Name of Institution: Harvard Graduate School of Design
Name of Academic Unit: Department of Architecture

Interim Progress Report

M. Arch

Track I (Undergraduate degree outside of architecture + 105 graduate credit hrs)
Track II (Related preprofessional degree + 75 graduate credit hours)
Please provide contact information for the following individuals:

Program Director: Grace La, Professor of Architecture

Chief administrator for the academic unit in which the program is located (e.g., dean or department chair): Inaki Abalos, Chair**,** Department of Architecture
Mohsen Mostafazi, Dean, Department of Architecture

Provost: Alan Garber

President of the Institution: Drew Faust

Individual submitting the Interim Program Report:
Grace La, Director, Master of Architecture Degree Program Professor of Architecture

Name of individual to whom questions should be directed: Grace La, Director of M.Arch Program
Andrea Croteau, Administrator

Year of the Previous Visit: Spring 2012

Current Term of Accreditation: 6 years (Next visit, Spring 2018)

Submitted to: The National Architectural Accrediting Board
Date: 14 September 2011

NOTES:

1. All sections should be in Ariel 10 pt type. The template indicates what titles or section headings should be in **bold** and what sections should be in *italics*.
2. All reports should be formatted with 1" margins for all edges.
3. Reports should be single-spaced with appropriate spacing between paragraphs.
4. Please use the headers and footers as established in the template.
5. Reports must be submitted in PDF or Word.
6. Reports are limited to 3 MGs.
7. Instructions for submitting supplemental material are appended to that section of the report.

Table of Contents

1. Plans for/Progress in Addressing Conditions Not Met from the 2012 Visiting Team Report

a. Conditions I.1-I.5 or II.2-II.3

4.1.Statement on NAAB-Accredited Degrees: *In order to promote an understanding of the accredited professional degree by prospective students, parents, and the public, all schools offering an accredited degree program or any candidacy program must include in catalogs and promotional media the exact language found in the* 2009 NAAB Conditions for Accreditation, *Appendix 5.*

2012 Team Assessment: The team found that the intention of the NAAB language is fulfilled in the various referenced documents, but "…the exact language…" was not met in that there were examples where the copy was incomplete and/or paraphrased and/or referenced the ***2004*** NAAB Conditions for Accreditation. Despite this, there is compelling evidence that students are fully aware of the critical professional implications of accredited versus non-accredited architecture programs.

2014 Program Response:
This (II.4.1) condition relates to the outdated language of the Statement on NAAB-Accredited Degrees published in our 2011-12 Guide to Gund; this error has been corrected in all print and digital media instances of the Statement published by the GSD since August 2011.

b. Conditions II.1 (Student Performance Criteria)

B. 2. Accessibility: *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

2012 Team Assessment: Architectural Design (GSD-1201) is listed as the source for fulfilling this SPC. There is evidence of one lecture that addresses accessibility in this course but a review of student graphic work does not convey their ability to apply the principles of accessibility in their project work. Main entries fail to provide ADA required avenues of ingress/egress, maneuvering space is insufficient to accommodate physical disabilities, door swings inhibit egress flow, accessible toilets are not indicated, and no references could be found for addressing sensory and cognitive disabilities.

B. 5. Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.

2012 Team Assessment: Students have not demonstrated the ability to apply basic egress systems to buildings. Projects show required exit stairs that a) are depicted as unenclosed, b) without doors, c) exiting internal to the building, d) ending without egress and large assembly areas as provided with only one means of egress. These issues were evident in a review of documents from Architectural Design (GSD-1201) and other studio work.

B. 6. Comprehensive Design: *Ability* 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.5. Life Safety
A.9 Historical Traditions and Global Culture	B.7 Environmental Systems
	B.9. Structural Systems

2012 Team Assessment: While evidence exists that the majority of the above sub-criteria are met individually, evidence does not exist in the comprehensive studio Architectural Design (GSD-1201) that there is any consistency within the projects in general, or from student to student, that all of the issues are integrated within the work. Particular emphasis is made for the absence of information in the comprehensive studio projects of B.2 Accessibility, B.3 Sustainability, B.5 Life Safety, and B.9 Structural Systems.

2014 Program Response:
Because the three above "Conditions Not Met" are closely interrelated and based on perceived deficiencies in Student Performance Criteria (specifically, B.2, B.5, and B.6) seen in the third-semester *Comprehensive Design studio (GSD-1201: Architectural Design)*, we have prepared our response to these concerns in the text for section 2 below, for clarity and ease of understanding. This studio was also the focus of the Team's sole "Cause for Concern," related to the studio project's scale and complexity (also below). The Visiting Team's overlapping concerns about our third-semester studio encouraged us to rethink this course's pedagogy and deliverables at a fundamental level, to ensure that our expectations of student work are made more explicit and more achievable.

2. Plans for/Progress in Addressing Causes of Concern from the Most Recent Visiting Team Report

Project Scale of Comprehensive Design

A. Project Scale of Comprehensive Design: It is the concern of the team that assignments in the Comprehensive Design studio may be too ambitiously large in scope and complexity, thereby leading to the inability (in time, or overwhelming scope) of the students to adequately include content and representation of all required technical components, systems, and information.

2014 Program Response:
Addressing the shortcomings cited by the 2012 NAAB Visiting Team has been a priority for department faculty since the NAAB visit. Leading the effort to reform the third-semester studio program, pedagogy, and requirements are chair Iñaki Ábalos (who also reinforced the ranks of the comprehensive studio teaching team as of fall 2012), former department chair Scott Cohen (who, for the fall 2014 is also teaching the comprehensive studio), former program director Mark Mulligan, studio coordinator Eric Howeler, and current program director, Grace La. Our primary areas of concern have been: 1) scope of the studio project; 2) complexity of the project site; 3) focus on students' fundamental knowledge about accessibility, circulation systems, egress and life safety; and 4) full integration of structural, environmental, and material concerns into projects. Our combined efforts have produced not only a new project brief, site, and pedagogy for GSD-1201 but also a new document, provisionally entitled "The GSD Guide to Building Code," that serves as an online reference for students in all semesters of our M.Arch program. Aspects of the new studio brief and online code guide

are detailed in the paragraphs that follow, and the documents themselves are attached as addenda to this report.

1. Scope of comprehensive design studio project
Both the 2010 and 2011 studio briefs called for a performing arts complex including one or two large auditoriums, combined with music and dance academies. Three design issues inherent in these programs were 1) hybrid activities requiring separate circulation systems for the public, students, performers, technicians, and staff; 2) large-capacity halls requiring well calibrated, multiple egress paths; and 3) long-span structures for the auditoriums. In reality, most students managed to resolve one or two of these challenges, but few could address all three convincingly while meeting the expectations for complete documentation of the studio project. As a result, in the subsequent months, 2012-present, we have worked to simplify the brief while maintaining the rich objectives of the comprehensive studio. In the most current 2014 studio brief (attached as an addendum to this report), we have retained the idea of a large-scale institutional building featuring a multi-use program: a gym, thermal bath, and hotel. However, we have omitted the large auditoriums of previous years' programs, with their concentrated egress loads and long-span structural challenges, so that circulation, accessibility, and egress can become a clear central focus for students. Due to its large floor area and constrained site (see below), the project has been presented to students as a high-rise structure – a genre that encourages systematic stacking and repetition of cellular units above a plinth of more public programs below. Moreover, this building type allows our students to actively engage in environmental concerns as driven by site and climate (see below). We believe that the fundamental programmatic challenges for this studio brief are not only more manageable than those of past years, but also clarify and heighten the focus on Comprehensive Design issues.

   As a result of these reforms to the program, two primary critical design challenges emerge: circulation/egress and vertical structure. We have retained a desirable scale and complexity for the project in order to cultivate students' mastery of structure, egress, accessibility, interior environments, etc. in a way that fulfills the intentions of the Comprehensive Design Studio and prepares them for the kinds of design challenges they will face in professional situations after graduation. The faculty recognizes, however, that the Comprehensive Design project always represents a difficult balance, and we will continue to evaluate the success of the new program as we see the students present their work next month. We are committed to making further revisions as necessary in the coming year.

2. Complexity of comprehensive design studio site
Looking back at the 2010 and 2011 comprehensive studios, we concur with the VTR's findings that the sites for those studios were unnecessarily complex and required students to spend too much design time resolving issues of urban siting (which we do address in other semesters of the core). Both the 2010 Boston waterfront site and the 2011 downtown site (an annex to Paul Rudolph's 1971 Government Service Center) required students to confront complex urban situations in which there was an abundance of unbuilt open space (to be designed as public park, outdoor theater, landscape, etc.) and no obvious "front" or "back," all sides being equally exposed and public. Since that time, the sites for the subsequent comprehensive design studios (2012-present) are more conventionally constrained by a dense urban context that requires the building to

nearly "fill out" its buildable area and volume; in doing so, the building volume produces two clear front/public facades and two less visible backstreet/alley facades (suitable for loading dock, emergency exits, and so on). By more tightly constraining the building volume to produce a smaller number of variations in massing and circulation, we see that most students are capable of resolving their urban siting early in the semester and thus have been able to spend more time on building organization, structure, tectonics, and so on.

Simplifying the type of site, as described above, has also allowed us to pay particular attention to the variation of site in terms of climate and environmental response. Accordingly, this year's comprehensive studio has engaged in three intentionally diverse sites: 1) Miami, 2) Chicago; 3) Phoenix. Students were asked to conduct research on each of these sites and to integrate that research into their comprehensive building design (also included in addenda package). As issues of sustainability are at the forefront of contemporary practice today, this site variation has allowed our students to engage in productive discourse on response to environmental and thermodynamic narratives. The students were also able to engage in comparative understanding of sites with extremely varied properties: hot/humid; cold/dry; hot/dry; etc.

3. Fundamental knowledge about accessibility, circulation, egress, and life safety
As noted in the 2012 VTR, prior to 2012, principles of accessibility, circulation, egress, and life safety had been introduced to students primarily in lectures given by studio instructors and guests during the Comprehensive Design semester. Once familiarizing students with these principles, individual studio instructors would be responsible for helping students implement certain rules (about ramp slopes, guardrails, door swings, emergency stair enclosures and exits, accessible toilets, etc.) into their projects. Judging from student work in fall 2010 and 2011, however, the focus provided by a single lecture on accessibility or on egress systems did not sufficiently instill in students the kind of lasting awareness about these issues that we would like to see.

Over the summer of 2012, former program director Mark Mulligan worked with a group of advanced architecture students to develop a new online reference document called "The GSD Guide to Building Code" (attached to this report as an addendum). In contrast to existing building code guides (e.g., *Building Codes Illustrated* by Ching and Winkel), our goal was not to produce a generic-looking, comprehensive book for professionals, but rather a concise handbook specifically aimed at providing students in the Comprehensive Design studio the knowledge necessary to develop accessible, code-compliant projects. To enhance its appeal, students illustrated the Guide with vignettes and graphics that appear aesthetically consistent with GSD studio projects (to demonstrate, for example, that code compliance does not necessitate designing rectangular boxes linked by corridors). Throughout the term, third-semester architecture students have been urged to refer to the online Guide between meetings with their studio instructors for concrete guidance about configuration and dimensional aspects of project elements such as ramps, stairs, emergency exits, and so on; they are expected to translate specific guidelines of the GSD Guide directly into their projects to produce universally accessible floor plans, with proper door swings, stair enclosures, emergency exits, etc. We have designed "The GSD Guide to Building Code" as an open document (PDF) with an easy-to-use layout template, so that it may be extended or revised as needed in future years.

In addition to the GSD Guide to Building Code, the revised third semester core studio brief places new emphasis on Code. Code is one of four topics (including Tectonics, Thermodynamics, and Program-- see more below) that are part of the initial research phase of the studio (Assignment 1), as well as the subject of a new Assignment 3 entitled "Code" which requires students to perform a "spatial audit" of their projects and "confirm compliance" with IBC, including "occupancy, construction type, allowable floor area, egress, and compartmentalization." This assignment explicitly deals with the key issues of life safety raised by the Visiting Team Report.

4. Integration of structural, environmental, and material concerns into projects
The revisions described in the preceding paragraphs create an external framework for more fundamental reforms that we have implemented in the third-semester core studio (GSD-1201) in terms of pedagogy, assignment schedule, and deliverables. These reforms allow us to focus our attention on the key purpose of the Comprehensive Design Studio: the successful integration of multiple systems into a single building design. The semester-long design project has been overlaid with five assignments and a final, cumulative project (see the attached GSD-1201 3rd semester syllabus). Each of the five assignments preceding the final has a clear focus: 1) Site and Environmental Analysis, and Program Analysis; 2) Site Strategy and Program Organization; 3) Code; 4) Flows and Forces; 5) Performative Envelope. Integrating these focus areas allows the students to develop a consistent trajectory over the course of the semester. To ensure that each student demonstrates the ability to integrate systems of circulation (access, egress), structure, and environmental performance into their final projects, each of the preparatory assignments explicitly requires students to develop detailed diagrams of those systems.

Since 2012, we have also engaged highly respected professional consultants each semester to lead targeted midterm reviews of individual student projects, focusing on the resolution of technological concerns in their respective fields. For example, consultants have included: sustainability engineer Matthias Schuler (Transsolar, Stuttgart) and structural engineer Jurg Conzett (Zurich); this year, we have invited engineer and materials expert Sal Craig (Foster Associates, London); structural engineer Robert Silman (New York City/Boston) and architect Frank Barkow (Barkow Liebinger, Berlin). Based on the new semester structure, with its more targeted assignments and reviews of component systems, we expect to see greater attention in the final student projects to the requirements and intentions of the Comprehensive Design studio.

As the fall semester draws to a close, pending the results of next month's final reviews, we will continue to evaluate our approach and search for additional refinements to the Comprehensive Studio. We welcome your comments and insights.

3. Changes or Planned Changes in the Program
Such as

- Faculty retirement/succession planning
- Administration changes (dean, department chair, provost)
- Changes in enrollment (increases, decreases, new external pressures)
- New opportunities for collaboration
- Changes in financial resources (increases, decreases, external pressures)

- Significant changes in educational approach or philosophy (e.g., new provost = new approach)
- Changes in physical resources (e.g., deferred maintenance, new building, cancelled new building)

We have highlighted program changes in the Secion 4 text below (in blue) as these changes are directly linked to the mission and overall strategic trajectory of the school and program. New faculty biographies are included in our Supplemenatary Materials Addenda package.

4. Identity & Self Assessment

a. History Mission

[The NAAB will provide this section, quoted directly, from the most recent APR]
The report must include the following:

- *Programs must describe how this section changed since the most recent APR was written and submitted*

History of Architectural Education at Harvard

For seventy-five years, the Graduate School of Design has both pioneered and exemplified excellence in the practice of design, education for the design professions, and design-related scholarship. As a professional school with established programs in architecture, landscape architecture, urban planning, and urban design, the GSD trained many of the twentieth century's foremost practitioners and scholars. Building on its history at the fore of the design professions and its position in a premiere academic institution with international reach, the Graduate School of Design remains committed to educating its graduates to assume leadership roles in a rapidly changing twenty-first century world. As the largest department within the GSD, the Department of Architecture shares (and puts into action) the School's overarching mission: *Design Leadership through Societal Engagement.*

Architectural history and design have been taught at Harvard University for more than a century, and programs at Harvard leading to the professional degree in architecture have received accreditation since the beginning of this process in 1940. In academic year 1971-72, the graduate Bachelor of Science degree in architecture was changed to the degree Master in Architecture, reflecting the general trend for graduate education to award the master's degree. Since then, the program has been organized into seven semesters of study, with a five-semester plan for students awarded advanced standing. The curriculum is centered on a series of design studios of increasing complexity, culminating in the completion of an independent master's thesis project. Courses in history and theory, visual and socioeconomic studies, science and technology, and professional practice provide students with a comprehensive, broad base of knowledge of the architectural profession.

Beginnings of Architectural Study at Harvard

Charles Eliot Norton of Harvard University's Department of Fine Arts first brought architectural history into the Harvard curriculum in 1874, and Herbert Langford Warren first taught classes devoted exclusively to architecture in 1893. Warren's richly eclectic architectural education – he had studied at Owens College in his native England, in Germany, and at MIT – combined with his professional training in the office of H.H. Richardson, had made him sensitive to the need to develop a multi-faceted program at Harvard. As outlined in the *Register,* the four-year program was posited on the continuing study of architectural history, the application of historical precedents to "modern work," the analysis of mechanics, materials and construction techniques, complementary courses in both mathematics and drawing, and the completion of a fourth-year thesis. Richard Morris Hunt Hall – named in tribute to the first American to attend the École des Beaux-Arts – opened in 1895 and served as the shared site for architecture and other fine arts at Harvard. The building served as the original Harvard University Fogg Museum of Art and housed a collection of plaster casts of classical sculpture and architectural components that "illustrated"

the curriculum offerings. The familiarity with “classic form” demanded of students in architecture was explicated by readings, lectures, study photographs, and the study of sculptural casts.
Robinson Hall, designed by Charles McKim and completed in 1902, was the first Harvard building dedicated exclusively to the study of architecture. Its Great Hall was designed to showcase the exhibition of both original fragments and casts; other vital elements included drafting rooms, drawing studios, and a library of books and study photographs supplemented by a “materials library” of samples. Forty students were enrolled in the program in 1902. Within a decade, the teaching faculty had expanded to include Eugene Duquesne, Robert Swain Peabody, Cass Gilbert, Henry Atherton Frost, and Charles Wilson Killam. In subsequent years Harvard established the nation’s first academic degree programs in landscape architecture, city and regional planning, and urban design.

The Faculty of Architecture was established as a graduate school in 1914. Warren, who had served as chairman of the architecture program since 1902, was named the first dean. Through the first two decades of the twentieth century, instruction in architecture remained greatly influenced by the École des Beaux-Arts in Paris. The School of Architecture was focused on the training of professionals at a graduate level, within the context of the shifting collaboration with the School of Landscape Architecture and the program in City Planning. In the early 1930s, art historian George Harold Edgell, who had served as Dean of the Faculty of Architecture and Landscape Architecture since 1922, addressed the shift in curriculum focus from history to design by appointing French artist and architect Jean-Jacques Haffner as the principal instructor in advanced design, thus significantly strengthening studio teaching. It was also during Edgell’s administration that the idea took hold that city planning, architecture, and landscape architecture should all be united under one roof.
A Unified School

The Graduate School of Design (GSD) was officially established in 1936, in recognition of the shared interests and collaborative relationship among the design professions, defined from the outset to include urban planning. An integrated faculty helped develop comprehensive programs while drawing on the great intellectual resources of other Harvard University faculties, research groups, and libraries. Joseph Hudnut, the GSD’s first dean, initiated a dramatic shift in the direction of architectural education at Harvard. Hudnut had long been interested in the emerging modernism in architecture and town planning, and had begun to transform architectural education at Columbia University before moving to Harvard. In 1937, he invited Walter Gropius to Harvard as professor and Chairman of the Department of Architecture. Together, Gropius and Hudnut were to be instrumental in shifting architectural education in the United States from a model based on classical precedent to one based on a modern conception of architecture and of the role of the architect. Gropius’ essay “Architecture at Harvard University,” published in *Architectural Record* in 1937, gave some indication of his ambitions for the program in architecture. Under Gropius’ direction, the program aspired to produce generations of creative practitioners, inspired by a modern aesthetic, who developed their understanding of the world from contemporary circumstances and could measure the social and technical implications of their work. Teams of faculty and students developed large projects, drawing on the skills of all the design professions, including landscape and city planning. The innovative master’s studio was revamped by Gropius and swiftly became both popular and influential. Marcel Breuer joined the faculty in 1938, and visiting lecturers in this period included Josef Albers, Gunnar Asplund, and Alvar Aalto. The department also initiated a program of innovative exhibitions focused on contemporary design. In 1941, Dean Hudnut introduced a new Department of Architectural Sciences within Harvard College, supplementing the traditional liberal arts undergraduatecurriculum in architecture with new studio courses in theory, practice, and design; until its dissolution in 1968, an average of eighty Harvard College students were enrolled annually.

The war years were characterized by significantly decreased enrollment at the GSD (although women were permitted to enroll for the first time in 1942) and the development of a truncated “wartime” curriculum in the various programs. After the war, in the fall of 1945, the GSD Department of Architecture renewed its curriculum, based on a core of integrated courses in Design, Planning, Construction and Architecture.

In 1953, Josep Lluis Sert was appointed dean of the GSD. Sert, who served simultaneously as Chairman of the Department of Architecture, advanced professional architecture education at the GSD, doubled the number of students and faculty, and expanded course offerings in the technical, behavioral, and social sciences. Sert was instrumental in developing an integrated approach to planning and design of the urban environment, and the school placed new emphasis on the subject of urban design. A degree program in urban design – again, the first in the United States – was established in 1960 to enable greater collaboration among the school's design and planning disciplines. The Joint Center for Urban Studies (now called the Joint Center for Housing Studies) was also created in 1959 to support research in the field and to address the troubling issues facing cities at the time.

Growth and Change

The next major turning point for the GSD came in the 1960s, when a plan gained momentum to move the school into a new building of its own. A new site became available at the corner of Cambridge and Quincy streets, and the Australian architect John Andrews was chosen to design what would become the 170,000-square-foot Gund Hall, completed in 1972. The most distinctive features of the new buildingwere its tiered student "trays," stepping down four stories in a continuous glazed hall and emphasizing the studio environment as the core of its design pedagogy. Presiding over the GSD at the opening of Gund Hall was Maurice D. Kilbridge, formerly a professor at the Harvard Business School, who had succeeded Sert as dean in 1969. Over the following decade, the school again doubled its enrollment and extended the scope and depth of its programs.

In 1980, Gerald McCue, then Chairman of the Department of Architecture, was appointed dean, and Harry Cobb assumed Architecture's chairmanship. Under their leadership, the school began a critical reexamination of the field of design, seeking to exploit more fully the school's position in the exceptional environment of Harvard. McCue expanded the research base of the school by creating new advanced degree programs. The Master in Design Studies (MDesS) and the Doctor of Design (DDes) programs were established in 1986. Research was also supported through the university's PhD programs in architecture, landscape architecture, and urban planning. McCue also led efforts to bolster endowment support for professorships and to secure gifts for educational resources, such as library collections and computer-based instruction materials. Cobb, meanwhile, established a new core curriculum centered on studio work and attracted to the faculty a group of exceptional, often controversial practitioners. In 1985, Rafael Moneo succeeded Cobb as Chair of the Department of Architecture; Moneo's tenure brought to the architecture curriculum both intensified focus on contemporary architectural theory and a large number of visiting professors and lecturers from Europe and around the world. Mack Scogin succeeded Moneo as chair in the fall of 1990, serving in that position until 1995.

From 1992 to 2004, Peter G. Rowe, Raymond Garbe Professor of Architecture and Urban Design, served as the fifth dean of the GSD. While extending the initiatives of his immediate predecessors, Rowe focused on expanding the School's international dimension and the development of continuing professional and executive education. In his 1993 academic plan for the GSD, he reaffirmed the present configuration of the school, its degree nomenclature, and degree programs housed within the three departments of Architecture, Landscape Architecture, and Urban Planning and Design, as well as the formalization of the Advanced Studies Program housing the PhD, DDes, and MDesS programs initiated under McCue. He also worked to increase the number of senior faculty; to develop new programs in urban planning, real estate, and environmental protection; to expand the School's information technology capacities; to renovate the Frances Loeb Library; and to enhance the classroom and shop facilities. During this period as well, the *Harvard Design Magazine* became an important forum for leading educators and practitioners to debate current issues in design and the environment. Rowe appointed two new Chairs to the Department of Architecture during his term: Jorge Silvetti (1995-2002) and Toshiko Mori (2002-2009). The latter appointment set an important precedent for diversity within the GSD, in that Mori was both the first female and the first Asian-American to lead one of the School's three Departments.

In 2005, Alan Altshuler, Ruth and Frank Stanton Professor in Urban Policy and Planning, was appointed the sixth dean of the Faculty of Design, setting as his priorities 1) adaptation to new technologies in design practice; 2) nurturing urban planning as a context-shaping discipline informing other design practices; and 3) integrating themes of sustainability, equity, and energy efficiency into all aspects of design education. Under his leadership, financial aid was greatly expanded so that the opportunity for a GSD education would be fully open to all students of talent. The most recent NAAB accreditation review took place in 2006, shortly after Altshuler had begun his three-and-a-half-year deanship. At the time of the 2006 review, Toshiko Mori was Chair of the Department of Architecture, and Preston Scott Cohen, Director for the Master in Architecture programs.

Recommitment to Institutional Mission

Mohsen Mostafavi, Alexander and Victoria Wiley Professor of Design, was appointed the seventh dean of the Faculty of Design in 2008. In three years' time, Mostafavi's leadership has reinvigorated the GSD's intellectual climate and research capabilities; expanded its physical, financial, computer, and human resources; and strengthened its external relations. Among Dean Mostafavi's most important objectives has been to build the School's outreach, beginning with strengthening the School's ties to Harvard University, ending a period of perceived isolation between the GSD and its parent institution. Mostafavi has been an outspoken advocate for the role of design professionals in all aspects of public life and has launched a number of initiatives, including, but not limited to, the 2009 Ecological Urbanism conference and exhibition; placing GSD faculty on university-wide advisory committees such as long-range planning for campus expansion, public space and facilities planning; overseeing the development of new crossdisciplinary concentrations within the Advanced Study Programs that bring faculty and experts to the GSD from across Harvard and other universities; and sponsoring students in their own initiatives to bring design awareness and service to underserved communities. Simultaneously Mostafavi has sought to strengthen both faculty and students' focus on design-related research; the production of new knowledge and new modes of understanding must be a critical activity within graduate design programs (details of the GSD's new research programs and initiatives are listed in this report under 1.2.1 "Human Resource and Human Resource Development"). Efforts to strengthen the School's future began with the appointment of a Five-Year Planning committee composed of senior faculty and administrators, whose findings – covering academic, financial, and space planning – were announced in the spring of 2011 (details on long-range planning for the GSD and its M.Arch degree program are provided in this report under 1.1.4 "Long-Range Planning").

Though he oversees degree programs in four major design disciplines at the GSD, Dean Mostafavi's own education is that of an architect-scholar, and his considerable contributions to steering the Master in Architecture program have been precisely aimed. He is strongly committed to the role of imagination and creativity as indispensable components of architecture, as well as materiality in buildings as the aspect that most tangibly links experience, aesthetics, and ethics. As one of his first acts as Dean, Mostafavi appointed Preston Scott Cohen as the new Chair of the Department of Architecture, signaling his commitment to architecture as an intellectual discipline that makes important contributions to society. Cohen's 2008-13 chairmanship has led the Department of Architecture in an introspective review of the Master in Architecture curriculum, informed by a broad consultation process with faculty, students, and alumni. In response to the 2006 NAAB visiting team report, changes embodied in the 2009 Conditions of Accreditation, and a range of inputs from students, faculty, and alumni, the review has led to a series of curricular reforms and revisions that have since been implemented by the Department. These changes have included a restructuring of core architecture studios to update thematic issues and clarify pedagogical objectives; revisions to the architecture thesis program aimed at linking student research to broader research activities going on at the School; an intensification of courses related to visual studies, particularly digital media; a reorganization of core history-theory courses from individual half-semester modules into a coordinated three-semester sequence; and modifications to the sequence of required technology courses to emphasize analysis of energy and sustainability issues as fundamental to architectural design today. A more detailed analysis of curricular developments in the M.Arch program were provided in later sections of this report (in Part Two: "Educational Outcomes and Curriculum").

Most recently, as of 2013, Dean Mostafavi has appointed Inaki Abalos as the new Chair of the Department of Architecture and Grace La as the new Director of the Master of Architecture Program. Abalos and La have been instrumental in continuing to strengthen the core curriculum. In particular, Abalos's acute interests in building systems, with a forte in thermodynamics, has been at the heart of curriculum reform for the Comprehensive Studio (described in the previous section of this report). Grace La is the Coordinator of the 2nd semester core curriculum with an emphasis on the introduction of site and program. As practitioners and academics, Abalos and La affirm the GSD's commitment to the material culture of architecture and its transformative potential. (N.B. Faculty Biographies of Abalos and La, among others, are included in 'Supplemental Materials' as requested).

Master in Architecture Program: Mission Statement and Objectives

The GSD's Master in Architecture program prepares graduates for professional practice in the field of architecture by immersing them in critical discussions about the role of architecture in contemporary society, while methodically guiding the development of skills in design, visual representation, building science and technique, and professional reasoning and judgment. The core mission of the Master in Architecture degree program echoes the overarching mission of the GSD itself: *Design Leadership through Societal Engagement*. To this end, intellect and imagination are brought to bear on the issues and opportunities affecting the physical environment. The studio method of teaching remains at the core of the Master in Architecture degree program's pedagogy, with a dual emphasis on understanding conceptual principles and developing operational skills. Through structured project assignments, students develop their creative potential and sharpen their analytic and critical skills. The primary objective of the program is to assist students in developing a high level of excellence in architectural design.

The Department of Architecture is rich in diversity, creativity, and scholarship. An internationally recognized faculty, representing a broad spectrum of architectural practice and research, exposes students to many different design approaches while introducing them to issues and trends in contemporary architectural design. Central to the Department's philosophy is a commitment to design excellence that demands not only the skillful manipulation of form but also inspiration from a broad body of knowledge. Instruction and research encompass design theory as well as visual studies, history, technology, and professional practice.

The Department of Architecture benefits from the GSD's information infrastructure as a foundation for design exploration and communication, offering students new ways to access design references, model buildings, and present ideas. Intelligence, creativity, sensitivity, and a thorough knowledge of the arts and sciences are essential to achieving distinguished architecture. Architects draw upon knowledge and experience gained from the past while adapting to the changing needs of the modern world. As new ways of thinking have emerged in the profession, the demands on design grow increasingly complex and require new interpretation.

The Master in Architecture program has established the following objectives for educating architects for the challenges of the twenty-first century: 1) promoting a continuous dialogue between faculty specializing in design, technology, history, and theory, aimed at building collective knowledge; 2) exploring and revising methodologies in architectural education that integrate building program, design, structure, material, and performance; 3) informing the discursive process of design and fabrication with a thorough knowledge of material properties, of engineering possibilities, and of the long-term impacts buildings and other built artifacts may have on our environment; 4) consciously promoting appreciation for the arts, particularly contemporary arts where the languages of artists and architects may intersect; and 5) enriching and broadening our common understanding of global culture. To achieve these goals – and through them, the holistic development of future leaders in the architectural profession – the curricular offerings of the Department of Architecture are supplemented and extended by offerings of other departments and the broader University, as well as by numerous extracurricular activities, internships, fellowships, and other opportunities for student engagement (detailed in sections 1.2.1 "Human Resource and Human Resource Development" and Part Two: "Educational Outcomes and Curriculum").

For generations, the GSD has educated committed individuals who have assumed leadership roles in shaping the built environment. Today's graduates in Architecture continue this tradition by answering the challenges posed by contemporary society.

b. Responses to the Five Perspectives

[The NAAB will provide this section, quoted directly, from the most recent APR]
The report must include the following:

- *Programs must describe how this section changed since the most recent APR was written and submitted*

Responses to the Five Perspectives

A. Architectural Education and the Academic Community
The Graduate School of Design is committed to maintaining and enhancing its reputation for leadership in the field of architectural education. A reputation for leadership depends not only on producing graduates who will go on to lead successful careers within the architectural profession, but also on establishing relationships with broader academic communities that enhance understanding of modes of intellectual inquiry unique to design pedagogy, and by extension, lead to enhanced respect for the role that architects play in society. Thanks to its situation as the largest and most visible program within the Graduate School of Design, the Master in Architecture degree program is well positioned to make unique and significant contributions to Harvard University and to the broader academic community.

Such contributions to the academic community by members of the M.Arch program's faculty and students may take many forms – comprising for example scholarship, pedagogy, and community engagement and service – and may have a variety of impacts over the long and short term. Publications represent a very clear measure of scholarly contribution by our faculty. Books, peer-reviewed journal essays, and publication of design work and criticism in professional journals have established national and international reputations for many of our tenured and non-tenured faculty. Full publication lists are included in faculty CVs in this report's Appendix 2; updated lists for spring 2012 are seen on individual faculty webpages (see architecture.gsd.harvard.edu/faculty). Faculty members also deliver public lectures on a regular basis at the GSD and other venues within Harvard University, at other schools of architecture, and at ACSA conferences (in academic year 2011-12, Professors Scott Cohen, Eric Howeler, and Danielle Etzler have all given talks at ACSA events).

Interdisciplinary collaboration is key to the architecture program's engagement with a broader academic community, and the GSD provides an excellent setting for such collaborations – beginning with interdepartmental initiatives in both curricular and extracurricular settings. For example, several options studios each semester are co-sponsored by the Department of Architecture and the Departments of Urban Planning and Design and Landscape Architecture, drawing students from different programs together to work on design challenges in collaborative teams. In the spring semester 2012, four studios are currently co-sponsored with UPD (Silvetti-Nakazawa, Abalos, Correa, Tagliabue) and one with Landscape Architecture (Aranda). In addition, a handful of non-studio elective courses each term are interdepartmental; in spring 2012, these courses include GSD-2322 "Intermediate Landscape as Digital Media" (Mah), GSD-5493 "The Archaeology of Civic Sustenance" (Georgoulias), GSD-7440 "Leading the Design Firm" (Kenet-Jennings), and GSD-9690 "Discourse and Methods" (Hyde). Interdisciplinary research, involving academic collaborators both within and outside of the GSD, takes several forms at the GSD and encompasses the efforts of both senior and junior architecture faculty, doctoral students, and advanced Master's degree candidates. The Research Advancement Initiative (RAI), chaired by Professor Hashim Sarkis, was created with the goal of integrating professional education with the academic pursuits of a research university and addressing emerging topics of common interest. In the spirit of promoting interdisciplinary research, this initiative also seeks to nurture opportunities for collaborative work within the GSD and between the GSD and other units at Harvard and elsewhere in the world (details of the GSD's Research Centers and Research Labs are described under the headings "Research Centers" and

"Curricular Opportunities for Student Research and Travel" in section 1.2.1 Human Resources and Human Resource Development).

Harvard University encourages innovative approaches to pedagogy among faculty members in each of its graduate and professional schools and in the Faculty of Arts and Sciences, and the GSD has taken an active role across the University in promoting design studio pedagogy as a model for teaching students synthetic problem solving skills. Members of the Architecture Department are regular participants (and speakers) in a university-wide program called "Talking about Teaching", in which faculty from different schools and disciplines experience one another's teaching methods in rotating seminars held in different classroom environments. Since 2009, Associate Dean for Academic Affairs Michael Hays has led the GSD's efforts to assist faculty in Harvard's Faculty of Arts and Sciences in developing an undergraduate liberal arts major in architecture at Harvard College; this new program will accept its first concentrators during academic year 2012-13. In these and other ways, the GSD's Department of Architecture affirms its strong commitment to a broad-based liberal arts education as the basis for professional education and future leadership.

Other kinds of engagements between our Master's program and the Harvard community include the involvement of students and faculty in university-wide initiatives related to the campus environment itself. Dean Mostafavi plays a leading role in Harvard's Arts Task Force (created by President Drew Faust in 2007) and has positioned GSD faculty to become active participants in campus expansion planning and in creative programming studies for outdoor space on campus. Further examples of community engagement and service are detailed below under the heading "Architectural Education and the Public Good".

B. Architectural Education and Students

The Graduate School of Design is fortunate to count among each class entering its Master in Architecture Degree Program some of the most accomplished, creative, and independent-thinking students to be found in graduate programs anywhere today. Drawing from a pool of applicants from across the US and internationally, the Department of Architecture asks its faculty, individually and collectively, to devote hundreds of hours each winter to reviewing admissions files and portfolios submitted by students from a wide range of academic, ethnic, and geographic backgrounds, in order to achieve in each matriculating class a diverse and unique group of individuals. There seems to be no better way to prepare today's architecture students to thrive in a globalizing world than to impress on them respect for such individuals and their diverse points of view as they work together, collaboratively and in parallel, with other students whose prior education and life experiences have shaped different intellectual and moral frameworks for viewing the world. At the same time, within this environment of exchange and debate, it is even more important that faculty be careful to nurture and strengthen individual voices among all the students. A key feature of our pedagogy is maintaining a high teacher-to-student ratio in the design studio – typically between one studio instructor is responsible for 10-11 students (and never more than 13) – so that students can count on frequent one-on-one meetings with their instructors each week (typically three times a week during the program's first year, afterwards twice a week) to discuss the progress of design projects as well as the overall advancement of their design skills. At the urging of the previous NAAB Team that visited the School in 2006, the GSD has developed and published a Studio Culture Policy that aims to establish, based on clear guidelines, an optimal learning environment based on an atmosphere of mutual respect between students and faculty, and among the students themselves.

Leadership skills are an essential component of design education, and the M.Arch program emphasizes this across its curriculum in various ways. Having design projects evaluated and discussed in a public jury setting train students to develop and refine both their graphic presentation and their public speaking skills, with high value placed on conceptual clarity in argumentation, responsiveness to criticism, composure and self-awareness. In the classroom, many instructors employ the case study method and role-playing to induce students to think both analytically and intuitively about technical and professional dilemmas they may face in practice. Outside the classroom, GSD architecture students are encouraged to establish and/or become active in extracurricular design initiatives, entrepreneurial ventures, and social action

groups that may help them define and test out future professional interests. The School sponsors and in many cases gives financial support to a wide range of student organizations (a full listing of student organizations is found in section 1.2.1 Human Resources and Human Resource Development, under "Student Organizations").

C. Architectural Education and the Regulatory Environment

While much of the GSD's pedagogical emphasis lies in the encouragement of design research, innovation, and speculative work, the Department of Architecture is equally committed to ensuring that students graduating from its professional degree program in architecture are well equipped for the (potentially more pragmatic) next phase of their design careers, including internship in architectural firms, studying for professional registration exams, and licensure within the context of international, national, and state regulatory environments. It is safe to say that helping students understand the kinds of opportunities and responsibilities they will encounter in the years after graduation, and how they can use these experiences to shape rewarding future careers, is an underlying concern of every faculty member, administrator, and staff member associated with the M.Arch Degree Program. More specifically, however, the GSD's Office of Student Services has several staff dedicated to Career Services. Career Services hosts numerous professionally oriented events – most notably two Career Fairs – over the course of each academic year. In addition, the Director of Career Services, Meryl Golden, also serves as the School's IDP Coordinator. In this capacity, she organizes one or two general meetings with students each year, to familiarize them with NCARB's Intern Development Program; helps students get enrolled in IDP and facilitates correspondence between NCARB and the GSD Registrar; and meets individually with students about their progress in IDP and the choices they may make about summer internships. (Further information about Career Services provided for M.Arch students at the GSD is provided in section 1.2.1 Human Resources and Human Resource Development under the heading "Career Services for Architecture Students"). The Intern Development Program itself is the explicit focus of a paired lecture and case study assignment during one week of the required course GSD-7212 "Issues in Architectural Practice and Ethics", so that students are encouraged to learn about IDP and to apply critical thought to career choices it may entail in a manner consistent with other aspects of professional practice presented in the course. Our program's attention to preparing the next generation of practitioners for licensure is substantiated by Architectural Registration Exam pass rates that have consistently ranked among the very highest in the nation for NAAB-accredited programs (a link to current ARE pass rates is found in section 2.4.5 ARE Pass Rates).

D. Architectural Education and the Profession

Awareness of the world of professional practice outside academia – where design ideas are tested and debated by means of real planning proposals and real projects, affecting the lives of diverse populations – is essential for the mature development of a budding architect. Students enrolled in the Master in Architecture program have numerous and prolonged opportunities during their time at the GSD to interact with practicing architects (including many faculty members) as well as with city planners, landscape architects, engineers and other design consultants, artists, construction managers, photographers, filmmakers, writers, journalists, and many others whose work relates to and enhances the practice of architecture. Each semester the Graduate School of Design hosts a rich array of lectures, conferences, symposia, executive education courses, alumni gatherings, and other events that bring to the GSD (and hence, into students' awareness) leaders and innovators working in diverse arenas of the design professions. (A current listing of upcoming events planned for the duration of spring semester 2012 may be found online at http://www.gsd.harvard.edu/#/events/index.html). Exposure to visiting faculty – many of them running high-profile practices in the US and/or abroad – brings renewed excitement to our program, introducing fresh ways of thinking about professional practice in different domestic and international contexts. The Loeb Fellowship Program brings nine mid-career design professionals to the GSD each year, and many Fellows choose to associate themselves with studios, research labs, or other curricular and extracurricular initiatives where they can have contact with faculty and advise students on their professional paths.

The Department of Architecture maintains strong ties not only to internationally renowned architects and practices around the globe, but also to a close-knit community of local practitioners – many of them GSD graduates – by means of hosting alumni events and executive education courses, and by playing an active role in the Boston Society of Architects (the BSA is New England's largest AIA chapter), including holding a seat on the BSA Board of Directors.

Students in the M.Arch program must complete one required course in professional practice as well as one additional professional practice distributional elective – meaning they may choose among many elective options, as approved by the Program Director (see Appendix 13 for a list of approved Professional Practice electives). The required course, GSD-7212 "Issues in Architectural Practice and Ethics", relies on the case study method (developed at the Harvard Business School and now employed at many other professional schools) and role-playing to expose students to a full range of ethical and professional dilemmas they may later face in practice. In spring 2011, Dean Mostafavi appointed a school-wide *ad hoc* committee, headed by Adjunct Professor of Architecture Jonathan Levi, to study the problem of professional practice education within the context of rapid changes taking place in the design professions – architecture, landscape architecture, urban planning and design. A draft report with recommendations for curricular reform is currently being prepared, likely affecting not only the content of required courses and electives but also modes of production in the design studio.

Among the most pressing challenges before the architectural profession today are those associated with environmental and social sustainability. Our profession's collective understanding of sustainability issues has matured greatly in the past decade, yet many challenges lie ahead for both practitioners (who tend to focus necessarily on regulatory and economic aspects of sustainability) and students (who tend to focus more on abstract and speculative aspects). The primary focus of sustainability pedagogy within the GSD's M.Arch core curriculum has been based on scientific analysis of building performance, as permitted by new designer-friendly software applications that are actively under development here and at other research universities. Professor Christoph Reinhart, who taught in the M.Arch program until January 2012, developed DIVA (a widely available Rhino plug-in application that allows architects to quickly and accurately assess daylighting strategies) using grants obtained during his time at Harvard. In 2008, a generous grant made by Paul and Joan Zofnass created a new research center at the GSD, the Zofnass Program for Sustainable Infrastructure, headed by Architecture Faculty members Professor Spiro Pollalis, Research Professor Daniel Schodek, and Andreas Georgoulias (further information on the Zofnass Program is found in section 1.2.1 Human Resources and Human Resource Development under the heading "Research Centers"). The Department continues to recruit and hire faculty with expertise in other areas of sustainability; Assistant Professor Kiel Moe, author of several books on contemporary building technique, was the most recent of such hires, and two other faculty searches are ongoing. With faculty like Moe teaching both core technology courses and introductory design studios, our program seeks full integration of sustainability principles into the design pedagogy, with the expectation that today's students will, once in practice, unlike previous generations, be unable to separate sustainability consciousness from design methodology.

Since the 2012 APR, the GSD has promoted Professor Kiel Moe to Associate Professor and he continues to play an active role in the Architecture Core. Additionally, we have hired Assistant Professor Holly Samuelson to teach our required Environmental course. Please see faculty biographies for additional new faculty.

E. Architectural Education and the Public Good

"Since its founding, the Graduate School of Design has been a crossroads of learning and intellectual debate. Today, the school is committed to building on that legacy of cultural diversity, firm in the conviction that a multiplicity of voices and viewpoints among students, staff, and faculty is essential to our mission of advancing the fields of architecture, landscape architecture, and urban planning and design." – Dean Mohsen Mostafavi

Graduates of the GSD's Master in Architecture degree program will only become leaders in the profession if their education has developed in them sufficient mental agility, inquisitiveness, and flexibility to respond to the needs not only of private clients but also of the broader public affected by and benefiting from their design solutions. With the exception of a few introductory studio exercises aimed at more abstract, spatial problem-solving, design pedagogy in the M.Arch program is shifting away from a notion of architectural solutions resulting directly from fixed program briefs, towards a more open dialogue between architectural space and programmatic needs of a given institution, community, and/or context; in other words, we no longer believe that reductive formulations such as "form follows function" are sufficient to produce an architecture that is responsive to the diverse needs of a rapidly changing world. In each successive semester of the core studio sequence, students are given increasing flexibility to design programs to be housed in their architecture: in the fourth-semester core studio, for example, students work collaboratively on urban master plans where, in response to a multi-layered analysis of social and economic forces, they engage in urban programming (determining appropriate uses and densities within a given district, as well as adjustments to transit planning and development phasing). In third-year options level, students may elect to enroll in studios that serve the public good in more direct ways – for example, studying low-cost deployable solutions to housing refugees in the wake of the 2010 earthquake in Haiti (Shigeru Ban, spring 2010); designing medical clinics and educational campuses for rural communities in the developing world, in collaboration with NGO sponsors (Peter Rose, spring 2009; Toshiko Mori, fall 2010); and developing programs and architecture to promote community among the survivors of the Tohoku tsunami in Kamaishi, Japan (Toyo Ito, spring 2012). Architecture students may also elect to enroll in options studios offered by the Department of Urban Planning and Design, which analyze and propose solutions for real urban (re)development projects in America and around the globe – nearly all of them sponsored by local governmental bodies, NGOs, or (in a few cases) enlightened developers.

Outside of the studio, students are exposed to the role architects play in addressing the world's very pressing challenges of environmental, social, and economic sustainability in a wide array of required and elective courses. Energy systems and responsible construction practice are covered, for example, in GSD-6125 "Environmental Technologies in Buildings", while the relationship of architecture and urban design to social theory is a key component of GSD-4223 "Buildings, Texts, and Contexts III: Architecture in the 20th Century". Students can pursue more specialized topics related to understanding how design impacts the public by taking advanced architectural electives in sustainability, construction technology, history and theory; courses in ecology offered by the Department of Landscape Architecture; and urban theory offerings of the Department of Urban Planning and Design. That the GSD provides architecture students with diverse and abundant opportunities to engage faculty and students from related design disciplines should be considered among the unique strengths of our program.

But the architect's engagement with the public is not merely a topic of academic interest, to be discussed hypothetically in the relative safety of the classroom. The GSD actively encourages students to get out into communities – local and global – to understand more directly the needs of communities underserved by architectural or urban design and, where practical, to provide design services. Numerous student-led social action organizations are recognized and their activities funded by the GSD – among these SoCA (Social Change and Activism), NOMAS (National Organization of Minority Architecture Students), and Women in Design. (A full listing of student organizations is found in section 1.2.1 Human Resources and Human Resource Development under the heading "Student Organizations"). The GSD also awards several Community Service Fellowships each year to students interested in working with community groups and nonprofits on deserving design and design education projects. The GSD is also interested in cultivating young and diverse pool of design talent for future generations. Project Link is an intensive four-week Architecture and Design studio created, planned, and initiated in 2008 by GSD students in the fields of Architecture, Landscape Architecture, and Urban Planning. It is a student-run and university-funded opportunity to reach out to Boston communities to introduce opportunities within the design field for underprivileged and talented high school students. The summer program teaches students architectural drafting, model-making, and representation techniques, and instills in them fundamental design principles that encourage them to think critically about their surroundings. Its goal is to immerse students in the world of design and put them on track for exploring these ideas at a collegiate level.

c. Long Range Planning

[The NAAB will provide this section, quoted directly, from the most recent APR]
The report must include the following:

- *Programs must describe how this section changed since the most recent APR was written and submitted*

Long-Range Planning at the GSD

In Fall 2010, Dean Mostafavi and the senior leadership of the GSD including Executive Dean Pat Roberts, Associate Dean (Academic) Michael Hays, and the Department Chairs began a new Five-Year Academic Planning exercise in consultation with GSD Senior Faculty. This renewal of the academic plan for the GSD is expected to be complete during the fall semester, 2011. This plan, many of whose details have already been announced and/or begun to be implemented, will form part of an academic planning exercise across Harvard University and is intended to also lend shape to the University's upcoming capital campaign.

The five-year planning exercise covers not only academic planning for the Graduate School of Design's various programs, including the Master in Architecture degree program, but also financial, staffing, and space planning. It includes projections for enrollment increase in several degree programs (though currently not for the Master in Architecture degree program) and a corresponding expansion and renovation of our facilities. The most important details of the GSD's five-year plan that have been made public are outlined below; aspects that affect or are closely related to the long-range plans of the Master in Architecture degree program are given particular focus.

In the fall of 2014, Dean Mostafavi announced the beginning of the GSD's capital campaign in support of the long-range planning efforts. This campaign, with the fundraising goal of $110 million, is the most ambitious campaign undertaken in the history of the school. A portion of the financial goal has been successfully raised and has established the Center for Green Buildings and Cities, founded and directed by faculty member, Ali Malkawi (appointed to the Department of Architecture in 2013). The Center "aims to transform the building industry through a commitment to design-centric strategy that directly links research outcomes to the development of new processes, systems, and products." http://www.harvardcgbc.org/

Enrollments

The Graduate School of Design, as an entity within the University, is relatively small in terms of student and faculty (in Full-Time Equivalent, or FTE, figures), and its scope and size have not enabled it to function optimally. The GSD does not benefit, for example, from critical mass in degree programs such as MUP that have relatively smaller enrollments compared to the M.Arch program. Although the GSD is one of the smallest schools within Harvard University, it offers (for better or worse) one of the highest number of separate degree programs (10). Bringing enrollments up in programs such as MUP, MAUD, and MDesS will bring critical mass, ensuring that the School is educating the appropriate number of future leaders in each of its disciplines. The M.Arch I program has historically had the largest enrollment among GSD programs, and its current enrollment targets – 60 students entering the program in the first year, with an additional 12 students added with Advanced Placement in the second year – are not expected to increase in the near future.

The MDesS program provides innovative opportunities for the GSD as we pursue the dual mission of design excellence and social engagement; the program has successfully launched several new concentrations during the Mostafavi deanship, including Art, Design, and the Public Domain (fall 2010), Critical and Strategic Conservation (fall 2011), and Anticipatory Spatial Practice (fall 2011). The MDesS program presents that possibility of instigating cross-disciplinary collaboration with faculty from other schools and departments and of contributing to an emerging discussion of developing more arts-related programs within the University. Increasing enrollments of non-studio based programs like the MDesS,

DDes, and to some extent, the MUP program, will help the school increase its overall enrollment without putting undue strain on desk space within the studio space of Gund Hall.

As the design disciplines become more complex, the School has needed to offer a greater variety of courses so that students from all disciplines can pursue not only their required courses but also those that expose them to broader fields of study, ranging from geometric modeling to advanced fabrication to largescale urban and landscape planning. Faculty hires have increased over the past several years, reflecting our response to this need (as well as to increased enrollments), and the size of the GSD faculty is projected to grow from 69.5 FTE (current) to 83.4 FTE within five years.

Financial Aid

Lack of sufficient financial aid has affected our ability to compete against certain schools for the best students, especially in architecture and planning. However, we achieved an admissions yield rate of approximately 72% over the past three years. Although the average grant to individual students has remained relatively flat since 2008, our financial aid expenditures have doubled over six years as a result of increased number of grants, higher enrollments, and making grants available to international students. The multiyear plan assumes we will maintain a standard tuition discount of 42%.

Faculty Planning

Faculty FTEs have steadily grown in recent years as a result of our efforts to create a stronger presence of full-time faculty who can provide the leadership necessary for achieving our goals. We plan to increase the number of tenured faculty and convert some of the part-time tenured faculty positions into nontenured positions as these faculty members retire. The recent increase in numbers is also due to reliance on visiting faculty, who fulfill their traditional role of linking design pedagogy to practice, and who also provide us with an opportunity to gain or experiment with emerging domains of knowledge in our various fields of study. More of these visiting faculty positions will be converted into multiyear junior and senior positions. The goal of increased faculty hiring in the next five years is to achieve an overall increase of roughly 14 FTEs over five years, which, together with projected enrollment increases, will produce a student-to-faculty ratio of roughly 9:1 (compared to 8.4:1 currently). It should be noted that design studio education is intensive, with 12-13 students per studio section normally the maximum, and 9-10 students ideal for core studios in M.Arch, MLA, and MUP programs.

Staffing
GSD staffing levels have been comparatively lean compared to the University as a whole, but additional staffing cuts (about 10%) were made in 2010 as part of an administrative reorganization. Over the past year, however, new positions have been created and filled, including a financial analyst in Financial Services, a Web Content Manager, a new director of Executive Education (see below), and additional positions in Student Services for recruitment and learning support. Providing adequate staff to support faculty research initiatives is now a high priority, so that the GSD can continue to attract and administer research sponsorship.

Executive Education

The GSD's Executive Education program was hit hard by the recent economic crisis; in 2011 a new Director, Rena Fonseca, took on the project of reshaping Exec Ed with the goals of addressing market needs more directly in course development; achieving greater participation of GSD faculty as instructors and guest speakers; and channeling the benefits of executive-level learning back to members of the GSD Community.

Space Planning

The School's design campus has started to take form with the recent acquisition of three nearby houses that are now in use. Doctoral students have workstations in 20 Sumner Road, and MDesS students are

housed in 40 Kirkland Street. Each house also has two seminar rooms for small classes and meeting space. Faculty and staff offices may be added over the course of the next few years.

After surveying students and faculty, slight modifications were made to the design of the new desks in the Gund Hall studio trays. The second floor and mezzanine have been renovated over the summer of 2011, and the replacement of all remaining older workstations is projected to be completed over the summer of 2012.

Additional modifications/renovations to the School's physical facilities entailed by the 2011 five-year plan (each of these detailed in greater depth in section 1.2.3 "Physical Resources") include a new classroom added adjacent to the Loeb Library and Portico Rooms; modifications to the Loeb Library interiors, responding to students' needs for meeting and computer use space, and consolidating specialized collections; updates and enhanced machinery and facilities for the basement Fabrication Labs; and a new curtain installed in Piper Auditorium, which will enable the School to more attractively configure the auditorium for various uses.

Since the 2012 APR, and as we mentioned above, the School's design campus has started to take form with the recent acquisition of three nearby houses that are now in use. The houses provide space for our many research labs, some of which are Geometric Computation, Design, Robotics Group, Responsive Environment & Artifacts, MetaLab, and the Harvard Green Center for Building & Cities.

The houses offer several seminar rooms for small classes and meeting space. One house holds a room large enough for a lecture (45 seats). They also have designated work space for students who are part of the MDes ADPD Program, Technology Program, and the Sustainability in Design Program. Faculty and staff offices have been recently added.

The slight modifications were made to the design of the new desks in the Gund Hall studio trays, and this effort is now complete. All older workstations were replaced with the new designs beginning in 2009 and finished summer of 2012.

Additional modifications/renovations to the School's physical facilities entailed by the 2011 five-year plan (each of these detailed in greater depth in section 1.2.3 "Physical Resources") that have been completed include a new classroom added adjacent to the Loeb Library and Portico Rooms which was completed in Fall 2013. Consolidation of the specialized collections; updated and enhanced machinery and facilities in the basement Fabrication Labs; a new curtain installed in Piper Auditorium, which enables the School to more attractively configure the auditorium for various uses; the creation of the HILT classroom in Gund Hall which offers flexible space with rolling tables/chairs and Mezzanine Oblong System with 6 interactive LCD screens. New studio space, 745 feet—enough for 12 studio desks--was made available in the renovation of room 521.

Finally, in summer 2014, the PhDs students, prodigious users of library resources, were integrated directly into the library footprint. This 1,145SF space has 25 custom workstations and assorted shared resources. The use of multiple glass openings creates a porosity that illustrates the strong link between these students and the library.

Remaining modifications/renovations to the School's physical facilities are the renovation of the Gund Hall roof and the upgrading of other classrooms into better multipurpose space.

Student Information System and Website

A number of information and communications systems improvements have been completed over the summer of 2011, including the new GSD Registrars Online Student Information System (GROPIUS), which replaces most of the paper formwork students needed to complete for registration and enrollment in the past with convenient online resources. Simultaneously, the GSD's new-and-improved website has just been launched in September 2011 (see section 2.4 "Public Information").

The school regularly assesses its website and as of this fall 2014, we are in process on the re-design of the website to incorporate the newest technologies. Additionally, in 2016-17, Harvard University will implememnt a university-wide student information system which the GSD will also adopt.

Curricular Planning

Long-term curricular planning for the Master in Architecture Degree Program – including the recent development of studio-abroad study programs for Architecture students, changes in the Independent Thesis program, and the integration of research laboratories into advanced elective curriculum – while under the general purview of the Dean's Five-Year Planning Study – have primarily evolved within the context of the Department of Architecture, led by the Chair, Senior Faculty, the Program Director, and individual faculty members responsible for specialized topic areas (history, theory, environment, technology, etc.). Curricular review and development procedures are discussed later in this report, in section 2.2.3 "Curricular Review and Development".

d. Program Self Assessment

[The NAAB will provide this section, quoted directly, from the most recent APR]
The report must include the following:

- *Programs must describe how this section changed since the most recent APR was written and submitted*

Program Self-Assessment

The GSD's Department of Architecture remains among the strongest programs of architectural studies in the United States. Nevertheless, the School is aware that it must remain alert and flexible as it continues to confront both unforeseeable challenges as well as problems endemic to the academy and the discipline at large. Therefore, the Dean of the School annually presents a strategic plan outlining broad achievements, goals and shortcomings, while the Department of Architecture regularly undertakes critical reassessments of its pedagogical mission and ongoing reforms. The details of both forms of strategic planning represent concrete steps taken to achieve goals set out in long-term planning studies, as outlined in the previous section 1.1.4 "Long-Range Planning".

Ongoing Evaluation of the Mission Statement

Review and evaluation of the architecture program and mission take place each academic year. While the principal pedagogic objectives do not radically change, adjustments in course material, modification of design exercises, and introduction of new courses are a frequent and necessary part of the educational process. Program self-assessment is a regular topic of discussion in Senior Faculty meetings, which occur once a month. Department Chairs and other tenured faculty confront difficult issues, including how the various programs are shaped and should evolve to remain current with the profession and with contemporary architectural research. Topics such as curriculum reform, individual course evaluation, faculty needs, junior faculty development and promotion, junior and senior faculty searches, and so on fall under the purview of these meetings.

Faculty, Student, and Graduate Assessment

Several faculty committees for review of curriculum have been established on an ad hoc basis. They have reported to and worked with the chair of the architecture department, and they have consulted with others, including students, as applicable. The entire faculty reviews and approves all curricular changes proposed by the departments.

Formal grading sessions, which take place each semester for core studios and for thesis projects, are a critical venue for curricular self-assessment within the Architecture Department. At these sessions, a majority of the design faculty gather to discuss the direction of the M.Arch curriculum, the effectiveness of

various teaching methods, as well as to agree on standards for grading and evaluation of student progress.

In addition, all students are asked to complete an evaluation of each of their courses, both lecture and studio, at the end of every term. Results are compiled and formatted by department staff, kept available (in summary form) for future reference by students, and referred to by the department chair in consultation with faculty for improving teaching and planning future courses and studios. They are also considered in reappointments of visitors and in promotions of faculty members. (A more detailed discussion of course evaluations as an element of the GSD's learning culture is included elsewhere in thireport, under section 1.1.2 "Learning Culture and Social Equity"; and samples of the new online course evaluations will be provided to the visiting team in the spring.)

The Student Forum is the governance body elected by students. They have subcommittees that deal with a variety of issues. The Academic Affairs subcommittee is responsible for remaining in touch with students about concerns related to curriculum, course scheduling, and other academic matters. This group of students comprises the student membership of the Student Affairs Committee, which also includes the faculty program directors from each of the school's programs, the assistant dean for academic services, the dean of students, and the executive dean. The agenda is set by the students and discussion centers on whatever issues they feel are most pressing. The Student Forum as a whole has lunch meetings monthly with the dean. They set the agenda and raise any administrative or academic issues that they wish. The administration takes these issues seriously and works with the Forum to implement agreed upon changes. A summary of issues considered in the past several years, as well as those currently under consideration, is included in Section 3.4.

The structure of the GSD Student Forum is flexible, and has evolved over the years to reflect the primary interests of the student body. Today, the Student Forum is headed by nine elected officers who oversee the forum's primary areas of initiative: academics, events, infrastructure, alumni relations, internal and external communications, and funding. In order to keep informed of students' primary concerns, the Student Forum officers rely on volunteer class representatives from each of the GSD's academic programs – Architecture, Landscape Architecture, Urban Design and Planning, Master in Design Studies (MDesS), and Doctor of Design (DDes). The Class Representatives determine the primary issues of their classmates, and set the agendas for meetings with departmental heads. The Student Forum Officers and Class Representatives come together to form committees centered on specific school-wide issues. These committees function sometimes as support for the Officers, and sometimes as "think tanks" for solving persistent issues such as the faculty advising system, student contact with alumni, and the lack of interdisciplinary courses at the GSD. The Student Forum committees are flexible, and can be formed and disbanded by the Officers depending on current student-wide interests.

Student representatives also meet annually with the Visiting Committee, and participate in faculty presentations on the curriculum to the Alumni/ae Council. Students do not sit on faculty search or other governance committees. To help the faculty remain cognizant of student opinion and perceptions, the chair schedules open discussions with students throughout the academic year.

The 32-member GSD Alumni/ae Council, which represents the ca. 7,500-alumni/ae body, meets semiannually to learn about the school and its programs. The two-day program offers opportunities for discussion and informal feedback, and also provides a chance for current students to meet the Council members. Also, at each meeting the GSD Student Forum gives a presentation to the Council, which is followed by a lively discussion on ways that the Council can help in advising students on their career paths.

Assessment by the University

In 2001-02, the former Provost, Steven Hyman, instituted a process of annual academic planning, which involves at least two meetings per year with the dean and senior administrators of each of the schools at

Harvard. Several vice-presidents and other university administrators also participate. The topics of these meeting with the GSD have included: profile and quality of applicant pools; executive education; the financial condition of the school; research centers and how they are reviewed for academic quality and fiscal management; the faculty appointments process; the Professor in Practice position and the role it plays in the school; the doctoral programs and their relationship to the other degree programs; and the role of the GSD in the future capital campaign.

The Board of Overseers, founded in 1642 and the senior of the two governing boards, represents "the ultimate responsibility of the community at large for the operation of the University -- the very core of the Overseers' role in Harvard governance being the duty to keep the University true to its Charter as a place of learning." The Board consists of thirty members, often alumni/ae, elected, in groups of five each year, to six-year terms by alumni/ae holding any degree from Harvard or Radcliffe. Its principal duties are "visitation," meant to inform the Overseers about the state of the University, and providing "counsel" to the President and Fellows.

On the educational side, visitation is carried out through an elaborate system of visiting committees (some sixty in all, involving almost a thousand individuals from outside the University); on the administrative side, standing committees of the Board essentially perform this function. Especially important is the independence of the visitation process, which answers to neither the Corporation nor the administration. "Visiting committees may have any information they ask for; they may 'pick up any rug.' The findings of a visiting committee are brought to the attention of the Overseers, though their powers are limited formally to calling these findings to the attention of the President and the deans of the Faculties…and it is up to these senior academic officers to determine how they are to be acted upon."

The school's Visiting Committee at any one time may consist of approximately twenty design practitioners, academics, planners, developers, legal experts, critics, artists, or other professionals with an interest in the GSD and the design and planning fields. The committee meets annually with the dean, faculty, senior staff, and students, and submits an evaluation to the board. The committee's visit generally includes discussion and review of the school's long-term goals and objectives; the current status of programs, faculty, students, and resources for support; in-depth focus groups on issues or programs of current concern; visits to studios; meetings with the chairmen and faculty of each department; a luncheon with members of the Student Forum; and a wrap-up meeting with the dean and chairmen. The in-depth topics of the most recent meeting included: Knowledge Domains and Design; Internationalism and Design; and Information Processing and Design. Other meetings have focused on building and environmental technology, information technology, the core component of the professional degree programs, and three subject areas of the professional programs: history and theory, science and technology and socioeconomic. (The list of current Visiting Committee members is included in Appendix 8.)

5. Summary of Activities in Response to Changes in the NAAB Conditions (NOTE: This section is not required for programs submitting reports in 2013.)

Detailed responses to changes in the 2009 Conditions of Accreditation, compared those in effect during the previous accreditation visit, were incorporated into 2012 APR texts accompanying the Student Performance Criteria Matrix in section 2.1. Broader responses to those changes -- and to the professional trends and societal forces motivating them – are found throughout this *APR*, from the Program's Mission Statement in section 1.1.1 to the development of Learning and Studio Culture Policies in section 1.1.2 to discussions of Curriculum Review and Development in section 2.2.3. We are aware that the NAAB has created the "2014 Conditions for Accreditation" to be effective by April 1, 2015. The Department of Architecture looks forward the NAAB's next visit in 2018 and to a lively discussion of these changes and their impact on the evolution of our M.Arch program since the NAAB's last visit in 2012.

Respectfully submitted,
Grace La, Professor of Architecture

Supplemental Material

Instruction: Include the following as a list of individual URLs or provide instructions for accessing a web-based portal for review of the following

Please do not attach files to the interim report, rather identify URLs to websites or servers, or other mainstream technology currently employed by your program to capture and host files.

1. Provide evidence that supports or demonstrates changes to the curriculum in response to not-met SPC (II.1).

   Be sure to identify the changes/outcomes expected.

   a. New/revised syllabi

   b. Student work demonstrating the change

2. Provide evidence or supporting documentation/narrative that demonstrates changes in other aspects of the program made in response to other not-met Conditions (I.1-I.4 or II.2-II.4)

3. Provide information regarding changes in leadership or faculty membership. Identify the desired contribution to the program. (i.e. narrative biography or one-page CV)

4. Provide additional information that may be of interest to the team at the next accreditation visit.

Additional information regarding the types of files that may be submitted in support of the program's responses in Sections 2-5:

1. *Syllabi or course descriptions. These shall be presented in Word or Adobe PDF*
2. *Student work*
   a. *Studio work shall be presented in digital form either 2D (PDF) or 3D (BIM) files. Reviewers must be able to review the files using zoom or pan techniques in order to review details. Further, the program is responsible for ensuring that the files can be reviewed in the same software used to create them. Instructors' comments and grades shall be visible or available. Students' identities may be removed in order to comply with FERPA.*
   b. *Classroom work shall be presented in digital form (PDF) after grading. Instructors' comments and grades shall be visible. Students' identities may be removed in order to comply with FERPA.*
   c. *Presentations or other oral projects shall be presented with both video clips of the presentation and copies of presentation materials (i.e. PowerPoint slides in PDF).Please limit video segments to 1 minute each.*

Per instructrion from Kesha Abdul Mateen of NAAB, we've created a dropbox containing the following Supplemental Materials:

GSD Guide to Buidling Code (also available at http://www.gsd.harvard.edu/images/content/5/4/544733/GSD-BuildingCode.pdf)

2014- 3rd Semester Core Comprehensive Design Studio (1201) Syllabus and Project Assignments
2014- 3rd Semester Research
Chicago / Miami / Phoenix (research on studio sites)
Code
Program
2012-13- 3rd Semester Student Work demonstrating many of the changes referred to in Section 2, including the outcome of assignments which have been integrated into the projects. (Please note that Fall 2014 work, for which a new program was assigned, is not available at this time due to the timing of this submission as final reviews are occurring presently).
New Faculty Biographies of Changes in Leadership and/or new Faculty Members