitated a long-discussed move for the Department from the College of Engineering and Architecture to the College of Arts, Humanities and Social Sciences, a move that has proved successful in many ways. As the Engineering departments had become more research and less-building science focused, the College of AHSS offered a more natural 21st century fit with its arts, social science, communication, and community engagement foci. Additionally, there have been benefits to being housed in the same college as our building-neighbor, the Department of Visual Arts. Currently, the University is working with the College and the Department on a name-change, which will result in the creation of a School of Architecture within the College.

In the summer of 2017, our permanent Chair, Dr. David Bertolini, was chosen as the <u>College's Interim</u> <u>Dean</u>, with the departure of Dean Kent Sandstrom. <u>The search effort</u> for the Dean's position is underway, and <u>Prof. Michael Strand, Chair of Visual Arts</u>, is currently serving as Interim Chair for the Department of Architecture and Landscape Architecture.

Program/Department Mission

The Department of Architecture and Landscape Architecture is committed to the University's mission of a student-focused, land-grant, research university. We offer a teaching, learning, and research environment that is dedicated to two principles: design excellence and strong leadership. Graduates are dedicated to finding solutions to regional, national and global challenges. Our research, creative, and grant activity address a broad spectrum of design issues that hold currency with today's students, professionals, and citizens. We serve our students with cutting-edge technology, innovative research and creative works, and professional advising in collaborative studio environments. Further, we meet or exceed the requirements of our accrediting bodies: The National Architectural Accreditation Board (NAAB) and the Landscape Architectural Accreditation Board (LAAB).

(Approved by the Architecture & Landscape Architecture Departmental Council, May 2017)

Program/Department Vision

We aspire to be the leading professional programs in the Upper Midwest region, acknowledged by professionals, our scholarly and creative accomplishments and our students who historically become creative designers, leaders in the profession, and innovative thinkers.

(Approved by the Architecture & Landscape Architecture Departmental Council, May 2017)

NDSU Architecture Program in the Context of 21st Century Architecture Education

We view architecture education in the 21st century as emerging from a focus on pure design to embrace a more holistic education focusing on the four cultures of our vision: The Culture of Inquiry guides us to a deeper investigation of the human condition and the contributions of the built environment. The Culture of Experience guides us beyond the design studio to engage with the community and to explore breadths of learning and diversity through initiatives such as our term abroad. The Culture of Making guides us to craft and the importance of quality. The Culture of Design continues to guide us through the traditional contribution of architecture to society: beauty, scale, harmony and excitement in creating the setting for human activities.

How the Program Benefits the Institution

Our architecture program is the only such program in the State. It benefits the institution by providing a major voice from the perspective of broadly-construed environmental design in the context of a primarily technical/scientific/agricultural institution, by directly working with communities in North Dakota and the region toward enhancing the role of design, through providing most of architecture graduates in the state and region, and through active involvement in the local architecture profession.

The faculty's benefits to the university include service to many University-wide and College committees and governing bodies. These include standing committees, search committee, administrative review committee, ad hoc committees, and the Faculty Senate. The university's image in the broader academic community is enhanced by faculty presentations at other institutions, and in our own community with design charrettes, public exhibits, and installations of student work. Our lecture series brings in speakers with international reputations, and whose topics are of interest to participants both inside and outside the institution. Our downtown buildings are frequently used by University and community groups for meetings, presentations, and symposiums.

Holistic Development

In addition to nine semesters of design studio, our students take required courses in philosophy, psychology, sociology, anthropology, in addition to three major courses which qualify as general education humanities and fine arts courses. Our design thesis requires students to pose a theoretical

question beyond design, and pursue that question through various research methods, such as historical, qualitative, and/or experimental methods. Further, we require research into case studies and design precedents.

I.1.2 LEARNING CULTURE

Architecture Program / Department Learning Culture

The learning culture in the architecture program at NDSU is one which historically has embodied a supportive ethos, in classrooms, studios, and critiques. Faculty, staff, and students maintain the kind of friendly relationships that are not characteristic of all schools of architecture. Students in the program have a reputation for a dedicated work ethic, but we encourage students to have a balanced life between working hard in studio and their personal interests, such as chess club, sports, or music. Further, our student groups actively plan social events that provide a strong counter to their coursework.

Fargo is a small enough community that most faculty and students live within a reasonable driving – if not walking – distance from studio spaces, and it is not unusual for faculty and students – along with IT and woodshop staff – to engage in discussion outside the classroom and scheduled studio environment. The program endeavors to model the student-focused mission of the University.

In the spring of 2015 and the fall of 2017, student leaders, faculty, and staff of the Department were invited to participate in a discussion of learning culture within the program. The following Learning Culture document was approved by students and the program faculty and staff in October 2017.

NDSU ALA Studio Learning Culture Policy

Who We Are. We are the students, faculty, and staff of the Department of Architecture and Landscape Architecture at North Dakota State University. We are the professionals of the future who will shape the built environment, the values of our society, and the legacy of our discipline. We celebrate the accomplishments of our peers, promote the personal growth of character in individuals, and encourage thoughtful discussions between one another.

Goals and Direction. The goal of this Studio Culture document is to establish a framework for healthy and constructive learning in our Department. This document will be reviewed and updated on a regular basis, in a process involving students, faculty, and staff.

How & What We Learn. In recognizing that a great range of skills and traits will be developed within the Department, we agree to work together to develop critical thinking through thoughtful and provocative discourse and hands-on studio experience. We work to develop our leadership skills by engagement in our department and our community. We engage our community directly through participation in public discussion and functions, thereby enriching and widening public understanding of our professions. We collaborate with disciplines other than our own, in an effort to deepen our understanding of the holistic nature of environmental design. Innovative teaching and learning, through creative and constructive discussions, assignments, and critique, become the means of testing and defining what we see as possible and plausible.

Social and Ecological Responsibility. We acknowledge our collective responsibility for our own health, safety, and welfare and that of our clients and the community, within the environment understood as a whole. Within this broad framework, we seek to maximize our resources through innovative design and the creative use of materials, as we test the boundaries of ecological thinking, research, and applications. We also actively advocate for social and economic equity for all members of society through the design of the human environment. We maintain an enthusiastic view of our future in pursuit of sustainable design, innovative thinking, and collaborative processes.

Responsibilities. Our students strive to maintain a healthy, safe, and balanced lifestyle in the design studio, to manage their time effectively, and to welcome diverse points of view and approaches. Students work to sustain communication with faculty during all stages of design, including communication of their needs as students. Students bring new and constructive ideas to discussions and critiques, with an emphasis on creativity, forward thinking and innovation throughout the design process.

Faculty strive to establish and sustain an open environment for communication, high standards and expectations, a dedication toward constructive critique, and transparency in assessment. Faculty challenge students intellectually while providing them access to resources. Faculty expectations are established with recognition of students' academic work loads, and respect for those dimensions of life outside of the design studio.

Our staff work to facilitate and support a safe, accessible, and open environment, promoting excellence and creativity in all aspects within the department.

Open discussion and Mutual Respect. Students, faculty, staff and Department visitors are always encouraged to take part in open, informal critique and discussion of each other's work in a constructive and respectful manner. We recognize the importance of constructive feedback from both designers and non-designers in our exploration of concepts and learning.

The Studio Learning Culture Policy is disseminated among the ALA community in the following ways:

- Posted on the Department's website
- · Posted in studio areas
- Presented in a first year lecture class along with the Department's <u>Facilities Use Agreement</u> and <u>Honor Pledge</u>

During their first year, students read and sign these three documents, all of which deal with the respectful treatment of other members of the department's learning culture community.

NDSU Learning Culture

NDSU's core value as a "student-focused" institution is central to its reputation and mission. The ability of a modern university to offer broad support to its student body is enhanced by its digital ability to make known the supportive services it offers, as well as information about activities, events, and organizations. This access to information is essential to our students in their downtown location. Our students rely on a few one-stop digital locations for this information:

Student Life Information

- Athletics (Go Bison!)
- Campus Attractions
- Memorial Union

Activities, Calendar, Reservations, Information Desk

- Residence Life
 - Housing, Apartments, Residence Halls
- Student Activities
- Student Affairs
- <u>Student Organizations</u>
 Greek Life, Governing and Advisory, Multicultural
- The Spectrum
 - Student-Run Newspaper
- ThunderRadio
 - Student-Run Radio Station

myNDSU, is a newly-announced "clearing house" for events, student organizations, and volunteer opportunities.

<u>NDSU Student Government</u> provides support for Department organizations, including funding for those groups which are open to all students.

Through participation in the National Science Foundation's <u>Gateways-ND program</u>, offered through NDSU's <u>Center for Teaching and Learning</u>, NDSU instructors gain knowledge and practice in a methodology for enhancing student learning. The values of this program mesh well with a healthy learning culture environment:

- · All students can learn successfully.
- Education research should inform teaching.
- Student-centered teaching practice enhances learning.
- All faculty can learn to teach in ways that are student-centered.
- Interaction is a hallmark of student-centered instruction.
- Backward design supports effective instruction.
- Evaluation of learning and teaching is vital.
- We enrich each other by working together.

Academic Integrity and Rights of Others

North Dakota State University has established policies regarding academic conduct, which go together with the spirit of professional conduct. It is assumed that the academic community operates on the basis of honesty, integrity, and fair play. To address all issues relating to student conduct, the University instituted in 2008 a policy titled "Rights and Responsibility of Community: A Code of Student Behavior." This policy establishes a code of conduct regarding respect for the rights of others, and grievance procedures.

I.1.3 SOCIAL EQUITY

Institutional Equity and Diversity

The University and Department maintain a <u>policy of equal opportunity for all faculty and students</u>. The goal is to create a climate of fairness, and to cultivate policies and practices that give everyone a voice while establishing a zero-tolerance policy regarding discrimination and harassment. The goal is also to recognize the contributions and support the advancement of all, and affirm the following:

- Pluralism grounded in visions of justice and belief in the transformative power of education.
- An open and free exchange of ideas rooted in civility and a respect for the contributions of all.
- Zero tolerance for acts of bias or hate.

NDSU continues to welcome and learn from its ever-expanding cultural and ethnic diversity, and it has served as a healthy base for the ever-increasing diversity of the Fargo-Moorhead metropolitan area. Cultivating diverse participation throughout the campus community is a catalyst for improved decision making, increased productivity and a competitive marketplace advantage. In order to cultivate a supportive climate, NDSU has instituted and promoted the following, much of which is organized through NDSU's <u>Diversity and Equity</u> initiatives, which benefit the architecture program,:

- <u>Diversity-specific accountability</u> for employees.
- Diversity training and sexual harassment training for all employees.
- Faculty and staff orientation that addresses diversity in the workplace, including recognizing and accepting differences.

- Nominating and search committees that emphasize the diversity of the university community in selecting candidates, with <u>training sessions for search committee members sponsored by the</u> campus NSF-sponsored Advance FORWARD initiative.
- Recruitment and retention efforts that strive to create a diverse qualified workforce.
- <u>Safe Zone training</u> for all employees (voluntary).
- NDSU Diversity Policies.

Departmental Equity and Diversity

The Department attempts to go beyond these standard by actively encouraging students to be aware of diverse cultures and viewpoints. The Department endeavors to establish an atmosphere that is consistent with the highest standards of ethical conduct expected of our profession and practiced in our society. The Department is dedicated to increasing diversity among faculty, staff, and students. In the past 4 years we have appointed a woman as Program Director, hired two female assistant professors, and adjusted pay inequity for a female lecturer. In 2016, we worked with students to attend the National Organization of Minority Architects (NOMA) Conference in Los Angeles with the goal of starting a NOMA student chapter. To facilitate this, we brought in the regional representative of NOMA to give a presentation and to work with our students. Our students established a NOMAS chapter in the fall of 2017. Additionally, we worked with our Alumni Foundation development officer, and we have developed two generous yearly scholarships of \$10,000 and \$1,500 for Native Americans, African Americans, and women.

The intent of the program beyond its achievement-oriented performance criteria is to expand students' perception of themselves, their society and the world around them. We are in the process of sending information on our first diversity scholarships to over 770 counselors in a five-state area. Additionally, the Chair has been invited to North Dakota High School and Junior High School counselors' continuing education events in 2014 and 2016. At these events the Chair is able to reach schools regarding recruitment, scholarships and degrees. Most of the students at NDSU come from within a 250-mile radius of Fargo from homes in North and South Dakota and Minnesota. A number come from the metropolitan area of Minneapolis-St. Paul but, for the majority, there has been little chance for exposure outside the northern Great Plains. Recruitment beyond the region is consistently a result of a positive impression that our students make in the firms in which they work, and word-of-mouth through our alumni and alumni firms around the country.

Each year, our program welcomes a small number of international students who have chosen to study architecture at NDSU, coming from Italy, Taiwan, Cambodia, Vietnam, Japan, Norway, Canada, Malaysia, China, Tibet, Brazil, and India, as well as our exchange students from Belgium. We welcome and cultivate these students, as their contributions to our program are invaluable. Admission into the freshman architecture class is open to all university students. However, admission into the second-year architecture program is based solely on GPA, a process that is clearly equitable and is communicated to all prospective students.

In the past five years, the percentage of female students graduating from the architecture program is 56%, and the current percentage of female students in all years in the program is 41%, but the percentage of female students remains below the goal of 50%. The number of minority and foreign students is still extremely low, mainly owing to the lack of diversity within this region, but both the program and the institution are currently more diverse than at the time of the last site visit. Currently the number of students in the program identifying themselves as non-white is 16%.

The Department strives to provide all our students with an appreciation of their own place and culture, and then to introduce their role as citizens of the multi-cultural, interdependent and fragile, global village in which they live. Respect for themselves, others and the world around them should be the foundation upon which the department builds the student's understanding of architecture and the profession.

Additional efforts have been made to improve our students' lack of exposure to diverse traditions and values by involving them in exercises that expose them to diversity. These range from academic programs focusing on urban sites in various national and international settings; field trips to urban centers such as Chicago, San Francisco, and Minneapolis-St. Paul; study tours in Dubai; and our Term Abroad Program, which since the spring of 2009 has taken mixed studios of architecture and landscape architecture students to Spain, India, and currently Belgium.

Through our Department <u>lecture series</u>, we have brought to the school a group diverse of speakers who represent diverse cultures, ethnicities, and gender. This fall we sponsored a one-day event, "<u>Level: A Symposium on Gender Equity in the Design of the Built Environment</u>," held concurrently with the fall conference of AIA North Dakota. We have also hosted lectures on community and diversity by Mr. James Garrett of <u>4rm+ULA</u>, a regional firm, and Ms. Tiffaney Brown, NOMA regional Representative.

Since the last site visit several minority students in the department have received grant support for research work with faculty in the Ronald McNair Scholars program, through Student Support Service's TRIO program. NDSU was one of the first 14 universities chosen in 1989 to be involved with this scholarship program, which has sought to increase the number of professors in underrepresented populations. Regrettably, this program was terminated in the fall of 2017 at NDSU.

An NDSU chapter of NOMA, the <u>National Organization for Minority Architects</u>, was launched in 2016-2017. As mentioned above, Tiffany Brown, the Midwest liaison for the organization, gave a kick-off lecture in the spring of 2017, "Advocacy in Architecture: A Battle for Our Communities." All five officers of our NOMA chapter recently attended the 2017 annual conference in Houston, TX.

In 2016, the John Klai Endowed Scholarship was established, an annual award of \$4,000 and the largest scholarship in the Department at the time, with preference given to recipients from diverse classifications. The Department has announced two new scholarships, one – the <u>Doug Hanson Diversity Scholarship</u> – awarded this year, where preference will be given to students from underrepresented groups. This award will provide two \$5,000 or one \$10,000 scholarships annually, and may be offered to high school or early-career students, with the possibility of renewal. The other diversity scholarship, the Deb Fredrickson Diversity Scholarship, will come online in 2018 and will provide a single award up to \$4,000.

Recent faculty searches have all resulted in diverse pools of candidates, with a female or diverse candidate being hired in four out of the last five searches. All search committee members are required to attend FORWARD-sponsored search committee training. It is a stated department goal to increase student and faculty diversity beyond our current numbers.

I.1.4 DEFINING PERSPECTIVES

I.1.4 A COLLABORATION AND LEADERSHIP

The Department of Architecture and Landscape Architecture has historically embraced students as partners in their education. Further, we have student leaders from each academic year who serve on our professional Advisory Board and meet twice a semester with the Chair to discuss concerns and ideas for how to make the program better. There is a positive camaraderie between students, faculty and staff that we value highly, because it provides an environment where collaboration and leadership are modeled and nurtured. Students understand the challenges of the future will best be met through collaborative and interdisciplinary solutions. Starting with their first year in the pre-professional program, collaborative research and/or team efforts are a part of both studio and lecture class curricula. In these efforts, and in their interactions with our alumni, students begin to understand that professional success also relies on leadership and problem-solving skills. A commonly used model for collaborative work is for a project to start as a shared research and modeling challenge, with an individual effort following. A common model for developing leadership roles is for students to alternate between leader and follower in a team project. Our studio-sequence structure also models a "collaborative, then individual" format.

- Our first-year ENVD structure is built on a model where students are presented the essentials of their studio projects in a large-class format (ENVD 102, 104), then break off to work in smaller studio sections (ENVD 130, 172). Studio sections are organized collaboratively by instructors.
- Our second-year ARCH 271-272 studios are team taught, with all students working on the same projects.
- Our third-year ARCH 371-372 studio projects vary from section to section, with a structural-system thread (wood, masonry, steel, then concrete) that weaves the work of the studios together.
- Our fourth-year fall ARCH 471 Integrated Design Studio is collaboratively taught with common assignments, followed by a spring ARCH 472/474 class that focuses on a topic selected by the instructor – often urban design.
- Our fifth-year fall ARCH 771 studios offer the most diverse selection of studio options (research, design/build, film-making, drawing/making, preservation, theoretical investigation), followed by a collaboratively-structured Thesis effort, with individually-selected projects.

The following are examples of ways that collaboration is fostered, and leadership encouraged in the classroom:

- Students in ENVD 172 studio are given a short measuring, mapping, and topo-modeling project in which working as a team is essential (Profs. Fischer, Moore, Taplin, Bertolini).
- Students in ARCH 271 and 271 studios work collaboratively on a photography project, "Terrature," with Landscape Architecture students, and follow the model of working collaborative and then individually throughout the two-semester sequence (Prof. Booker, Greub, Urness, Vorderbruggen, Yergens).
- Students in ARCH 371 and 372 studios often work collaboratively from start-to-finish on a project, and will often "trade" a design mid-project with another group or individual. Students at this level may begin to program on their own, collaborating on an effort that is new to them, and modeling leadership skills to lead that process (Profs. Christenson, Schwaen, Gleye, Aly Ahmed, Ramsay, Yergens, Barnhouse).
- Students in ARCH 341 *Site Design* work collaboratively with Landscape Architecture students to produce a digital and analog site model (Greub).
- Students in <u>ARCH 771 Research Studio</u> work collaboratively with alumni firms on specific initiatives, cultivating collaborative and leadership skills as they work with firm liaisons (Prof. Mahalingam). In ARCH 771 Design/Build Studio, individual ideations because the shared property of the group, from which ideas were selected and developed, and then traded, so that by the end of the class each student had taken on a leader or follower role several times (Prof. Srivastava).
- Many lecture or seminar classes use the shared presentation model, with students taking on a research topic, becoming "local experts," and presenting their findings to the class, gaining experience with leadership and collaboration.
- See Section 2 Progress since the Previous Visit for additional examples of cross-disciplinary efforts

Extracurricular activities often provide the best means for students to build their leadership skills. Within the Department and College, there are many <u>student groups</u> which provide these opportunities, and students are able to earn AXP credit for their leadership efforts. These groups include AIAS/Freedom by Design, Tau Sigma Delta Honorary, USGBC, NOMAS, and AHSS Ambassadors.

Student leaders work together with faculty and our Advisory Board to facilitate building tours, organize and lead portfolio reviews, mock interviews, studio critiques, resume reviews, and town halls.

I.1.4 B DESIGN

The Architecture program has a long history of educating students in a pluralist design milieu, with an emphasis on students and faculty engaging in discussions which may include a broad range of theories, techniques, and approaches. At the time of graduation, the goal is for students to leave with their own approach to design, rather than an approach that is the school's singular design methodology. Each

student, in their exposure to diverse faculty perspectives, are exposed – even within the same studio year – to a variety of different teaching styles and content emphases. The fact that studio levels are grouped together in an open-plan desk arrangement, rather than studios being "housed" in separate rooms, encourages the type of cross-pollination of ideas that the faculty strives for in a student learning environment. Additionally, the frequent presence of outside critics in mid-term and final reviews guarantees that perspectives that are not NDSU-centric are also welcomed. Local practitioners participate, but funding is also available for external critics from around the country or continent for Thesis and Integrated Design/Capstone reviews. That said, the curriculum is organized in a vertical manner with guiding "themes" for the integration of studio and lecture courses within a year. The broad descriptions are as follows, which expand into a more detailed list of expected outcomes:

First year studios: "Intro/Overview and Design Fundamentals"

Focus on fundamentals of design, composition, and representation

Second year studios: "Architectural Fundamentals"

Focus on fundamentals of environment perception/experience/composition/process

Third year studios: "Architectonics and Building Systems"

Focus on technology, construction, safety systems and poetic/systems integrations

Fourth year studios: "Socio-cultural Responses and Integrated Design"

Focus on addressing and integrating complex/sensitive contextual (rural/urban) systems, as well as integrated design of complex buildings.

Fifth year studios: "Design as Research

Focus on formal analysis and research-based investigation and responses. Solutions to be diagrammatically comprehensive but focused on research topics.

At all levels, emphasis is placed on design process, problem solving, scale, and community engagement. The program is advantaged, also, by our interdisciplinary first year, and the emphasis on thinking and designing broadly, with an eye to the past and future.

As critical thinkers, our students prepare to be advocates for design, proposing solutions that respond positively to client requirements, understanding that only through teamwork can we address larger social needs that often go unspoken. Mindful that we ride the cusp between tradition and innovation, our graduates must be ready to work within a profession they will inevitably change.

I.1.4 C PROFESSIONAL OPPORTUNITY

The department has long-enjoyed a great deal of support from the profession in North Dakota and Minnesota. The level of dialogue and direct participation of professionals with students continues. The school has a large and active AIAS student chapter and its Freedom by Design chapter has been recognized nationally for its work. Membership in these two organizations provide a gateway to a future connection to the profession. Many local architects are involved in the education process as guest lecturers and studio critics for numerous courses. Many NDSU students work summers, and work part time in the offices of local architects during the school year. Information about job opportunities are distributed through the student listserv and through the NDSU Career Center. Our studio travel takes students to San Francisco, Chicago, and Minneapolis, and visits to professional offices in these urban areas are a routine part of these trips. Firm Crawls are organized annually by student groups, this year our Tau Sigma Delta and NOMA chapters.

Architects around the region have a casual, friendly relationship with the department's faculty and are frequent participants in studio reviews. Several faculty members actively participate in professional activities sponsored by both state AIA organizations (AIA North Dakota and AIA Minnesota). One faculty member (Cindy Urness) is the President-elect of AIA North Dakota. Faculty members Mike Christenson

and Malini Srivastava have recently won an AIA North Dakota Design Award, and Prof. Srivastava has been awarded a number of AIA Minnesota awards, including Young Architect Award. Participation by faculty includes attending lectures, product shows, and continuing education activities. One faculty (Darryl Booker) has been especially active in the North Shore Design Conference sponsored by the Duluth Chapter of AIA and Young Architects Forum. AIA North Dakota Executive Director Bonnie Staiger Larson is a member of the Department's Advisory Board.

As described in *Section 1.2.1 Human Resources and Human Resource Development*, The Architect Licensing Advisor for NDSU, Prof. Mark Barnhouse, introduces the Architectural Experience Process (AXP) process - together with a comprehensive overview of internship, state law, and the transition to practice - to each class level each year, starting in a lecture class at the second year.

ARCH 781 – *Professional Practice*, in the fifth year of the curriculum, addresses the processes of experience and examination, as well as job-seeking. Non-traditional careers are also introduced, and Advisory Board members visit the class to discuss their own career paths and answer student questions. Students in the class who have had work in the profession are encouraged to establish their AXP records.

I.1.4 D STEWARDSHIP OF THE ENVIRONMENT

Discussions of sustainability and our responsibility to be stewards of our environment are embedded in courses throughout our curriculum. It is now a given in our studio assignments that sustainable is not just an "added" feature, but a minimum requirement for all design work, from the scale of a small project to a sustainable city. Sustainability is the ultimate ethical question for the planet. Efforts in the Department in include:

- Prof. Malini Srivastava's <u>eFargo partnership</u> project is a model for University and community cooperation. This partnership, which includes the city of Fargo, NDSU, Cass County Electric Coop and Xcel Energy, is an offshoot of Prof. Srivastava's <u>Bush Grant</u> research, with a goal of reducing Fargo's energy footprint. Fargo is currently a finalist in the <u>Georgetown University Energy Prize</u> Competition, and work on eFargo has given many students in the program an opportunity to work as Research Assistants, working in the community to educate the public about energy conservation.
- Prof. Srivastava's newly awarded NSF grant, serving as a Co-PI with Landscape Architecture
 professor, Dominic Fischer, will bring together electrical engineers, architects, community
 planners and artists to envision the development of an ensemble of tools and technologies for
 low-cost, non-toxic, off-grid capable future household energy delivery systems.
- Prof. David Crutchfield's seminars, "The Green Aesthetic" and "Greenwash in Architecture" have been two of our most popular sustainability seminars, as well as Prof. Darryl Booker's "Esonia" seminar.
- Prof. Crutchfield has collaborated with Landscape Architecture professor Kathleen Pepple, and Interior Design professor Susan Ray-Degges on a Net-Zero farmstead, "Friluftsliv Farm," in western North Dakota, as a laboratory for sustainable strategies.
- ARCH 472, our Urban/Community Design 4th year studio, often focuses on sustainable urbanism (Prof. Don Faulkner).
- Student groups have taken on many sustainably focused projects over the years, including establishing and sustaining a recycling program for our buildings.
- Additionally, our departmental library has used its limited funding to expand our collection of resources on sustainability.

I.1.4 E COMMUNITY AND SOCIAL RESPONSIBILITY

The majority of students enrolled in architecture or landscape architecture major courses will enter the profession. But many others, in the general education classes we offer to the campus, are also exposed to an environmental design perspective that will affect their many other social roles. As parents, teachers,

members of church building committees; voting on a school bond issue or buying a home, they will exercise design judgments, participate in and influence the very processes of government and exercise leadership in their respective communities, and in our classes we emphasize to them their responsibilities as citizens.

The social and environmental context for architecture is emphasized throughout our curriculum beginning in the first year. The place of architecture within society has been a focus of several of our courses. Our history/theory seminars in the fourth and fifth year look at the recent or current condition of architecture throughout the world. Several of these courses have focused on ethical decision making in the profession, as does the Professional Practice class. The strengthening of our Landscape Architecture program has increased the level of expertise and intensity of interest in environmental quality. The general education portion of our curriculum requires students to take sociology, anthropology, psychology and philosophy to provide the background and theoretical base for later discussions and involvement of architecture within the varied cultures of our globe.

Many of the faculty members in the department lead by example. Faculty are involved in the community as elected officials, members of local review boards, frequent lecturers at public events, organizers for regional issues such as affordable housing, volunteers for service activities, leaders of neighborhood associations, members of service groups, and lobbyists for environmental and design issues. Efforts of our faculty have resulted in the local school district adopting LEED standards for its buildings and sustainability becoming a major issue for the design of new facilities throughout the city of Fargo. In addition:

- Prof. David Crutchfield has been involved in the co-founding of the North Dakota chapter of USGBC, chaired the regional eco-leadership round-table called "The Valley Earth Week Committee," successfully recruited for "Architecture for Humanity," and advises both the student USGBC and AFH groups.
- Emeritus Professor Steve Martens has served both the North Dakota and Minnesota State Historical Societies, and has been appointed to the National Register State Review Board for North Dakota and has been a noted state leader in historic preservation, along with Prof. Ron Ramsay. Profs. Ramsay and Martens have written the only comprehensive book on the architecture of the state, *Buildings of North Dakota* (2015), part of the *Buildings of the United States* series.
- Prof. Don Faulkner served multiple terms on the Fargo School Board.
- Dr. Paul Gleye served as Chair of the Historic Preservation Commission of Fargo.
- Dr. David Bertolini serves on the newly established Fargo Arts and Culture Commission.

Our Freedom by Design chapter, with Prof. Darryl Booker as faculty advisor, has accomplished a number of large and small projects during their eight years of existence, and continues to provide students in the program an opportunity to use their design and construction skills to bring universal design to individuals in the community.

I.1.5 LONG-RANGE PLANNING

Long-range planning constitutes an ongoing process in the department. The department's first strategic plan, adopted in 2000, included initiatives such as increasing our degree offerings, building international connections, elevating standards of student performance, providing greater support for faculty research and creative work, increasing faculty diversity, attracting greater alumni support, securing improved facilities, and establishing an endowment. By 2006 our department had realized many of these goals, and we embarked on a quest to take the department to a new next level with a new 6-year target date of 2014. This document, titled *Vision 2014* and completed in 2008, emphasized four defining values called the "Four Cultures of Excellence" by which we wish our shared vision to be guided: a Culture of Design, a Culture of Inquiry, a Culture of Making, and a Culture of Experience. Many of the *Vision 2014* goals have

been realized and the document has evolved into the <u>Vision 2021</u> planning document. Planning initiatives promulgated in the original <u>Vision 2014</u> document resulted primarily from discussions by the faculty, with input from students and the department's Advisory Board. Recently completed <u>Strategy Plan Goals 2017-2018</u> from the University and the <u>AHSS Strategic Vision 2016-2021</u> coincide in many ways with the Department's vision.

Broad-stroke long-range objectives for student learning are discussed at the department level, resulting over the years in the transition of the Architecture program's BArch to an MArch degree, the current inprogress transition to an MLA in the Landscape Architecture program, and planning for the future launch of post-professional degrees and/or certificate programs, which will be collaborative in nature, serving both programs. Recent changes and improvements to our first-year Environmental Design sequence were also planned collaboratively by both programs, given the shared nature of that year's curriculum.

Data sources, many of them new, have allowed the program to seek better information that drives our curricular decision making. ACSA information sources have recently prompted a time-extension to our studio hours. ARE test score reporting has allowed us to see areas for improvement in some of our content areas. "NCARB by the Numbers" allows us to see where we stand regarding registration and time-to-licensure statistics and share those with our students. NDSU's Office of Institutional Research provides multiple data sources, and the *Tableau* visualization analytics software that they administer offers opportunities to plan and analyze student numbers.

Regarding the Defining Perspectives and long-range planning:

- For *Collaboration and Leadership*, our plans are to pursue post-professional master's degree which will be interdisciplinary in nature, involving both our programs and other campus majors.
- For *Design* and *Community and Social Responsibility*, our plans for a Community Design Center will provide real-world opportunities for our students to be involved in design projects for groups and communities which do not have access to design services.
- For *Professional Opportunity*, we will continue with our one-year pilot internship project, a prelude to meeting AXP requirements for an IPAL application.
- For Stewardship of the Environment, our design/build project for net-zero housing has the potential to scale-up and link to the Community Design Center of the future.

I.1.6 ASSESSMENT

I.1.6 A PROGRAM SELF-ASSESSMENT

Critical evaluation of the programs, processes, and goals of the Department of Architecture and Landscape Architecture are imbedded into the everyday work of our department. Starting with our preyear faculty meeting and continuing in our committee structure, our Advisory Board meetings, University program review, our formal assessment process, and our departmental council we continually review our progress toward our long-term goals and a culture of excellence. For example, in 2013 the Department of Architecture and Landscape Architecture was suffering from several years of incoming student decline that was also a national trend. Additionally, the incoming first-year class had attrition of over -30% by the end of their first-year. To remediate this, the department developed a multithreaded recruitment and retention strategy. The strategy was comprised of four parts: re-introduce ourselves to university admissions officers, develop clear messaging, engage alumni and faculty, and inform potential our firstyear numbers were up 29% from the previous year. These increases exceed national trends which are still in decline. To solve the first-year retention the Chair and an ad-hoc faculty committee analyzed where and why attrition was occurring. The conclusion was there were three issues: we did not have a meaningful sequence of classes, our core messaging was confusing, and our course content did not match our goals. After working with faculty and the Program Directors meaningful changes were made, so that after implementing them in 2016-2017 attrition decreased from -30% to -8%.

Each year, within our departmental council meetings we review our progress toward our long-term goals. We make assignments to various committees, standing or ad hoc, and solicit help from students and professionals in the pursuit of our goals. Changes in leadership and changed goals at the University level certainly impact our ability to achieve our long-term goals. We assess the direction of the University and alter our approach to our goals accordingly. Our goals have not changed significantly but our focus and our dedication to certain goals has changed as a result of our reading of the University's goals for student numbers and current funding priorities. Within our process of working toward excellence we take the opportunity to assess our core decisions and to reaffirm our commitment or to change our goals or strategy.

Institutional Requirements for Assessment

Program Review

Strengths and weaknesses of University departments are reviewed periodically through the University's Program Review process. The Program Review Committee suggests actions based on the review and urges the department to act in the areas specified. The architecture program was last reviewed in 2011-2012.

As part of any program review process, students in the Architecture and Landscape Architecture programs may be surveyed regarding their satisfaction with the program and their future. While we do not have a program review on the horizon, we still conduct periodic surveys, including this survey which was recently conducted in the 5th year Professional Practice class.

Student Rating of Instruction Forms

The University requires student course evaluations of all courses at the university. The results of these evaluations are provided to the faculty and are used in the annual evaluations of faculty performance. In addition, the Department of Architecture and Landscape Architecture at NDSU is required, by the University, to conduct assessments of student learning. Our Department has developed an assessment strategy that links our needs for program assessment, the University's desire for program assessment and the NAAB/LAAB need for student assessment. We utilize a survey instrument, filled out by faculty, in both a formative and a summative manner. The survey is used in various studio sections as a formative tool and then again as an evaluation of the thesis projects, a summative evaluation. The survey groups the NAAB student standards into seven areas of pedagogical interest: design process and critical thinking; history and theory; humanism, culture and nature; design application; communication/representation; technology and construction; and professional practice. Low assessments, in any of these areas, results in discussions within the faculty about strategies and changes that might be necessary to increase performance in the area.

I.1.6 B CURRICULAR ASSESSMENT AND DEVELOPMENT

Results of our Assessments

As a result of our multi-pronged approach to assessment, we have made significant enhancements to our "Culture of Experience" by instituting an enhanced semester abroad opportunity for our students, with more opportunities for local travel. We continue to focus on design outreach projects that serve the needs of our large region.

As a result of our assessments related to our "Culture of Design" we have identified a need to improve our communication to the world, so we are in the process of making changes in the way that we represent ourselves to the world (social media, website, prospective student packages).

We have expanded the opportunities for faculty and students to be involved with research/creative activities, and we have sought to increase Research Assistant opportunities for our students as a result of our assessments of our "Culture of Inquiry".

Our assessments of our "Culture of Making" show that we still have room for improvement. Our most important change has been to offer several design/build studios since the last visit and to add innovative technology for model building. Our wood shop facilities and staff are excellent, and we have added fabrication tools such as a CNC router and 3D printers, but we still need additional space for wet and large-scale fabrication.

Assessments of student learning have resulted in several changes to courses in the past two years. An assessment of our beginning design experience led to significant changes in the way that our freshman courses were offered and taught. A lack of opportunity for students in our two programs to work together has resulted in joint classes in Digital Technology, Thesis Preparation, and Professional Practice.

Impact of Assessment

Our assessment activities have not shown a need to drastically change our design programs but instead they provide us with information and data that can be used to improve our existing programs. The changes that are made because of our assessments have a positive impact on the quality of education that our students receive and on the opportunities that are made available to our students. The changes that we have made because of our assessment have dramatically improved our ability to strive for excellence.

Self-Assessment, Alumni, and Students

The Department benefits from the dedicated support of an alumni Advisory Board, representing both Architecture and Landscape Architecture graduates, but also includes representatives of our allied professions and the profession at-large, including the Executive Director of AIA North Dakota and the State Board of Architecture, the lead construction executive in North Dakota of a large regional construction firm, and a visual artist who serves the profession as a consulting artist. The Board meets in Fargo twice a year and conducts two teleconference meetings a year, and alumni voices act as sound assessors of our program.

The Board is joined in their two-day sessions by a representative from each class, and the faculty is also invited to attend. A Town-hall meeting is conducted during each visit, members have given presentations about their work, and guest speakers for open forums have included the President and Provost of the University, and the Dean of the College, and representatives from both NCARB and Design Intelligence.

While the Advisory Board purposefully embraces their mission to "advocate for" and not "advise," their involvement with the Department has often acted as an assessment instrument in the following ways:

- They are a mirror of what the Department has been, and who we are. They serve as role models, mentors, and networking allies to our students, and conduct portfolio review sessions and give feedback from the employer's point of view
- They provide the faculty with accurate and frank information about the current state of the
 profession, how our students are doing in the work setting, and future trends and concerns. In the
 recent past, three members of the AIA Large Firm Roundtable were NDSU alumni and members
 of our Advisory Board this translates to valuable insight regarding the profession at large.

Assessment Summary

The Department of Architecture and Landscape Architecture has continued to expand our assessment activities beyond the day-to-day assessment of desk critiques and small-group critiques that is imbedded into any studio-based curriculum. We more clearly linked our classroom assessment activities with the student learning outcomes required by NAAB and with ARE pass rates. We expanded our assessment efforts to include formative assessments as well as the summative assessment that we had been using in the past. As a result of our activities we have instituted a major re-design of our first-year courses, as well as changes to the course which is now responsible for Integrated Design.

SECTION 2. PROGRESS SINCE THE PREVIOUS VISIT

Visiting Team Report (2012) CONDITIONS NOT MET:

II.1.1 - Student Performance Criteria

<u>2009 B. 6 Comprehensive Design: Comprehensive Design: Ability</u> to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:

A.2. Design Thinking Skills B.2. Accessibility

A.4. Technical Documentation B.3. Sustainability

A.5. Investigative Skills B.4. Site Design

A.8. Ordering Systems B.7. Environmental Systems

A.9. Historical Traditions and Global

Culture B.9.Structural Systems

B.5. Life Safety

2012 Visiting Team Assessment: The program has identified that the thesis projects are intended to satisfy this criterion. However, the breadth of projects in the thesis appears to be an obstacle to demonstrating the required integration of all categories. The team did find evidence that this criterion was satisfied in several thesis projects, but not all. In order to get a wider sample, the team also looked at work chosen by the program for display as well as additional examples on file with the library. The team also looked at other courses that included portions of the subject matter referenced above, but did not find consistent results that are part of the required curriculum for all students.

This SPC has been revised, with the specific list of embedded SPC's eliminated. A new realm, Realm C: Integrated Architectural Solutions, has been added, to emphasize the ability of the student to demonstrate the full scope of integrative thinking that shapes complex design and technical actions.

2017 Program Response: The 2012 assessment caused the faculty to look once again at the process that we had had in place for many years to require students to view their Thesis projects as an "opportunity to culminate your education by rigorously developing a comprehensive, student generated design project," as stated in our Thesis manual. During the following two academic years, there was a concerted effort among faculty to emphasize to students the necessity to address the already-in-place requirements of Comprehensive Design as part of the Thesis design and communication process, with an increased emphasis on the necessity of projects of adequate breadth. While we were reasonably satisfied with the results of these efforts, we saw that there was still too much that was left to chance, and that despite the best efforts of faculty and students, the exigencies of completing a comprehensive, individually-driven Thesis design within a thirteen-week period was not resulting in the uniformity of Comprehensive Design documentation that we wanted to see. Often, we knew that the work had been done but it had simply not made its way to the presentation. Additionally, there was the sense that Comprehensive Design requirements (soon to evolve into the Realm C: Integrated Architectural Solutions requirements) in the Thesis project might not be suitable for any interest that the program had to encourage Thesis work of a more research-based nature.

During the 2015-16 academic year, the program transitioned Realm C: Integrated Architectural Solutions to the fall ARCH 471 design studio, which had long served as the program's capstone project. This collaboratively-taught studio (Profs. AlyAhmed, Crutchfield, Faulkner), focused on

the design of a high-rise building, has proven to be a more suitable vehicle for the requirements of Realm C. During that year, to make the transition, both ARCH 471 students and ARCH 772 (Thesis) students incorporated Realm C: into their project requirements.

2009 C. 1 Collaboration: *Ability* to work in collaboration with others and in multi-disciplinary teams to successfully complete design projects.

2012 Visiting Team Assessment: Evidence of the ability to work in collaboration with other architecture majors is found in both course work and projects as presented in student's work in studio teams of two or more on a variety of projects in both second and fourth year curriculum; ARCH 271 Architectural Design I; and ARCH 272 Architectural Design II; and specifically in ARCH 471 Architectural Design VI.

However, collaboration with others in multidisciplinary teams is not part of the required curriculum. While the program has identified many opportunities to collaborate with Engineering, Visual Arts, Landscape Architecture, English, Nursing, Construction Management, Environmental Resources, etc., these have not been built in as required experiences for all students.

This SPC has been eliminated, with these principles now expressed as Defining Perspectives. See I.1.4.

2017 Program Response:

The program faculty has worked hard to identify opportunities for multidisciplinary collaborative work which involves ALL students at a given level, including the following:

<u>Multidisciplinary Opportunities within the Department of Architecture and Landscape Architecture</u> (all students):

- Our ARCH and LA students start their NDSU career studying and working together in our five Environmental Design introductory classes: three lecture classes, a drawing class, and a beginning design studio. Here they begin to understand the overlapping nature of the two disciplines, as well as the differences (Profs. Faulkner, Kirkwood, H. Fischer, Moore, Pepple).
- During the first few weeks of 2nd year design studio, all Architecture students work once again with all Landscape Architecture students, on a project called the Terrature project, as they all work on their own designs for a Tea House complex. There are a number of occasions during this project when the students meet and learn together about Tea Ceremony rituals, and Tea Garden design (Prof. Booker, Urness, Greub, Yergens, Pepple).
- 4th year Architecture and Landscape Architectures share studio space and work on a joint urban design project in the same large American city. Students travel together to San Francisco (our ARCH and LA 3rd year students also travel together to Chicago) and research and design work intersects at various times during the semester (Profs. AlyAhmed, Crutchfield, Faulkner, Kost).

Multidisciplinary Opportunities within the Department of Architecture and Landscape Architecture (class sections), open to all students:

- Term Abroad Program. Opportunities exist for both Architecture and Landscape Architecture students to participate.
- Joint Architecture/Landscape Architecture 5th year seminars have been conducted on:
 - Healing Environments, with the work of the class culminating in the design of a Healing Garden at the VA Hospital in Fargo (Profs. Vorderbruggen, Pepple)
 - CNC Fabrication (Prof. Kirkwood)
 - Advanced Revit (Prof. Stine)
- Led by Architecture and Landscape Architecture faculty members, the programs have collaborated on a six-week hosting within the Department of the North Dakota Governor's School, a summer program for academically advanced high school students.

Multidisciplinary Opportunities with Other Departments

- In the fall of 2012, third-year students worked collaboratively with Dr. Mark Engler's students from Theatre Arts on the design of an Ideal Theater. The collaborative effort went on to win the USITT national prize for their design (Profs. Christenson and Crutchfield).
- In the spring of 2015, students and alumni from Architecture, Landscape Architecture, Interior Design, Construction Management, and Engineering were involved in a series of lectures and presentations sponsored by the NDSU Alumni Foundation, featuring alumni who are involved with a major regional construction project. One of the Construction Management leaders of this effort is now a member of our Advisory Board.
- Our students have regularly participated in Region 4 American Society of Construction competitions with Construction Management students.

Multidisciplinary Opportunities Involving Faculty from Other Departments/Entities

- For the past ten years one of the 5th year fall studios has been collaborating with Dr. Marinus Otte, the Editor-in-Chief of Wetlands and the Director of the Wet Ecosystem Research Group, Department of Biological Sciences on the semester's studio project, a Wetlands Research Laboratory in the nearby Aspen State Wildlife Management Area. Each year Dr. Otte gives the studio a presentation on his past and current work, a tour of the site, and a tour of his group's laboratory. He functions as an adviser to the studio during the semester and is invited to Mid-term and Final Reviews (Prof. Barnhouse).
- Faculty from Art and English were guest resources for the Green Aesthetic graduate seminar on the connections between sustainability, literature and art (Prof. Crutchfield).
- Faculty from Business and Accounting have been guest resources for the Greenwash graduate seminar, on the connections of ethics and business to sustainable design (Prof. Crutchfield), as well as the Cost and Price seminar on economic forces which affect our profession (Prof. Barnhouse).

Multidisciplinary Opportunities Involving Student Group Connections

Our student groups have worked hard to reach out to other disciplines. Our Tau Sigma Delta
honorary has active members for Landscape Architecture and Interior Design and has
launched an open house series where student members from each discipline host a
presentation and social event for the other disciplines once a year. Our USGBCS group is
comprised of students from disciplines across campus. Students from our program have
joined Construction Management students in the Region 4 ASC Student Construction
Management Competition in Nebraska.

Challenges

We found major challenges in planning for multidisciplinary opportunities that can be experienced by an entire class (roughly 48-64 students), on an on-going basis. While other programs are interested and excited about the prospect of working with smaller groups (e.g., a studio of 16 students), it has been difficult to find one-on-one classroom opportunities with other disciplines, given class-time coordination challenges. We've focused, then, on finding opportunities for studio-section-size matchups, and pulling in other disciplines for smaller projects, as well as student-to-student connections, as described above.

1. Conditions II.2.2

2009 II. 2.2 Professional Degrees and Curriculum: The NAAB accredits the following professional degree programs: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and electives. Schools offering the degrees B. Arch., M. Arch., and/or D. Arch. are strongly encouraged to use these degree titles exclusively with NAAB-accredited professional degree programs.

2012 Visiting Team Assessment: PLEASE NOTE: Refer to II-Section 3 for clarification of the team's application of NAAB conditions to the full five-year curriculum.

The curriculum meets the required number of overall (168) and graduate level credits. However, the program offers two courses as general studies—ENDV 101 Introduction to Environmental Design and ARCH 321 History of Architecture I—that include a great deal of architectural content. It counts these as non-architecture courses but requires architecture majors to complete them. Without these courses, the remaining credits do not meet the NAAB requirement for "at least 45 credit hours... outside of architectural studies." Although these courses are available to non-architecture majors, they do not include "other than architectural content." The curriculum includes 40 hours of general studies in addition to 3 credits of ENVD 101 and 3 credits of ARCH 321.

2017 Program Response: On pp. 204-205 of our 2011 APR, we broke down our non-architecture credits in the following summary, showing that our curriculum offers 49 non-architecture credits:

"NAAB Non-Architecture Credit Requirement

The 45 semester-credit-hour NAAB minimum for general studies (non-architecture) credits is met by the following (six general credits for ENVD 101 and ARCH 321 are not counted because they are also major courses). We addressed this in our response to the VTR in 2012, but it was suggested that we wait until the 2014 Interim Report to address these concerns, which we did, including a breakdown of our five-year plan, color-coding the following credit distribution:

General education courses	34 credits
Basic courses	9 credits
Electives	6 credits
TOTAL	49 credits"

We continue to not count ENVD 101 and ARCH 321 as part of our General Studies courses, rather counting them among our Professional Studies courses.

Visiting Team Report (2012) CAUSES OF CONCERN:

A. Promotion and Tenure Expectations

The team noted in its review of the materials for Condition 1.2.1, Human Resources/Development: Faculty & Staff that the university has written policies for rank, reappointment, tenure, and promotion that include scholarly activity as an important factor in these decisions. However, the team is concerned that there are conflicting expectations surrounding the definition of scholarly and creative activity that are not accounted for in these policies in a way that recognizes the unique nature of architectural work.

2017 Program Response: In the summer of 2014, our Department made a move from the College of Engineering and Architecture to the College of Arts, Humanities and Social Sciences, a College housing Visual Arts, Music, and Theater, with a climate more welcoming of the kind of creative work that was difficult to evaluate in a College of Engineering. By December 2014 we were able to revise and move forward a new PT&E document for approval, one which addresses creative activity in a more detailed manner (see Supplemental Materials for the document, pp. 7-8).

B. Department Chair Search

The team noted in its review of the materials for Condition 1.2.2, Administrative Structure and Governance, that the program has clearly been affected by the sense of limbo from a four-year protracted interim status of the department chair. The team understands that the position is now funded and a search is underway, with the expectation that a new chair will be in place by fall 2012. However, this has

not yet occurred, and the team understands that previous searches have not yielded sufficient applicant pools to fill the position.

2017 Program Response: During the summer of 2012, consecutive offers were made to two Chair search candidates, and the search process ended when the University's Equity and Diversity Office determined that the pool had not been diverse enough for the search to be valid. A new search was launched in the fall of 2012; a new Interim Chair was appointed in January 2013. The search yielded many strong applicants, and the search ended with a positive outcome in June of 2013. Dr. David Bertolini, previously the Graduate Coordinator in the School of Architecture at Louisiana State University, was appointed to the position, and the Department has had permanent leadership since August 1, 2013. Currently, Dr. Bertolini has been recruited to serve as the Interim Dean of AHSS, but it is anticipated that he will return to his position in Architecture and Landscape Architecture in the summer of fall or 2018.

C. Visibility within the Institution

The team noted in its review of the materials for Condition 1.2.3, Physical Resources, that the facilities are a tremendous asset to the program. They have clearly enhanced its educational effectiveness. The students' presence has been a key factor in transforming Fargo's downtown into a vibrant commercial core, and has introduced the students to urbanism and the community in a direct way. However, the team heard concerns from students about the lack of visibility of the program within the overall university's main campus located just over a mile away.

2017 Program Response: Efforts have been made in a variety of ways to address this valid student concern. Our location in Downtown Fargo has certainly removed our students and our program from our more visible position on campus. These are the efforts that they and we have made, in various ways, to strive for more visibility within the University community and the community at large, in addition to some of the multidisciplinary efforts that were previously mentioned and expansion of student groups to include students from disciplines which are located on campus.

Participation of Students in Campus Life

Discussions with students about this area of concern, after the team visit, resulted in a sense among students that there might be benefits that come from leading a life more closely connected to campus. We have seen more students join on-campus student organizations, volunteer, and find pleasure in music, artistic endeavors, and even athletics.

Exhibits of Student's Studio Work

- Spring/summer 2012-2017 The Birdhouse Project. Hand-crafted birdhouses, completed by 2nd year students, translate the design philosophy of a Pritzker architect into a house designed for a particular house-dwelling local bird species. This is a recurring exhibit at the Plains Museum of Art and a crowd favorite. This exhibit has expanded from having a one-week duration to a full-summer exhibit. Selected birdhouses and their creators were recently featured at the annual Homecoming President's Dinner (Profs. Vorderburggen, Booker, Urness, Greub, Yergens).
- Spring semesters The "Brise Soleil" lifeguard tower design project for 3rd year Environmental Control Systems I are dispersed throughout the main NDSU Library for the spring semester, and this is now a recurring event (Prof. Crutchfield).
- Fall 2014 Forty-two book covers from the 4th year *Design Theory* class were on display at the NDSU Main Library. Each book cover was designed specifically for an important book on modern design theory (Prof. Schwaen).
- Spring 2017 and 2018 "Speculative Architecture and Oblique Representation," an exhibit
 created in the University's Memorial Union Gallery by graduate seminar students, who also
 created videos of themselves talking about their artefact work which was made available to
 all university students (Prof. Wischer).

• Our students, as class members, had their work shown in several exhibits organized by Visual Arts Prof. Meghan Kirkwood, as part of their photography courses.

Exhibits of Student Scholarship/Innovation

- Fall 2014-2017 Students have participated in the <u>NDSU EXPLORE</u> undergraduate event, an opportunity for students to exhibit their work on campus. In fall of 2014, 3rd year students exhibited their research, and received the People's Choice Award. This year our eFargo team (Mitch Musel, Noah Thompson, Noor Abdelhamid, and Ben Dalton) exhibited their team's work and received second and third place in the competition (Profs. Srivastava and Christenson, advisors).
- Fall 2014-2017 Students from the Professional Practice class have participated yearly in the NDSU Innovation Challenge event, with teams preceding to the semi-finals and finals each year. In 2015, the Architecture team of Caret Fox and Amber Grindeland (Prof. Cindy Urness, advisor) won the second-place price in the product category for their innovative hanger system. In 2017, the Architecture "Passive House Design+Build" team of Nick Braaksma, Joshua Highley, Alex Jansen, Dylan Neururer, and Aaron warner won the second-place prize in the Social category (Prof. Malini Srivastava, advisor).

SECTION 3. COMPLIANCE WITH THE CONDITIONS FOR ACCREDITATION

1.2.1 HUMAN RESOURCES AND HUMAN RESOURCE DEVELOPMENT

The Architecture program at NDSU currently has seventeen full-time faculty members (including the permanent Department Chair) and three full-time Landscape Architecture faculty teaching in Architecture or Environmental Design classes, distributed in the following ranks:

Rank or Program	No.	M/F	Registration	
			U.S./International	
Professor	5	5/0	3/1	
Associate Professor	7	6/1	3/2	
Associate Professor of Practice	1	1/0	1/0	
Assistant Professor	2	0/2	1/1	
Lecturers	2	1/1	0/0	
LA Faculty (two courses)	3	. 2/1	2/0	
TOTAL	20	15/5	10/4	

Efforts are ongoing to increase faculty diversity. Every faculty search is conducted under the guidelines of EEO/AA and each search committee is charged with trying to seek out qualified candidates who will add diversity to the school. Currently five of the faculty are women and the ethnic and cultural diversity of the faculty is reflected by faculty members from India, Egypt, Denmark, Canada, and Germany.

Faculty resumes and a faculty matrix of courses-taught and expertise may be found in Supplemental Materials.

The Department is committed to the development of a faculty made up of individuals who are capable of teaching both architectural design and lecture courses. This provides maximum flexibility in awarding teaching assignments, encourages introduction of technological systems into the studio, and allows departmental leave and course release without undue disruption of the program. A typical teaching load per semester has each faculty member teaching a lecture or seminar course and one section of design studio, with release from one course rotated through the faculty as is feasible. The majority of current faculty have specialized skills and are committed to creativity, scholarship and research (both funded and non-funded) as a means of professional development.

A typical breakup of the time spent by each faculty member in the various activities is as follows:

Teaching (60%); Research and Creative Activities (30%) and Service (10%).

Faculty Support Services

Human Resource Development Opportunities

The Architecture Program at North Dakota State University strongly encourages its faculty to pursue faculty development opportunities as they relate to the profession, teaching effectiveness, or research and creative activities. In addition to professional development, faculty members are encouraged to pursue development opportunities which broaden their academic interests and capabilities, including efforts to improve teaching effectiveness, and to pursue their research and creative interests.

Support for Engagement in the Profession

Eight of the 17 full-time architecture faculty members are registered architects in the United States, four are registered overseas, and one is a certified planner. Seven faculty are members of the AIA and subject to annual continuing education requirements, and many attend North Dakota and/or Minnesota annual AIA conferences, to keep current in their knowledge of the changing demands of practice and licensure.

The architecture program at NDSU maintains strong ties with AIA North Dakota, which often hosts events in the department's facilities, providing both faculty and students knowledge of concerns of the profession (faculty member Mark Barnhouse serves as the department's official liaison to AIA North Dakota). Faculty also attend seminars and workshops at the local, regional, and national levels, and local CEU workshops sponsored by FM Architects, AIA North Dakota, and the local chapter of CSI. Officers or staff members of the AIA and NCARB are often speakers in the Department, most recently Jared Zurn, NCARB Director of Examination (and an NDSU graduate) and Martin Smith, NCARB Assistant Director of Experience + Education.

Support for Improving Teaching Effectiveness

North Dakota State University, through the office of the Provost, sponsors a Faculty Luncheon series on a regular basis which focus on issues related to enhancing student learning, as well as a day-long Faculty Conference for new and returning faculty members during the week preceding the start of the school year. These teaching-support opportunities are well-attended by program faculty members. The College also has "Teaching Cafes and research and creative activity presentations that are organized by the AHSS Associate Dean.

Financial Support for Research and Creative Projects

Faculty members receive a certain amount of financial support from the University, College, and Department for attendance at conferences and other research activities. The current travel allowance at the department level is \$750 and a maximum of \$1,000 support from the Office of the Dean for conference attendance is available. Travel awards up to \$1000 are available from the office of the Vice President for Research, Creative Activities, and the RCA provides information about and resources for researching and receiving a variety of institutional and outside funding.

NDSU Advance FORWARD Program

The NDSU Advance FORWARD Program, funded by an NSF institutional transformation grant of almost \$4 million, sought to study and address issues of recruitment, retention and advancement of women faculty within the STEM disciplines. Specific program goals included: improve the climate across the campus and narrow the gap between men's and women's perceptions of the campus climate, employ targeted recruiting strategies to recruit women faculty, retain more women faculty through their probationary period and the promotion/tenure process, support women associate professors as they move to full professor, and hire advanced rank-women to build a critical mass and promote and hire women faculty into academic leadership positions. All female faculty working in the Department during the years of FORWARD funding benefited from grants and initiatives.

While the grant funding has ended, FORWARD leaves a legacy of on-going faculty support, including active programs such as FORWARD-sponsored search committee training and Advocates and Allies training, as well as access to all resources that were developed during the years of FORWARD funding. The goals listed above were attained, with institutional transformation occurring University-wide and not just in the STEM disciplines.

Support for Developmental, Course, and Un-paid Leave

NDSU policy allows for various types of leave, including the following (additional information available in Supplemental Materials):

- Developmental leave two architecture faculty members have been given developmental leave since the last accreditation visit, one to pursue Ph.D. studies, and one to focus on software development
- At least one faculty member per semester is given course release to pursue research or bookwriting projects.
- Course buyouts several faculty members have been granted this type of leave to work on research projects.
- Sabbatical leave NDSU does not have a policy for granting scheduled sabbatical leave.

Student Support Services

Department Services

Starting in the summer of 2009, a full time professional academic advisor with a master's degree in educational leadership was hired to oversee all advising for the Department of Architecture and Landscape Architecture. Stacy Jordet, our academic advisor, was previously the department liaison in the Office of Registration and Records, bringing a deep understanding of our curriculums and our programs to her position.

The academic advisor advises approximately 400 students, one of the largest individual numbers of advisees for any academic advisor on campus. The students are asked to see their advisor a minimum of twice a year to ensure they are on track to graduate, and utilize an on-line appointment system, Student Success Collaborative (SSC) to make their appointments. Additionally, students are encouraged to meet with a faculty member for assistance on other issues, including all matters having to do with the profession and career questions. The academic advisor is the student's first person to contact if any academic or personal issues arise. This individual would try to assist the student and if they are not able to, they would assist the student in helping to get in contact with someone who can. The types of additional services that students are most in need of are tutoring, counseling and financial advice. The academic advisor has a good working relationship with individuals in these student service areas, which benefits our students. The academic advisor is an ad hoc member of the department curriculum committee, and provides valuable insight that the faculty might not otherwise be aware of. The addition of the academic advisor has benefited the department significantly in the following ways:

- Each student receives consistent advising regarding course requirements and pre-requisites
- Each student receives consistent advising regarding the application process at the preprofessional level, and at the graduate school level
- Each student knows that the advice they receive regarding policies and procedures is accurate and up-to-date
- The academic advisor serves as a knowledgeable resource regarding all other student support services that the university provides
- The academic advisor is able to alert the administration and faculty concerning issues they may not be aware regarding schedules, loads, and student concerns in general.

With the addition of the academic advisor, the faculty plays more of a mentorship role to the students, building on the relationships that form in the studio setting. The academic advisor guides the students academically through group meetings with entire class levels and also with individual appointments

throughout a student's academic career, while faculty members are there to mentor the students and also help them with any type of career questions they might have. Faculty/student mentoring meetings occur on an ad hoc basis. The alumni Advisory Board and their student members envisioned a pilot mentorship program to give students the opportunity to interact with professional alumni. This program is being redeveloped and will be available to students starting in the fall of 2018. The program will take the form of a one-credit Mentorship class, with the goal of bringing mentors and mentees together with leadership content, where students maintain correspondence that they can reflect upon.

Career guidance for students begins with first-year students who may or may not have a very good idea of why they have chosen architecture for a career. During the time that these students are associated with the department, we try to give them the most complete understanding possible of the art and profession of architecture, as well as a positive attitude about the role of design in the world. Because not all those who begin in the program can be selected for the second year, a considerable number of students must find an alternative course of study. Our academic advisor begins to discuss other possible plans within their first semester. The intent is to first connect with other design units such as Interior Design and Graphic Design and then discuss their other interests to find an alternative path. NDSU's new Student Success Collabroative (SSC) provides students with a desktop interface that is easy to navigate and helps them and explore other majors and connect with advisors. The Advising Resource Center provides guidance on choosing an academic major. The NDSU Career Center also provides career coaching and a number of assessment resources to assist students in finding majors that are a good fit.

For students who are graduating from the program but want to consider other options besides traditional practice, students in the Professional Practice class are presented early in the year with a lecture that focuses on the options available to them outside of practice, and the unique skills they bring to any endeavor.

A number of architectural firms visit the school twice each year to recruit interns through the <u>Career Expo</u>. To date, no formal process of internship placement exists, although the department maintains a good working relationship with the state's Architectural Experience Program (AXP) Coordinator and many faculty members have served as AXP advisors for graduates. Although most of our graduates seek jobs in the Minneapolis/St. Paul or Denver metropolitan areas, many are recruited into positions throughout the nation. The Career Center assists with resume preparation and letter writing, and the alumni Advisory Board conducts portfolio reviews during their semi-annual visits. Additionally, the Tau Sigma Delta student honorary society has organized portfolio reviews, drawing on local professionals and faculty for feedback.

The Chair forwards requests that come in from Architecture and Landscape Architecture firms seeking employees by posting them on the departmental student e-mail Listserv, and the Department regularly posts the announcements of job openings through the departmental student e-mail Listserv. Our Department's alumni and department Facebook pages also serve as a posting location for available job openings.

Institution Services

The University developed The Center for Writers with the purpose of providing writing assistance for students and faculty. Students are encouraged to use this resource as they prepare written assignments, term papers and written thesis documents. The Center is staffed by qualified, full-time staff assisted part-time, by graduate students. It is located in the main library and is readily accessible to students.

Outside the Department, during the past several years there has been a University-wide effort to increase the effectiveness of the advising process with an emphasis on increasing student retention. To assist in this effort the <u>Counseling Center</u> is available to students, providing a high level of personal service. Faculty members or the academic advisor typically direct students to these counselors as early as possible and have seen some gratifying results, particularly for students with diagnosed learning

disabilities. The Counseling Center has a dedicated staff that provides a great deal of time and attention to students who seek their help, including their Behavioral Intervention Team for crisis management.

NDSU's Architect Licensing Advisor

The Architect Licensing Advisor for NDSU, Prof. Mark Barnhouse, introduces the Architectural Experience Process (AXP) process - together with a comprehensive overview of internship, state law, and the transition to practice - to all students, starting in a lecture class at the second year. Students are also walked through the excellent resources available to them online from the NCARB web site.

Using resources provided by NCARB and AIA, the Licensing Advisor has made substantial effort to give student interns and alumni emerging architects consistent, accurate, timely and reliable information based on current NCARB and AXP guidelines. The Licensing Advisor has met with North Dakota State Board representatives and has carefully followed the changes that NCARB has executed during the past few years, regarding AXP hours and the ARE licensing examinations.

In order to keep current, familiar, and factual, NDSU's Licensing Advisor has attended annual NCARB training sessions, maintains an active membership in AIA, and periodically meets with the state's Licensing Advisor.

The AXP process culminates for the program's graduates in passing the ARE. and obtaining licensure. The NDSU architecture program has historically ranked well among top architecture schools in the country on measures of success with the ARE. Test scores from the first round of ARE 5.0 testing, however, do not match the level of previous scores, so the program will monitor these scores going forward and respond with additional content support in the curriculum if necessary.

The program at NDSU has considered making application to NCARB's Integrated Path to Architectural Licensure (IPAL) experience, and has the support of the State Board of Architects to make such application. An application was prepared for the first round of selected schools, with a cooperative internship year built into the proposal so that all the AXP hours could be met before graduation. The pilot program was presented to North Dakota architects at the annual fall conference in 2015, and seven firms expressed interest in reviewing the applications of students who interested in participating in the pilot program. Four students applied for the pilot-year position and one was selected. Students in the program would pay for three credits of tuition but would receive a deferment of student loan payments during the pilot experience. The sense, based on student feedback, is that the program would appeal to a very small group of students, due in part to the desire of most students to graduate with their classmates. For now, NDSU will continue to offer the pilot program, so that interested students have an opportunity to complete their AXP hours while in school, but test-taking would be on their own after graduation.

I.2.2 PHYSICAL RESOURCES

General Description of Physical Resources

Institutional Context

NDSU's main campus encompasses 142 buildings on nearly 258 total acres. The yellow-brick and brownstone buildings that housed NDSU during its early years are now included in a historic district that forms the southeast corner of the campus. After World War II the campus grew rapidly, and many conservative two and three-story, red brick structures were added as the campus expanded to the north and west. The College of Engineering and Architecture complex was built during the 1960s and was added to over the years with modest in-fill projects and additions. Ehly Hall, a 14,700-sq.ft. addition to the Architecture & Landscape Architecture Building, was completed in the fall of 1999.

In 2004 the architecture and landscape architecture programs vacated the two quonsets on campus and moved into Renaissance Hall, a historic loft building specifically renovated to house the NDSU visual arts department and half of the architecture and landscape architecture department.

In 2008, the former office space for Lincoln Mutual Insurance was dedicated as a state-of-the-art facility for the Department of Architecture and Landscape Architecture, and named Klai Hall in honor of alumnus John R. Klai II, the major donor for the project. Klai Hall is located adjacent to the home of the College of Business, Barry Hall. These three facilities have provided an outstanding boost to both morale and recruitment, as well as a significant impetus to the revitalization and transformation of downtown Fargo.

For travel between NDSU Downtown and the main campus, the Fargo-Moorhead Metro Area Transit offers transportation every 7-15 minutes during the school day. All NDSU students ride the entire MAT system free using their student ID cards. Required lecture classes for first year students in prearchitecture are scheduled, whenever possible, for campus classrooms so that major and general education class times might coordinate well. Each semester, however, one studio-type class is scheduled in Renaissance Hall for first-year students to familiarize them with the culture of the programs. As the students move through the program, the remainder of their major classes are scheduled in downtown classrooms.

Program/Department Facilities

The 75,830-sq.ft. Renaissance Hall building was dedicated in 2004. Formerly occupied by the Robb-Lawrence Company and Northern School Supply, the five-story state-of-the-art facility is home to major components of the Department of Architecture and Landscape Architecture Departments, as well as the Visual Arts Department and the Tri-College University office.

The Department of Architecture and Landscape Architecture occupies studio, classrooms, breakout areas, display space, offices, computer and fabrication labs, a spray booth, model building space, presentation and display space, and conference rooms on the 2nd floor, the 4th floor, and the 5th floor. Additionally, the department shares a woodshop in the basement, the main gallery, main office space, conference room and lecture hall on the 1st floor, a 2D Design studio space and a photo-documentation room on the 2nd floor with the Visual Arts Department, and a shared university computer lab on the 4th floor.

The Department's woodshop is a state-of-the-art resource for students in our programs, and plays a key role in our culture of "making." All second-year students receive woodshop training during their first week in the program. Students are encouraged to use the shop for both class and personal projects. Our woodshop staff continue to find ways to make improvements in equipment, access, and teaching opportunities to benefit the work that the students do in this space, while keeping a focus on safe procedures. An over- 300-item inventory includes the following pieces of equipment: 36"-wide belt sanders as well as drum, edge and stationary spindle sanders; 3 cabinet-style Saw stop table saws as well as a scroll saw and 2 miter saws; planer, jointer, mortise, and turning lathe with a slow speed sharpener; 2 drill presses; 14", 18" and 24" band-saws, as well as various clamps and hand tools. The shop is served by a dust collection system and air filtration units.

The 31,404-sq.ft. Klai Hall was the former office space for Lincoln Mutual Insurance. It opened in the fall of 2008 as a state-of-the-art facility for the functions of the department which had remained on campus. Klai Hall features studios, classrooms, a computer lab and fabrication space, a spray booth, student group offices, faculty offices, and library for the Department of Architecture and Landscape Architecture. The adjacent Barry Hall provides classrooms for seminars and large lecture classes, as well as a coffee/lunch facility, additional university computer labs, student study/conference spaces, and lounge space.

Detailed information regarding the department's facilities may be found in Supplemental Materials.

Physical Resources Specifically for Faculty

Each full-time faculty member is provided a private office for teaching preparation, meeting with students, coordinating service work, and research which does not involve laboratory space. Each office provides phone and internet (ethernet and wireless) access, and b/w and color printing are available on the same floor as faculty offices. An office is provided in both Renaissance and Klai for adjunct faculty use. Mail service is available in the Main Offices of Renaissance and Klai. Teaching spaces are provided in Renaissance, Klai, and Barry Hall, as well as the Main Campus.

Physical Resources Specifically for Students

At the beginning of each semester, starting in the second year, students are assigned or claim a studio desk for the reminder of the semester, within their studio section. Each student has his/her own studio desk (30"x72" or 36"x60"), an adjustable padded drafting chair, and a metal storage cabinet. Students are encouraged to outfit their desks with shelves, plants, and appliances up to eye height only, so the feel of the studio space is open and collaborative. Studio spaces include wall surfaces of cork or homosote, to encourage group discussion. Duplex outlets and data ports are provided for each student. Studio spaces are augmented by breakout classrooms for presentation and group meetings, reservable through the main office.

The Department's Studio Technician maintains student and faculty equipment, and arranges spaces within the Department to accommodate a variety of functions (exhibits, lectures, meetings, social gatherings)

Ongoing or Proposed Changes

Necessary upgrades to Klai Hall, noted in our 2011 APR, are on-going. More attractive floor and wall treatment has been completed in the Klai RCDC lab, and floor treatment has been completed in the studio areas. An underutilized immersive lab on the 2nd floor is currently undergoing renovation. [Anything to add?]

Departmental Technology Resources

Computer Services Specialist & RCDC Laboratory Assistants

The Department provides a full-time staff member to be responsible for the Department's digital assets and needs. Specifically, the Computer Services Specialist maintains the two department computer laboratories, provides support and instruction for student, faculty, and staff equipment and software, and advises the Department on new developments in information technology. Throughout the school year, there are typically three to five student laboratory assistant positions available to assist the Computer Services Specialist with department training, development, and maintenance needs.

3D Printing

The Department has fifteen MakerBot 3d printers available for student use at no cost 24x7x365; ten located in Renaissance 408, five in Klai 206. These machines are updated or replaced every 3-4 years.

3D Scanning

The Department is equipped with one Fuel 3D Scanify handheld 3D scanner available for student and faculty use at no cost 24x7x365.

Augmented Reality Sand Table

In a collaboration between the Department, Geosciences, and the Information Technology Division, the department has an augmented reality sand table available for use 24x7x365 in Klai 206. The augmented reality sand table allows users to simulate a wide variety of terrain, topographical maps, and simulate water flow upon those features in real time:

https://arsandbox.ucdavis.edu

Department Environmental Sensors

The Department has purchased a number of types of environmental sensors available for students and faculty to check out from the Architecture & Landscape Architecture Library, located in Klai Hall's third floor. Currently, there are fifteen multifunction multimeters, fifteen multifunction HOBO data loggers, three handheld infrared digital cameras, and one multifunction environmental meter available. The meters and data loggers primarily measure light and sound intensity, temperature, and humidity.

Digital Repository

At the end of 2008, the Department began to beta test the Library's ability to collect and host an online digital repository with the Department's slide collection, created and updated by Professor Emeritus Vincen Hatlen. With the success of this project, the Department required student thesis work to be uploaded to the digital repository:

https://library.ndsu.edu/ir/handle/10365/26141

Laser Cutters

The Department has three Universal Laser Systems laser cutters available for students to use; two are located in Renaissance 422 and the other in Klai 16. The laser cutters are capable of cutting wood, paper, and acrylic up to $\frac{1}{4}$ " deep and can etch or mark a wide variety of materials. With a two-hour workshop, students can freely use the laser cutters 24x7x365.

Lecture Capture

The Department has 'lecture capture' technology - the ability to record both the lecturer and the information displayed over a digital projector and offer the content within a web browser - installed in Renaissance 114 and 502, and Klai 206. The lecture capture is available to any instructor who uses these spaces so that they might record lectures for students to access later, any student who wants to use the technology to record a presentation for class use or presentation practice, or capturing the talks of guest lecturers, with permission.

Media Carts

The Department has three media carts, each equipped with a 60" LCD display available for student and faculty use 24x7x365; two located in Renaissance Hall, one in Klai.

Mounted Projectors

The Department has digital projectors mounted in each breakout space available. Specifically, the mounted projectors are available in Renaissance 102, 114, 206A, 214, 216, 408, 420, 502, 504 and Klai 20, 22, 112, 114, 208, and 210.

Research Center for Design Computing (RCDC) Laboratories

There is an RCDC located in Klai 10 and Renaissance 422. Each is equipped with ten design workstations on a three-year replacement cycle, two large format printers, four large format flatbed scanners, a slide scanner, and a black-and-white laser printer with both letter and 11" x 17" trays. Students do not have to pay for printing but are required to furnish their own paper for the large format printers.

There is a wide variety of design and graphics software available on the RCDC workstations, including Adobe CS 6 Design Standard, AutoCAD, 3ds Max Design, Revit, Rhino 5, ESRI ArcGIS, SketchUp Pro, Lumion, Enscape, and the Microsoft Office suite.

Virtual Reality

The Department has the Oculus DK1, DK2, and Oculus Rift + Touch headsets available for student and faculty use 24x7x365.

Faculty Resources

Each faculty member in the Department has been provided with a startup funding package of \$3000 (\$2,000 from the College Dean, \$1,000 from Department resources) to purchase computing equipment and software. The startup funds are used by incoming faculty for their specific research and/or creative activities. Thus, each outlay is unique, although most new faculty use this funding for a laptop, tablet, peripherals, and/or software. Additional Department funding is used to upgrade several faculty members with new laptops or desktops and the corresponding software each year. Faculty in each building have access to a color laser printer capable of printing up to 11" x 17", as well as an office phone (certain staff such as the IT and woodshop technicians are provided with department cell phones due to the aspect of their jobs that take them to various locations in the department).

Student Resources

Since 1996, every student entering the professional Architecture and Landscape Architecture programs is required to purchase a laptop computer and design software according to department specifications. Students are provided with a high-end and low-end specification to meet all budget needs. Students are able to have financial aid increased to accommodate the cost of the laptop. Typically, students spend about \$1,500-\$2,500 for laptop and software. The specification is distributed during the fall semeseter so that second year students can be ready with their new laptops for the start of the Spring semester.

Challenges that Impact Operation or Services

Currently the department lacks space for the following activities: large-scale design/build fabrication and fabrication space for casting and wet media. The department is presently involved in university-wide planning for a shared innovation/maker-space, which may alleviate the above needs.

I.2.3 FINANCIAL RESOURCES

Institutional Process for Allocating Resources

As required by the North Dakota State Board of Higher Education (SBHE) NDSU prepares a comprehensive annual budget <u>and a biennial budget request</u> for all funding. The budget process and priorities are discussed and planned by the NDSU President and the President's cabinet. The Budget Director prepares the budget at the direction of the Pres

ident and according to SBHE established guidelines for the annual budget including: room and board, salary and operating, and tuition and fees rates for the upcoming fiscal/academic year. State funding comprises 28% of NDSU revenue, tuition and fees provides 25%, and research funding and auxiliary revenue (bookstore sales and housing and dining) comprise the remainder.

Annual budgets are prepared and reviewed by college units before submission to the Budget Office and must reflect all revenue and expense activity, based on the best information available at the time of preparation. Responsibility for monitoring and comparing of budget to actual revenue and expenditures occurs at various levels within the university. Financial allocations to departments (appropriated funding) are based on Student Credit Hour (SCH) projections, and are adjusted annually. Each department is responsible for monitoring and reviewing budgets on a regular basis and are responsible for living within their budget.

Department Budget, Expenses, and Revenues

The department Chair prepares an <u>annual budget</u> for the department, in consultation with the College Dean, program directors, faculty, and staff, with a review or update once a semester. The Chair also reviews relevant department financial information with Advisory Board student representatives, representing all students, and solicits their input. Department revenues are shared resources, benefiting both Architecture and Landscape Architecture. Since 2007, with the institution of a Program Fee (now

called <u>differential tuition</u>) generating additional non-appropriated revenue pegged to 1/3 of tuition, the department has experienced relatively stable finances, compared to other campus units relying solely on base tuition.

Description of Expense Categories

Department expenses over which the program has control or influence fall under two categories, salaries and operating expenses, with funding from two sources, appropriated and differential tuition. Appropriated salaries are influenced only through merit raise decisions:

•	Appropriated salaries and fringes, F18:		\$ 1,582.442.00
•	Approp	priated operating expenses, F18	\$ 35,735.00
	0	Phones	
	0	Printing/copying	
	0	Postage	
	0	Office supplies	
	0	Miscellaneous	
	0	Computers (faculty)	
	0	Conferences/administrative travel	

- Faculty development/travel (@ \$750/faculty member)
 Differential tuition salaries and fringes, F18 (budget, p.2)
- Partial lecturers and staff, TA's, GTA's, GSA's. Adjuncts
 Differential tuition operating expenses. F18 (budget, p.3)
 \$ 198,544.00
 - Data processing
 - Major field trips
 - Lecture series
 - Accreditation fees
 - Visiting critics
 - Studio maintenance
 - Debt collections
 - Cell phones
 - Student officers travel
 - Shop
 - Food and beverages
 - Library: Avery Index
 - Local travel
 - o Contingencies
 - Student initiatives
 - Departmental memberships
 - USGBC speaker
 - First aid kits
 - Architecture accreditation

Description of Revenue Categories

The department has four sources of revenue over which the program has control or influence (<u>budget</u>, *p.2*). Appropriated revenues are adjusted annually based on student numbers, which we can control in terms of how many students are admitted to the professional programs. Differential tuition revenues fluctuate based on student numbers and tuition increases. Course fee revenues are primarily from two first-year courses, ENVD 130 and ENVD 172, as well as two fourth-

year courses which require supplement travel funding for airfare. Endowment earnings are drawn on by the department on an as-needed basis.

•	Appropriated revenue for salaries and fringes, F18	\$ 1,582,442.00
•	Differential Tuition revenue for salaries and operating expenses, F18	\$ 617,361.00
•	Course Fee revenue for first-year salaries and travel, F18	\$ 79,200.00
•	Earnings from contributions to various funds and endowments dedicated to the department in the NDSU Development Foundation, unrestricted or restricted in expenditure, that the department may spend or retain	\$ 29,694.00

Scholarships, Fellowships, and Grants Available for Student and Faculty Use

Since the last accreditation visit the department, its professional Advisory Board and the NDSU Foundation have made noteworthy progress in increasing endowments which focus on scholarships and activities which will enrich both students and faculty.

- Endowed scholarships have increased in number from 8 to 15, with new awards at a significantly higher level of support that long-standing awards. Two new scholarships, the Kristi Hanson Travel Scholarship and the Harlyn Thompson Travel Scholarship, expand student travel opportunities. Two diversity scholarships have been added in 2017: The Douglas Hanson Diversity Scholarship and the Deb Fredrickson Diversity Scholarship. NDSU has recently streamlined the scholarship application process through its searchable "ASAP" (Academic Scholarship Application Program) process, allowing for students to proactively engage in the application process.
- Our <u>Centennial Celebration</u> in 2014 resulted in the successful establishment of two new endowments, the <u>Visiting Professional-in-Residence Endowment</u> and the <u>Green Jacket Fund</u>, in support of a department tradition where graduates each receive a green jacket at a "families-invited" graduation party funded by alumni.
- Support for student competitions has increased, with three new funded competitions, a 4th year Integrated Design Prize, and 2nd year Birdhouse and Dwelling House competitions, added within the last year, in addition to the 3rd year BWBR Prize, 4th year Marvin Windows Competition, and 5th year Thesis Prize and Studio Mentor Award. All but two of these are funded by alumni or alumni firms.
- For students, differential tuition and the Friends of Architecture endowment provides funding for student group travel and ad-hoc student initiatives. Differential tuition has also provided substantial funding for two national symposiums, "A Symposium on the Future of Design Education" in 2015, and "Level: A Symposium on Gender Equity in the Design of the Built Environment" in 2017.
- Alumni firms have sponsored grants which have provided stipends for students working in a 5th year Architectural Research Studio.
- Faculty have been successful in obtaining outside grants for various research and projects, including a Bush Grant, an NSF grant, Advance FORWARD grants, State Historical Society grants, as well as University, College and Provost grants.

Pending Reductions or Increases, Changes in Funding and Facilities, or Institution Development Initiatives

• Starting in 2013, and reaching a low point in 2016, we saw declining enrollment numbers in our first year of the pre-professional program. We responded to this trend by decreasing the number of students we admitted to the program from 54 to 48 to 46, with the intention of trying to maintain a steady GPA cut-off for student accepted into the professional program in the 2nd year. In the fall of 2016, however, we saw our first-year numbers increase by 43%, our first-year retention increase, and our 2nd year application numbers double. We made the decision, therefore, to accept 66 students into our 2nd year, with the GPA cut-off increasing by almost a full point. This year our fall first-year numbers have increased by 19% over last fall's numbers, and it is our intention to accept 64 students for Fall 2018 if our application numbers are comparable to last year's. First-year course fees and Differential tuition allow for any enrollment increases to be self-supporting.

- Not unlike other states with fossil fuel energy and/or agricultural-based economies, North Dakota's state government has experienced a dramatic change in its available financial resources in the past few years. NDSU saw a 16.9% cut in funding support for the 2017-19 biennium, in addition to an initial 6.55% cut that was implemented in the spring of 2016. NDSU managed these cuts through retirement incentives, administrative and staff cuts, athletic program cuts, down-scaling a major interdisciplinary research initiative, and not automatically filling open positions or adding new positions. The College of Arts, Humanities and Social Sciences saw a \$1.7 million per annum budget cut through 2019. The College established a Budget Advisory Group which solicited faculty input regarding prioritizing of cuts. In Architecture and Landscape Architecture, our contribution to the College's budget cut was the reduction of one (retiring) faculty member and 1.5 staff members.
- We have experienced no major changes in funding models for faculty compensation, instruction, overhead, or facilities since the last visit. The State Board of Higher Education has, however, approved for implementation in F19 a change to the tuition model which would eliminate both course fees and the additional tuition currently charged for on-line courses. Both changes would be covered by an overall increase in tuition. While the Department currently offers no on-line courses, we would rely on the tuition increase to in-fill our lost course fees, critical to our first-year teaching. The tuition increase would also enable the University to lift the current hiring freeze.
- Within the next year NDSU will be launching their largest to-date capital campaign. Designations for
 the Department will likely focus on scholarships and endowments, and costs associated with our
 transition from a Department to a School. Since the last visit, many of our North Dakota alumni have
 taken advantage of a <u>tax-credit program</u> to optimize contributions, while the Department has also
 benefited from the <u>North Dakota Higher Education Challenge Grant</u>, where the State has matched
 one dollar for every two dollars contributed for qualified gifts.

I.2.4 INFORMATION RESOURCES

Institutional Context for Library and Information Resources

The NDSU Libraries energize and advance research, teaching, and learning in an evolving information environment. The Klai Juba Wald Architectural Studies Library is one of four branches of the NDSU Libraries, located in Klai Hall, approximately one mile from the NDSU main campus. The Library supports the learning and research needs of the students and faculty of the North Dakota State University Architecture and Landscape Architecture Department. Many courses offered in the department require some use of the library, whether it is precedent studies for a design project, use of reserve materials for a lecture course, or the use of technical reference materials.

The departmental library is a vital part of the NDSU Libraries and of the Tri-College University system. Library materials at either Minnesota State University Moorhead, Concordia College, North Dakota State College of Science, and Minnesota State Community & Technical College are readily available via the electronic catalog and an interlibrary loan system with a two-day turn-around time. Materials from the Tri-College University system can also be checked out directly with an NDSU ID card. The collections for the other libraries in the Fargo-Moorhead area can be found on the Internet and materials can be requested through Interlibrary Loan. The departmental library has the most comprehensive architecture collection between Minneapolis, Minnesota and Bozeman, Montana and between Lincoln, Nebraska and Winnipeg, Manitoba. With electronic access available to library collections around the world, as well as interlibrary loan, almost all student and faculty research needs can be met.

The primary source of funding for the Libraries' resources is state appropriations. Other funding sources may include interest on endowments, supplemental funds, grants, student fees, and the Office of the Provost. The budget is divided between one-time and ongoing expenditures. Ongoing expenditures are

given the initial allocation and consist of journal and database subscriptions. Remaining funds are used for one-time expenditures, such as books, media, and journal backfile collections.

The Architecture & Visual Arts Librarian makes the final decision on the materials purchased with the advice of the Departmental Library Committee. Since 2011 the departmental library budget has been supplemented by funds from the Architecture/Landscape Architecture Foundation funds and program fees. Two alumni of the architecture program, John Klai and Dan Juba, have also generously given the Library \$10,000 worth of books beginning in the spring of 1999, which continued as an annual gift until 2009.

The NDSU Libraries has not had a consistent budget for materials for many years; however, in spring 2017 library administration made a proposal to student government to increase the Student Library Fee, in order to establish regular funds to be spent on print and electronic monographs. The proposal passed, which nearly quadruples the amount the Libraries has been able to spend on monographs in the last several years.

Library and Information Resource Collections, Services, Staff, Facilities, and Equipment

Collections

The Library has a small but sound collection that now holds 14,888 monographs, 7,250 periodical volumes, 462 media volumes, 1,628 student theses, over 40,000 slides, and a small building materials collection. Since 2010, the student theses have been submitted to the NDSU Institutional Repository, and the Library no longer receives a print copy. There are currently 511 digital theses in the repository from the Department of Architecture and Landscape Architecture. The student theses are also accessible from the Library catalog, as well as via search engines such as Google.

The collection in the departmental library continues to be sufficient in all areas to support the Architecture program. Over 7,000 volumes are classified as NA in the Library of Congress classification system. Other portions of the collection are classed in HT (City Planning; Urban Renewal), SB (Landscape Architecture), and TH (Building Construction). Special efforts have been made to update and expand the collection in the areas of building materials, urban design, individual architects and design firms, sustainable design, tall buildings, and architectural theory.

The Library maintains current subscriptions to 35 print periodical titles, as well as access to nearly 300 online periodical titles in the architecture subject area. To facilitate the use of these periodicals, the Library has online access to the Avery Index to Architectural Periodicals, Art & Architecture Source, Art Index Retrospective, and JSTOR. In addition to periodical databases, patrons also have access to the Material ConneXion database. A complete listing of databases available to the NDSU community can be found at https://library.ndsu.edu/research/databases.

The Library houses a collection of 35mm slides that have been donated by faculty and students over the years, as well as slide sets that have been purchased by the library. During the process, slides of poor quality have been discarded and, in some instances, replaced with newer images. While there has been little to no support for processing slides, we have had volunteer help from an emeritus faculty member in digitizing the slide collection. Since 2008, there have been 4,450 slides digitized and added to the NDSU Institutional Repository, (https://library.ndsu.edu/ir/handle/10365/26142). Digitization of the slides halted in 2013, however. Library staff plan to take over the digitization of the slides at some point.

Services

During the academic year, the library is open 54.25 hours per week. The hours are 7:45 a.m. to 7 p.m. Monday through Thursday, and 7:45 a.m. to 5 p.m. on Friday. The Library is closed on weekends. Additional reference services are available at the Main Library during extended hours. Hours are posted on the NDSU Libraries website, https://library.ndsu.edu/locations/klai-juba-wald-architectural-studies-library.

The Library staff provide circulation, reference, research, and course reserves services. In addition to typical library materials, the Library also manages the circulation of various environmental meters, a DSLR camera, and two GoPro cameras. The Architecture & Visual Arts Librarian, Library Associate, and the student employees are knowledgeable in the use of the Library's resources. Research guides for architecture and landscape architecture are also available on the Libraries' website. The librarian provides bibliographic instruction, as well as assistance with in-depth research. The instruction provided is at various levels in the curriculum, from Introduction to Environmental Design up to the Programming and Thesis Preparation course.

Students, faculty, and staff may also request physical resources be delivered from the NDSU Main Library or other branch libraries to the Architectural Studies Library, with a one-day turnaround time. This service is also being extended to a designated location in Renaissance Hall, where the majority of students in the architecture program are located.

The NDSU Libraries provides interlibrary loan services to fulfill requests for materials not held by NDSU, and is frequently used by the department to overcome local limitations. The NDSU Libraries has an excellent Interlibrary Loan department (ILL) utilizing MINIITEX, a library information network, to coordinate borrowing materials throughout Minnesota, North Dakota and South Dakota. Beyond this region, interlibrary loan borrows and lends materials using OCLC. There is no charge for using Interlibrary Loan services.

Staff

The Dean of Libraries oversees the NDSU Libraries. A full-time Architecture & Visual Arts Librarian, a full-time Library Associate, and six to eight part-time student assistants staff the departmental library. The full-time Library Associate's time is split between the Architectural Studies Library and the Business Learning Center, another NDSU branch library located in Barry Hall, one block from Klai Hall. The part-time student employees are also shared with the Business Learning Center.

The Library staff attend workshops, conferences, seminars and courses that are offered online, on campus, throughout the state, region, and nationally. The Dean of Libraries promotes education of all staff and financially supports such activities when funding is available. Members of the departmental library staff participate in the Association of Architecture School Librarians (AASL) and the Art Libraries Society of North America (ARLIS/NA) discussions and activities.

Members of the departmental library staff are active participants of the Architecture and Landscape Architecture Library Committee. The committee meets as needed, and is comprised of the Architecture & Visual Arts Librarian, Library Associate, four architecture faculty, and one landscape architecture faculty. The committee discusses and makes recommendations to the Librarian and the Library Associate on matters of library policies, services, resources, programs and selection of materials. Students are also regularly encouraged to provide feedback regarding the library collections and services.

Facilities

The Library has nearly 3,000 square feet of space. The materials are housed on one floor with easy access. The Library is located on the third floor of Klai Hall, which is part of the downtown campus. The building is three blocks from Renaissance Hall, which is also occupied by the Department of Architecture and Landscape Architecture, and Department of Visual Arts. The third floor of Klai Hall was an addition to the building when it was renovated in 2008. The space is well-lit, with a variety of seating available to accommodate individual or group study. Remote storage for pre-1975 architecture periodicals is maintained by the NDSU Libraries.

<u>Equipment</u>

The Architecture Library is equipped with five computer workstations for patron use, a caramate slide viewer, light table, TV/VCR combo, flatbed scanner, printer, and photocopier. An external DVD drive, environmental meters, and cameras are also available for checkout. A microform viewer and printer is available in the main library. In addition to the five computers workstations, the majority of the seating

areas have access ports to the Internet, as well as wireless access for patrons who wish to utilize laptop computers and mobile devices within the Library.

Library Concerns Affecting the Program

Even with the continued support from the Program Fee and increased Student Library Fee, the materials budget for the departmental library is still less than adequate. The NDSU Libraries has not had an increase in appropriated funds for acquiring new continuing resources for several years. The Library subscribes to less than half of the titles in the core periodicals list, as determined by the Association of Architecture School Librarians. Standing orders for technical and reference materials were cancelled in 2012, though they may be purchases as firm orders as funds allow, although on an irregular basis.

Another area of concern is the Architecture & Visual Arts Librarian position. In 2013, the person in that role was appointed Interim Head of Resource Acquisition, Management and Discovery, splitting her time among the Architectural Studies Library and the Main Library. In 2015, she accepted the permanent appointment for the other role, while still serving as subject liaison to the departments of Architecture and Landscape Architecture and Visual Arts. She maintains office hours in the Architectural Studies Library one morning per week, provides bibliographic instruction as needed, and collection management duties. The day to day operations of the Architectural Studies Library and supervision of student staff is overseen by the Business Librarian and Library Associate.

While the library staff and Head of Resource Acquisition, Management and Discovery are doing the best they can to serve the needs of the program, the absence of a full-time Architecture & Visual Arts Librarian is detrimental to further developing collaborations with faculty for integrating library and information resources into the curriculum. Students also do not have easy access to a librarian with expertise in the subject area. There were searches to fill the librarian position in the fall of 2015 and spring of 2016, though neither were successful. The NDSU Libraries is planning to conduct another search in early 2018.

1.2.5 ADMINISTRATIVE STRUCTURE AND GOVERNANCE

University Administrative Structure

The University President presides over a <u>Cabinet</u> representing the offices of the Provost, the Vice President for Finance and Administration, the Vice President for Research and Creative Activity, the Vice President for Information Technology, the Vice President for Agricultural Affairs, the Associate Vice President for University Relations, the Athletic Director, and the State Forester, with liaisons from the Development Foundation, the Research and Development Park, the Research Foundation, the Graduate School, as well as the Presidents of the Faculty Senate, the Staff Senate, and the Student Body.

The University's administrative structure is organized into eight colleges reflected in the current Bulletin: Agriculture, Food Systems, and Natural Resources; Arts, Humanities and Social Sciences; Business; Engineering; Human Development and Education; Health Professions; Science and Mathematics; and University Studies.

University Organizational Chart

College of Arts, Humanities and Social Sciences (AHSS)

The College of Arts, Humanities and Social Sciences has approximately 125 faculty and lecturers, 15 staff members, 1,500 undergraduate and 200 graduate students from the departments of Architecture and Landscape Architecture; Communications; Criminal Justice and Political Science; Emergency Management; English; History, Philosophy and Religious Studies; Modern Languages; Performing Arts (Theatre Arts and School of Music); Sociology and Anthropology; Visual Arts; and Women and Gender Studies.

Department and Program Administrative Structure

The Department of Architecture and Landscape Architecture is made up of two professional programs: the Architecture program and the Landscape Architecture program. The Department is administered by a permanent Chair who reports to the Dean of the College of Arts, Humanities and Social Sciences. Because of the modest size of the institution and generally informal atmosphere of the university community, direct and frequent communication takes place between the department and all levels of the university administration. Prof. Michael Strand, the permanent Chair of Visual Arts, is currently serving as the A/LA Interim Chair, while our permanent Chair, Dr. David Bertolini is serving as the Interim Dean of the College of Arts, Humanities and Social Sciences. Both interim positions were effective as of July 1, 2017.

Department Organizational Chart

Currently the chair's appointment allows for nearly 80% release from a typical teaching load to fulfill administrative responsibilities during the academic year and full-time appointment during the summer. Additional administrative duties are shared by program directors in each discipline (Architecture and Landscape Architecture).

The faculty of each program meets as necessary, and there is a monthly meeting of the Departmental Council consisting of all faculty members from architecture and landscape architecture. There are numerous standing committees made up of faculty and student members who report to the Departmental Council or program faculty on the following areas of responsibility, as listed in Department Bylaws:

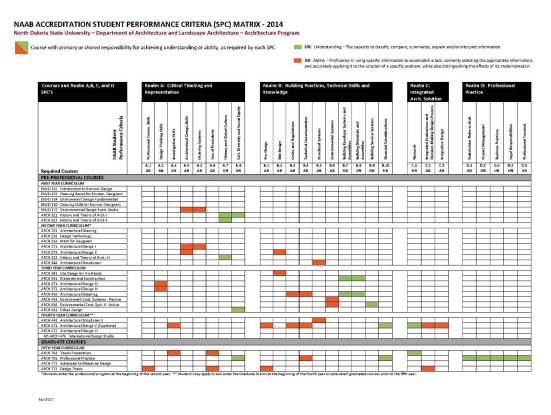
- Assessment Committee (a university requirement to assess student learning)
- Community Service Committee
- Creative Means Committee (overseeing computer use and policy)
- Curriculum Committees for both programs (to review curriculum change proposals)
- Facilities and Space Committee
- Library Committee
- Differential Tuition Oversight Committee (not included in Bylaws)
- PTE Committee
- Student Affairs and Scholarships Committee (student grade appeals and scholarship recommendations)
- Supplementary Education Committee (primarily guest lecturers)
- Term Abroad/Foreign Study Committee
- Study Abroad Committee
- Thesis Committees (to oversee the design thesis process)
- Search Committees (as needed)

The Chair and two directors make up an executive committee to perform administrative duties and to act on the Department's behalf when the full faculty cannot be convened. Ad hoc committees are appointed by the Chair to handle specific issues.

Student participation in most of the decision-making and planning processes in the Department is strongly encouraged. The AIAS/FBD, ASLA, Tau Sigma Delta honor society, USGBC, a newly formed NOMA chapter and student class representatives to the Advisory Board have been particularly active and have been very helpful in organizing and promoting departmental functions.

II.1.1 STUDENT PERFORMANCE CRITERIA

SPC Matrix



Description of the Pedagogy and Methodology of Realm C

Arch472 is the semester-long capstone design studio project of the undergraduate curriculum. As such, students are required to demonstrate an understanding of 'the whole building' and 'integrative design'. The three-phase assignment entails the resolution of a complex mixed-use urban development involving the integration of environmental, social, economic, and technological systems.

Phase 1 involves a qualitative and quantitative pre-design investigation of site demographics, geoclimate, land-development 'due-diligence', zoning, and code analysis. Phase 2 encompasses the iteration of a Schematic Design response including building/site programming, space/form, structure, and passive/active systems. Phase 3 entails Design Development with the ongoing detailed refinement of envelope, site, and finishes and the completion of a final project presentation.

This studio is effectively 'team-taught' with an intensive site investigation trip, supplemental topical lectures, revolving individual desk critiques, and mid/final critiques by invited regional and national design professionals. Assignments for the concurrent Structures II course have been interwoven with the studio schedule and aid in the project development.

Description of the Methodology for Assessing Student Work

Faculty members are responsible for individually or in teams assessing their coursework and making decisions about which work to keep regarding "high pass" and "minimum pass" work (using this alternate description of "low pass" work, from the NAAB "Guidelines for the Use of Digital Content in Accreditation Visits").

High-Pass Work

This category represents outstanding performance relative to the Student Performance Criteria assigned to the course. There need not be a direct correlation, however, between a high-pass designation and the

grade for the assignment or the course, although the presumption could be made that high pass work is generally A or B work.

Minimum-Pass Work

This category represents a minimum level of performance and competency relative to the Student Performance Criteria assigned to the course. Again, there need not be a direct correlation between the grade for the assignment and the course. It is possible that a student might receive an A or B for an assignment and perform minimally in a specific SPC category.

II.2.1 INSTITUTIONAL ACCREDITATION

NDSU is accredited by the Higher Learning Commission (HLC). The date of the <u>most recent</u> <u>reaccrediting letter</u> was March 26, 2016, with the next scheduled review to occur in 2025-2026. Additional information, including the final report, may be found on the University's Accreditation website.

II.2.2 PROFESSIONAL DEGREES AND CURRICULUM

Degree Offered

NDSU's Architecture program offers a pre-professional Bachelors of Science in Architecture degree, leading to a professional Master's of Architecture degree:

Pre-professional Bachelor of Science in Architecture (BSArch)	136 credits
Professional Master of Architecture (MArch)	32 credits
,	168 credits

Curriculum

Areas of Study	Courses	Credit Hours
General Education Studies	14	40
Required Professional Studies	29	108
Optional Studies	7	20
TOTAL	48	168

The <u>Master of Architecture degree curriculum</u> is made up of three components (link includes semester-by-semester suggested curriculum and areas-of-study):

General Education Studies: (40 credits total - having recently changed from 39)

<u>University General Education Requirements</u>: (34 credits, not including 6 credits from the preprofessional curriculum)

- Communication: 13 credits
- Quantitative Reasoning: 3 credits
- Science and Technology: 10 credits (includes 1-credit lab)
- Humanities and Fine Arts: 6 credits (met with 6 credits from the professional curriculum not counted in table above)
- Social & Behavioral Science: 6 credits
- Wellness: 2 credits
- Cultural Diversity (met with no additional credit by professional studies course)

Global Perspective (met with no additional credit by professional studies course)

Additional General Studies Courses: (6 credits)

These courses are general studies courses required by the architecture program beyond the university's general education requirements.

- A third social & behavioral science class: 3 credits
- A philosophy elective class: 3 credits

Optional Studies: (20 credits total)

- Three undergraduate level elective courses beyond university general education requirements: 8
 credits
- Four graduate level courses: 12 credits

Professional Studies: (108 credits total)

Courses at the undergraduate level: 88 credits

Courses at the graduate level: 20 credits

Minors

Our program does not require a minor or an additional area of concentration. Our five-year Master's degree offers a limited number of elective credit options, but we are seeing more students enter the University with transfer credits gained in high-school (AP or dual enrollment). These students, and those transferring from other majors or other institutions, are the most likely to pursue a minor, typically requiring 18-24 credits. In the past five years, these are the minors that our students have pursued, in order of occurrence: Art, Landscape Architecture, Business Administration, Psychology, Anthropology, International Studies, Spanish, Chemistry, Accounting, Community Development.

Off-Campus Program

The Department's Term Abroad Program (TAP) constitutes a full semester of residential study in an overseas location. Student participants complete their studies under the direction of an NDSU faculty member working in cooperation with faculty at international host institutions. The TAP was launched to respond to the following concern raised in the 2006 NAAB VTR:

"The foreign travel program appears to be a tourist travel program rather than a study abroad program. The returning students do not exhibit the same growth in design maturity seen in students from other schools with true study abroad programs."

In contrast to the previously offered short-duration International Summer Study seminars, the semester-long Term Abroad Program immerses students within a foreign environment. Immersion provides the students with a unique basis from which to approach their professional education. By living and studying for an extended period in a foreign location, students are enabled to understand complex interrelationships between culture and the built environment with the kind of breadth and depth not possible in experiences of shorter duration.

The Term Abroad Program incorporates the NDSU M. Arch. curriculum for the Spring Semester of 4th Year. Thus, from a curricular point of view, TAP participants complete the same courses, earn the same credits, and make identical progress toward their degrees as do the students who opt not to participate. However, TAP participants have the additional opportunity to participate in workshops and lectures offered at international host institutions. These workshops and lectures may be structured as purely optional or, as in the case of design workshop, may be required courses co-taught by NDSU and foreign faculty as part of the term abroad experience.

Structure of the Term Abroad Program

Extended discussion and organization over a period of several years, in response to the 2006 VTR, led to the inaugural offering of the TAP in 2009 and has continued on an annual basis since then, currently under the leadership of Dr. Paul Gleye and operating under a Memorandum of Agreement between NDSU and the Catholic University of Louvain, Belgium. Under this agreement, the Catholic University of Louvain each spring semester hosts a group of 20 NDSU 4th-year architecture students and one faculty member at their architecture campus in Brussels by offering a classroom, access to the architecture library, access to the student cafeteria, invitations to guest lectures, and an international design workshop for Belgian and NDSU students, plus a group of students from a third country, usually from the Lebanese Academy of Fine Arts in Beirut. In return, the NDSU architecture school hosts up to 3 4th-year Belgian students tuition-free each spring semester to study architecture in Fargo. TAP logistics are coordinated with staff at NDSU's Office of International Programs, who also work to assist students requiring financial assistance.

In addition to the workshop and lectures offered to NDSU term abroad students by our partner school in Brussels, the NDSU term abroad semester comprises three courses:

- 1) An urban design studio, whereby the NDSU term abroad students address an urban design issue in Brussels. As with many cities, the periphery of the urban core in Brussels was long occupied by heavy industry, but in recent years these industrial districts have seen encroachment by the "bright new city" of new-economy employment and expensive condominiums. The urban design challenge presented to the NDSU term abroad students has generally dealt with addressing the interface, in various ways, between the new economy and old industry.
- 2) A graduate seminar comprising field trips to major European cities, with assignment asking the students to reflect on their experiences through a series of videos and other presentations.
- 3) A second graduate seminar comprising a series of assignments relating to the question of "What can the United States learn from Europe, and what can Europe learn from the United States," both in terms of architecture and urban design, and in broader questions of quality of life.

Outcomes of the Program / Future Plans

The program has produced outcomes in tangible form, as post-trip publications and exhibitions at NDSU have provided an important means of sharing the value of the experience with faculty and students. Further, most students return from the term abroad with a broader perspective and an enhanced enthusiasm for the opportunities available to them as architects to enhance the design of buildings and cities. Future plans for the TAP include the possibility of exchange opportunities for students and faculty at NDSU and other international institutions.

Other Degree Programs Offered in the Department

The Department of Architecture and Landscape Architecture offers one additional professional degree besides the professional degree in architecture. The Landscape Architecture program offers a five-year professional program leading to a Bachelor of Landscape Architecture degree. The Landscape Architecture program was last reaccredited for a six-year term in 2014, and will be reviewed again in fall of 2019. A proposal to transition the BLA to a five-year professional Masters of Landscape Architecture degree has recently received Stage I approvals. The pending MLA will be reviewed in the fall of 2018.

II.3 EVALUATION OF PREPARATORY EDUCATION

For nearly all our students, the pre-professional education of students entering our accredited program is accomplished during the first four years of our five-year program. The process through which these students apply to and are accepted into the professional program at the beginning of their second year is described in Section II.4.6. With the two exceptions described below, all students in our professional program start in the first year at North Dakota State University in the pre-architecture first-year.

- Undergraduate transfer students, who have completed coursework in architecture at another
 institution may apply to our pre-professional program and be given advanced standing. Transfer
 credits are awarded in compliance with <u>NDSU transfer policies</u>. Only transfer courses with 'C'
 grades and above will be accepted.
- Graduates of pre-professional programs in architecture may apply to our professional program, for placement in the fifth year, or in the fourth year if a student is deemed to require remedial NAAB coursework, or coursework for which there was no previous SPC match.

In both cases, students must submit transcripts, course descriptions, and a portfolio for review by the Program Director. Non-studio courses will be evaluated through a review of a catalog course description while studio courses will be evaluated through a portfolio review. In both cases, the content of transfer courses must align with course offerings in the Department that meet required SPC standards as defined by NAAB. Transfer courses may be combined to meet the SPC requirement of an NDSU course. The NDSU Bulletin points out general transfer requirements for both <u>undergraduate</u> and <u>graduate</u> admission, as well as program-specific transfer information for <u>undergraduate</u> and <u>graduation</u> admission. Each transfer candidate receives, on the undergraduate level, an <u>analysis</u> from the program which shows transfer credit awarded, and on the graduate level, an <u>analysis</u> from the program which shows courses/semesters to completion.

PART TWO (II) SECTION 4: PUBLIC INFORMATION

II.4.1 Statement on NAAB-Accredited Degrees

Department website:

https://www.ndsu.edu/ala/architecture/Degree_accreditation.php

NDSU Undergraduate Bulletin:

https://bulletin.ndsu.edu/undergraduate/colleges/arts-humanities-social-sciences/architecture-landscape/NDSU Graduate Bulletin:

https://bulletin.ndsu.edu/graduate/programs/architecture/

II.4.2 Access to NAAB Conditions and Procedures

https://www.ndsu.edu/ala/architecture/Degree accreditation.php

II.4.3 Access to Career Development Information

https://www.ndsu.edu/ala/architecture/Degree_accreditation.php

II.4.4 Public Access to APR's and VTR's

https://www.ndsu.edu/ala/architecture/Degree accreditation.php

II.4.5 ARE Pass Rates

Pass rates for both ARE 4.0 and 5.0 are listed on the Department website. https://www.ndsu.edu/ala/architecture/Degree_accreditation.php

II.4.6 Admissions and Advising

Admission to NDSU – First-year and Transfer Students

The NDSU Admissions website - https://www.ndsu.edu/admission/ - is a comprehensive gateway to all aspects of the admissions process, directing prospective students to the appropriate information and forms. All Pre-architecture students make application directly to NDSU:

- About NDSU
- Academic Information

- Admission Information
- Applications + Forms
- Campus Visit Opportunities
- Costs + Financial Aid
- Counselor + Advisor Resources
- <u>Diversity Resources</u>
- International Admission
- Military + Veterans Certification
- Scholarships
- Transfer Students

The "Admission Information" tab provides information on the following:

- Admission Process Timeline
- <u>Freshman Admission Requirements</u> (includes high school GPA, test score, and high school core coursework requirements, and admissions procedures)
- Application (includes link to application form)
- Early Entry Program
- International Student Admission
- Pathway Program
- Transfer Admission Requirements

Admission to the Professional Program (Beginning of the Second Year)

In April of their first year, all pre-architecture students apply for one of 64 spots (currently) in the professional program. <u>Application</u> was made on-line for the first time in the spring of 2017, and students are asked basic questions, indicating the program for which they are applying (Architecture, Landscape Architecture, or either, with a first choice indicated), where they can be reached at the beginning of June, and some basic questions useful for future recruiting. Once spring grades are posted, student grades are <u>recorded and ranked</u> by weighted GPA. Students are notified the first week of June of offers of admittance, and given two weeks to reply.

Acceptance into the program is based on a weighted GPA, with 60% emphasis on first-year ENVD courses, and 40% on all other courses. Only NDSU grades are considered and each student must have attempted 12 credits per semester. Grading criteria is discussed among first-year studio faculty (ENVD 130 and ENVD 172) where there are multiple sections to ensure uniformity of grading. Other first year ENVD lecture classes (ENVD 101, ENVD 102, and ENVD 104) are each taught by one instructor so uniform grading is assumed.

Admission to the Graduate Program (Beginning of the Fifth Year)

Students may first apply to the Graduate School for entrance at the beginning of the fourth year, taking optional topics courses before full-time graduate school admission at the beginning of the 5th year. Application is made through the Graduate School portal, but with a streamlined process that does not require references and GRE testing for student who are continuing from the pre-professional program.

- Campus & Community
- Request Information
- How to Apply (on-line application)

II.4.7 STUDENT FINANCIAL INFORMATION

NDSU's website provides comprehensive financial information for prospective and current students.

- Cost of Attendance and Budget
- Tuition, Student Fees, Room and Board
- Financial Aid
- Scholarship Information:
 - o **Grants**
 - o Loans
 - Scholarships

<u>Freshman Scholarships</u>
Transfer Student Scholarships

- Net Price Calculator:
- Military and Veterans Certification

The Department website, with an "<u>Anticipated Costs</u>" worksheet, provides additional, department-specific information on estimated costs. This same information is provided in our prospective students' packet.

III.1.1 ANNUAL STATISTICAL REPORTS

The NDSU Office of Institutional Research and Analysis has verified in a <u>letter dated August 29, 2017</u> that data submitted in the NAAB Annual Reporting System was accurate and consistent with reports sent to other national and regional agencies.

Annual Statistical Reports, 2012-2016

- 2012 NAAB ARS
- 2013 NAAB ARS
- 2014 NAAB ARS
- 2015 NAAB ARS
- 2016 NAAB ARS

III.1.2 INTERIM PROGRESS REPORTS

These documents will be provided by NAAB.

SECTION 4. SUPPLEMENTAL MATERIAL

The following documents are available as linked below:

- Resumes of faculty teaching in the accredited program
- Faculty credentials matrices
- Plans or images of physical resources assigned to the program
- Descriptions of all courses offered within the curriculum of the NAAB-accredited degree program.
- Studio Culture Policy
- Self-Assessment Policies and Objectives

- Policies on academic integrity for students (e.g., cheating and plagiarism)
- Information resources policies including collection development
- The institution's policies and procedures relative to EEO/AA for faculty, staff, and students
- The institution's policy regarding human resource development opportunities, such as sabbatical, research leave, and scholarly achievements and here
- The policies, procedures, and criteria for faculty appointment, promotion, and when applicable, tenure
 College, Department
- The previous VTR (from 2012)
- Copy of institutional accreditation letter
- Letter from institutional research regarding ARS data