



A Comparison of Practice Analysis Defined Competency Requirements for the Architecture and Interior Design Professions

and

A Comparison of Examination Objectives of the *Architect Registration Examination*[®] (ARE[®]) and the *NCIDQ*[®] Examination

Performed by Subject Matter Experts Representing:
National Council of Architectural Registration Boards (NCARB)
Council for Interior Design Qualification (CIDQ)

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EXECUTIVE SUMMARY

This report, and the scope of work it summarizes, serves to acknowledge architecture and interior design as two unique, distinct disciplines serving the public in the built environment. This report does not suggest a merger of the two professions, nor does it suggest that the expertise or services provided to the public are interchangeable. Rather, this report documents required areas of competency in professional knowledge and skills that are similar, and in some cases substantially identical. The subject matter experts (SMEs) participating in this study affirm there are areas of strong similarity in the expectations for competency to practice architecture upon licensure and to practice interior design upon NCIDQ certification.

This study was conducted by SMEs from both the National Council of Architectural Registration Boards (NCARB) and the Council for Interior Design Qualification (CIDQ), including experienced architects and interior designers. All research team members are accomplished designers with a breadth of practice experience. Many research team members are licensed/registered as both architects and interior designers, enabling researchers to bridge the nuances and vocabulary of both professions. Efforts began in 2018, when NCARB's FY19 Interior Architecture Work Group (IAWG) was charged by the NCARB Board of Directors to:

1. Perform a comparison of the results of the *Practice Analysis of Architecture* and the *Practice Analysis of Interior Design* to identify similarities and differences in distinct tasks, knowledge, and skills required for competent performance.
2. Perform a review of the NCIDQ exam and test specification to understand content areas of knowledge and skills being tested.
3. Continue the dialogue with CIDQ on ways we can collaborate/communicate to the public our roles, responsibilities, and value regarding the protection of the public's health, safety, and welfare (HSW).

Research team members followed a rigorous review process, including independent comparison of the tasks identified in NCARB and CIDQ's most recent practice analyses and the objectives in each organization's examination specification, joint analysis and deliberation over findings, and eventual consensus on areas of definite similarity, some similarity, and no similarity. NCARB and CIDQ both have well-established procedures and rigorous requirements that must be met to obtain a license to practice architecture or NCIDQ certification, respectively. The paths to licensure as an architect and to NCIDQ certification as an interior designer include the same principal components:

1. specialized education,
2. relevant professional experience, and
3. examination of essential professional knowledge and skills.

Determination and validation of these essential competencies and resulting assessment objectives included in test specifications occur similarly in both professions through the use of professional practice analyses (PA).

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Practice analyses are commissioned regularly by NCARB and CIDQ to support their member jurisdictional regulatory boards' mission to protect the public's HSW in the built environment.

NCARB and CIDQ apply distinctly different approaches to designating competencies and assessment objectives as HSW related. NCARB recognizes all knowledge, skills, and tasks identified in the *Practice Analysis of Architecture* as HSW. Although the resulting ARE and NCIDQ Examination are *entirely* devoted to assessing knowledge and skills related to health, safety, and welfare, there are distinct differences in the categorical application of these designations between the professions. As one example, the NCIDQ Examination broadly defines Professional and Business Practice in a way that does not focus specifically on the management of design firms, whereas the ARE includes a distinct assessment objective, Practice Management, which results in specific content that cannot be precisely correlated.

While the competency requirements for practice identified and assessed by NCARB and CIDQ do not follow step-by-step in line, many competencies do cross over and align at different points along the paths to licensure and certification, respectively. There are areas of strong similarity in the expectations for competency to practice architecture upon licensure and to practice interior design upon NCIDQ certification.

NCARB approached CIDQ about collaborating on a practice analysis and exam specification comparison, a proposal that CIDQ readily accepted, and CIDQ subsequently assembled a team of subject matter experts. The two organizations and their research teams agreed upon a common methodology that sought to address the complexities and disciplinary nuances in order to provide an accurate, comprehensive comparison that would support meaningful interdisciplinary dialogue.

Working first independently and then together, the NCARB and CIDQ teams approached their work in the following order:

Focus 1: Practice Analysis Comparison

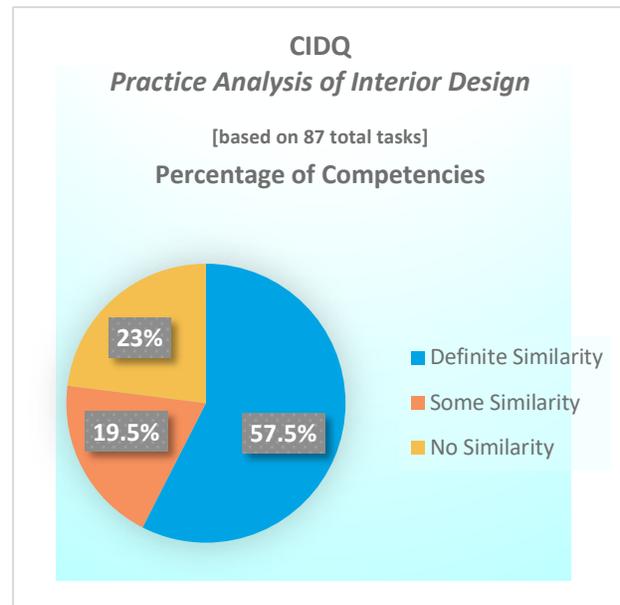
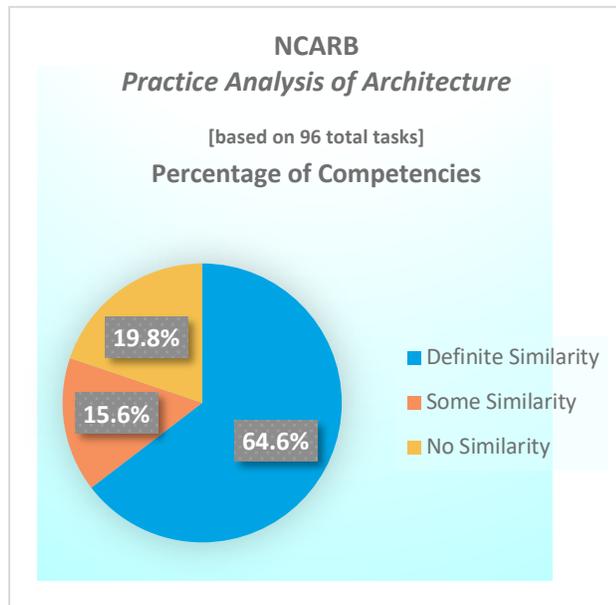
The team felt that it was important to begin its investigation with the competencies (knowledge, skills, and tasks) each respective profession has defined as necessary to meet its professional responsibilities, that is, the “big picture” of practice.

This study is based on the 2012 NCARB *Practice Analysis of Architecture* and CIDQ's 2014 *Practice Analysis for Interior Design*. Both practice analyses were current at the beginning of this effort.

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Summary of Findings:

The SMEs identified numerous similar “tasks” that were agreed to be prevalent in interior design practice, but are not explicitly articulated in CIDQ’s PA. Examples include “Develop professional and leadership skills within firm,” “Perform constructability reviews throughout the design process,” etc. Team members agreed that many similar tasks may be occurring within interior design practice—particularly in sole proprietorships—however, they are not included in the PA, and thus not assessed through the NCIDQ Examination.

This characterizes how competency expectations do exist between NCARB and CIDQ requirements but may not be fully realized through a process of item-for-item matching of tasks within the *Preliminary Task Analysis Mapping* and final *Task Similarity Summary* documents (*Refer to Appendix I. Practice Analyses Similarity Summaries*). The team concluded that NCARB’s knowledge, skills, and tasks were typically more specific in their definition than CIDQ’s more generalized task descriptions.

Examples of NCARB “practice areas” and CIDQ “domains” containing multiple task similarity, indicating significant parallels in the competency expectations of the two professions (*Refer to Appendix 1.3.*):

- Programming and Analysis (NCARB) and Programming (CIDQ)
- Project Development and Documentation (NCARB) and Schematic Design (CIDQ)
- Project Planning and Design (NCARB) and Design Development (CIDQ)
- Construction and Evaluation (NCARB) and Contract Administration (CIDQ)

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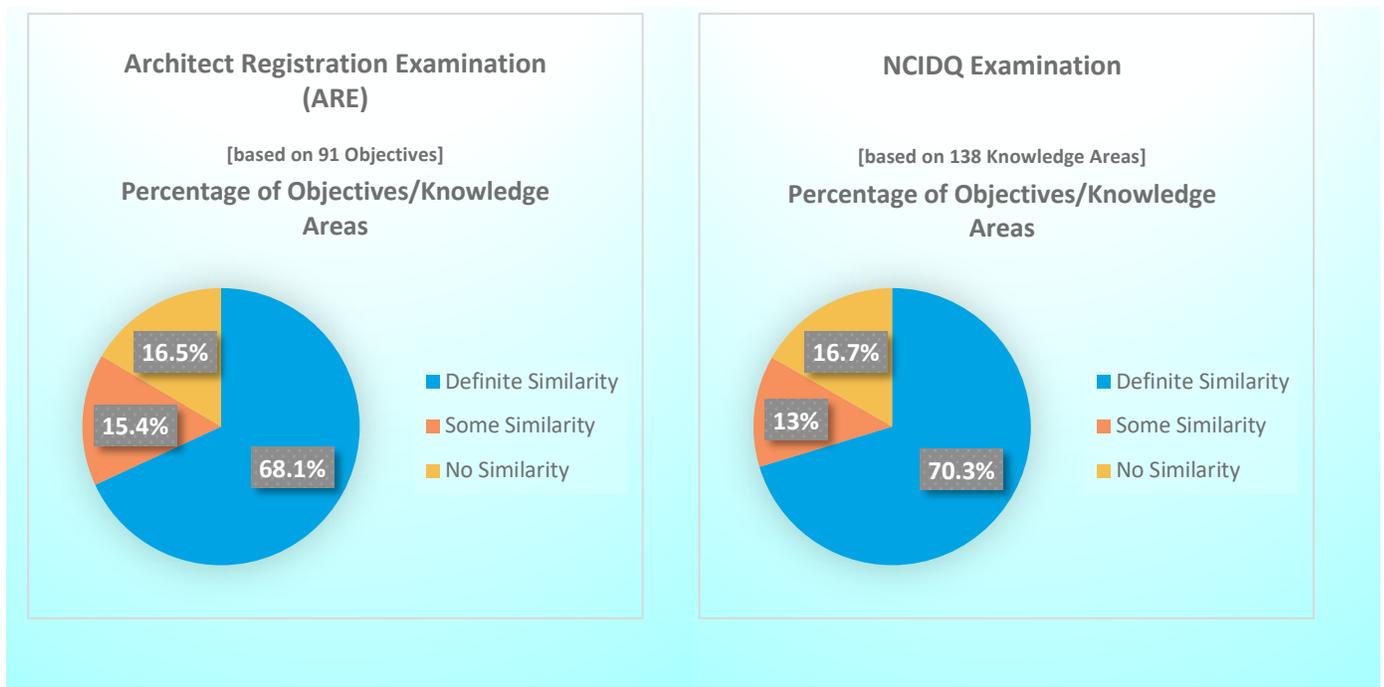
Examples of NCARB practice areas and CIDQ domains containing no task similarity, indicating a lack of parallels in the competency expectations of the two professions (Refer to Appendix 1.3.):

- Project Development and Documentation and Construction and Evaluation (NCARB) and Pre-Design and Programming (CIDQ)
- Practice Management (NCARB) and Contract Administration, Project, and Ancillary/Additional Services (CIDQ)

Focus 2: Examination Content Areas Comparison

Secondary to the expectations of the profession to do one’s job, the team examined what content areas and objectives are tested to assess a candidate’s knowledge and skills to perform the tasks identified.

This study is based on NCARB’s *ARE 5.0 Handbook “objectives”* and CIDQ’s *NCIDQ Examination Blueprint*. Both examination specifications were current at the beginning of this effort.



Summary of Findings:

The SMEs identified numerous assessment objectives that were agreed to be prevalent in interior design practice, but not explicitly articulated in CIDQ’s *Examination Blueprint*. Examples from the ARE include “Evaluate design, coordination, and documentation methodologies for the practice,” “Determine impact of neighborhood context on the project design,” “Evaluate design alternative based on the program,” etc. Team members agreed that certain knowledge and skills may be necessary within interior design practice—particularly in sole proprietorships—however, they are not included in the *Blueprint*, and thus not assessed through the NCIDQ Examination.

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This characterizes how assessment objectives and “knowledge areas” do exist between NCARB and CIDQ requirements but may not be fully realized through a process of item-for-item matching of assessment objectives/knowledge areas within the *Preliminary Assessment Objective Mapping* and final *Objectives Similarity Summary* documents (*Refer to Appendix 2. Examination Assessment Objectives Summaries*). The team concluded that NCARB’s assessment of knowledge, skills, and tasks were typically more granular and targeted in defined practice areas than CIDQ’s more generalized descriptions. CIDQ’s knowledge areas are distributed and realized at various levels across the three sections of the *NCIDQ Examination*.

Examples of NCARB’s ARE divisions and CIDQ’s NCIDQ Examination sections containing multiple objective/knowledge area similarity, indicating significant parallels in the assessment of knowledge and skills in the two professions (*Refer to Appendix 2.3*):

- Practice Management (NCARB) and Professional and Business Practice (NCIDQ, IDPX exam)
- Construction and Evaluation (NCARB) and Contract Administration (NCIDQ, IDPX exam)
- Project Development and Documentation (NCARB) and Construction Drawings and Specifications (NCIDQ, IDFX exam).

Examples of NCARB’s ARE divisions and CIDQ’s NCIDQ Examination sections containing no objective/knowledge area similarity, indicating the absence of parallels in the assessment of knowledge and skills in the two professions (*Refer to Appendix 2.3*):

- Programming and Analysis (NCARB) and Building Systems and Construction (NCIDQ, IDFX)
- Project Planning and Design (NCARB) and Project Coordination from (NCIDQ, IDPX)
- Programming and Analysis (NCARB) and Contract Documents (NCIDQ, PRAC)

The team of SMEs are confident the findings reported herein clearly illuminate specific areas of similarity as well as differences in the knowledge and skills required for competent practice of architecture and interior design, which are embedded in the assessment objectives developed by the respective organization. Furthermore, the team believes these findings can be leveraged to promote productive collaboration and dialogue between the two professions in pursuit of mutual acknowledgement and agreement regarding the reasonable regulation of architecture and interior design.

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BACKGROUND

The professions of architecture and interior design, while distinct, inarguably have intersecting areas of knowledge and scope of practice. As the interior design profession has evolved and advanced its HSW role over recent decades, acknowledged through the establishment of the NCIDQ exam in 1974 and the achievement of regulation in numerous U.S. and Canadian jurisdictions, its intersection of practice with architecture has increased. Additionally, the increasing number of “interior architecture” academic programs within the United States has led many within both professions to question the disciplinary boundaries. This questioning is what prompted the charges assigned (below) to the National Council of Architectural Registration Boards’ (NCARB) FY19 Interior Architecture Work Group (IAWG), and the subsequent invitation to the Council for Interior Design Qualification (CIDQ) proposing an interorganizational approach.

1. Perform a comparison of the results of the *Practice Analysis of Architecture* and the *Practice Analysis of Interior Design* to identify similarities and differences in distinct tasks, knowledge, and skills required for competent performance.
2. Perform a review of the NCIDQ exam and test specification to understand content areas of knowledge and skills being tested.
3. Continue the dialogue with the Council for Interior Design Qualification (CIDQ) on ways we can collaborate/communicate to the public our roles, responsibilities, and value regarding the protection of the public’s health, safety, and welfare (HSW).

The resultant project collaboration between NCARB and CIDQ sought to formally identify and document areas of similarity and difference in defined competencies.

In 2019, each organization established a team of subject matter experts (SMEs) to compare the architecture and interior design practice analyses (PA), followed by a comparison of each organization’s examination content specification.

NCARB and CIDQ Subject Matter Expert/Research Team Members:

NCARB	CIDQ
<p>Michael Daly, AIA, NCARB, NCIDQ - Member, NCARB Interiors Task Force - Member, NCARB Interior Architecture Work Group - Board Member, Maryland Board of Certified Interior Designers</p>	<p>Kari Frontera, NCIDQ, AIA, IIDA - Member, CIDQ/NCARB Comparison Task Force - Past-President, CIDQ - Member, Practicum Committee</p>
<p>Marzette Fisher, FAIA, NCARB - Member, NCARB Interiors Task Force - Member, NCARB Interior Architecture Work Group - Former Board Chair, Alabama Board for Registration of Architects</p>	<p>Jim Klawiter, NCIDQ, IIDA - Member, CIDQ/NCARB Comparison Task Force - Past-President, CIDQ - Member, Practicum Grader</p>

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<p>Richard McNeel, AIA, NCARB, IIDA - Member, NCARB Interiors Task Force - Former Chair, NCARB Interior Architecture Work Group - Chair, NCARB Region 3 - President, Mississippi State Board of Architecture</p>	<p>Katherine S. Setser, NCIDQ, ASID, IIDA, IDEC - Member, CIDQ/NCARB Comparison Task Force - Board Chair, CIDA - Former Chair, CIDQ Multiple Choice Exam Development Committee - Chair, ASID Ethics and Professional Responsibility Committee</p>
<p>Jim Mickey, NCARB, AIA - Chair, NCARB Interiors Task Force - Former Chair, NCARB Examination Committee - Secretary/Treasurer, Nevada State Board of Architecture, Interior Design & Residential Design</p>	<p>Jessie Shappell, NCIDQ, NCARB, IIDA - Member, CIDQ/NCARB Comparison Task Force - Board Member, CIDQ - Former Chair, CIDQ Practicum Item Writing Committee - Member, PRAC 2.0 Standard Setting Committee</p>
<p>Anne K. Smith, FAIA, NCARB - Former Chair, NCARB Interiors Task Force - Member, NCARB Interior Architecture Work Group - Board Chair, Georgia Board of Architects & Interior Designers</p>	<p>Felice Silverman, NCIDQ, FIIDA - Member, CIDQ/NCARB Comparison Task Force - Board Member, CIDA - Past-President, IIDA - Past-President, IDCEC</p>
Staff	Staff
<p>Harry Falconer, FAIA, NCARB, HonD, Hon. FCARM Vice President, Experience + Education, NCARB</p>	<p>Thom Banks, Hon. FASID, Hon. Member IDC Chief Executive Officer, CIDQ</p>
	<p>Cornelia Springer Exam Director, CIDQ</p>

All practitioner research team members are seasoned, accomplished designers with a breadth of practice experience. In addition, multiple members of each team possess education, examination, practice experience, and or licensure/registration as both architects and interior designers, which enabled the teams to more easily bridge the nuances and vocabulary of both disciplines.

As outlined above, the team was charged to perform comparisons to evaluate the level of similarity between the professional competency expectations and the objectives of assessment through examination of architects and NCIDQ certified interior designers. Over the course of several months, each organization’s team worked independently to document perceived content intersections.

In November 2019, the teams from each organization met at CIDQ’s headquarters in Alexandria, Virginia, to review, compare, and discuss the findings. As a result of this initial meeting, the research team members agreed that the comparison warranted continued, rigorous exploration and discussion in order to yield useful and meaningful results. To that end, the group agreed to form a joint NCARB/CIDQ team with a goal of issuing a single consensus-based report to each organization’s board of directors.

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PROJECT:

I. Compare Results Between 2012 NCARB Practice Analysis of Architecture and CIDQ's 2014 Practice Analysis for Interior Design

GOAL: To identify similarities in competency expectations by recognizing tasks that are performed by architects and NCIDQ certified interior designers, tasks that may be similar though achieved through different processes, and tasks that are only performed by architects or only by NCIDQ certified interior designers.

A practice analysis is conducted with practitioners of a profession in order to define the knowledge and skills they must possess and the tasks they must be able to perform at the time of licensure or credentialing. These scientific studies are carefully designed according to strict standards and are used to ensure that the body of knowledge necessary to practice reflects the current state of the profession and the needs of practitioners. Practice analyses are not limited to the professions of architecture and interior design; they are conducted on behalf of a wide variety of professions, occupations, and vocations, and play an important role in licensure and certification programs all over the world.

Commissioned regularly by NCARB and CIDQ, practice analyses serve to identify and validate the essential tasks that demonstrate professional competency upon licensure as an architect (NCARB) or upon certification as an interior designer (NCIDQ). Practice analyses support NCARB and CIDQ's member jurisdictional regulatory boards' mission to protect the public health, safety, and welfare in the built environment.

Through its long history and experience, NCARB has determined that surveying stakeholders every five to seven years most appropriately responds to identifying the needs of the architecture profession. NCARB's most recent *Practice Analysis*, completed in 2012, has been used to define the competency requirements in the Architectural Experience Program® (AXP®), the assessment "objectives" of the Architect Registration Examination® (ARE®), and inform education initiatives. The 2012 PA was completed by 7,867 individuals, reflecting a diverse and representative sample of architects, licensure candidates, and educators providing an unprecedented breadth of information germane to architecture education, training, and assessment. The 2012 PA resulted in the identification of 96 essential tasks required for architectural professional competency.

Similarly, CIDQ conducts a practice analysis of the interior design profession every five years that is used to define overall practice areas, distinct tasks, knowledge, and skills. The CIDQ PA serves as the basis for the development of the three NCIDQ Examination sections: the Interior Design Fundamentals Exam (IDFX), the Interior Design Professional Exam (IDPX), and the Practicum (PRAC). The most recent PA was completed in late 2019 and will be reflected in spring 2021 exam content (*Refer to Appendix 3*). However, because the 2019 PA was not completed until after the start of this project, CIDQ's 2014 *Practice Analysis for Interior Design* was utilized in this study. The 2014 PA was completed by nearly 800 active NCIDQ certificate holders representing a diversity of practice areas, identifying the tasks, knowledge, and skills necessary for

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competent interior design practice. The 2014 PA identified 87 essential tasks required for interior design professional competency.

II. Compare Assessment Objectives Between NCARB's ARE Test Specification and CIDQ's NCIDQ Examination Blueprints

GOAL: To identify similarities in objectives and knowledge areas assessment for licensure or NCIDQ certification by recognizing knowledge and skills assessed for both architects and NCIDQ certified interior designers, knowledge and skills assessed that may be similar though achieved through different processes, and knowledge and skills that are only assessed for architects or only for NCIDQ certified interior designers.

Credentialing organizations use practice analyses to define the assessment objectives and direct the creation of their exam “specifications.” In addition to delineating the tasks that constitute competency, the PA also typically addresses the level of importance of specific knowledge and skills that directly correlate to the relative weighting (i.e., number of questions) of content included in the examination.

For this comparison, the research team compared the 91 “objectives” identified in NCARB's *Architect Registration Examination (ARE) 5.0 Handbook* to the 138 “knowledge areas” identified in CIDQ's *Fundamentals (IDFX) Exam Blueprint*, *Professional (IDPX) Exam Blueprint*, and *Practicum (PRAC) Blueprint*.

METHODOLOGY

NCARB's and CIDQ's teams implemented a mixed-methodology approach to generate, evaluate, and report the findings of their work. After performing a qualitative comparison of the NCARB and CIDQ *Practice Analyses* and exam assessment objectives, the findings were quantified and documented in this report. Although each organization's team took a slightly different approach to collecting and assembling their data, all SMEs performed an exhaustive, line-by-line review and analysis of each profession's competency requirements. The resulting organizational compilations reflect the preliminary findings of the SMEs (*Refer to Appendices 1.3 and 2.3*).

Beginning in the fall of 2018, NCARB's FY19 IAWG assembled a member subgroup to begin the comparison of the architecture and interior design PAs and to review the *NCIDQ Examination Blueprint* to understand content areas of knowledge and skills being tested. Documents comparing NCARB content and CIDQ content were distributed to the subgroup SMEs, along with instructions to mark tasks and assessment objectives/knowledge areas with definite overlap content as green and those with potential overlap as yellow. Those with no perceived overlap were left blank (white). Each SME individually reviewed and compared each organization's *Practice Analyses* and exam objectives. Results of the individual reviews were discussed with the IAWG and then compiled.

The IAWG invited CIDQ's president and chief executive officer to its spring 2019 meeting in support of their charge to continue the dialogue on ways the two organizations can collaborate and communicate their roles to

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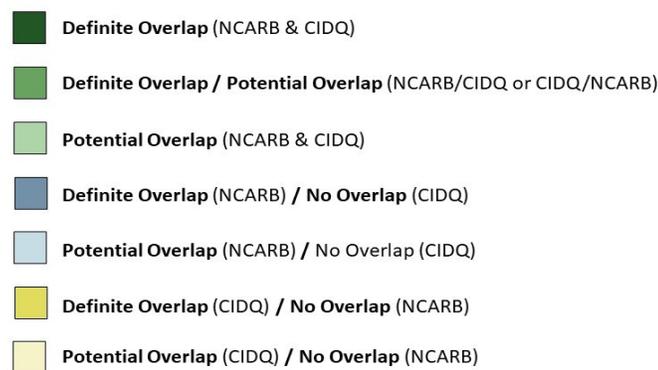
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the public. Upon discussion of the charges and the effort to compare competencies, the value of a similar comparison of PA competencies and exam assessment objectives by CIDQ SMEs became evident. CIDQ was invited to participate and subsequently accepted. NCARB’s team shared the methodology and SME instructions for completing the comparisons.

The CIDQ team implemented a consensus-based approach. In May 2019, each of the teams’ SMEs individually annotated the practice analyses and exam objectives comparisons, then met in July 2019 at CIDQ’s headquarters to review and discuss as a group, creating a mapping document that represented the consensus of the SME team. Due to the extensive amount of debate and discussion necessitated by this process, the group participated in numerous virtual meetings to finalize these documents.

In November 2019, the NCARB and CIDQ teams met at CIDQ’s headquarters to review, compare, and discuss the organizations’ findings. At the conclusion of the meeting, both organizations acknowledged a significant amount of content similarity for both the practice analyses and the exam assessment objectives. Data from the NCARB and CIDQ SMEs was subsequently combined into new NCARB/CIDQ preliminary mapping documents (*Refer to Appendices 1.3: Task Analysis Mapping and 2.3: Assessment Objectives/Knowledge Areas Mapping*). Accordingly, in addition to considering definite, potential, or no overlap, the teams also considered the number of SMEs who marked each cell, quantifying the frequency of each perceived overlap/similarity. All team members¹ concurred that the comparison warranted continued exploration and discussion and agreed to participate in a joint NCARB/CIDQ team to continue the comparison review, with the goal of issuing a single consensus-based report of its findings to each organization’s board of directors. A second in-person meeting was scheduled in March

Joint Meeting Overlap Summary



[Figure 1, Joint meeting overlap summary]

2020; however, due to the COVID-19 pandemic the meeting was canceled. After a four-month hiatus, the joint team regrouped to continue its work through a series of virtual meetings between July and November 2020. The team collaboratively reviewed the combined NCARB/CIDQ preliminary mapping documents, which were color-

¹ One NCARB team member resigned from the 2020 NCARB volunteer role.

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coded to reflect the data from each respective organization (Refer to Figure 1). Tasks and assessment objectives/knowledge areas marked as a “Definite Overlap” by both organizations were unanimously accepted as overlapping content. Tasks and assessment objectives/knowledge areas marked as “Definite Overlap/Potential Overlap,” “Definite Overlap/No Overlap,” “Potential Overlap/No Overlap,” or “Potential Overlap” were reviewed line-by-line. Throughout this comprehensive process, the SMEs discussed and deliberated each perceived overlap. As a result of this process, the practice analyses and exam objectives mapping documents were revised and simplified to include three color codes: “Definite Similarity,” “Some Similarity,” and “No Similarity.” Tasks or assessment objectives/knowledge areas with green lines connect items with “definite similarity” to corresponding items in the other profession, yellow lines connect items with “some similarity,” and items with “no similarity” are shown in orange.

It is important to note that during this phase of investigation, the SMEs acknowledged that the reference to the term “overlap” could be misinterpreted. The team members were not assigned to offer an opinion or judgement as to the degree of any overlap in services provided by architects and NCIDQ certified interior designers. The project was designed to determine where the knowledge, skills, tasks, and assessment thereof have some level of similarity between the two professions. The three-color coded system was interpreted as follows:

- “Definite Similarity” – clear or undeniable direct correspondence in the knowledge, skills, tasks, and assessment goals required for full competency.
- “Some Similarity” – a clear but partial correspondence in the knowledge, skills, tasks, and assessment goals required for competency. While no attempt was made to establish a degree of similarity, it is clear that one discipline or the other does not possess *all* necessary knowledge, skills, tasks, and assessment goals to establish full competency.
- “No Similarity” – clear or undeniable incomparability in the knowledge, skills, tasks, and assessment goals required for full competency. The knowledge, skills, tasks, and assessment goals are completely different in nature or extent.

The next step in the process was to collectively analyze the content in each mapping summary. Four text documents were generated to collate the mapping content (Refer to Figure 2). For the practice analyses comparisons, a final color-coded chart was created for each profession: 1. NCARB/CIDQ – Task Similarity Summary and 2. CIDQ/NCARB – Task Similarity Summary (Refer to Appendices 1.1, 1.2), which lists all the disciplinary specific tasks in the first column.

Similarly, final charts were developed to cross reference comparative exam criteria: 3. ARE/NCIDQ – “Objectives”

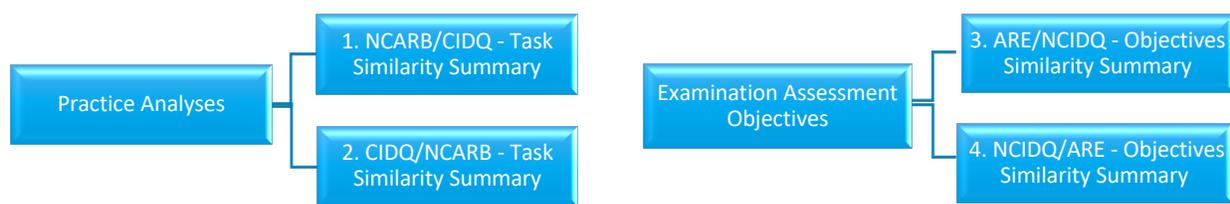


Figure 2, Practice Analyses practice Areas/domains; exam divisions, by organization

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Similarity Summary and 4. *NCIDQ/ARE – “Objectives” Similarity Summary* (Refer to Appendices 2.1, 2.2). Here ARE objective descriptions are cross-referenced with the NCIDQ Examination knowledge areas.

The team collaboratively reviewed each of the four documents, focusing predominantly on items marked as “Some Similarity.” Items marked as “Definite Similarity” were closed to further discussion as these had been previously established by consensus. Discussion points included terminology identified as having differing connotations between the professions. Upon completion of the review of text documents, the team quantified content agreed to be “Definite Similarity,” “Some Similarity,” or “No Similarity.” Refer to the “Findings” section of this report.

FINDINGS

As described above, the methodology involved a detailed line-by-line comparison of the NCARB and CIDQ criteria. As the detailed review progressed, the SMEs discovered that certain key words and terms were found in both sets of criteria; however, their meaning, interpretation, or applications were not necessarily consistent between the two professions. The variations in key words fell into three categories:

1. Words with different definitions and application in practice
2. Words with similar definitions but different application in practice
3. Words with multiple definitions and different application in practice

To resolve these issues of consistency, the research team closely evaluated the intent of the word use within the contextual application of the task/assessment objective. The team then collectively agreed upon the appropriate contextual definition for use within the comparison following criteria for evaluation:

The following are examples of select words and the resulting interpretation as it relates to the team’s comparison analysis:

- **Example 1: “Zoning”** *Words with multiple definitions and different application in practice*

Practice of architecture: “zoning” typically refers to local codes that pertain to building size, setbacks for property lines, height restrictions, occupancy types, parking requirements, etc. There can also be many other zoning requirements such as for signage, landscaping, etc. Zoning within a building is most typically used in reference to HVAC “zones” for climate control.

Architecture task/competency: “Determine impact of applicable zoning and development ordinances to determine project constraints.”

Practice of interior design: “zoning” is typically used to describe or address “areas” of space from a planning perspective (i.e., relationship dependencies/adjacencies, core/ancillary service areas).

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Interior design task/competency: “Identify specialized end-user requirements (e.g., sustainability, cultural, zoning, historic preservation, special needs of end user.)”

Resolution: Since there is no similarity between definition or application in practice, criteria that referenced “zoning” was typically identified as “No Similarity” in the review.

- **Example 2: “Site”** Words with similar definitions but different application in practice

Practice of architecture: “site” typically refers to the land and exterior elements of a project (i.e., the legal limits/boundaries where a building is located, including exterior components such as topography, utilities, etc.).

Architecture task/competency: “Determine results of environmental studies when developing site alternatives.”

Practice of interior design: “site” typically refers to the project site or location within the interior of a building.

Interior design task/competency: “Verify site conditions (e.g., perform field survey, document as built conditions).”

Resolution: Since there is no similarity between these two applications, criteria that referenced “site” in this application was typically identified as “No Similarity” in the review.

- **Example 3: “Survey”** Words with similar definitions but different application in practice

Practice of architecture: the term “survey” typically indicates a site plan document representing the land boundaries, topography, site utilities, existing site structures, and significant plantings performed by professional land surveyors. The term “survey” also includes the “process of surveying” to collect and identify project information (existing building conditions, solicitation of neighborhood/user input, etc.).

Architecture task/competency: “Define requirements for site survey based on established project scope.”

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Practice of interior design: the term “survey” indicates the “process of surveying” to collect and identify project information (existing building conditions, fixtures, furnishings, and equipment, solicitation of user input, etc.).

Interior design task/competency: “Verify site conditions (e.g., perform field survey, document as built conditions).”

Resolution: Since there is similarity between these two definitions and its application in specific practice areas, criteria that referenced “survey” may reflect “Some Similarity” in the review.

I. Comparison Results Between NCARB’s 2012 Practice Analysis of Architecture and CIDQ’s 2014 Practice Analysis for Interior Design

The format and content of the *Practice Analyses* were notably different and resulted in extensive discussions to determine where similarities exist. The 2012 NCARB *Practice Analysis of Architecture* identified 96 tasks (competencies) distributed within six practice areas. The 2014 CIDQ *Practice Analysis for Interior Design* identified 87 tasks (competencies) distributed within nine domains (*Refer to Figure 3*). Examples include:

- NCARB identifies practice management tasks in the Practice Management practice area. CIDQ identifies and distributes practice management tasks across several domains.
- CIDQ’s Programming domain includes the task “Confirm project requirements, goals, and objectives,” which is similar with tasks identified in NCARB’s Practice Management and Programming & Analysis practice areas.
- At the task level, NCARB specifically identifies “Apply ethical standards to comply with accepted principles within a given situation.” CIDQ does not identify a similar task. Rather, NCIDQ certificate holders are obligated to apply ethical standards to comply with accepted principles identified in the CIDQ *Code of Ethics*.

The SMEs concluded that NCARB’s tasks were typically more specific than CIDQ’s generalized tasks. In some cases, the SMEs identified numerous similar tasks, which were agreed to be prevalent in interior design practice, but not specifically represented by a specific task listing in CIDQ’s *Practice Analysis*. Examples include “Develop professional and leadership skills within firm,” “Perform constructability reviews throughout the design process,” etc. Team members agreed that many such tasks may be occurring within interior design practice—particularly for sole proprietorships—however, are not represented in the *Practice Analysis*.

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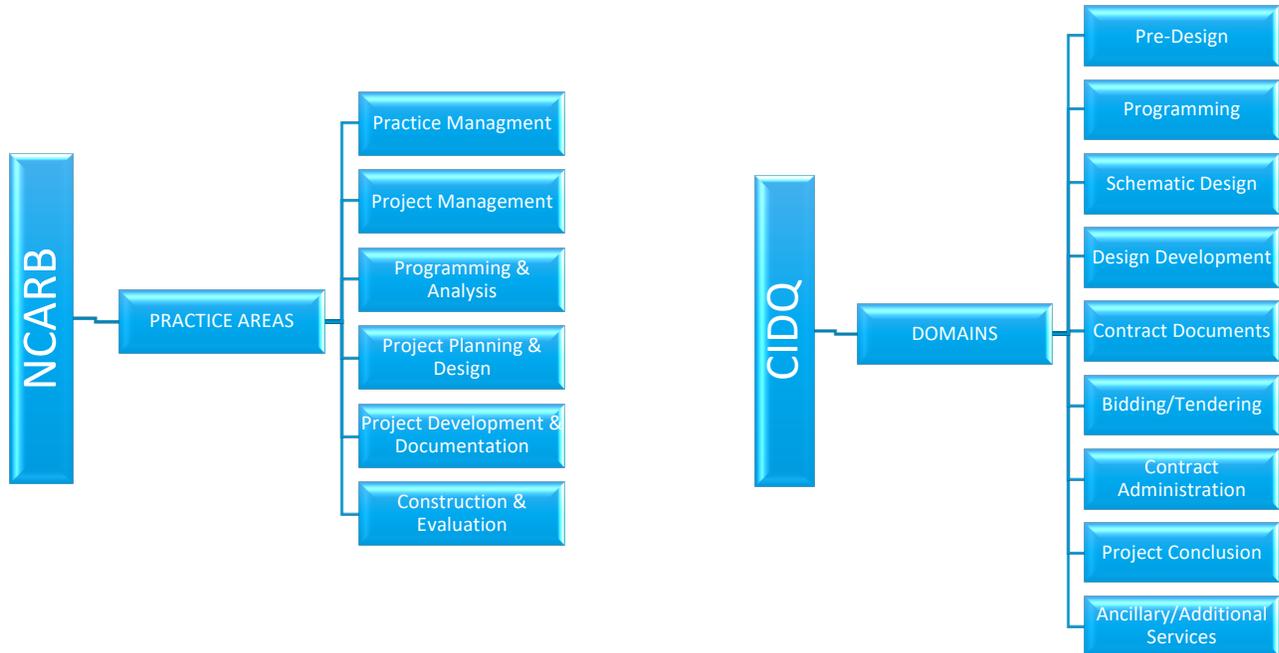


Figure 3, NCARB practice areas and CIDQ domains

Although the combined research team’s evaluation of the *Practice Analyses* tasks first through the lens of the NCARB practice areas and then through the CIDQ domains yields slightly different results, certain patterns emerge. In both instances, the majority of tasks reveal definite similarity (65% and 58% respectively). Inasmuch as the distinction between tasks deemed some similarity and no similarity are comparably distributed, in each case tasks that indicate no similarity occur approximately 4% more frequently than some similarity (*Refer to Figure 4; Refer also to Appendices 1.1 and 1.2*).

NCARB Practice Analysis of Architecture <i>[based on 96 total tasks]</i>			CIDQ Practice Analysis for Interior Design <i>[based on 87 total tasks]</i>		
Competencies	Number of Competencies	Percentage of Competencies	Competencies	Number of Competencies	Percentage of Competencies
Definite Similarity	62	64.6%	Definite Similarity	50	57.5%
Some Similarity	15	15.6%	Some Similarity	17	19.5%
No Similarity	19	19.8%	No Similarity	20	23.0%

Figure 4, Summary of task similarity

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As noted in the Methodology section, NCARB and CIDQ mapped their respective *Practice Analyses* results according to the six major practice areas identified within the 2012 NCARB *Practice Analysis of Architecture* and the nine domains defined in the 2014 CIDQ *Practice Analysis for Interior Design* (Refer to Figure 3).

An example of the comparison of tasks using the Programming and Analysis practice area of NCARB's Practice Analysis and the Programming domain from CIDQ's Practice Analysis appears below (Refer to Figure 5).

Correlation Between Tasks - NCARB's Programming & Analysis

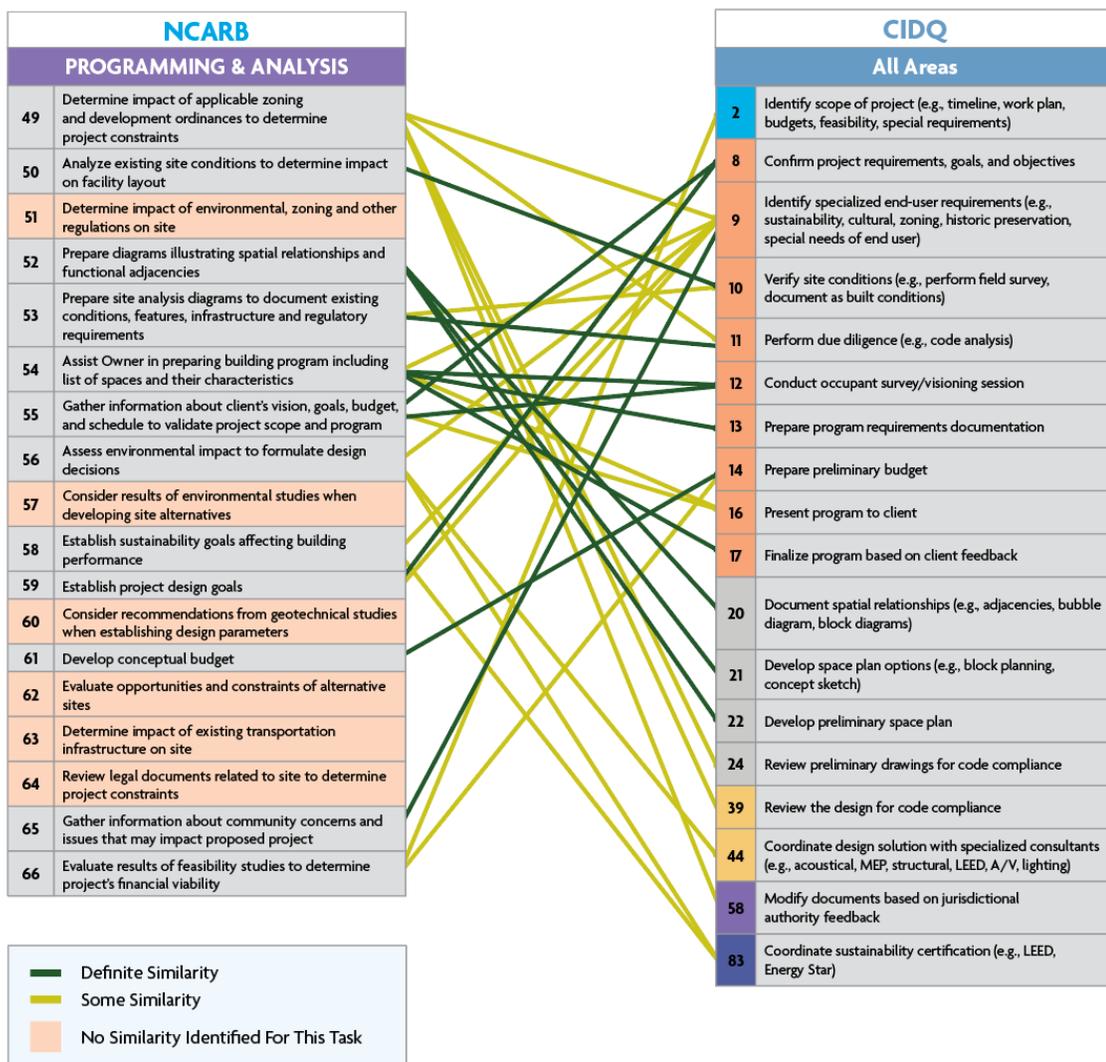


Figure 5, Practice Analysis mapping example

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Comparing all tasks resulted in 54 different combinations of tasks that were assessed for similarity. (Refer to Appendix 1.3 for detailed cross-referencing of the correlated tasks).

Of the 54 possible combinations of tasks assessed, 20 (37%) yielded no similarity.

However, 34 category blocks (63%) showed at least some degree (one or more tasks) of similarity. Of those 34, 29 category blocks (54% of the 54 possible combinations) contained one or more tasks with a definite similarity between the two *Practice Analyses*.

Examples of NCARB practice areas and CIDQ domains containing multiple task similarity, indicating significant parallels in the competency expectations of the two professions:

- Programming and Analysis (NCARB) and Programming (CIDQ)
- Project Development and Documentation (NCARB) and Schematic Design (CIDQ)
- Project Planning and Design (NCARB) and Design Development (CIDQ)
- Construction and Evaluation (NCARB) and Contract Administration (CIDQ)

Examples of NCARB practice areas and CIDQ domains containing virtually no task similarity, indicating a lack of parallels in the competency expectations between these areas of the two professions:

- Project Development and Documentation and Construction and Evaluation (NCARB) and Pre-Design and Programming (CIDQ)
- Project Management (NCARB) and Project Conclusion and Ancillary/Additional Services (CIDQ)

It is important to note that the SME team agrees that “no similarity” findings are as meaningful as those indicating “definite similarity.” It is also important to note that these “no similarity” findings do not denote positive or negative implications. For example, a “no similarity” indication may simply indicate disparate category blocks. It would be anomalous if similarities were identified as illustrated by the examples immediately above. To the extent that the CIDQ and NCARB competency and assessment objectives vary in form and content, many competencies intersect and align at different points on the path to licensure or NCIDQ certification.

II. Comparison Results of the Assessment Objectives Between NCARB’s ARE 5.0 Handbook and CIDQ’s NCIDQ Examination Blueprint

The NCARB Architect Registration Examination (ARE) assesses knowledge/skill acquisition in 91 objectives, which are distributed across six examination divisions.

The NCIDQ Examination assesses knowledge/skill acquisition in 18 overarching knowledge areas, which are distributed across three examination sections. Each exam section includes competency assessment in specific knowledge areas. In some cases, knowledge areas may be repeated across exam sections to reflect different levels of knowledge and skill relevant to that phase of professional development.

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The difference in formatting and organization of the examination content into assessment areas presented a challenge to the team resulting in redundancy of similarities when comparing the exam assessment objectives (Refer to Figure 6).

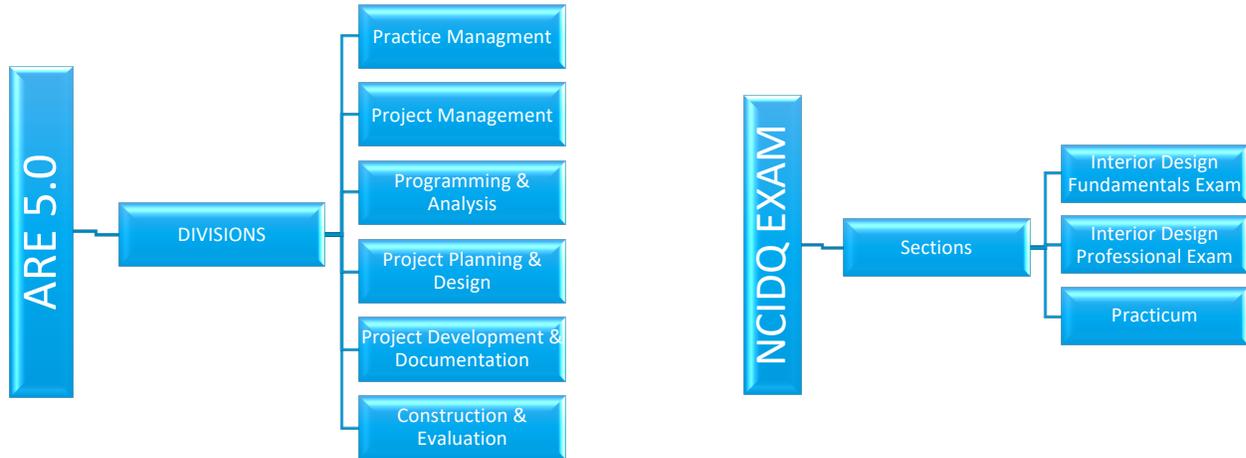


Figure 6: ARE divisions and NCIDQ sections

The SMEs identified numerous assessment objectives that were agreed to be prevalent in interior design practice but are not clearly articulated in the *NCIDQ Examination Blueprint*. Examples include “Evaluate design, coordination, and documentation methodologies for the practice,” “Determine impact of neighborhood context on the project design,” “Evaluate design alternative based on the program,” etc. Team members agreed that many knowledge and skills may occur within interior design practice—particularly for sole proprietorships—that are not included in the examination.

The combined research team evaluated the assessment objectives first through the lens of the *ARE 5.0* objectives and then through the *NCIDQ Examination Blueprint* knowledge areas, with the following result (Refer to Figure 7; Refer to Appendices 2.1 and 2.2):

Architect Registration Examination (ARE 5.0) <i>[based on 91 Objectives]</i>		
Assessment Objectives	Number of Objectives	Percentage of Objectives
Definite Similarity	62	68.1 %
Some Similarity	14	15.4 %
No Similarity	15	16.5 %

NCIDQ Examination <i>[based on 138 Knowledge Areas]</i>		
Assessment Knowledge Areas	Number of Knowledge Areas	Percentage of Knowledge Areas
Definite Similarity	97	70.3 %
Some Similarity	18	13.0 %
No Similarity	23	16.7 %

Figure 7: Summary of objective/knowledge area similarity

The comparison of the examination assessment objectives was complicated by the organization of CIDQ’s *NCIDQ Examination Blueprint* as some of the examination knowledge areas are repeated, although the knowledge areas being assessed are distinct to each section. An example of the comparison of the

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assessment objectives in NCARB’s ARE Project Planning and Design division and the knowledge areas of the NCIDQ Practicum appears below in *Figure 8*.

Assessment Objectives Comparison-NCARB Project Planning & Design

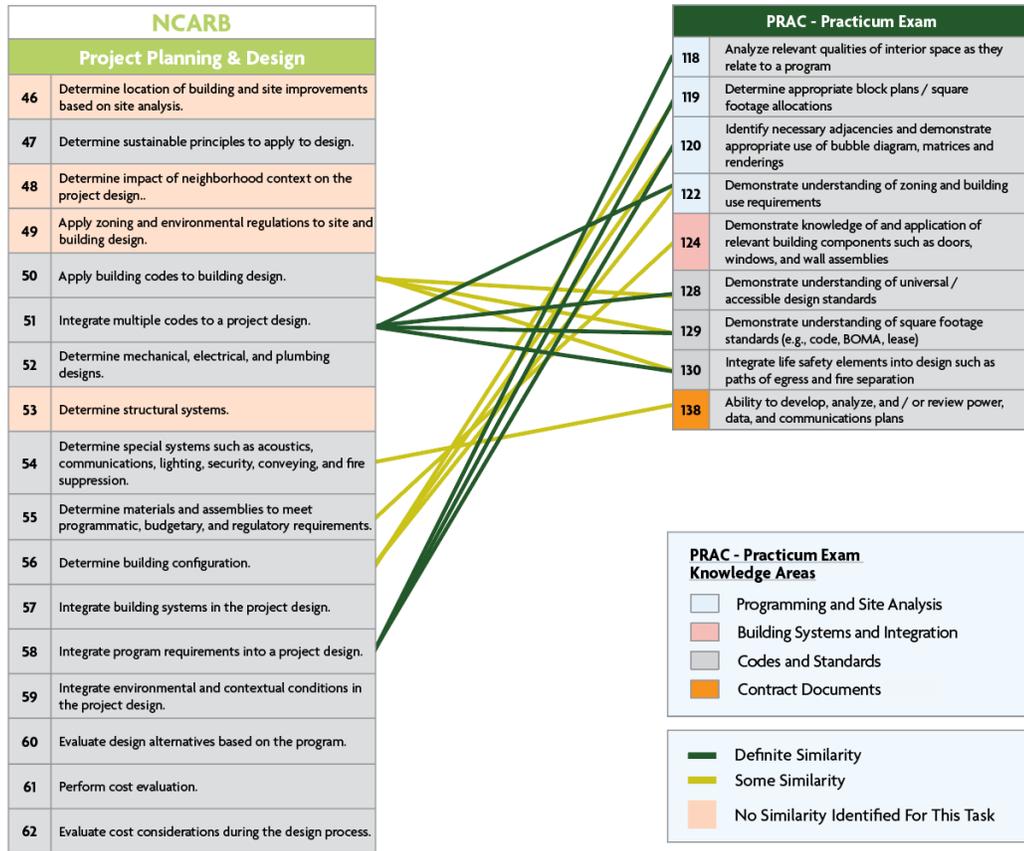


Figure 8: Examination objective and knowledge area mapping example

This results in a total of 18 distinct knowledge area blocks for CIDQ’s NCIDQ Examination. In contrast, NCARB’s ARE objectives are organized into six examination divisions, and each objective is independently assessed in only one division. As a result, there are 108 possible combinations to be evaluated (*Refer to Appendix 2.3*).

The SMEs determined that 57 of the 108 assessment objectives/knowledge areas (53%) showed no similarity. However, 51 assessment objectives/knowledge areas (47%) showed at least some similarity between one or more objectives. Thirty-five assessment objectives/knowledge areas (32%) showed definite similarity in one or more assessment objectives between the ARE and the NCIDQ Examination.

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Examples of NCARB ARE divisions and NCIDQ Examination sections containing multiple objective/knowledge area similarity, indicating significant parallels in the assessment of knowledge and skills in the two professions:

- Practice Management (NCARB) and Professional and Business Practice (NCIDQ, IDPX exam);
- Construction and Evaluation (NCARB) and Contract Administration (NCIDQ, IDPX exam); and
- Project Development and Documentation (NCARB) and Construction Drawings and Specifications (NCIDQ, IDFX exam).

Examples of NCARB ARE divisions and NCIDQ Examination sections containing few objective/knowledge area similarity, indicating the absence of parallels in the assessment of knowledge and skills in the two professions:

- Programming and Analysis (NCARB) and Building Systems and Construction (NCIDQ, IDFX);
- Project Planning and Design (NCARB), and Project Coordination from (NCIDQ, IDPX); and
- Programming and Analysis (NCARB) and Contract Documents (NCIDQ, PRAC).

As with the *Practice Analyses* comparison, identifying areas where no similarity of assessment objectives/knowledge area blocks exist is as important as identifying areas or similarities, and connotes no positive or negative implication.

CONCLUSION

This report, and the scope of work it summarizes, serves to acknowledge architecture and interior design as two unique, distinct disciplines serving the public in the built environment. The report does not suggest a merger of the two professions, nor does it suggest that the expertise or services provided to the public are interchangeable. Rather, this report documents required areas of professional knowledge and skill competency that are similar, and in some cases substantially identical. The SMEs participating in this study affirm there are areas of strong similarity in the expectations for competency to practice architecture upon licensure and to practice interior design upon NCIDQ certification.

NCARB and CIDQ both have well established procedures and rigorous requirements that must be met to obtain a license to practice architecture or NCIDQ certification, respectively. The paths to licensure as an architect and to certification as an interior designer include the same principal components: 1) specialized education, 2) relevant professional experience, and 3) examination of essential professional knowledge and skills. Determination and validation of these essential competencies and resulting assessment objectives included in test specifications occur similarly in both professions through the use of professional practice analyses. Practice analyses are commissioned regularly by NCARB and CIDQ to support their member jurisdictional regulatory boards' mission to protect the public health, safety, and welfare in the built environment.

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NCARB and CIDQ apply distinctly different approaches to designating competencies and assessment objectives as HSW related. NCARB identifies all knowledge, skills, and tasks identified in the *Practice Analysis of Architecture* as HSW. Although the resulting ARE and NCIDQ Examination are *entirely* devoted to assessing competencies related to health, safety, and welfare, there are distinct differences in the categorical application of these designations between the professions. As one example, the NCIDQ Examination broadly defines Professional and Business Practice in a way that does not focus specifically on the management of design firms, whereas the ARE includes a distinct assessment objective, Practice Management, which results in specific content that cannot be precisely correlated.

The team of subject matter experts assembled to perform these comparative evaluations are confident the findings reported herein clearly illuminate specific areas of similarity as well as differences in the knowledge and skills required for competent practice of architecture and interior design and that are embedded in the assessment objectives developed by each organization. Furthermore, the SME team believes these findings can be leveraged to promote productive dialogue and collaboration between the two professions in pursuit of mutual acknowledgement and agreement regarding the reasonable regulation of architecture and interior design.

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APPENDICES

1. Practice Analyses Similarity Summaries

1.1 NCARB/CIDQ *Practice Analysis*: Task Similarity Summary

1.2 CIDQ/NCARB *Practice Analysis*: Task Similarity Summary

1.3 NCARB/CIDQ Task Analysis Mapping

2. Examination Assessment Objectives Summaries

2.1 ARE/NCIDQ Exams: Objectives Similarity Summary

2.2 NCIDQ/ARE Exams: Objectives Similarity Summary

2.3 NCARB/CIDQ Assessment Objectives/Knowledge Areas Mapping

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1. Practice Analyses Similarity Summaries

1.1 NCARB/CIDQ *Practice Analysis*: Task Similarity Summary

1.2 CIDQ/NCARB *Practice Analysis*: Task Similarity Summary

1.3 NCARB/CIDQ Task Analysis Map Mapping

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APPENDIX 1.1: NCARB/CIDQ Practice Analysis: Task Similarity Summary

NCARB - Similar Task Compilation + Comparison Summary				Date: 02/16/2021
Definite Similarity		62/96 Tasks	64.6%	
Some Similarity		15/96 Tasks	15.6%	
No Similarity		19/96 Tasks	19.8%	

	NCARB/CIDQ - Definite Task Similarity
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AXP Task #	AXP Task Description	CIDQ Task #	CIDQ Task Description
1	Adhere to ethical standards and codes of professional conduct	1	Assess client/project type to confirm that the project falls within the scope of practice for an interior designer
2	Comply with laws and regulations governing the practice of architecture	1	Assess client/project type to confirm that the project falls within the scope of practice for an interior designer
3	Prepare final procurement and contract documents	56	Finalize contract documents
3	Prepare final procurement and contract documents	59	Prepare bid (tender) documents and specifications (e.g., invitation to bid, instructions to bidders)
10	Prepare proposals for services in response to client requirements	5	Solicit proposals for collateral consultants
10	Prepare proposals for services in response to client requirements	6	Prepare proposal (e.g., scope, deliverables, fees, presentation)
12	Develop procedures for responding to contractor requests (Requests for Information)	63	Coordinate response to Request for Information (RFI)
15	Develop procedures for responding to changes in project scope	19	Develop preliminary design concept
15	Develop procedures for responding to changes in project scope	70	Coordinate change directives and/or change orders for client approval
16	Establish procedures to process documentation during	68	Review and respond to submittals and shop drawings

NOTE: The relationships expressed in this document are one to (typically) several when comparing a “Task” from one *Practice Analysis* to the other moving from left to right. “Tasks” on the left were grouped according to the highest degree of similarity (Definite, Some, None) determined among what was often a list of associated “Tasks” on the right. Those “Tasks” on the right with a lesser degree of similarity were removed from this document to avoid misrepresenting their relationship but are captured in the NCARB/CIDQ Task Analysis Map in yellow. (Refer to Appendix 1.3.

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	contract administration	69	Respond to Request for Information (e.g., unforeseen condition, field change, document conflicts)
		70	Coordinate change directives and/or change orders for client approval
		71	Prepare punch lists/deficiency list
		74	Process Certificates of Payment
		75	Review contractor provided close-out package
		76	Provide client with project record (e.g., finish binder, electronic files)
		77	Verify completion of punch list/deficiency list items
17	Participate in pre-construction, pre-installation and regular progress meetings with design team	62	Conduct bid (tender) orientation meeting with qualified bidders (e.g., walk-through, review schedule)
		67	Conduct site visits (e.g., monitor progress, verify design intent compliance, field conditions, construction meetings)
18	Coordinate design work of consultants	44	Coordinate design solution with specialized consultants (e.g., acoustical, MEP, structural, LEED, A/V, lighting)
19	Determine project schedule	15	Prepare preliminary timeline
		46	Refine schedule
		51	Finalize project deliverables schedule
21	Prepare written communications related to design ideas, project documentation and contracts	7	Prepare contract(s)
22	Monitor project schedule to maintain compliance with established milestones	46	Refine schedule
23	Assist Owner in obtaining necessary permits and approvals	57	Prepare documents for permits
24	Conduct periodic progress meetings with design and project team	44	Coordinate design solution with specialized consultants (e.g., acoustical, MEP, structural, LEED, A/V, lighting)
25	Identify changes in project scope that require additional services	25	Compare schematic design to programmatic requirements (e.g., client requirements, schedule, budget)

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		69	Respond to Request for Information (e.g., unforeseen condition, field change, document conflicts)
		70	Coordinate change directives and/or change orders for client approval
26	Manage information exchange during construction	68	Review and respond to submittals and shop drawings
		69	Respond to Request for Information (e.g., unforeseen condition, field change, document conflicts)
		71	Prepare punch lists/deficiency list
27	Perform quality control reviews throughout the documentation process	54	Review documents for quality assurance (e.g., code compliance, coordination with specialty consultants)
28	Determine scope of services	1	Assess client/project type to confirm that the project falls within the scope of practice for an interior designer
		2	Identify scope of project (e.g., timeline, work plan, budgets, feasibility, special requirements)
29	Monitor performance of design team consultants	54	Review documents for quality assurance (e.g., code compliance, coordination with specialty consultants)
30	Present design concept to stakeholders	29	Present preliminary design solution to client
		48	Present design solution to client
31	Resolve conflicts that may arise during design and construction process	69	Respond to Request for Information (e.g., unforeseen condition, field change, document conflicts)
		70	Coordinate change directives and/or change orders for client approval
32	Manage implementation of sustainability criteria	83	Coordinate sustainability certification (e.g., LEED, Energy Star)
33	Determine design fee budget	6	Prepare proposal (e.g., scope, deliverables, fees, presentation)
34	Collaborate with stakeholders during design process to maintain design intent and comply with Owner specifications	12	Conduct occupant survey/visioning session
35	Coordinate design work of in-house team members	44	Coordinate design solution with specialized consultants (e.g., acoustical, MEP, structural, LEED, A/V, lighting)
36	Prepare Architect-Consultant Agreement	5	Solicit proposals for collateral consultants
		7	Prepare contract(s)

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38	Prepare Owner-Architect Agreement	7	Prepare contract(s)
41	Manage modifications to the construction contract	70	Coordinate change directives and/or change orders for client approval
43	Define roles and responsibilities of team members	4	Select project design team (based on experience and qualifications)
44	Manage project-specific bidding process	59	Prepare bid (tender) documents and specifications (e.g., invitation to bid, instructions to bidders)
		60	Pre-qualify bidders
		61	Distribute bid (tender) packages
		62	Conduct bid (tender) orientation meeting with qualified bidders (e.g., walk-through, review schedule)
		63	Coordinate response to Request for Information (RFI)
		64	Issue addendum
		65	Evaluate bids (tenders)
46	Submit schedule of Architect's services to Owner for each phase	7	Prepare contract(s)
47	Prepare staffing plan to meet project goals	4	Select project design team (based on experience and qualifications)
48	Assist client in selecting contractors	60	Pre-qualify bidders
		65	Evaluate bids (tenders)
50	Analyze existing site conditions to determine impact on facility layout	10	Verify site conditions (e.g., perform field survey, document as built conditions)
52	Prepare diagrams illustrating spatial relationships and functional adjacencies	20	Document spatial relationships (e.g., adjacencies, bubble diagram, block diagrams)
		21	Develop space plan options (e.g., block planning, concept sketch)
		22	Develop preliminary space plan
54	Assist Owner in preparing building program including list of spaces and their characteristics	12	Conduct occupant survey/visioning session
		13	Prepare program requirements documentation
		17	Finalize program based on client feedback
55	Gather information about client's vision, goals, budget, and schedule to validate project scope and program	8	Confirm project requirements, goals, and objectives
		12	Conduct occupant survey/visioning session

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58	Establish sustainability goals affecting building performance	83	Coordinate sustainability certification (e.g., LEED, Energy Star)
59	Establish project design goals	8	Confirm project requirements, goals, and objectives
61	Develop conceptual budget	14	Prepare preliminary budget
65	Gather information about community concerns and issues that may impact proposed project	9	Identify specialized end-user requirements (e.g., sustainability, cultural, zoning, historic preservation, special needs of end user)
67	Perform building code analysis	24	Review preliminary drawings for code compliance
		39	Review the design for code compliance
68	Prepare code analysis documentation	26	Research and source materials (e.g., FF&E, finish materials)
			Select preliminary finishes
69	Select materials, finishes, and systems based on technical properties and aesthetic requirements	26	Research and source materials (e.g., FF&E, finish materials)
		27	Select preliminary finishes
		33	Develop detailed furniture and equipment plan
		34	Develop way-finding concepts
		35	Develop reflected ceiling plans
		36	Develop detailed lighting plan
		37	Develop electrical/power/data/ communications plan
		38	Develop finish plan/schedules
		40	Develop outline specifications (e.g., lighting, materials, FF&E, finishes)
		45	Prepare presentation materials (e.g., renderings, materials, models, mock-up)
71	Oversee design integration of building components and systems	53	Prepare written specifications
		44	Coordinate design solution with specialized consultants (e.g., acoustical, MEP, structural, LEED, A/V, lighting)
72	Review local, state and federal codes for changes that may impact design and construction	54	Review documents for quality assurance (e.g., code compliance, coordination with specialty consultants)
		11	Perform due diligence (e.g., code analysis)

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74	Understand implications of evolving sustainable design strategies and technologies	83	Coordinate sustainability certification (e.g., LEED, Energy Star)
75	Develop sustainability goals based on existing environmental conditions	83	Coordinate sustainability certification (e.g., LEED, Energy Star)
78	Present design ideas to client orally	29	Present preliminary design solution to client
79	Evaluate results of feasibility studies to determine project's technical viability	2	Identify scope of project (e.g., timeline, work plan, budgets, feasibility, special requirements)
		8	Confirm project requirements, goals, and objectives
80	Prepare Cost of Work estimates	14	Prepare preliminary budget
		47	Coordinate the preparation of detailed cost estimates
84	Communicate design ideas to the client graphically	28	Develop sketches/3-D design studies
		29	Present preliminary design solution to client
		45	Prepare presentation materials (e.g., renderings, materials, models, mock-up)
		48	Present design solution to client
85	Prepare submittals for regulatory approval	57	Prepare documents for permits
86	Communicate design ideas to client with two-dimensional (2-D) computer aided design software	21	Develop space plan options (e.g., block planning, concept sketch)
		28	Develop sketches/3-D design studies
		29	Present preliminary design solution to client
		45	Prepare presentation materials (e.g., renderings, materials, models, mock-up)
		48	Present design solution to client
87	Select furniture, fixtures and equipment that meet client's design requirements and needs	86	Create digital 3-D rendering, virtual tours, and/or architectural models
		23	Develop preliminary furniture and equipment plan
89	Communicate design ideas to client with three-dimensional (3-D) computer aided design software	33	Develop detailed furniture and equipment plan
		28	Develop sketches/3-D design studies
90	Update Cost of Work estimates	86	Create digital 3-D rendering, virtual tours, and/or architectural models
		47	Coordinate the preparation of detailed cost estimates
91	Review shop drawings and submittals during construction for conformance with design intent	68	Review and respond to submittals and shop drawings

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92	Respond to Contractor Requests for Information	69	Respond to Request for Information (e.g., unforeseen condition, field change, document conflicts)
93	Complete field reports to document field observations from construction site visit	67	Conduct site visits (e.g., monitor progress, verify design intent compliance, field conditions, construction meetings)
95	Review Application and Certificate for Payment	74	Process Certificates of Payment
96	Manage project close-out procedures and documentation	75	Review contractor provided close-out package
		76	Provide client with project record (e.g., finish binder, electronic files)

	NCARB/CIDQ – Some Task Similarity
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AXP Task #	AXP Task Description	CIDQ Task #	CIDQ Task Description
8	Develop and maintain effective and productive relationships with clients	1	Assess client/project type to confirm that the project falls within the scope of practice for an interior designer
		3	Identify stakeholders (key players)
		7	Prepare contract(s)
		16	Present program to client
		17	Finalize program based on client feedback
		18	Obtain client sign-off on program phase
		29	Present preliminary design solution to client
		31	Obtain client sign-off on preliminary design solution

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		48	Present design solution to client
		50	Obtain client sign-off on design solution
11	Participate in community activities that may provide opportunities for design of facilities that reflect community needs	3	Identify stakeholders (key players)
13	Prepare marketing documents that accurately communicate firm's experience and capabilities	6	Prepare proposal (e.g., scope, deliverables, fees, presentation)
20	Understand implications of project delivery methods	2	Identify scope of project (e.g., timeline, work plan, budgets, feasibility, special requirements)
		5	Prepare proposal (e.g., scope, deliverables, fees, presentation)
37	Assist client in determining delivery method for construction of project	2	Identify scope of project (e.g., timeline, work plan, budgets, feasibility, special requirements)
39	Perform constructability review to determine buildability, bidability, and construction sequencing of proposed project	2	Identify scope of project (e.g., timeline, work plan, budgets, feasibility, special requirements)
		54	Review documents for quality assurance (e.g., code compliance, coordination with specialty consultants)
45	Evaluate appropriateness of building information modeling (BIM) for proposed project	2	Identify scope of project (e.g., timeline, work plan, budgets, feasibility, special requirements)
53	Prepare site analysis diagrams to document existing conditions, features, infrastructure and regulatory requirements	10	Verify site conditions (e.g., perform field survey, document as built conditions)
		11	Perform due diligence (e.g., code analysis)
56	Assess environmental impact to formulate design decisions	9	Identify specialized end-user requirements (e.g., sustainability, cultural, zoning, historic preservation, special needs of end user)
		44	Coordinate design solution with specialized consultants (e.g., acoustical, MEP, structural, LEED, A/V, lighting)
		83	Coordinate sustainability certification (e.g., LEED, Energy Star)

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66	Evaluate results of feasibility studies to determine project's financial viability	2	Identify scope of project (e.g., timeline, work plan, budgets, feasibility, special requirements)
		14	Prepare preliminary budget
70	Prepare design alternatives for client review	19	Develop preliminary design concept
		29	Present preliminary design solution to client
		30	Modify preliminary design based on client feedback
76	Define requirements for site survey based on established project scope	10	Verify site conditions (e.g., perform field survey, document as built conditions)
81	Apply principles of historic preservation for projects involving building restoration or renovation	9	Identify specialized end-user requirements (e.g., sustainability, cultural, zoning, historic preservation, special needs of end user)
88	Communicate design ideas to the client using hand drawings	48	Present design solution to client
94	Review results from field reports, third-party inspections, and other test results for conformance with contract documents	67	Conduct site visits (e.g., monitor progress, verify design intent compliance, field conditions, construction meetings)
		68	Review and respond to submittals and shop drawings
		73	Follow-up on deficiencies
		77	Verify completion of punch list/deficiency list items

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	NCARB/CIDQ – No Task Similarity
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AXP Task #	AXP Task Description	CIDQ Task #	CIDQ Task Description
4	Understand implications of project delivery technologies		
5	Participate in professional development activities that offer exchanges with other design professionals		
6	Understand implications of policies and procedures to ensure supervision of design work by architect in responsible charge/control		
7	Maintain positive work environment within firm that facilitates cooperation, teamwork, and staff morale		
9	Develop professional and leadership skills within firm		
14	Establish procedures for documenting project decisions		
40	Establish methods for Architect-Client communication based on project scope of work		
42	Perform constructability reviews throughout the design process		
49	Determine impact of applicable zoning and development ordinances to determine project constraints		
51	Determine impact of environmental, zoning and other regulations on site		
57	Consider results of environmental studies when developing site alternatives		
60	Consider recommendations from geotechnical studies when establishing design parameters		

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62	Evaluate opportunities and constraints of alternative sites		
63	Determine impact of existing transportation infrastructure on site		
64	Review legal documents related to site to determine project constraints		
73	Determine impact of existing utilities infrastructure on site		
77	Determine design parameters for building engineering systems		
82	Develop mitigation options to address adverse site conditions		
83	Design landscape elements for site		

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Appendix 1.2: CIDQ/NCARB *Practice Analysis*: Task Similarity Summary

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APPENDIX 1.2: CIDQ/NCARB Practice Analysis: Task Similarity Summary

CIDQ - Similar Task Compilation + Comparison Summary				Date: 02/16/2021
Definite Similarity	50/87 Tasks	57.5%		
Some Similarity	17/87 Tasks	19.5%		
No Similarity	20/87 Tasks	23.0%		

	CIDQ/NCARB – Definite Task Similarity
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CIDQ Task #	CIDQ Task Description	NCARB Task #	AXP Task Description
1	Assess client/project type to confirm that the project falls within the scope of practice for an interior designer	1	Adhere to ethical standards and codes of professional conduct
		28	Determine scope of services
2	Identify scope of project (e.g., timeline, work plan, budgets, feasibility, special requirements)	1	Adhere to ethical standards and codes of professional conduct
		28	Determine scope of services
		79	Evaluate results of feasibility studies to determine project's technical viability
4	Select project design team (based on experience and qualifications)	43	Define roles and responsibilities of team members
		47	Prepare staffing plan to meet project goals
5	Solicit proposals for collateral consultants	10	Prepare proposals for services in response to client requirements
6	Prepare proposal (e.g., scope, deliverables, fees, presentation)	10	Prepare proposals for services in response to client requirements
		33	Determine design fee budget
7	Prepare contract(s)	21	Prepare written communications related to design ideas, project documentation and contracts
		38	Prepare Owner-Architect Agreement
8	Confirm project requirements, goals, and objectives	55	Gather information about client's vision, goals, budget, and schedule to validate project scope and program
		59	Establish project design goals
		79	Evaluate results of feasibility studies to determine project's technical viability

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11	Perform due diligence (e.g., code analysis)	53	Prepare site analysis diagrams to document existing conditions, features, infrastructure and regulatory requirements
		72	Review local, state and federal codes for changes that may impact design and construction
12	Conduct occupant survey/visioning session	34	Collaborate with stakeholders during design process to maintain design intent and comply with Owner specifications
		54	Assist Owner in preparing building program including list of spaces and their characteristics
		55	Gather information about client's vision, goals, budget, and schedule to validate project scope and program
13	Prepare program requirements documentation	54	Assist Owner in preparing building program including list of spaces and their characteristics
14	Prepare preliminary budget	61	Develop conceptual budget
		80	Prepare Cost of Work estimates
15	Prepare preliminary timeline	19	Determine project schedule
17	Finalize program based on client feedback	54	Assist Owner in preparing building program including list of spaces and their characteristics
20	Document spatial relationships (e.g., adjacencies, bubble diagram, block diagrams)	52	Prepare diagrams illustrating spatial relationships and functional adjacencies
21	Develop space plan options (e.g., block planning, concept sketch)	52	Prepare diagrams illustrating spatial relationships and functional adjacencies
		86	Communicate design ideas to client with two-dimensional (2-D) computer aided design software
22	Develop preliminary space plan	52	Prepare diagrams illustrating spatial relationships and functional adjacencies
23	Develop preliminary furniture and equipment plan	87	Select furniture, fixtures and equipment that meet client's design requirements and needs
24	Review preliminary drawings for code compliance	67	Perform building code analysis
26	Research and source materials (e.g., FF&E, finish materials)	69	Select materials, finishes, and systems based on technical properties and aesthetic requirements
27	Select preliminary finishes	69	Select materials, finishes, and systems based on technical properties and aesthetic requirements
28	Develop sketches/3-D design studies	84	Communicate design ideas to the client graphically

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		86	Communicate design ideas to client with two-dimensional (2-D) computer aided design software
		89	Communicate design ideas to client with three-dimensional (3-D) computer aided design software
29	Present preliminary design solution to client	30	Present design concept to stakeholders
		78	Present design ideas to client orally
		84	Communicate design ideas to the client graphically
		86	Communicate design ideas to client with two-dimensional (2-D) computer aided design software
33	Develop detailed furniture and equipment plan	69	Select materials, finishes, and systems based on technical properties and aesthetic requirements
		87	Select furniture, fixtures and equipment that meet client's design requirements and needs
39	Review the design for code compliance	67	Perform building code analysis
44	Coordinate design solution with specialized consultants (e.g., acoustical, MEP, structural, LEED, A/V, lighting)	18	Coordinate design work of consultants
		35	Coordinate design work of in-house team members
		71	Oversee design integration of building components and systems
45	Prepare presentation materials (e.g., renderings, materials, models, mock-up)	69	Select materials, finishes, and systems based on technical properties and aesthetic requirements
		84	Communicate design ideas to the client graphically
		86	Communicate design ideas to client with two-dimensional (2-D) computer aided design software
46	Refine schedule	19	Determine project schedule
		22	Monitor project schedule to maintain compliance with established milestones
47	Coordinate the preparation of detailed cost estimates	80	Prepare Cost of Work estimates
		90	Update Cost of Work estimates
48	Present design solution to client	30	Present design concept to stakeholders
		84	Communicate design ideas to the client graphically
		86	Communicate design ideas to client with two-dimensional (2-D) computer aided design software
51	Finalize project deliverables schedule	19	Determine project schedule
54		27	Perform quality control reviews throughout the documentation process

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	Review documents for quality assurance (e.g., code compliance, coordination with specialty consultants)	29	Monitor performance of design team consultants
		71	Oversee design integration of building components and systems
56	Finalize contract documents	3	Prepare final procurement and contract documents
57	Prepare documents for permits	23	Assist Owner in obtaining necessary permits and approvals
		85	Prepare submittals for regulatory approval
59	Prepare bid (tender) documents and specifications (e.g., invitation to bid, instructions to bidders)	3	Prepare final procurement and contract documents
		44	Manage project-specific bidding process
60	Pre-qualify bidders	44	Manage project-specific bidding process
61	Distribute bid (tender) packages	44	Manage project-specific bidding process
62	Conduct bid (tender) orientation meeting with qualified bidders (e.g., walk-through, review schedule)	17	Participate in pre-construction, pre-installation and regular progress meetings with design team
		44	Manage project-specific bidding process
63	Coordinate response to Request for Information (RFI)	12	Develop procedures for responding to contractor requests (Requests for Information)
		44	Manage project-specific bidding process
64	Issue addendum	44	Manage project-specific bidding process
65	Evaluate bids (tenders)	44	Manage project-specific bidding process
67	Conduct site visits (e.g., monitor progress, verify design intent compliance, field conditions, construction meetings)	17	Participate in pre-construction, pre-installation and regular progress meetings with design team
		93	Complete field reports to document field observations from construction site visit
68	Review and respond to submittals and shop drawings	26	Manage information exchange during construction
		91	Review shop drawings and submittals during construction for conformance with design intent
69	Respond to Request for Information (e.g., unforeseen condition, field change, document conflicts)	25	Identify changes in project scope that require additional services
		26	Manage information exchange during construction
		92	Respond to Contractor Requests for Information
70	Coordinate change directives and/or change orders for client approval	25	Identify changes in project scope that require additional services
		41	Manage modifications to the construction contract
71	Prepare punch lists/deficiency list	26	Manage information exchange during construction
74	Process Certificates of Payment	95	Review Application and Certificate for Payment
75	Review contractor provided close-out package	96	Manage project close-out procedures and documentation
76	Provide client with project record (e.g., finish binder, electronic files)	96	Manage project close-out procedures and documentation

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83	Coordinate sustainability certification (e.g., LEED, Energy Star)	32	Manage implementation of sustainability criteria
		58	Establish sustainability goals affecting building performance
		74	Understand implications of evolving sustainable design strategies and technologies
		75	Develop sustainability goals based on existing environmental conditions
86	Create digital 3-D rendering, virtual tours, and/or architectural models	86	Communicate design ideas to client with two-dimensional (2-D) computer aided design software
		89	Communicate design ideas to client with three-dimensional (3-D) computer aided design software

CIDQ/NCARB – Some Task Similarity

CIDQ Task #	CIDQ Task Description	AXP Task #	AXP Task Description
9	Identify specialized end-user requirements (e.g., sustainability, cultural, zoning, historic preservation, special needs of end user)	25	Identify changes in project scope that require additional services
		49	Determine impact of applicable zoning and development ordinances to determine project constraints
		54	Assist Owner in preparing building program including list of spaces and their characteristics
		56	Assess environmental impact to formulate design decisions
		58	Establish sustainability goals affecting building performance
		59	Establish project design goals
		65	Gather information about community concerns and issues that may impact proposed project
		75	Develop sustainability goals based on existing environmental conditions
81	Apply principles of historic preservation for projects involving building restoration or renovation		
10	Verify site conditions (e.g., perform field survey, document as built conditions)	50	Analyze existing site conditions to determine impact on facility layout
16	Present program to client	54	Assist Owner in preparing building program including list of spaces and their characteristics
		55	Gather information about client's vision, goals, budget, and schedule to validate project scope and program
19	Develop preliminary design concept	70	Prepare design alternatives for client review

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30	Modify preliminary design based on client feedback	21	Prepare written communications related to design ideas, project documentation and contracts
		70	Prepare design alternatives for client review
32	Develop detailed floor plan	21	Prepare written communications related to design ideas, project documentation and contracts
35	Develop reflected ceiling plans	21	Prepare written communications related to design ideas, project documentation and contracts
36	Develop detailed lighting plan	18	Coordinate design work of consultants
		21	Prepare written communications related to design ideas, project documentation and contracts
37	Develop electrical/power/data/communications plan	18	Coordinate design work of consultants
		21	Prepare written communications related to design ideas, project documentation and contracts
38	Develop finish plan/schedules	21	Prepare written communications related to design ideas, project documentation and contracts
41	Develop preliminary elevations, sections, and details	21	Prepare written communications related to design ideas, project documentation and contracts
49	Modify design solution based on client feedback	29	Monitor performance of design team consultants
		34	Collaborate with stakeholders during design process to maintain design intent and comply with Owner specifications
53	Prepare written specifications	21	Prepare written communications related to design ideas, project documentation and contracts
55	Obtain client sign-off on contract documents	1	Adhere to ethical standards and codes of professional conduct
58	Modify documents based on jurisdictional authority feedback	23	Assist Owner in obtaining necessary permits and approvals
		49	Determine impact of applicable zoning and development ordinances to determine project constraints
77	Verify completion of punch list/deficiency list items	96	Manage project close-out procedures and documentation
78	Process final project billing	95	Review Application and Certificate for Payment
		96	Manage project close out procedures and documentation

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CIDQ/NCARB – No Task Similarity			
CIDQ Task #	CIDQ Task Description	AXP Task #	AXP Task Description
3	Identify stakeholders (key players)		
18	Obtain client sign-off on program phase		
25	Compare schematic design to programmatic requirements (e.g., client requirements, schedule, budget)		
31	Obtain client sign-off on preliminary design solution		
34	Develop way-finding concepts		
40	Develop finish plan/schedules		
42	Develop specialized design features (e.g., millwork, architectural woodwork, feature element)		
43	Review mock-ups or samples from vendors		
50	Obtain client sign-off on design solution		
52	Prepare construction drawings		
66	Coordinate purchase requisitions		
72	Monitor installation of products (e.g., furniture, equipment, art work, accessories, lighting)		
73	Follow-up on deficiencies		
79	Prepare inventory of existing furniture and equipment		
80	Conduct post-occupancy evaluation		
81	Produce as-built drawings		
82	Perform project management (e.g., owner's representative)		

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84	Coordinate and commission custom products (e.g., art, accessories, furniture, finishes)		
85	Manage FF&E procurement		
87	Perform accessibility compliance evaluations		

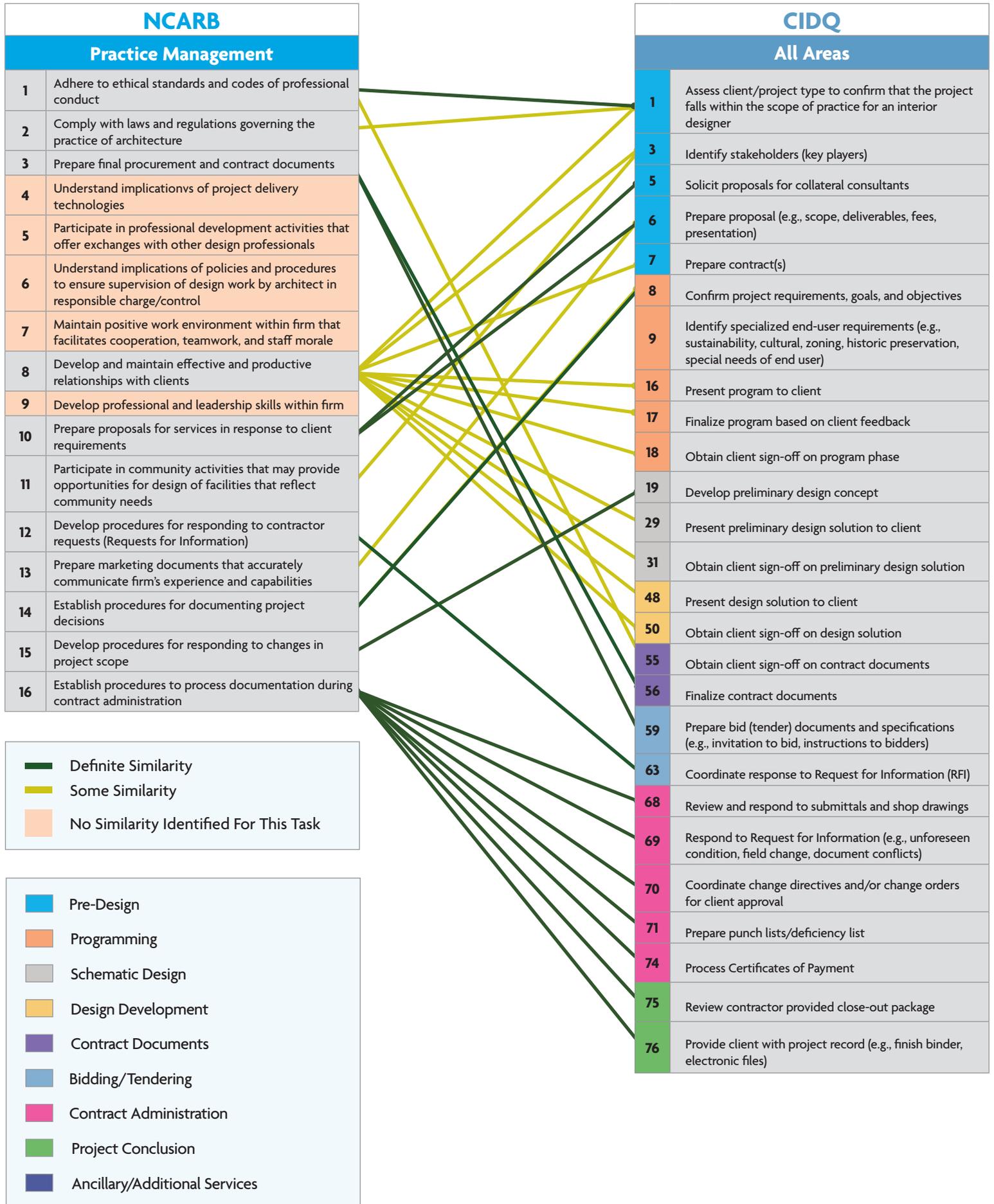
NOTE: The relationships expressed in this document are one to (typically) several when comparing a “Task” from one *Practice Analysis* to the other moving from left to right. “Tasks” on the left were grouped according to the highest degree of similarity (Definite, Some, None) determined among what was often a list of associated “Tasks” on the right. Those “Tasks” on the right with a lesser degree of similarity were removed from this document to avoid misrepresenting their relationship but are captured in the NCARB/CIDQ Task Analysis Map in yellow. (Refer to Appendix 1.3.

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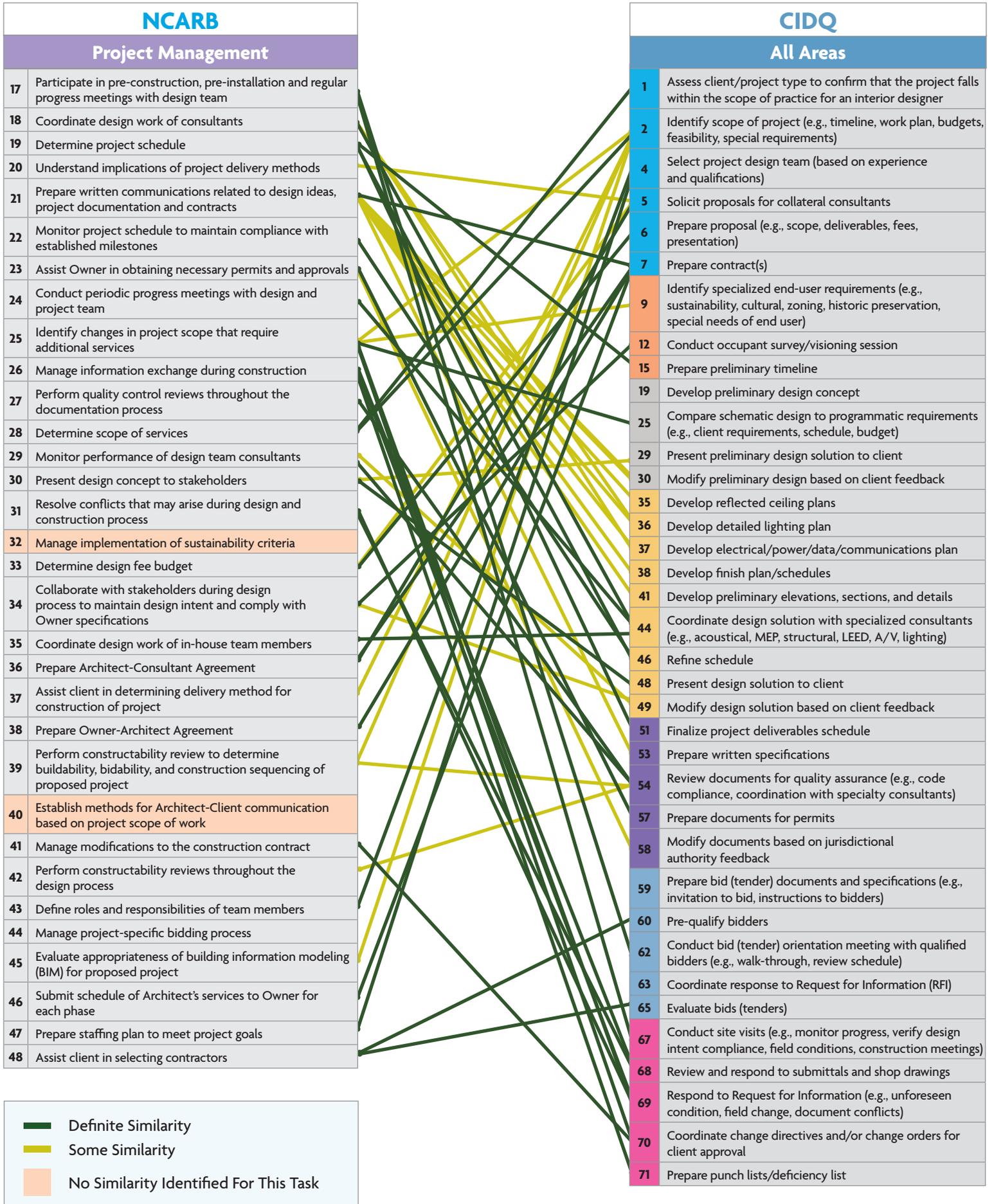
Appendix 1.3: Summary of Preliminary Task Analysis Mapping

Please note: These charts have been created to reflect the preliminary mapping exercise performed by the two work groups. A small number of correlations were reassigned in the final review.

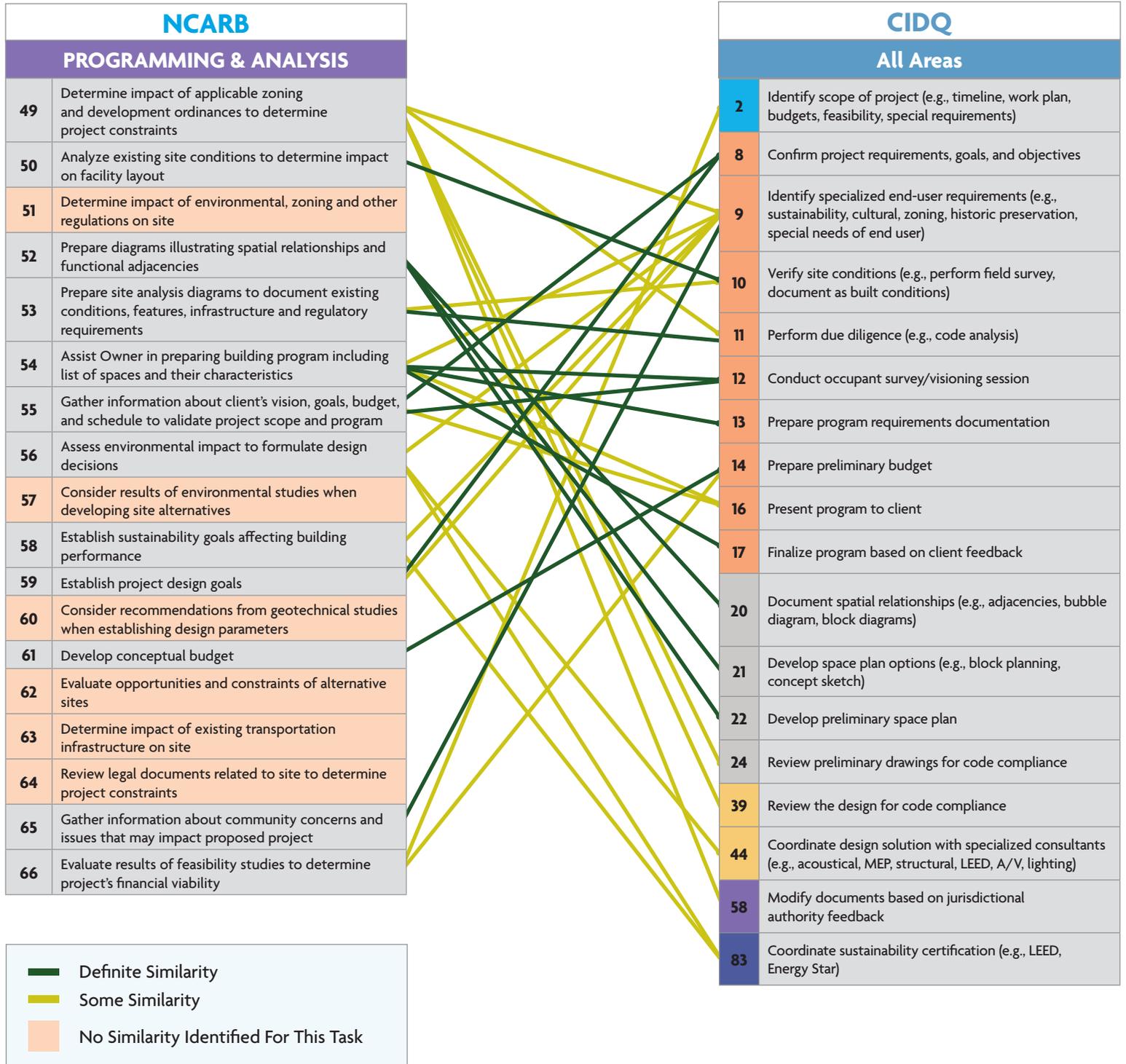
Task Analysis - NCARB's Practice Management



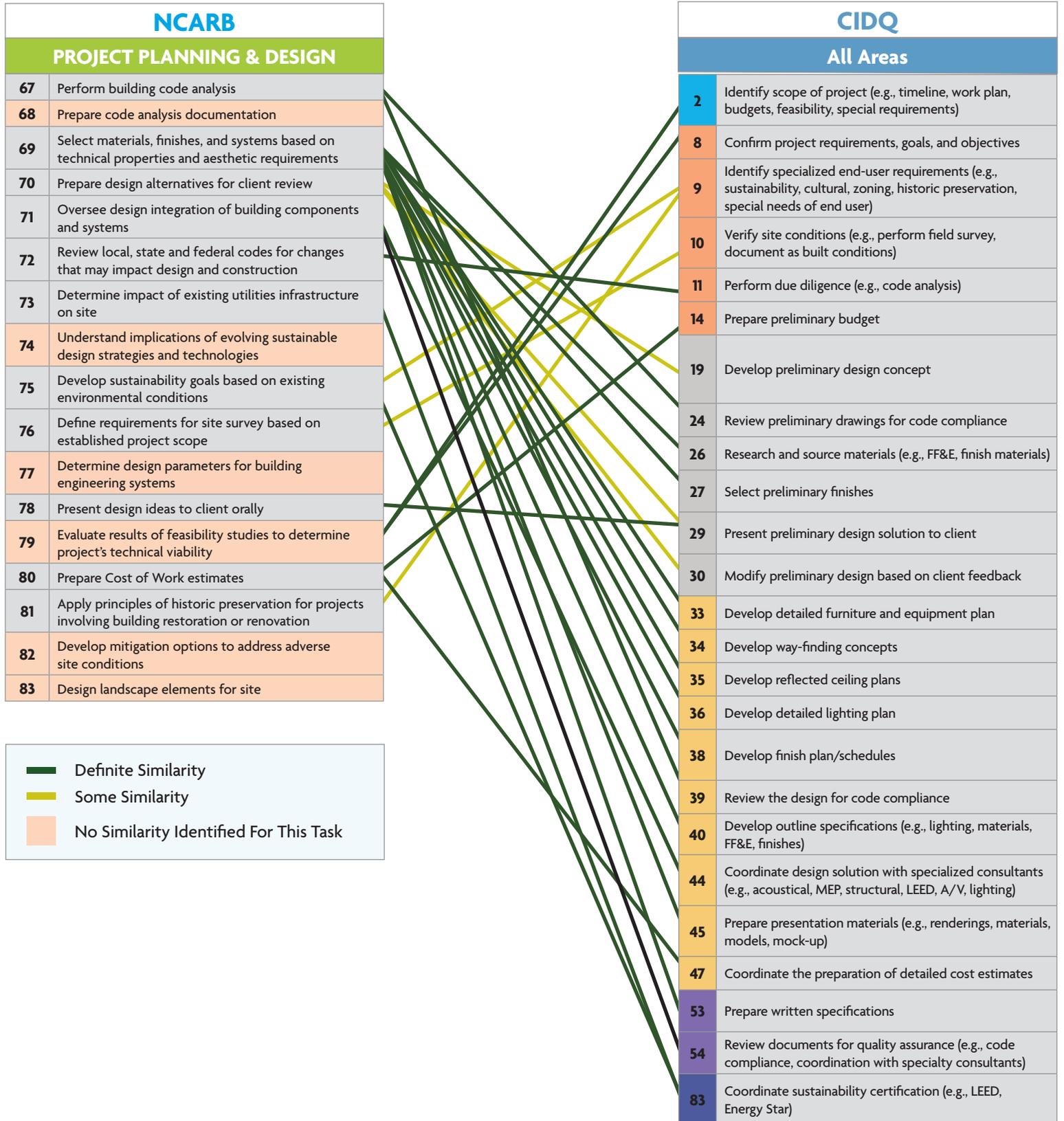
Task Analysis - NCARB's Project Management



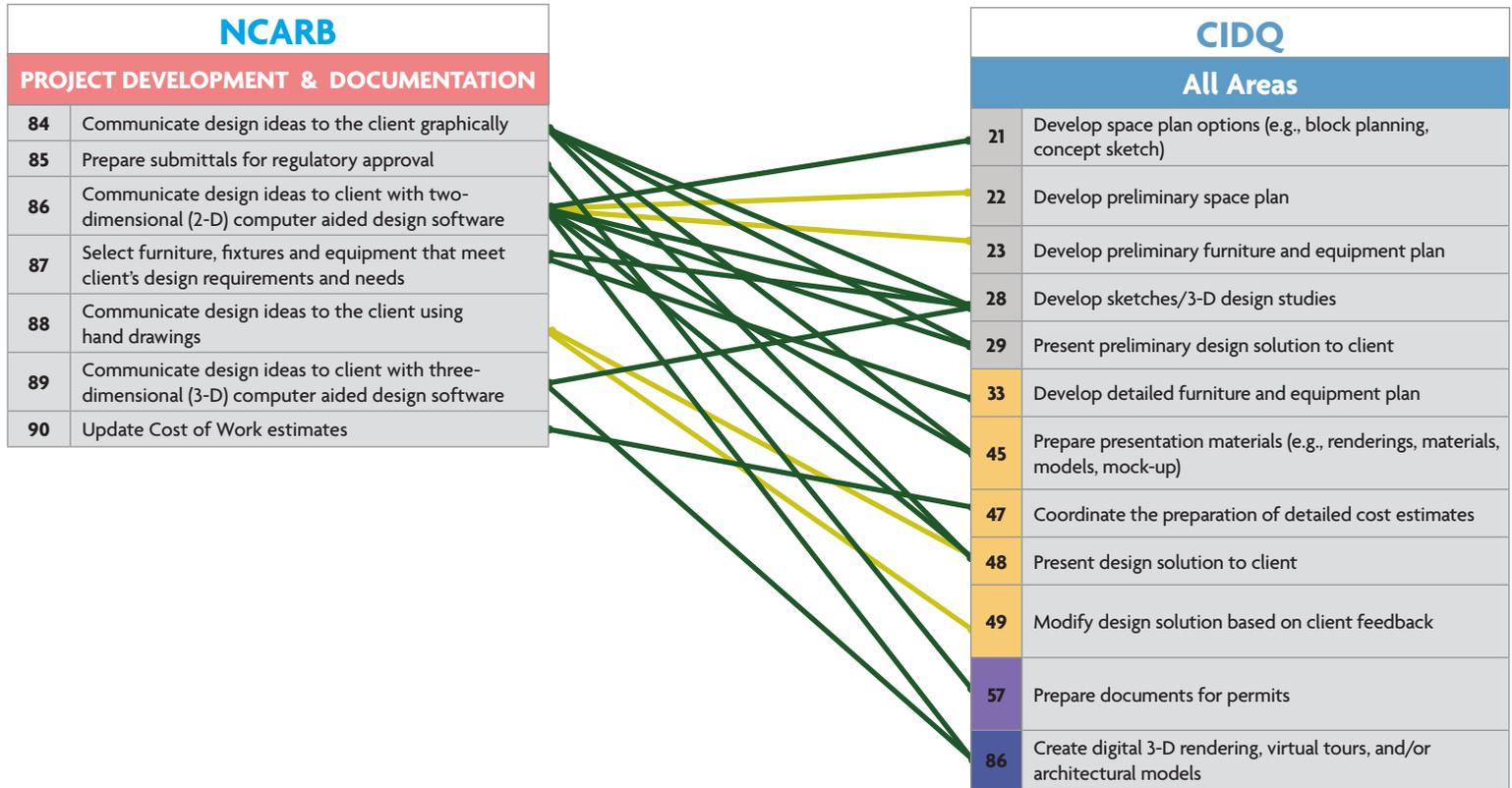
Task Analysis - NCARB's Programming & Analysis



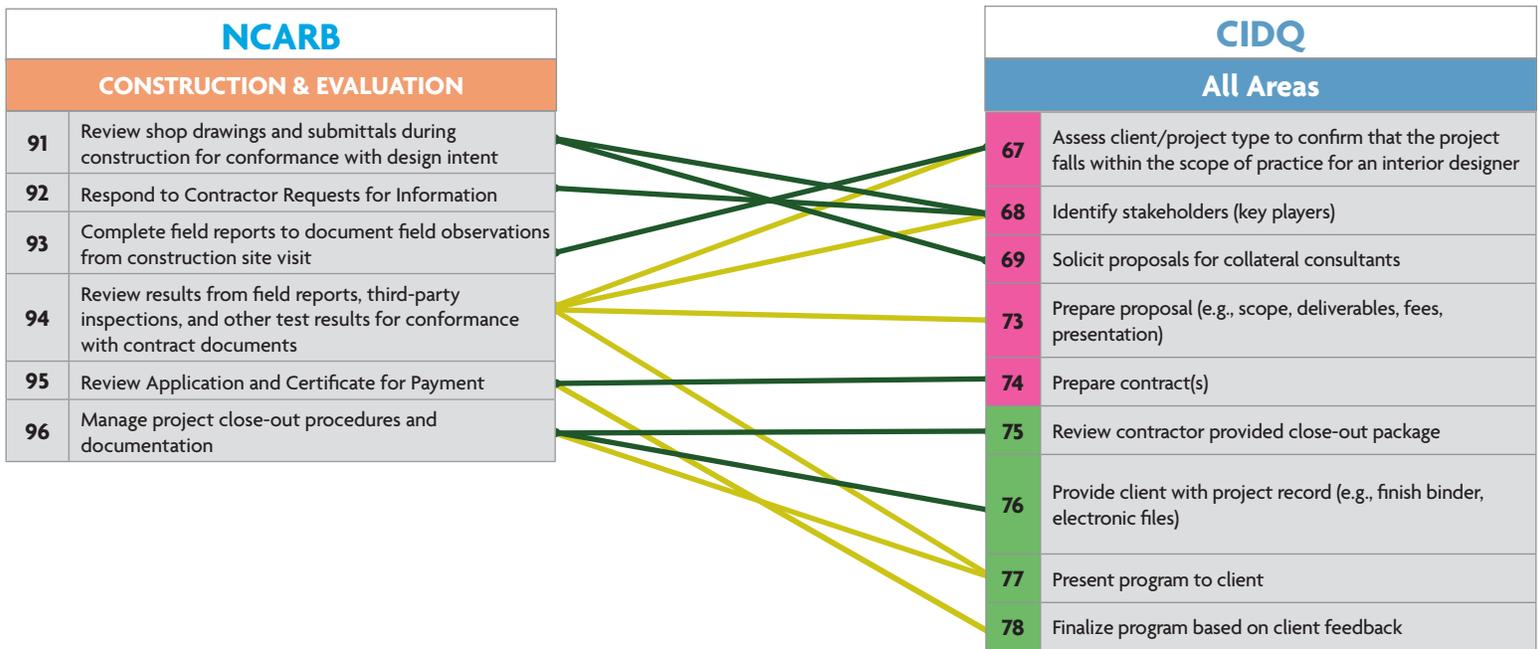
Task Analysis - NCARB's Project Planning & Design



Task Analysis - NCARB's Project Development & Documentation

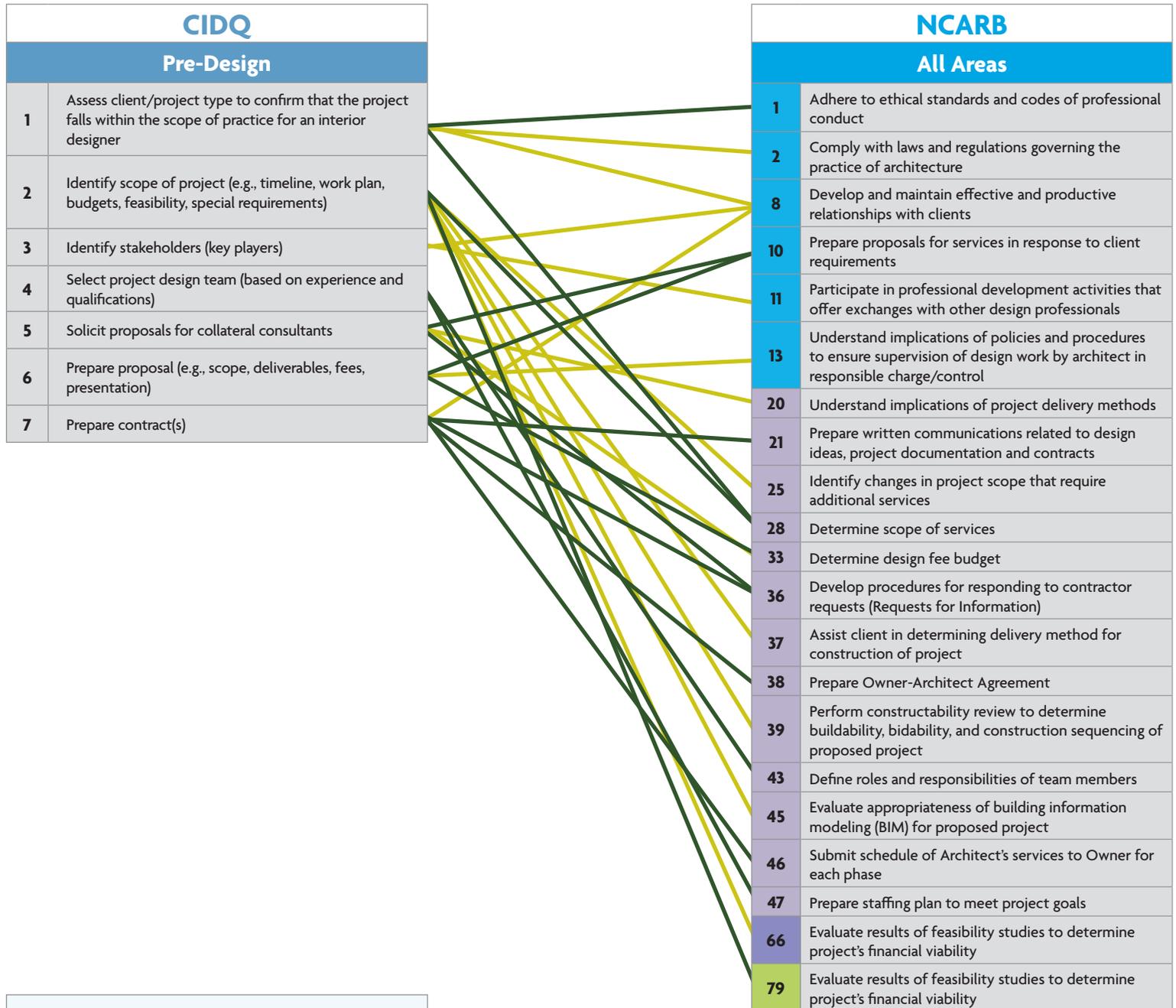


Task Analysis - NCARB's Construction & Evaluation



■	Definite Similarity
■	Some Similarity
■	No Similarity Identified For This Task

Task Analysis - CIDQ Pre-Design

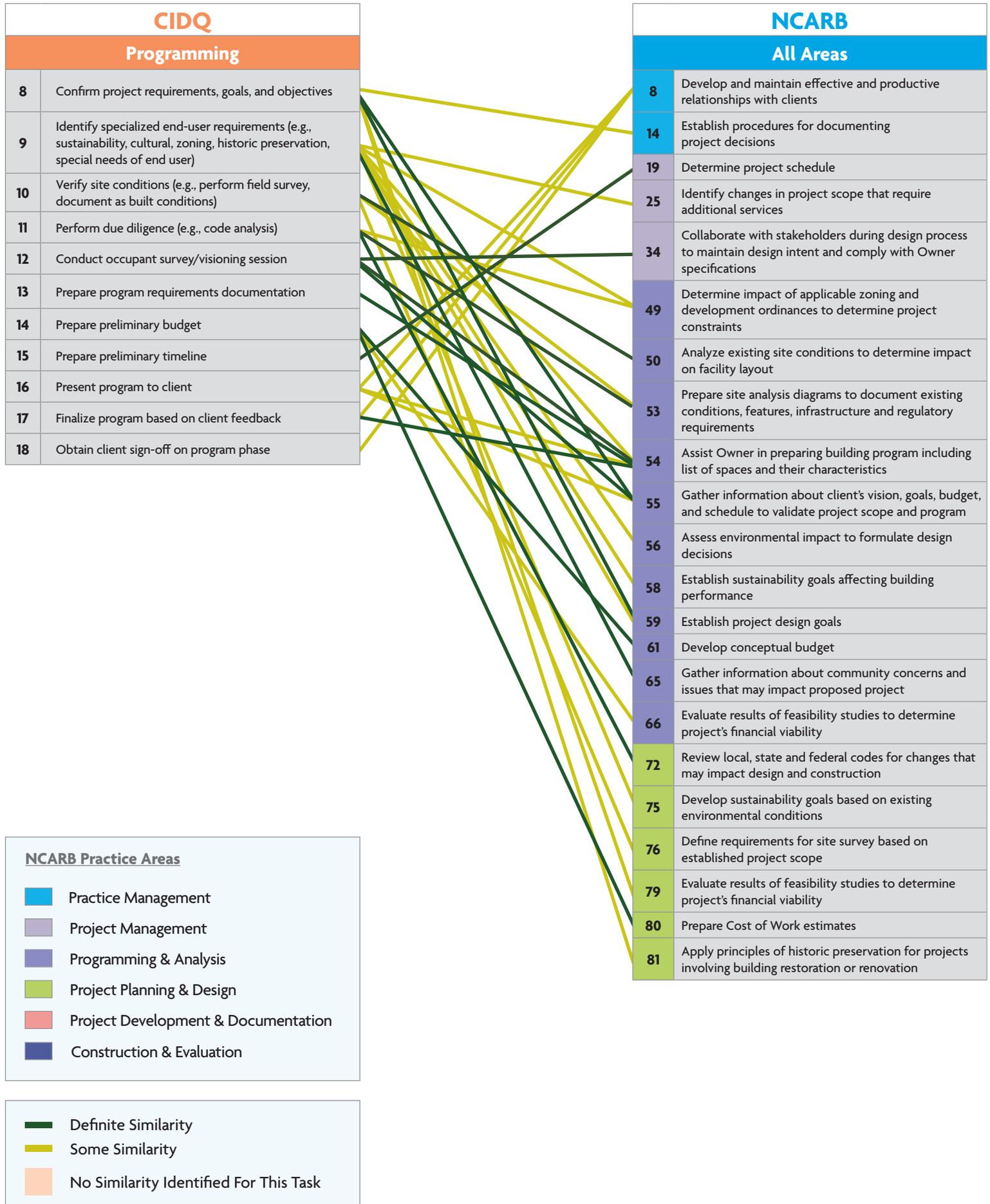


NCARB Practice Areas

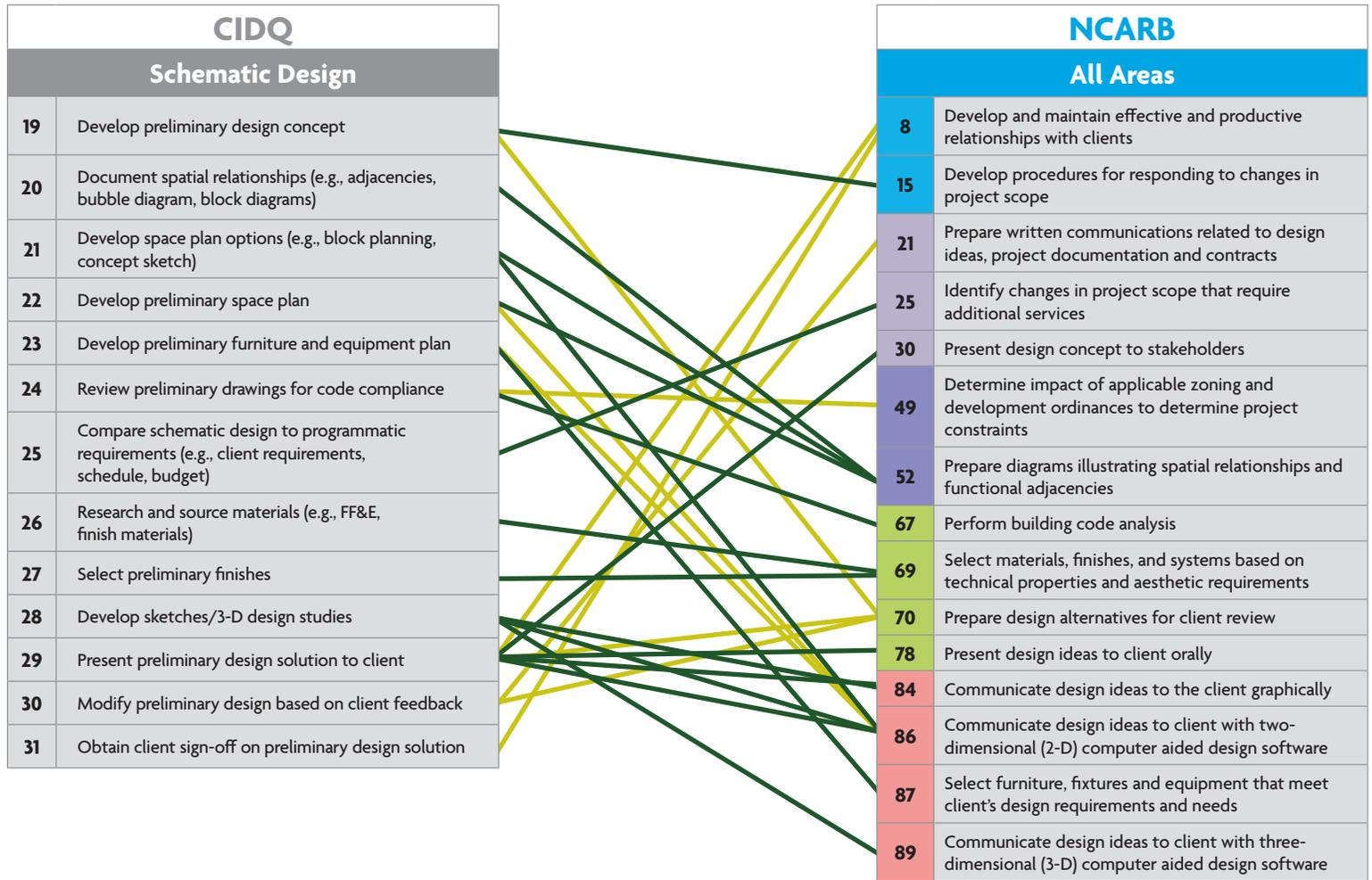
- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Task Analysis - CIDQ Programming



Task Analysis - CIDQ Schematic Design

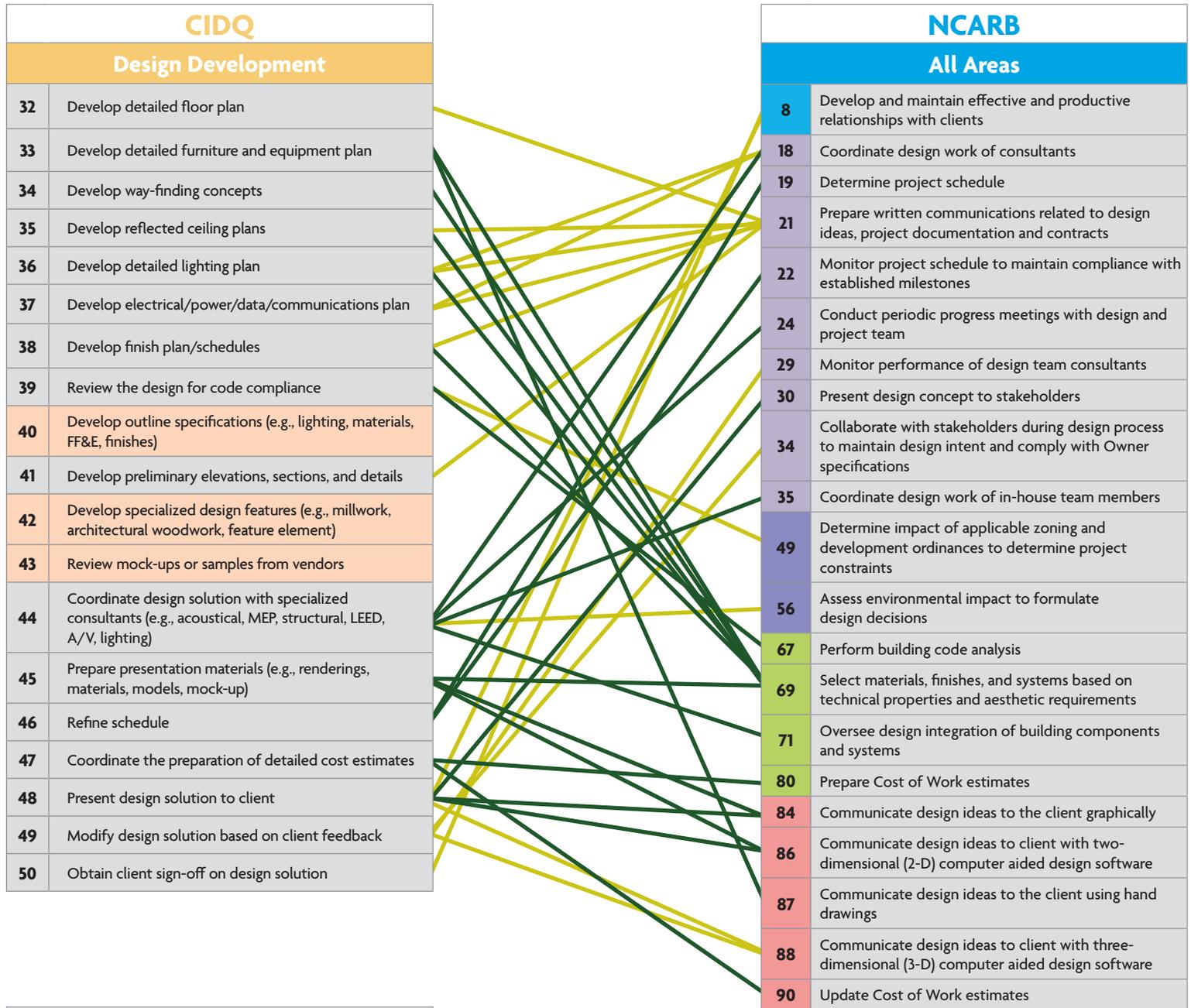


NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Task Analysis - CIDQ Design Development

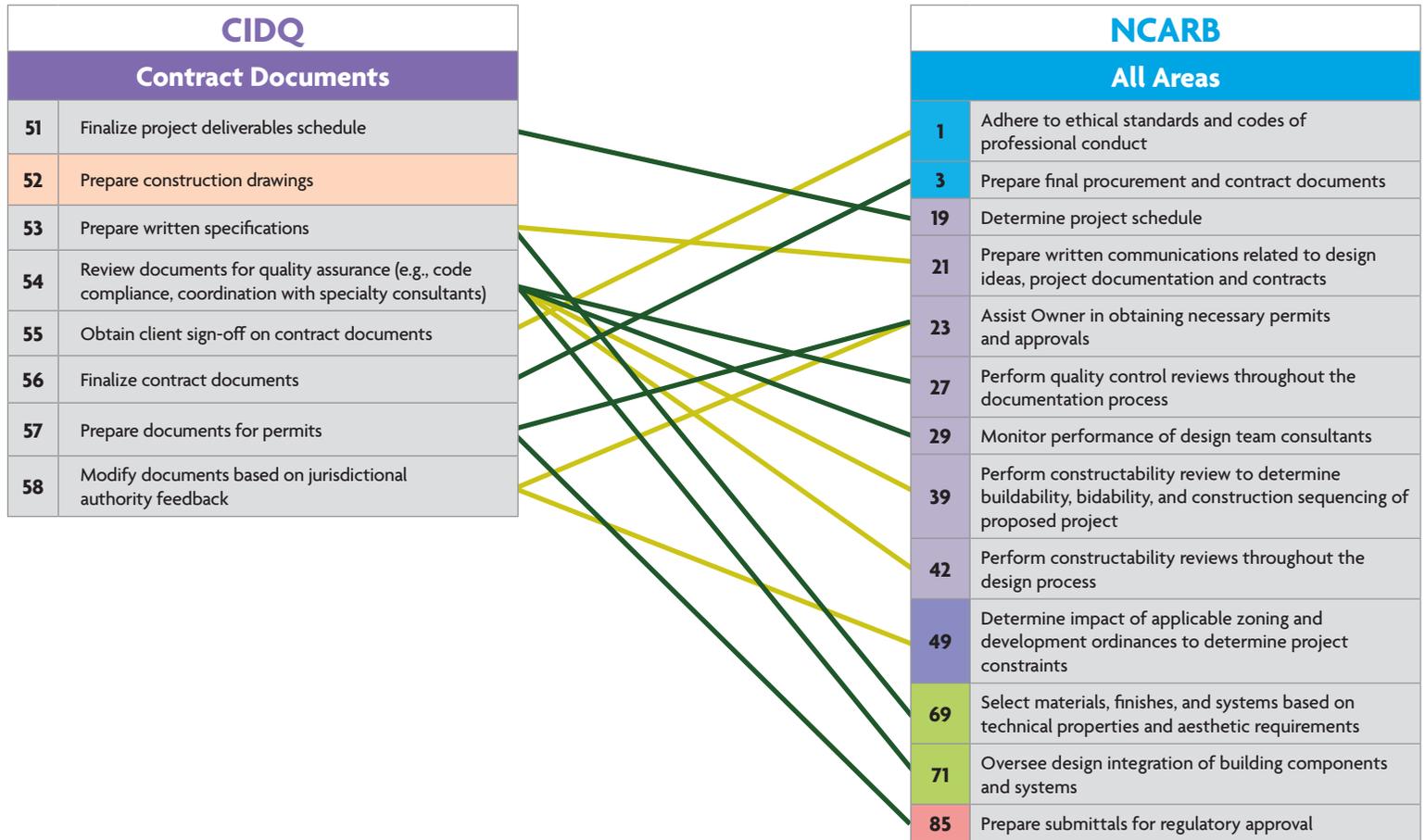


NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Task Analysis - CIDQ Contract Documents

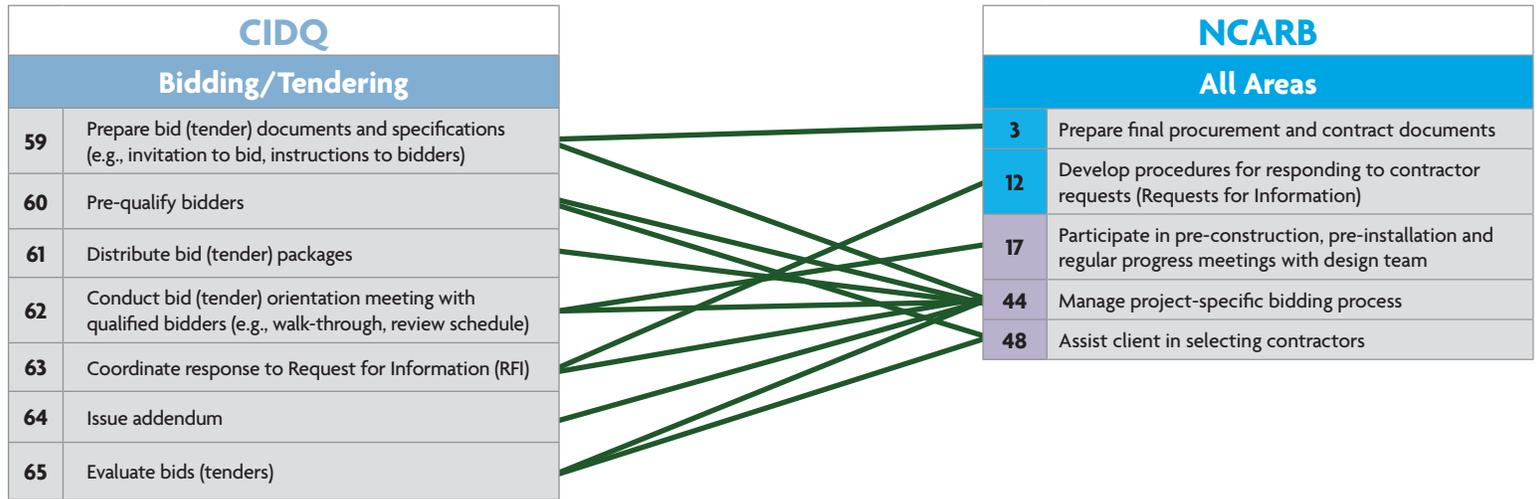


NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Task Analysis - CIDQ Bidding/Tendering

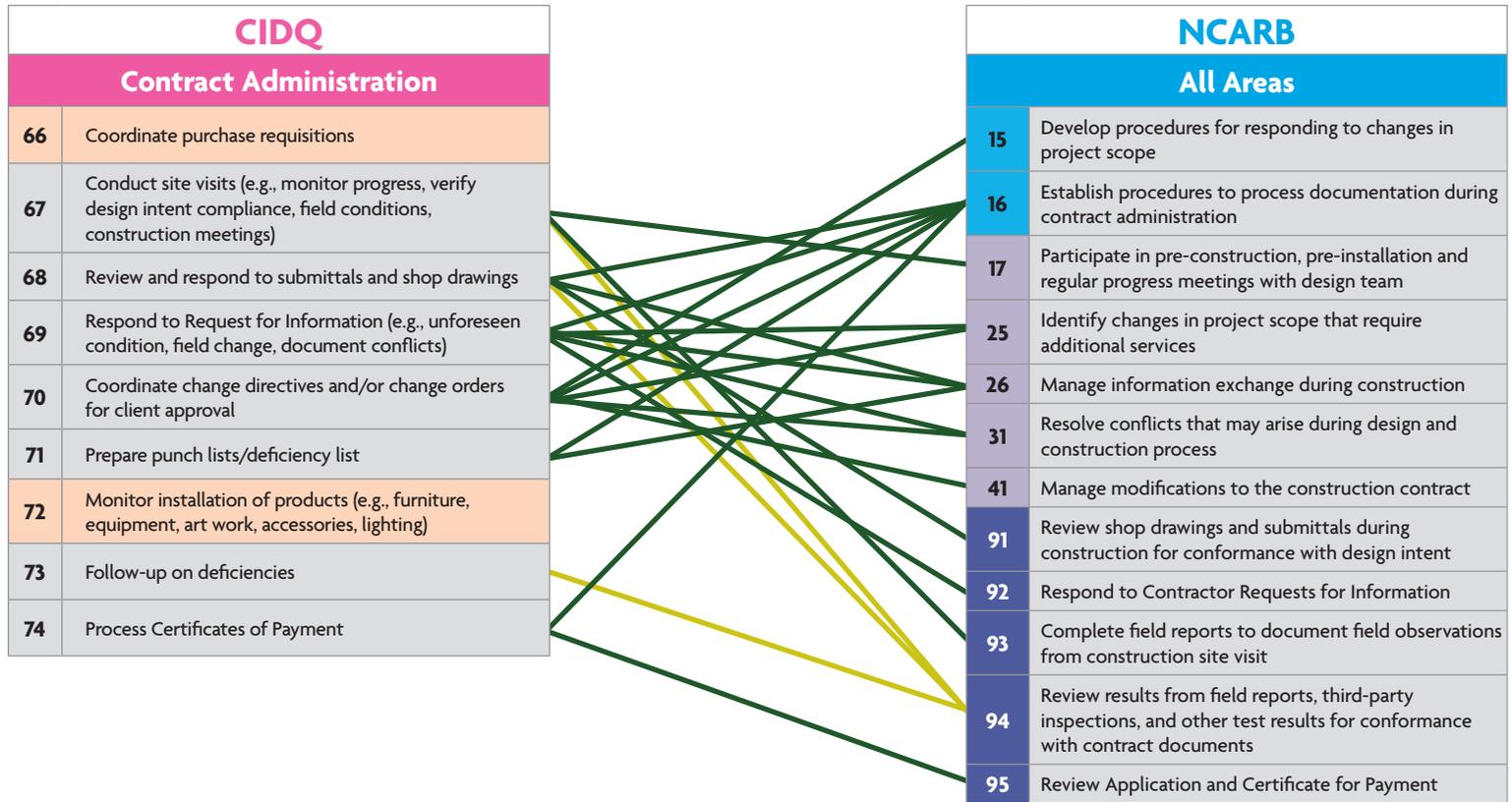


NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Task Analysis - CIDQ Contract Administration

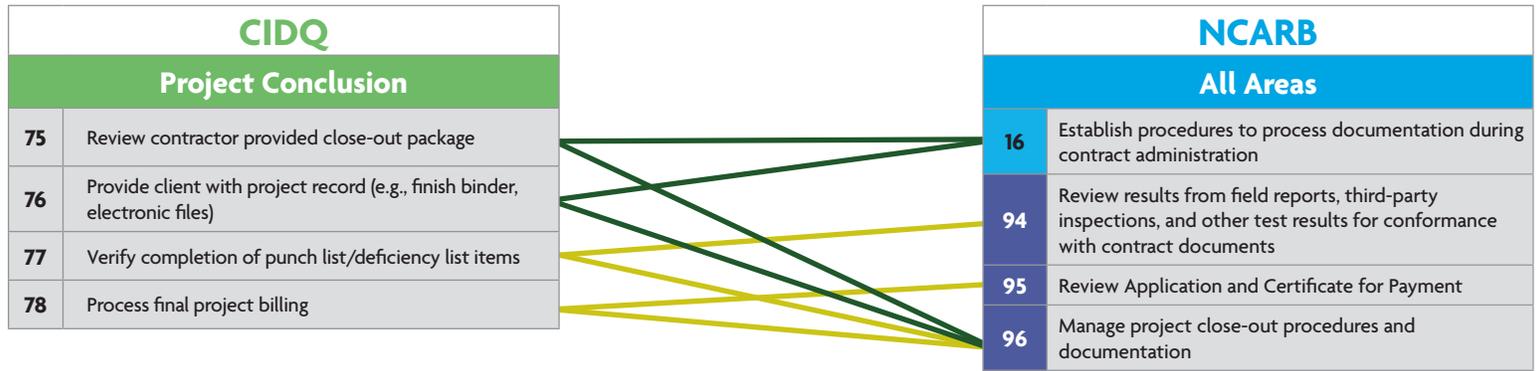


NCARB Practice Areas

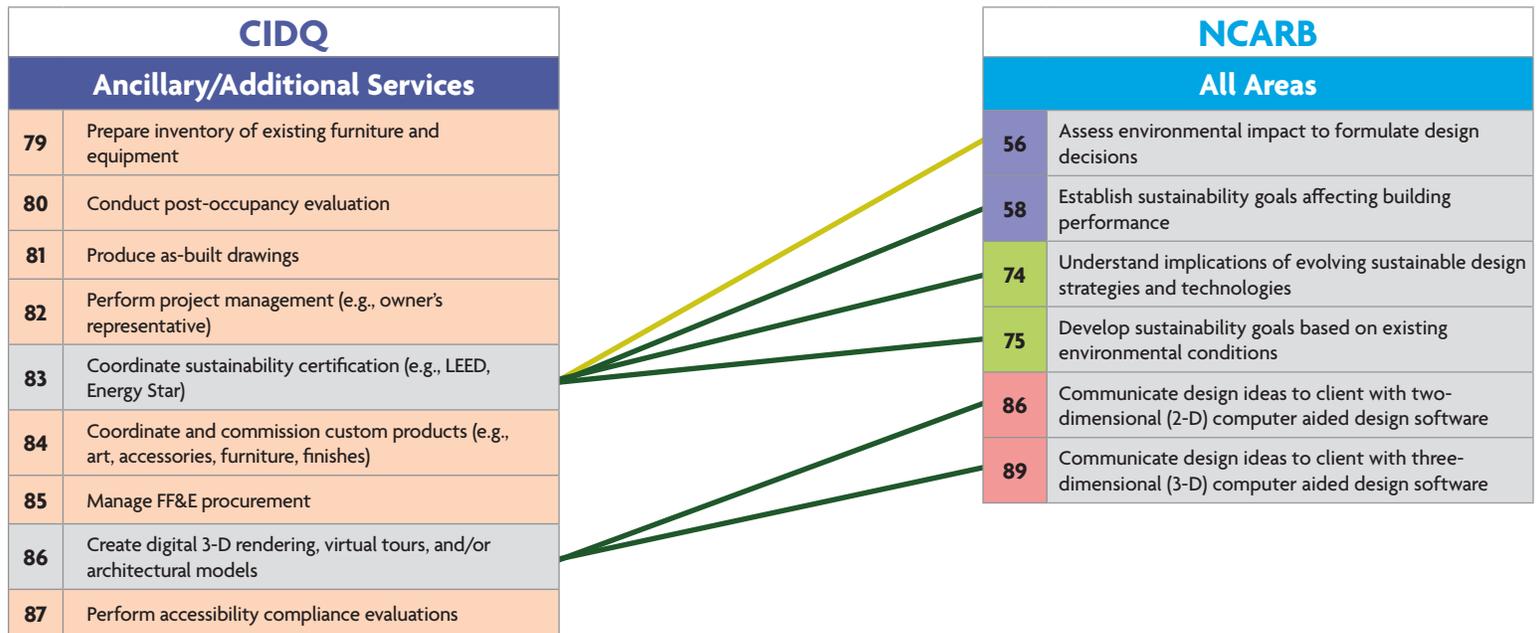
- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Task Analysis - CIDQ Project Conclusion



Task Analysis - CIDQ Ancillary/Additional Services



NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

APPENDICES

2. Examination Assessment Objectives Summaries

2.1 *ARE/NCIDQ* Exams: Objectives Similarity Summary

2.2 *NCIDQ/ARE* Exams: Objectives Similarity Summary

2.3 NCARB/CIDQ Assessment Objectives/Knowledge Areas Mapping

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APPENDIX 2.1: ARE/NCIDQ Exams: Objectives Similarity Summary

ARE Exam Objectives Compilation + Comparison Summary				Date: 02/16/2021
1	Definite Similarity	62/91	68.1%	
2	Some Similarity	14/91	15.4%	
3	No Similarity	15/91	16.5%	

	ARE/NCIDQ – Definite Objective Similarity
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ARE Objective Description #	ARE Objective Description	NCIDQ Knowledge Area #	NCIDQ Knowledge Area Description
1	Assess resources within the practice.	59	Business Licenses (e.g., sales and use tax, resale certificates)
		60	Accounting principles (office / business)
		61	Legal considerations (e.g., liabilities and forms of business)
		63	Professional Licensure, certification, & registration
2	Apply the regulations and requirements governing the work environment.	59	Business Licenses (e.g., sales and use tax, resale certificates)
		61	Legal considerations (e.g., liabilities and forms of business)
		62	Insurance
3	Apply ethical standards to comply with accepted principles within a given situation.	56	Budgeting principles and practices (project specific)
		61	Legal considerations (e.g., liabilities and forms of business)

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4	Apply appropriate Standard of Care within a given situation.	54	Scope of practice
		55	Proposals (e.g., time and fee estimation, RFP process, project scope)
		56	Budgeting principles and practices (project specific)
		57	Contracts
		58	Phases of a project
		59	Business Licenses (e.g., sales and use tax, resale certificates)
		60	Accounting principles (office / business)
		61	Legal considerations (e.g., liabilities and forms of business)
		62	Insurance
		63	Professional licensure, certification, registration
		64	Economic factors
6	Identify practice policies and methodologies for risk, legal exposure, and resolutions.	61	Legal considerations (e.g., liabilities and forms of business)
		62	Insurance
		63	Professional licensure, certification, registration
8	Analyze and determine response for client services requests.	55	Proposals (e.g., time and fee estimation, RFP process, project scope)
9	Analyze applicability of contract types and delivery methods.	57	Contracts
10	Determine potential risk and/or reward of a project and its impact on the practice.	56	Budgeting principles and practices (project specific)
		61	Legal considerations (e.g., liabilities and forms of business)
		64	Economic factors

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11	Analyze the impact of practice methodologies relative to structure and organization of the practice.	54	Scope of practice
		59	Business Licenses (e.g., sales and use tax, resale certificates)
		61	Legal considerations (e.g., liabilities and forms of business)
13	Determine criteria required to assemble team.	66	Project team dynamics
14	Assess criteria required to allocate and manage project resources.	67	Project budgeting / tracking during design phases
15	Develop and maintain project work plan.	65	Critical path (i.e., design milestones, sequencing)
		66	Project team dynamics
		67	Project budgeting / tracking during design phases
16	Determine criteria required to develop and maintain project schedule.	65	Critical path (i.e., design milestones, sequencing)
17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff.	68	Architects
		69	Engineers (e.g., electrical, structural, mechanical, civil)
		70	Specialty consultants (e.g., landscape, lighting A/V, acoustical, food service, graphics/signage)
		71	Contractors / construction managers
		72	Real estate professionals (e.g., realtor, landlord, leasing agent, developer, property owner)
		106	Project management (e.g., schedule, budget, quality control)
18	Evaluate and verify adherence to owner/architect agreement.	57	Contracts
19	Interpret key elements of, and verify adherence to architect/consultant agreement.	69	Engineers (e.g., electrical, structural, mechanical, civil)
		70	Specialty consultants (e.g., landscape, lighting A/V, acoustical, food service, graphics/signage)
21		69	Engineers (e.g., electrical, structural, mechanical, civil)

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	Interpret key elements of the owner/consultant agreement to integrate the consultant's work into the project.	70	Specialty consultants (e.g., landscape, lighting A/V, acoustical, food service, graphics/signage)
22	Evaluate compliance with construction budget.	67	Project budgeting / tracking during design phases
23	Evaluate and address change in scope of work and scope creep.	67	Project budgeting / tracking during design phases
25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.	78	Life safety (e.g., flammability, toxicity, slip resistance)
		94	Permit Requirements
		101	Universal/accessible design
		102	Life safety (e.g., egress, fire separation)
		103	Zoning and building use
		104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
		105	Square footage standards (e.g., code, BOMA, lease)
		128	Demonstrate understanding of universal / accessible design standards
26	Apply procedures required for adherence to laws and regulations relating to the project.	130	Integrate life safety elements into design such as paths of egress and fire separation
		78	Life safety (e.g., flammability, toxicity, slip resistance)
		94	Permit Requirements
		101	Universal/accessible design
		102	Life safety (e.g., egress, fire separation)
		103	Zoning and building use

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		104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
		105	Square footage standards (e.g., code, BOMA, lease)
		128	Demonstrate understanding of universal / accessible design standards
		130	Integrate life safety elements into design such as paths of egress and fire separation
27	Identify steps in maintaining project quality control and reducing risks and liabilities.	61	Legal considerations (e.g., liabilities and forms of business)
		62	Insurance
28	Perform quality control reviews of project documentation throughout life of the project.	106	Project management (e.g., schedule, budget, quality control)
		131	Ability to develop, analyze, and / or review a detailed floor plan including construction plans, dimensions, demolition plans
		132	Ability to develop, analyze, and / or review a finished plan for an interior space
		134	Ability to develop, analyze, and / or review a preliminary elevation, sections, and details including partition types and millwork
		135	Ability to develop, analyze, and / or review code required plans such as egress, accessibility, specialty codes
		136	Ability to develop, analyze, and / or review a reflected ceiling plan including a lighting plan
		137	Ability to develop, analyze, and / or review schedules
		138	Ability to develop, analyze, and / or review power, data, and communications plans

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29	Evaluate management of the design process to maintain integrity of the design objectives.	106	Project management (e.g., schedule, budget, quality control)
30	Evaluate site-specific environmental and socio-cultural opportunities.	12	Influences (environmental, social, psychological, cultural, aesthetic, global)
36	Evaluate relevant qualitative and quantitative attributes of a new or existing building as they relate to the program.	39	Site context (e.g., location, views, solar orientation)
39	Evaluate relevant qualitative and quantitative attributes of a new or existing building as they relate to the program.	40	Existing conditions
		118	Analyze relevant qualities of interior space as they relate to a program
40	Evaluate documentation, reports, assessments, and analyses to inform the building program.	37	Analysis tools (e.g., spreadsheets, site photographs, matrices, bubble diagrams)
		118	Analyze relevant qualities of interior space as they relate to a program
42	Assess spatial and functional relationships for the building program.	5	Bubble diagrams
		6	Adjacency matrices
		8	Stacking/zoning diagrams
		9	Block plans/square footage allocations
		39	Site context (e.g., location, views, solar orientation)
43	Recommend a preliminary project budget and schedule.	65	Critical path (i.e., design milestones, sequencing)
		67	Project budgeting / tracking during design phases
45	Analyze graphical representations regarding building analysis and building programming.	5	Bubble diagrams
		6	Adjacency matrices
		8	Stacking/zoning diagrams

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		9	Block plans/square footage allocations
		119	Determine appropriate block plans / square footage allocations
47	Determine sustainable principles to apply to design.	41	Sustainable attributes (e.g., indoor air quality, energy conservation, renewable resources)
51	Integrate multiple codes to a project design.	78	Life safety (e.g., flammability, toxicity, slip resistance)
		94	Permit Requirements
		96	Code required plans (e.g., egress, accessibility, specialty codes)
		101	Universal/accessible design
		102	Life safety (e.g., egress, fire separation)
		103	Zoning and building use
		104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
		105	Square footage standards (e.g., code, BOMA, lease)
		122	Demonstrate understanding of zoning and building use requirements
		128	Demonstrate understanding of universal / accessible design standards
		129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)
55		18	Building components (e.g., doors, windows, studs)
		102	Life safety (e.g., egress, fire separation)

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	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.	104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
57	Integrate building system in the project design.	19	Mechanical systems
		20	Electrical systems
		21	Lighting systems (e.g., zoning, sensors, daylighting)
		22	Plumbing systems
		23	Structural systems
		24	Fire protection systems
		25	Low voltage systems (e.g., data and communication, security, A/V)
		26	Acoustical system
		83	Building construction types (e.g., wood, steel, concrete)
		84	Building components (e.g., doors, windows, wall assemblies)
		85	Mechanical systems
		86	Electrical systems
		87	Lighting systems (e.g., zoning, sensors, daylighting)
		88	Plumbing systems
		89	Structural systems
58	Integrate program requirements into a project design.	118	Analyze relevant qualities of interior space as they relate to a program
		119	Determine appropriate block plans / square footage allocations

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		120	Identify necessary adjacencies and demonstrate appropriate use of bubble diagram, matrices and renderings
59	Integrate environmental and contextual conditions in the project design.	12	Influences (environmental, social, psychological, cultural, aesthetic, global)
61	Perform cost evaluation.	73	Cost estimating
		113	Value engineering
62	Evaluate cost considerations during the design process.	73	Cost estimating
63	Analyze the integration of building materials and systems.	18	Building components (e.g., doors, windows, studs)
		83	Building construction types (e.g., wood, steel, concrete)
		84	Building components (e.g., doors, windows, wall assemblies)
		85	Mechanical systems
		86	Electrical systems
		87	Lighting systems (e.g., zoning, sensors, daylighting)
		88	Plumbing systems
		89	Structural systems
		90	Fire protection systems
		91	Low voltage systems I(e.g., data and communication, security, A/V)
		92	Acoustical systems
		123	Demonstrate knowledge of and application of relevant consultant drawings such as MEP, structural, security and specialty consultants
66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.	21	Lighting systems (e.g., zoning, sensors, daylighting)
		126	Determine appropriate lighting systems for interior spaces such as zoning, sensors, and daylighting
		127	Integrate fire protection systems into design

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67	Determine how to detail the integration of multiple building systems and technologies.	123	Demonstrate knowledge of and application of relevant consultant drawings such as MEP, structural, security and specialty consultants
68	Coordinate mechanical, electrical, plumbing, structural, and specialty systems and technologies.	123	Demonstrate knowledge of and application of relevant consultant drawings such as MEP, structural, security and specialty consultants
71	Determine appropriate documentation of detailed building drawings within individual architectural systems.	42	Measuring conventions (e.g., scale, unit of measure, dimensioning)
		43	Construction drawing standards (e.g., line weights, hatching, symbols)
		44	Demolition plan
		45	Floor plan (e.g., partitions, construction, dimensions, enlarged)
		46	Reflected ceiling plan
		47	Lighting plan
		48	Power and communication plan
		51	Elevations, sections, and details (e.g., partition types, millwork)
72	Apply standards required to assemble a set of clear and coordinated construction documentation.	52	Schedules
		42	Measuring conventions (e.g., scale, unit of measure, dimensioning)
		43	Construction drawing standards (e.g., line weights, hatching, symbols)
		45	Floor plan (e.g., partitions, construction, dimensions, enlarged)
		46	Reflected ceiling plan
		47	Lighting plan
		48	Power and communication plan
		51	Elevations, sections, and details (e.g., partition types, millwork)
73	Determine impact of project changes on documentation requirements and method to	107	Forms (e.g., transmittals, change orders, bid/tender, addenda, bulletin, purchase orders)

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	communicate those changes to owner and design team.		
74	Identify and prioritize components required to write, maintain, and refine project manual.	53	Specifications (e.g., prescriptive, performance, and proprietary)
		79	Technical specifications
75	Identify and prioritize components required to write, maintain, and refine project specifications.	53	Specifications (e.g., prescriptive, performance, and proprietary)
		79	Technical specifications
		99	Specification types (e.g., prescriptive, performance and proprietary)
		100	Specification formats (e.g., divisions)
76	Coordinate specifications with construction documentation.	53	Specifications (e.g., prescriptive, performance, and proprietary)
		79	Technical specifications
		99	Specification types (e.g., prescriptive, performance and proprietary)
		100	Specification formats (e.g., divisions)
77	Determine adherence to building regulatory requirements (IBC) at details level.	96	Code required plans (e.g., egress, accessibility, specialty codes)
		101	Universal/accessible design
		102	Life safety (e.g., egress, fire separation)
		103	Zoning and building use
		104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
		105	Square footage standards (e.g., code, BOMA, lease)
		128	Demonstrate understanding of universal / accessible design standards
		129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)

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		130	Integrate life safety elements into design such as paths of egress and fire separation
78	Determine adherence to specialty regulatory requirements at the detail level.	96	Code required plans (e.g., egress, accessibility, specialty codes)
		101	Universal/accessible design
		102	Life safety (e.g., egress, fire separation)
		103	Zoning and building use
		104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
		105	Square footage standards (e.g., code, BOMA, lease)
		128	Demonstrate understanding of universal / accessible design standards
		130	Integrate life safety elements into design such as paths of egress and fire separation
81	Analyze criteria for selecting contractors.	71	Contractors / construction managers
82	Analyze aspects of contract or design to adjust project costs.	106	Project management (e.g., schedule, budget, quality control)
		107	Forms (e.g., transmittals, change orders, bid/tender, addenda, bulletin, purchase orders)
		113	Value engineering
83	Evaluate the architect's role during construction activities.	106	Project management (e.g., schedule, budget, quality control)
84	Evaluate construction conformance with contract documents, codes, regulations, and sustainability requirements.	106	Project management (e.g., schedule, budget, quality control)
		108	Punch list/deficiency lists
		109	Site visits and field reports

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		110	Project meetings / meeting management / meeting protocol and minutes
		111	Shop drawings and submittals
85	Determine construction progress.	106	Project management (e.g., schedule, budget, quality control)
		109	Site visits and field reports
		110	Project meetings / meeting management / meeting protocol and minutes
86	Determine appropriate additional information to supplement contract documents.	106	Project management (e.g., schedule, budget, quality control)
		107	Forms (e.g., transmittals, change orders, bid/tender, addenda, bulletin, purchase orders)
87	Evaluate submittals including shop drawings, samples, mock-ups, product data, and test results.	106	Project management (e.g., schedule, budget, quality control)
		107	Forms (e.g., transmittals, change orders, bid/tender, addenda, bulletin, purchase orders)
		111	Shop drawings and submittals
		112	Construction mock-ups
88	Evaluate the contractor's application for payment.	106	Project management (e.g., schedule, budget, quality control)
		115	Contractor pay applications
89	Evaluate responses to non-conformance with contract documents.	106	Project management (e.g., schedule, budget, quality control)
		108	Punch list/deficiency lists
90	Apply procedural concepts to complete closeout activities.	106	Project management (e.g., schedule, budget, quality control)
		116	Project close-out
91	Evaluate building design and performance.	106	Project management (e.g., schedule, budget, quality control)
		117	Post-occupancy evaluation

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ARE/NCIDQ – Some Objective Similarity			
ARE Objective Description #	ARE Objective Description	NCIDQ Knowledge Area #	NCIDQ KA Description
7	Select and apply practice strategies for given business situation and policy.	54	Scope of practice
		55	Proposals (e.g., time and fee estimation, RFP process, project scope)
		57	Contracts
		59	Business Licenses (e.g., sales and use tax, resale certificates)
		60	Accounting principles (office / business)
		61	Legal considerations (e.g., liabilities and forms of business)
		62	Insurance
		63	Professional Licensure/Certification
20	Interpret key elements of the owner/contractor agreement.	57	Contracts
		71	Contractors / construction managers
24	Evaluate project documentation to insure it supports the specified delivery method.	57	Contracts
		65	Critical path (i.e., design milestones, sequencing)
		98	Consultant drawings (e.g., MEP, structural, security, specialty consultants)
		99	Specification types (e.g., prescriptive, performance and proprietary)

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		100	Specification formats (e.g., divisions)
		106	Project management (e.g., schedule, budget, quality control)
32	Determine optimal use of onsite resources by incorporating sustainability principles.	41	Sustainable attributes (e.g., indoor air quality, energy conservation, renewable resources)
		104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
33	Identify relevant code requirements for building and site types.	83	Building construction types (e.g., wood, steel, concrete)
		128	Demonstrate understanding of universal / accessible design standards
		129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)
		130	Integrate life safety elements into design such as paths of egress and fire separation
34	Identify relevant zoning and land use requirements.	103	Zoning and building use
35	Identify relevant local and site-specific requirements.	94	Permit Requirements
		103	Zoning and building use
		122	Demonstrate understanding of zoning and building use requirements
38	Analyze graphical representations regarding site analysis and site programming.	39	Site context (e.g., location, views, solar orientation)
41	Identify and prioritize components of the building program.	6	Adjacency matrices
		9	Block plans/square footage allocations

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		37	Analysis tools (e.g., spreadsheets, site photographs, matrices, bubble diagrams)
		118	Analyze relevant qualities of interior space as they relate to a program
		119	Determine appropriate block plans / square footage allocations
		120	Identify necessary adjacencies and demonstrate appropriate use of bubble diagram, matrices, and renderings
50	Apply building codes to building design.	101	Universal/accessible design
		102	Life safety (e.g., egress, fire separation)
		103	Zoning and building use
		104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
		105	Square footage standards (e.g., code, BOMA, lease)
		128	Demonstrate understanding of universal / accessible design standards
		129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)
		130	Integrate life safety elements into design such as paths of egress and fire separation
54	Determine special systems such as acoustics, communications, lighting, security, conveying, and fire suppression.	92	Acoustical systems
		138	Ability to develop, analyze, and / or review power, data, and communications plans
56	Determine building configuration.	9	Block plans/square footage allocations
		10	Floor plans

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		119	Determine appropriate block plans / square footage allocations
		120	Identify necessary adjacencies and demonstrate appropriate use of bubble diagram, matrices, and renderings
		122	Demonstrate understanding of zoning and building use requirements
69	Determine appropriate documentation of building design.	42	Measuring conventions (e.g., scale, unit of measure, dimensioning)
		43	Construction drawing standards (e.g., line weights, hatching, symbols)
		44	Demolition plan
		45	Floor plan (e.g., partitions, construction, dimensions, enlarged)
		46	Reflected ceiling plan
		47	Lighting plan
		50	Finish plan
		51	Elevations, sections, and details (e.g., partition types, millwork)
		52	Schedules
		53	Specifications (e.g., prescriptive, performance, and proprietary)
		131	Ability to develop, analyze, and / or review a detailed floor plan including construction plans, dimensions, demolition plans
		132	Ability to develop, analyze, and / or review a finished plan for an interior space
		133	Ability to develop, analyze, and / or review a detailed furniture plan
		134	Ability to develop, analyze, and / or review a preliminary elevation, sections, and details including partition types and millwork
135	Ability to develop, analyze, and / or review code required plans such as egress, accessibility, specialty codes		

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79	Analyze construction cost estimates to confirm alignment with project design.	136	Ability to develop, analyze, and / or review a reflected ceiling plan including a lighting plan
		137	Ability to develop, analyze, and / or review schedules
		138	Ability to develop, analyze, and / or review power, data, and communications plans
79	Analyze construction cost estimates to confirm alignment with project design.	73	Cost estimating

	ARE/NCIDQ – NO Similarity
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ARE Objective Description #	ARE Objective Description
5	Evaluate the financial well-being of the practice.
12	Evaluate design, coordination, and documentation methodologies for the practice.
31	Evaluate site-specific environmental constraints.
37	Synthesize site reports with other documentation and analysis.
44	Identify alternatives for building and structural systems for given programmatic requirements, preliminary budget, and schedule.
46	Determine Location of Building and site improvements based on site analysis.
48	Determine impact of neighborhood context on the project design.
49	Apply zoning and environmental regulations to site and building design.

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52	Determine mechanical, electrical, and plumbing designs.
53	Determine structural systems.
60	Evaluate design alternatives based on the program.
64	Determine the size of mechanical, electrical, and plumbing systems and components to meet the project goals.
65	Determine the size of structural systems to meet project goals.
70	Determine appropriate documentation of site features.
80	Interpret the architect's role and responsibilities during preconstruction, based on delivery method.

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APPENDICES

2.2 NCIDQ/ARE Exams: Objectives Similarity Summary

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APPENDIX 2.2: NCIDQ/ARE Exams: Objectives Similarity Summary

NCIDQ Exam Objectives Compilation + Comparison Summary				Date: 02/16/2021
Definite Similarity	97/138	70.3%		
Some Similarity	18/138	13.0%		
No Similarity	23/138	16.7%		

NCIDQ/ARE - Definite Objective Similarity
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NCIDQ Knowledge Area #	NCIDQ Knowledge Area Description	ARE Objective Description #	ARE Objective Description
5	Bubble diagrams	42	Assess spatial and functional relationships for the building program.
		45	Analyze graphical representations regarding building analysis and building programming.
6	Adjacency matrices	41	Identify and prioritize components of the building program.
		42	Assess spatial and functional relationships for the building program.
		45	Analyze graphical representations regarding building analysis and building programming.
8	Stacking/zoning diagrams	42	Assess spatial and functional relationships for the building program.

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		45	Analyze graphical representations regarding building analysis and building programming.
9	Block plans/square footage allocations	41	Identify and prioritize components of the building program.
		42	Assess spatial and functional relationships for the building program.
		45	Analyze graphical representations regarding building analysis and building programming.
12	Influences (environmental, social, psychological, cultural, aesthetic, global)	30	Evaluate site-specific environmental and socio-cultural opportunities.
		59	Integrate environmental and contextual conditions in the project design.
18	Building components (e.g., doors, windows, studs)	55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
		63	Analyze the integration of building materials and systems.
19	Mechanical systems	57	Integrate building systems in the project design.
20	Electrical systems	57	Integrate building systems in the project design.
21	Lighting systems (e.g., zoning, sensors, daylighting)	57	Integrate building systems in the project design.
		66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
22	Plumbing systems	57	Integrate building systems in the project design.

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23	Structural systems	57	Integrate building systems in the project design.
24	Fire protection systems	57	Integrate building systems in the project design.
25	Low voltage systems (e.g., data and communication, security, A/V)	57	Integrate building systems in the project design.
26	Acoustical system	57	Integrate building systems in the project design.
37	Analysis tools (e.g., spreadsheets, site photographs, matrices, bubble diagrams)	40	Evaluate documentation, reports, assessments, and analyses to inform the building program.
39	Site context (e.g., location, views, solar orientation)	42	Assess spatial and functional relationships for the building program.
40	Existing conditions	39	Evaluate relevant qualitative and quantitative attributes of a new or existing building as they relate to the program.
41	Sustainable attributes (e.g., indoor air quality, energy conservation, renewable resources)	47	Determine sustainable principles to apply to design.
42	Measuring conventions (e.g., scale, unit of measure, dimensioning)	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation.
43	Construction drawing standards (e.g., line weights, hatching, symbols)	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation.
45	Floor plan (e.g., partitions, construction, dimensions, enlarged)	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.

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46	Reflected ceiling plan	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation.
47	Lighting plan	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation.
48	Power and communication plan	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation.
51	Elevations, sections, and details (e.g., partition types, millwork)	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation.
52	Schedules	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation.

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53	Specifications (e.g., prescriptive, performance, and proprietary)	74	Identify and prioritize components required to write, maintain, and refine project manual.
		75	Identify and prioritize components required to write, maintain, and refine project specifications.
		76	Coordinate specifications with construction documentation.
54	Scope of practice	4	Apply appropriate Standard of Care within a given situation. (U/A)
55	Proposals (e.g., time and fee estimation, RFP process, project scope)	4	Apply appropriate Standard of Care within a given situation. (U/A)
		8	Analyze and determine response for client services requests. (A/E)
56	Budgeting principles and practices (project specific)	3	Apply ethical standards to comply with accepted principles within a given situation. (U/A)
		4	Apply appropriate Standard of Care within a given situation. (U/A)
57	Contracts	4	Apply appropriate Standard of Care within a given situation. (U/A)
		9	Analyze applicability of contract types and delivery methods. (A/E)
		18	Evaluate and verify adherence to owner/architect agreement.
58	Phases of a project	4	Apply appropriate Standard of Care within a given situation. (U/A)
59	Business Licenses (e.g., sales and use tax, resale certificates)	2	Apply the regulations and requirements governing the work environment. (U/A)

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		4	Apply appropriate Standard of Care within a given situation. (U/A)
60	Accounting principles (office / business)	4	Apply appropriate Standard of Care within a given situation. (U/A)
61	Legal considerations (e.g., liabilities and forms of business)	2	Apply the regulations and requirements governing the work environment. (U/A)
		3	Apply ethical standards to comply with accepted principles within a given situation. (U/A)
		4	Apply appropriate Standard of Care within a given situation. (U/A)
		6	Identify practice policies and methodologies for risk, legal exposure, and resolutions. (U/A)
		27	Identify steps in maintaining project quality control and reducing risks and liabilities.
62	Insurance	2	Apply the regulations and requirements governing the work environment. (U/A)
		4	Apply appropriate Standard of Care within a given situation. (U/A)
		6	Identify practice policies and methodologies for risk, legal exposure, and resolutions. (U/A)
		27	Identify steps in maintaining project quality control and reducing risks and liabilities.
63	Professional licensure, certification, registration	4	Apply appropriate Standard of Care within a given situation. (U/A)
		6	Identify practice policies and methodologies for risk, legal exposure, and resolutions. (U/A)

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64	Economic factors	4	Apply appropriate Standard of Care within a given situation. (U/A)
65	Critical path (i.e., design milestones, sequencing)	15	Develop and maintain project work plan. (U/A)
		16	Determine criteria required to develop and maintain project schedule. (A/E)
		43	Recommend a preliminary project budget and schedule.
66	Project team dynamics	13	Determine criteria required to assemble team. (U/A)
		15	Develop and maintain project work plan. (U/A)
67	Project budgeting / tracking during design phases	14	Assess criteria required to allocate and manage project resources. (A/E)
		15	Develop and maintain project work plan. (U/A)
		22	Evaluate compliance with construction budget.
		23	Evaluate and address change in scope of work and scope creep.
68	Architects	43	Recommend a preliminary project budget and schedule.
		17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff. (U/A)
69	Engineers (e.g., electrical, structural, mechanical, civil)	17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff. (U/A)
		19	Interpret key elements of and verify adherence to architect/consultant agreement.
		21	Interpret key elements of the owner/consultant agreement to integrate the consultant's work into the project.

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70	Specialty consultants (e.g., landscape, lighting A/V, acoustical, food service, graphics/signage)	17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff. (U/A)
		19	Interpret key elements of and verify adherence to architect/consultant agreement.
		21	Interpret key elements of the owner/consultant agreement to integrate the consultant's work into the project.
71	Contractors / construction managers	17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff. (U/A)
		81	Analyze criteria for selecting contractors.
72	Real estate professionals (e.g., realtor, landlord, leasing agent, developer, property owner)	17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff. (U/A)
73	Cost estimating	61	Perform cost evaluation.
		62	Evaluate cost considerations during the design process.
78	Life safety (e.g., flammability, toxicity, slip resistance)	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design.
79	Technical specifications	74	Identify and prioritize components required to write, maintain, and refine project manual.
		75	Identify and prioritize components required to write, maintain, and refine project specifications.

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		76	Coordinate specifications with construction documentation.
83	Building construction types (e.g., wood, steel, concrete)	57	Integrate building systems in the project design.
		63	Analyze the integration of building materials and systems.
84	Building components (e.g., doors, windows, wall assemblies)	57	Integrate building systems in the project design.
		63	Analyze the integration of building materials and systems.
85	Mechanical systems	57	Integrate building systems in the project design.
		63	Analyze the integration of building materials and systems.
86	Electrical systems	57	Integrate building systems in the project design.
		63	Analyze the integration of building materials and systems
87	Lighting systems (e.g., zoning, sensors, daylighting)	57	Integrate building systems in the project design.
		63	Analyze the integration of building materials and systems.
88	Plumbing systems	57	Integrate building systems in the project design
		63	Analyze the integration of building materials and systems.
89	Structural systems	57	Integrate building systems in the project design.
		63	Analyze the integration of building materials and systems.
90	Fire protection systems	57	Integrate building systems in the project design.

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		63	Analyze the integration of building materials and systems.
91	Low voltage systems I (e.g., data and communication, security, A/V)	57	Integrate building systems in the project design.
		63	Analyze the integration of building materials and systems.
92	Acoustical systems	57	Integrate building systems in the project design.
		63	Analyze the integration of building materials and systems.
93	Sequencing of work (e.g. plumbing before drywall)	57	Integrate building systems in the project design.
94	Permit Requirements	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design.
96	Code required plans (e.g., egress, accessibility, specialty codes)	51	Integrate multiple codes to a project design.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.
99	Specification types (e.g., prescriptive, performance and proprietary)	75	Identify and prioritize components required to write, maintain, and refine project specifications.
		76	Coordinate specifications with construction documentation.
100	Specification formats (e.g., divisions)	75	Identify and prioritize components required to write, maintain, and refine project specifications.

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		76	Coordinate specifications with construction documentation.
101	Universal/accessible design	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.
102	Life safety (e.g., egress, fire separation)	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design.
		55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.

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103	Zoning and building use	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.
104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design
		55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
105	Square footage standards (e.g., code, BOMA, lease)	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.

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		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.
106	Project management (e.g., schedule, budget, quality control)	17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff. (U/A)
		28	Perform quality control reviews of project documentation throughout life of the project.
		29	Evaluate management of the design process to maintain integrity of the design objectives.
		82	Analyze aspects of contract or design to adjust project costs.
		83	Evaluate the architect's role during construction activities.
		84	Evaluate construction conformance with contract documents, codes, regulations, and sustainability requirements.
		85	Determine construction progress.
		86	Determine appropriate additional information to supplement contract documents.
		87	Evaluate submittals including shop drawings, samples, mock-ups, product data, and test results.
		88	Evaluate the contractor's application for payment.

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		89	Evaluate responses to non-conformance with contract documents.
		90	Apply procedural concepts to complete closeout activities.
		91	Evaluate building design and performance.
107	Forms (e.g., transmittals, change orders, bid/tender, addenda, bulletin, purchase orders)	82	Analyze aspects of contract or design to adjust project costs.
		86	Determine appropriate additional information to supplement contract documents.
		87	Evaluate submittals including shop drawings, samples, mock-ups, product data, and test results.
108	Punch list/deficiency lists	84	Evaluate construction conformance with contract documents, codes, regulations, and sustainability requirements.
		89	Evaluate responses to non-conformance with contract documents.
109	Site visits and field reports	84	Evaluate construction conformance with contract documents, codes, regulations, and sustainability requirements.
		85	Determine construction progress.
110	Project meetings / meeting management / meeting protocol and minutes	84	Evaluate construction conformance with contract documents, codes, regulations, and sustainability requirements.
		85	Determine construction progress.

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111	Shop drawings and submittals	84	Evaluate construction conformance with contract documents, codes, regulations, and sustainability requirements.
		87	Evaluate submittals including shop drawings, samples, mock-ups, product data, and test results.
112	Construction mock-ups	87	Evaluate submittals including shop drawings, samples, mock-ups, product data, and test results.
113	Value engineering	61	Perform cost evaluation.
		82	Analyze aspects of contract or design to adjust project costs.
115	Contractors pay applications	88	Evaluate the contractor's application for payment.
116	Project close-out	90	Apply procedural concepts to complete closeout activities.
117	Post-occupancy evaluation	91	Evaluate building design and performance.
118	Analyze relevant qualities of interior space as they relate to a program	39	Evaluate relevant qualitative and quantitative attributes of a new or existing building as they relate to the program.
		40	Evaluate documentation, reports, assessments, and analyses to inform the building program.
		58	Integrate program requirements into a project design.
119	Determine appropriate block plans / square footage allocations	45	Analyze graphical representations regarding building analysis and building programming.
		58	Integrate program requirements into a project design.
120	Identify necessary adjacencies and demonstrate appropriate use of bubble diagram, matrices, and renderings	58	Integrate program requirements into a project design.

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122	Demonstrate understanding of zoning and building use requirements	51	Integrate multiple codes to a project design.
123	Demonstrate knowledge of and application of relevant consultant drawings such as MEP, structural, security and specialty consultants	63	Analyze the integration of building materials and systems.
		67	Determine how to detail the integration of multiple building systems and technologies.
		68	Coordinate mechanical, electrical, plumbing, structural, and specialty systems and technologies.
126	Determine appropriate lighting systems for interior spaces such as zoning, sensors, and daylighting	66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
127	Integrate fire protection systems into design	66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
128	Demonstrate understanding of universal / accessible design standards	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.
129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)	51	Integrate multiple codes to a project design.

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		77	Determine adherence to building regulatory requirements (IBC) at details level.
130	Integrate life safety elements into design such as paths of egress and fire separation	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		51	Integrate multiple codes to a project design.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.
131	Ability to develop, analyze, and / or review a detailed floor plan including construction plans, dimensions, demolition plans	28	Perform quality control reviews of project documentation throughout life of the project.
132	Ability to develop, analyze, and / or review a finished plan for an interior space	28	Perform quality control reviews of project documentation throughout life of the project.
134	Ability to develop, analyze, and / or review a preliminary elevation, sections, and details including partition types and millwork	28	Perform quality control reviews of project documentation throughout life of the project.
135	Ability to develop, analyze, and / or review code required plans such as egress, accessibility, specialty codes	28	Perform quality control reviews of project documentation throughout life of the project.
136	Ability to develop, analyze, and / or review a reflected ceiling plan including a lighting plan	28	Perform quality control reviews of project documentation throughout life of the project.
137	Ability to develop, analyze, and / or review schedules	28	Perform quality control reviews of project documentation throughout life of the project.

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138	Ability to develop, analyze, and / or review power, data, and communications plans	28	Perform quality control reviews of project documentation throughout life of the project.
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	NCIDQ/ARE – Some Objective Similarity
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NCIDQ Knowledge Area #	NCIDQ KA Description	ARE Objective Description #	ARE Objective Description
2	Models (e.g., physical, virtual)	42	Assess spatial and functional relationships for the building program.
3	Rendering (e.g., 2-D, perspective)	58	Integrate program requirements into a project design.
		60	Evaluate design alternatives based on the program.
10	Floor plans	56	Determine building configuration.
27	Life safety (e.g., flammability, toxicity, slip resistance)	2	Apply the regulations and requirements governing the work environment. (U/A)
		25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
		26	Apply procedures required for adherence to laws and regulations relating to the project.
		50	Apply building codes to building design.
		51	Integrate multiple codes to a project design.

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		54	Determine special systems such as acoustics, communications, lighting, security, conveying, and fire suppression.
		55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
		66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.
29	Acoustics	63	Analyze the integration of building materials and systems.
		66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
34	Lighting (e.g., light sources, fixtures, calculations, distribution color rendering)	66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
44	Demolition plan	69	Determine appropriate documentation of building design.
		71	Determine appropriate documentation of detailed building drawings within individual architectural systems.

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50	Finish plan	71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation
74	Product components (e.g., types, assembly, methods)	44	Identify alternatives for building and structural systems for given programmatic requirements, preliminary budget, and schedule.
		55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
		57	Integrate building systems in the project design
		63	Analyze the integration of building materials and systems.
		71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
75	Material detail drawings (e.g., custom products)	55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
		63	Analyze the integration of building materials and systems.
		69	Determine appropriate documentation of building design.

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		71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
76	Lead time (e.g., manufacturing time, delivery / installation)	16	Determine criteria required to develop and maintain project schedule. (A/E)
77	Installation	55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
		63	Analyze the integration of building materials and systems.
80	Maintenance documents (e.g., warranties, manuals)	74	Identify and prioritize components required to write, maintain, and refine project manual.
95	Cover Sheet (e.g., General Conditions and Notes, drawing index)	72	Apply standards required to assemble a set of clear and coordinated construction documentation.
97	Elevations, sections, and details (e.g., partition types, millwork)	72	Apply standards required to assemble a set of clear and coordinated construction documentation.
98	Consultant drawings (e.g., MEP, structural, security, specialty consultants)	12	Evaluate design, coordination, and documentation methodologies for the practice. (A/E)
		28	Perform quality control reviews of project documentation throughout life of the project.
		66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
		68	Coordinate mechanical, electrical, plumbing, structural, and specialty systems and technologies.

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		72	Apply standards required to assemble a set of clear and coordinated construction documentation.
124	Demonstrate knowledge of and application of relevant building components such as doors, windows, and wall assemblies	55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
		66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
		71	Determine appropriate documentation of detailed building drawings within individual architectural systems.
125	Demonstrate knowledge of and application of relevant building construction types such as wood, steel, and concrete	33	Identify relevant code requirements for building and site types.

	NCIDQ/ARE – No Objective Similarity
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NCIDQ Knowledge Area #	NCIDQ Knowledge Area Description
1	Functional parti diagrams
4	Material finish presentations (e.g., boards, binders, digital)
7	Charts (e.g., flow chart, Gantt chart)
11	Mock-ups and prototypes
13	Human factors (e.g., ergonomic, anthropometrics, proxemics)

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14	Sensory considerations (e.g., acoustics, lighting, visual stimuli, color theory, scent, tactile)
15	Universal Design
16	Special population considerations (e.g., Aging in Place, pediatric, special needs)
17	Building construction types (e.g., wood, steel, concrete)
28	Textiles
30	Wall treatments
31	Floor coverings
32	Ceiling treatments
33	Window treatments
35	Furniture and equipment (e.g., types, uses, space needs)
36	Research methods (interviewing, surveying, case studies, benchmarking/precedent)
38	Project context (e.g., space use, culture, client preference)
49	Furniture plan
81	Existing FF&E inventory documentation
82	Procurement procedures (e.g., purchase orders, prepayment requirements)
114	Project accounting (e.g., payment schedules, invoices)
121	Assess human factors related to the interior space (e.g., ergonomic, anthropometrics, proxemics)
133	Ability to develop, analyze, and / or review a detailed furniture plan

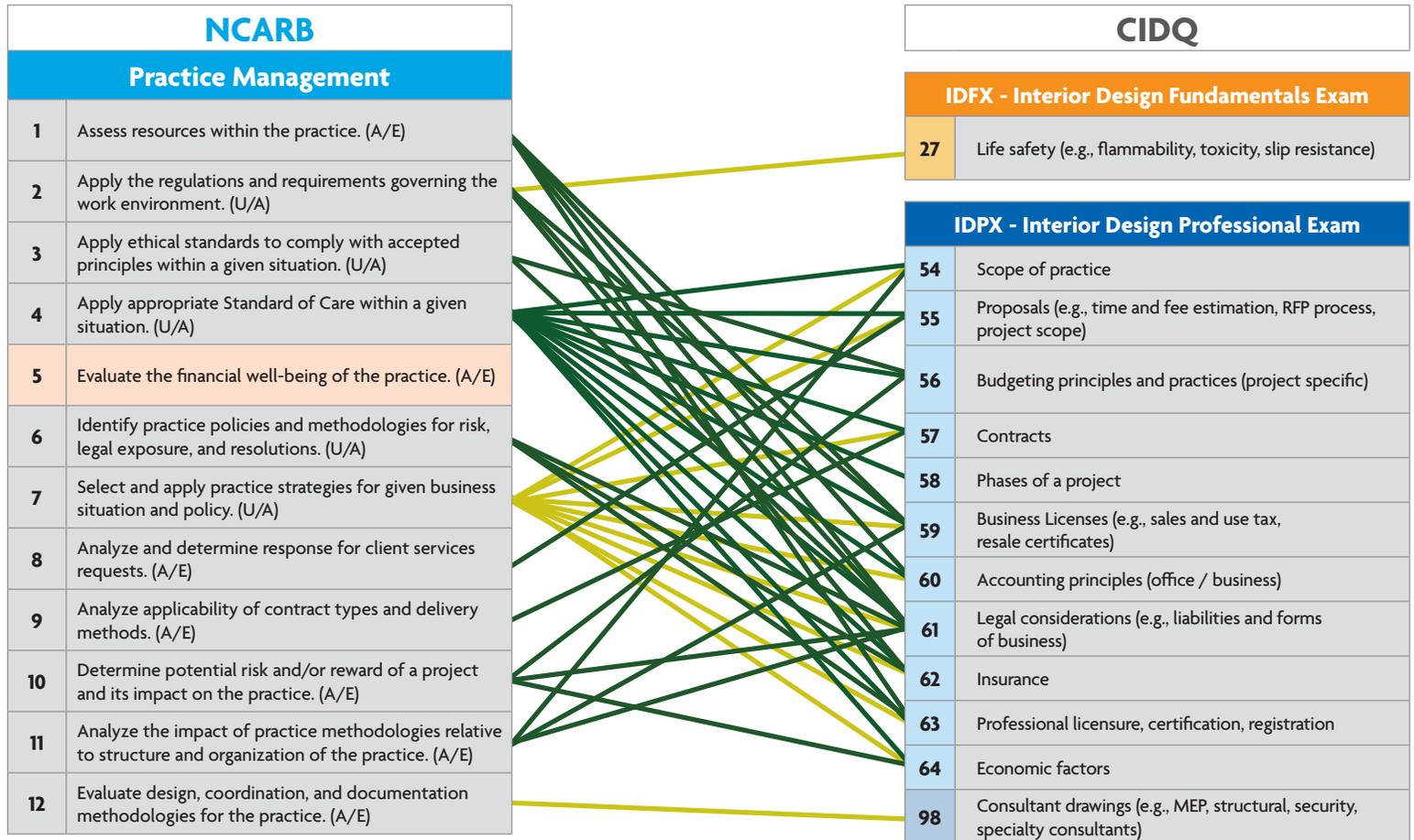
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APPENDICES

2.3 Summary of Preliminary Assessment Objectives Mapping

Please note: These charts have been created to reflect the preliminary mapping exercise performed by the two work groups. A small number of correlations were reassigned in the final review.

Assessment Objectives Comparison-NCARB Practice Management



IDFX Interior Design Fundamentals Exam Knowledge Areas

 Furniture Fixtures Equipment Lighting

IDPX Interior Design Professional Exam Knowledge Areas

 Professional and Business Practice

 Definite Similarity

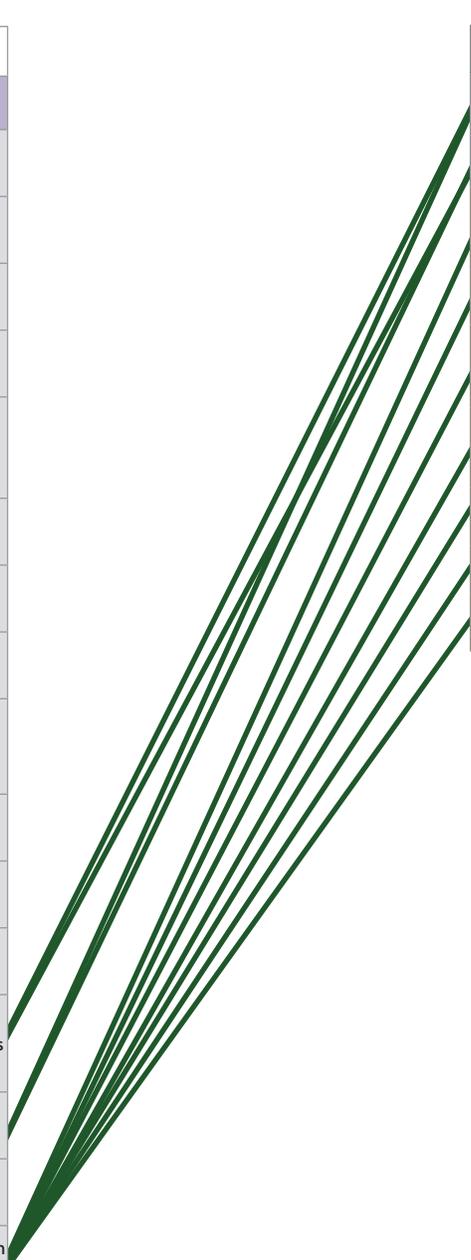
 Some Similarity

 No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Project Management

NCARB	
Project Management	
13	Determine criteria required to assemble team. (U/A)
14	Assess criteria required to allocate and manage project resources. (A/E)
15	Develop and maintain project work plan. (U/A)
16	Determine criteria required to develop and maintain project schedule. (A/E)
17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff. (U/A)
18	Evaluate and verify adherence to owner/architect agreement.
19	Interpret key elements of, and verify adherence to architect/consultant agreement.
20	Interpret key elements of the owner/contractor agreement.
21	Interpret key elements of the owner/consultant agreement to integrate the consultant's work into the project.
22	Evaluate compliance with construction budget.
23	Evaluate and address change in scope of work and scope creep.
24	Evaluate project documentation to insure it supports the specified delivery method.
25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
26	Apply procedures required for adherence to laws and regulations relating to the project.
27	Identify steps in maintaining project quality control and reducing risks and liabilities.
28	Perform quality control reviews of project documentation throughout life of the project.
29	Evaluate management of the design process to maintain integrity of the design objectives.

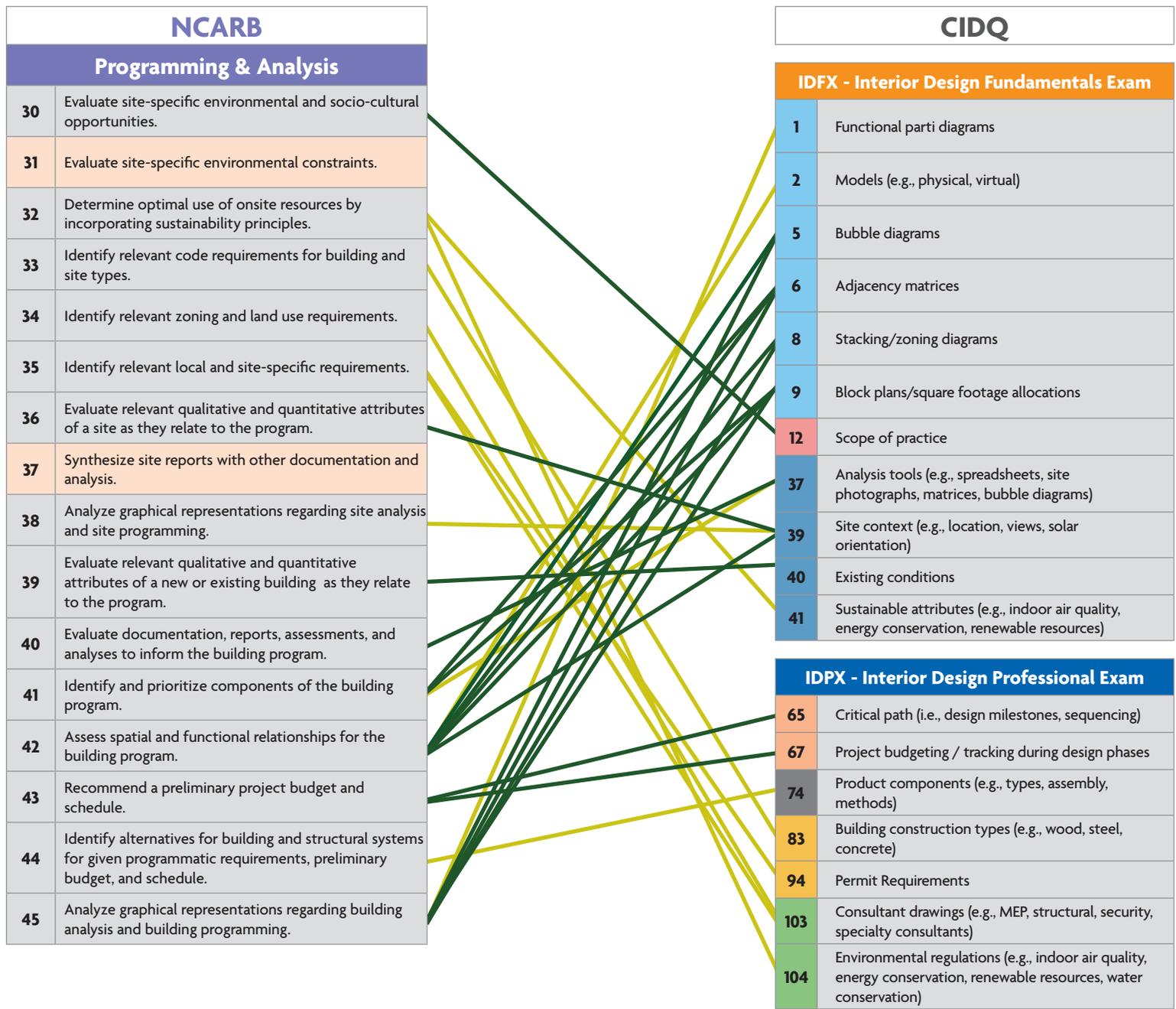
PRAC - Practicum Exam	
128	Demonstrate understanding of universal / accessible design standards
130	Integrate life safety elements into design such as paths of egress and fire separation
131	Ability to develop, analyze, and / or review a detailed floor plan including construction plans, dimensions, demolition plans
132	Ability to develop, analyze, and / or review a finished plan for an interior space
134	Ability to develop, analyze, and / or review a preliminary elevation, sections, and details including partition types and millwork
135	Ability to develop, analyze, and / or review code required plans such as egress, accessibility, specialty codes
136	Ability to develop, analyze, and / or review a reflected ceiling plan including a lighting plan
137	Ability to develop, analyze, and / or review schedules
138	Ability to develop, analyze, and / or review power, data, and communications plans



PRAC - Practicum Exam Knowledge Areas	
	Codes and Standards
	Contract Documents 40%

	Definite Similarity
	Some Similarity
	No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Programming & Analysis



IDFX Interior Design Fundamentals Exam Knowledge Areas

- Design Communication
- Human Behavior / Design Environment
- Programming and Site Analysis

IDPX Interior Design Professional Exam Knowledge Areas

- Project Coordination
- Product and Material Coordination
- Building Systems and Integration
- Codes and Standards

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Programming & Analysis

NCARB	
Programming & Analysis	
30	Evaluate site-specific environmental and socio-cultural opportunities.
31	Evaluate site-specific environmental constraints.
32	Determine optimal use of onsite resources by incorporating sustainability principles.
33	Identify relevant code requirements for building and site types.
34	Identify relevant zoning and land use requirements.
35	Identify relevant local and site-specific requirements.
36	Evaluate relevant qualitative and quantitative attributes of a site as they relate to the program.
37	Synthesize site reports with other documentation and analysis.
38	Analyze graphical representations regarding site analysis and site programming.
39	Evaluate relevant qualitative and quantitative attributes of a new or existing building as they relate to the program.
40	Evaluate documentation, reports, assessments, and analyses to inform the building program.
41	Identify and prioritize components of the building program.
42	Assess spatial and functional relationships for the building program.
43	Recommend a preliminary project budget and schedule.
44	Identify alternatives for building and structural systems for given programmatic requirements, preliminary budget, and schedule.
45	Analyze graphical representations regarding building analysis and building programming.

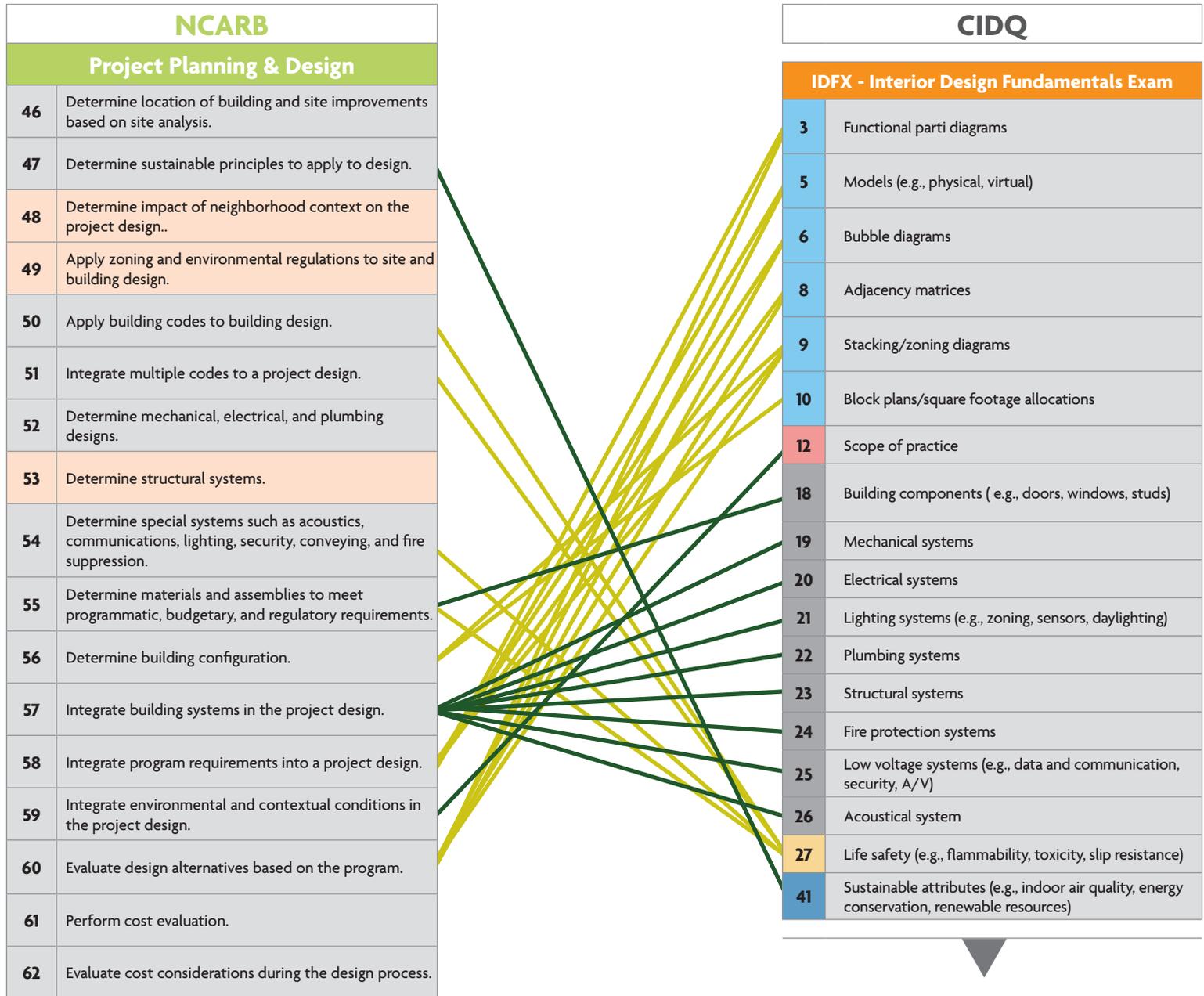
PRAC - Practicum Exam	
118	Analyze relevant qualities of interior space as they relate to a program
119	Determine appropriate block plans / square footage allocations
120	Identify necessary adjacencies and demonstrate appropriate use of bubble diagram, matrices and renderings
122	Demonstrate understanding of zoning and building use requirements
125	Demonstrate knowledge of and application of relevant building construction types such as wood, steel, and concrete
128	Demonstrate understanding of universal / accessible design standards
129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)
130	Integrate life safety elements into design such as paths of egress and fire separation



PRAC - Practicum Exam Knowledge Areas	
■	Programming and Site Analysis
■	Building Systems and Integration
■	Codes and Standards

—	Definite Similarity
—	Some Similarity
—	No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Project Planning & Design



IDFX Interior Design Fundamentals Exam Knowledge Areas

- Design Communication
- Human Behavior / Design Environment
- Building Systems and Construction
- Furniture Fixtures Equipment Lighting
- Programming and Site Analysis

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Project Planning & Design

NCARB		IDPX - Interior Design Professional Exam	
Project Planning & Design			
46	Determine location of building and site improvements based on site analysis.	73	Critical path (i.e., design milestones, sequencing)
47	Determine sustainable principles to apply to design.	74	Project budgeting / tracking during design phases
48	Determine impact of neighborhood context on the project design..	75	Product components (e.g., types, assembly, methods)
49	Apply zoning and environmental regulations to site and building design.	77	Building construction types (e.g., wood, steel, concrete)
50	Apply building codes to building design.	78	Permit Requirements
51	Integrate multiple codes to a project design.	83	Building construction types (e.g., wood, steel, concrete)
52	Determine mechanical, electrical, and plumbing designs.	84	Building components (e.g., doors, windows, wall assemblies)
53	Determine structural systems.	85	Mechanical systems
54	Determine special systems such as acoustics, communications, lighting, security, conveying, and fire suppression.	86	Electrical systems
55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.	87	Lighting systems (e.g., zoning, sensors, daylighting)
56	Determine building configuration.	88	Plumbing systems
57	Integrate building systems in the project design.	89	Structural systems
58	Integrate program requirements into a project design.	90	Fire protection systems
59	Integrate environmental and contextual conditions in the project design.	91	Low voltage systems (e.g., data and communication, security, A/V)
60	Evaluate design alternatives based on the program.	92	Acoustical systems
61	Perform cost evaluation.	93	Sequencing of work (e.g. plumbing before drywall)
62	Evaluate cost considerations during the design process.	94	Permit Requirements
		96	Code required plans (e.g., egress, accessibility, specialty codes)
		101	Universal/accessible design
		102	Life safety (e.g., egress, fire separation)
		103	Zoning and building use
		104	Environmental regulations (e.g., indoor air quality, energy conservation, renewable resources, water conservation)
		105	Square footage standards (e.g., code, BOMA, lease)
		113	Value engineering

IDPX Interior Design Professional Exam Knowledge Areas

- Product and Material Coordination
- Building Systems and Integration
- Contract Documents 16%
- Codes and Standards
- Contract Administration

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Project Planning & Design

NCARB		PRAC - Practicum Exam	
Project Planning & Design			
46	Determine location of building and site improvements based on site analysis.	118	Analyze relevant qualities of interior space as they relate to a program
47	Determine sustainable principles to apply to design.	119	Determine appropriate block plans / square footage allocations
48	Determine impact of neighborhood context on the project design..	120	Identify necessary adjacencies and demonstrate appropriate use of bubble diagram, matrices and renderings
49	Apply zoning and environmental regulations to site and building design.	122	Demonstrate understanding of zoning and building use requirements
50	Apply building codes to building design.	124	Demonstrate knowledge of and application of relevant building components such as doors, windows, and wall assemblies
51	Integrate multiple codes to a project design.	128	Demonstrate understanding of universal / accessible design standards
52	Determine mechanical, electrical, and plumbing designs.	129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)
53	Determine structural systems.	130	Integrate life safety elements into design such as paths of egress and fire separation
54	Determine special systems such as acoustics, communications, lighting, security, conveying, and fire suppression.	138	Ability to develop, analyze, and / or review power, data, and communications plans
55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.		
56	Determine building configuration.		
57	Integrate building systems in the project design.		
58	Integrate program requirements into a project design.		
59	Integrate environmental and contextual conditions in the project design.		
60	Evaluate design alternatives based on the program.		
61	Perform cost evaluation.		
62	Evaluate cost considerations during the design process.		

PRAC - Practicum Exam Knowledge Areas

- Programming and Site Analysis
- Building Systems and Integration
- Codes and Standards
- Contract Documents 40%

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Project Development & Documentation

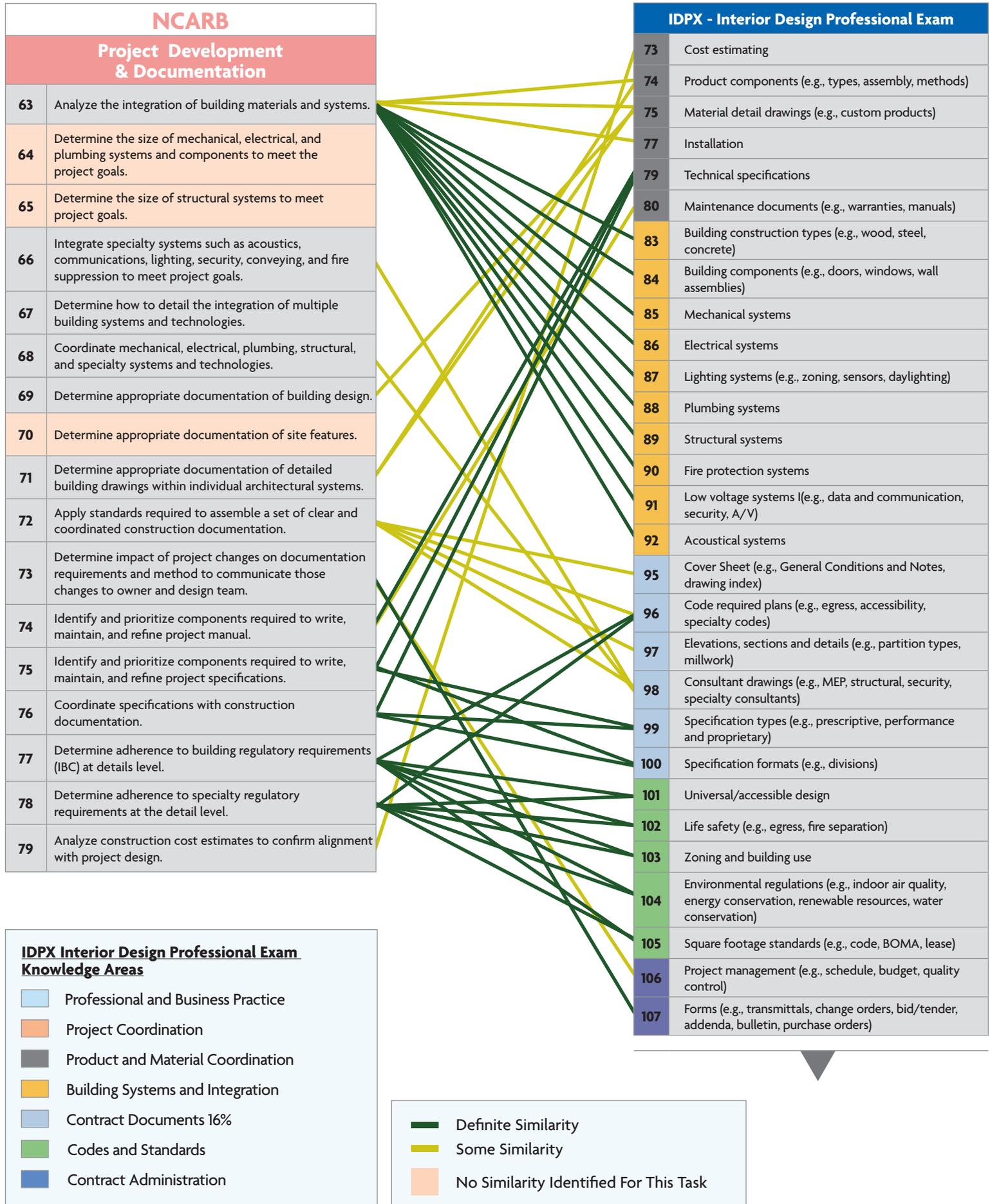
NCARB		CIDQ	
Project Development & Documentation		IDFX - Interior Design Fundamentals Exam	
63	Analyze the integration of building materials and systems.	18	Building components (e.g., doors, windows, studs)
64	Determine the size of mechanical, electrical, and plumbing systems and components to meet the project goals.	21	Lighting systems (e.g., zoning, sensors, daylighting)
65	Determine the size of structural systems to meet project goals.	27	Life safety (e.g., flammability, toxicity, slip resistance)
66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.	29	Acoustics
67	Determine how to detail the integration of multiple building systems and technologies.	34	Lighting (e.g., flight (sic) sources, fixtures, calculations, distribution color rendering)
68	Coordinate mechanical, electrical, plumbing, structural, and specialty systems and technologies.	42	Measuring conventions (e.g., scale, unit of measure, dimensioning)
69	Determine appropriate documentation of building design.	43	Construction drawing standards (e.g., line weights, hatching, symbols)
70	Determine appropriate documentation of site features.	44	Demolition plan
71	Determine appropriate documentation of detailed building drawings within individual architectural systems.	45	Floor plan (e.g., partitions, construction, dimensions, enlarged)
72	Apply standards required to assemble a set of clear and coordinated construction documentation.	46	Reflected ceiling plan
73	Determine impact of project changes on documentation requirements and method to communicate those changes to owner and design team.	47	Lighting plan
74	Identify and prioritize components required to write, maintain, and refine project manual.	48	Power and communication plan
75	Identify and prioritize components required to write, maintain, and refine project specifications.	50	Finish plan
76	Coordinate specifications with construction documentation.	51	Elevations, sections, and details (e.g., partition types, millwork)
77	Determine adherence to building regulatory requirements (IBC) at details level.	52	Schedules
78	Determine adherence to specialty regulatory requirements at the detail level.	53	Specifications (e.g., prescriptive, performance, and proprietary)
79	Analyze construction cost estimates to confirm alignment with project design.		

IDFX Interior Design Fundamentals Exam Knowledge Areas

- Building Systems and Construction
- Furniture Fixtures Equipment Lighting
- Tech. Dwg. Cnvtns
- Construction Drawings and Specification

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Project Development & Documentation



Assessment Objectives Comparison-NCARB Project Development & Documentation

NCARB		PRAC - Practicum Exam	
Project Development & Documentation		123	Demonstrate knowledge of and application of relevant consultant drawings such as MEP, structural, security and specialty consultants
63	Analyze the integration of building materials and systems.	124	Demonstrate knowledge of and application of relevant building components such as doors, windows, and wall assemblies
64	Determine the size of mechanical, electrical, and plumbing systems and components to meet the project goals.	126	Determine appropriate lighting systems for interior spaces such as zoning, sensors, and daylighting
65	Determine the size of structural systems to meet project goals.	127	Integrate fire protection systems into design
66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.	128	Demonstrate understanding of universal / accessible design standards
67	Determine how to detail the integration of multiple building systems and technologies.	129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)
68	Coordinate mechanical, electrical, plumbing, structural, and specialty systems and technologies.	130	Integrate life safety elements into design such as paths of egress and fire separation
69	Determine appropriate documentation of building design.	131	Ability to develop, analyze, and / or review a detailed floor plan including construction plans, dimensions, demolition plans
70	Determine appropriate documentation of site features.	132	Ability to develop, analyze, and / or review a finished plan for an interior space
71	Determine appropriate documentation of detailed building drawings within individual architectural systems.	133	Ability to develop, analyze, and / or review a detailed furniture plan
72	Apply standards required to assemble a set of clear and coordinated construction documentation.	134	Ability to develop, analyze, and / or review a preliminary elevation, sections, and details including partition types and millwork
73	Determine impact of project changes on documentation requirements and method to communicate those changes to owner and design team.	135	Ability to develop, analyze, and / or review code required plans such as egress, accessibility, specialty codes
74	Identify and prioritize components required to write, maintain, and refine project manual.	136	Ability to develop, analyze, and / or review a reflected ceiling plan including a lighting plan
75	Identify and prioritize components required to write, maintain, and refine project specifications.	137	Ability to develop, analyze, and / or review schedules
76	Coordinate specifications with construction documentation.	138	Ability to develop, analyze, and / or review power, data, and communications plans
77	Determine adherence to building regulatory requirements (IBC) at details level.		
78	Determine adherence to specialty regulatory requirements at the detail level.		
79	Analyze construction cost estimates to confirm alignment with project design.		

PRAC - Practicum Exam Knowledge Areas

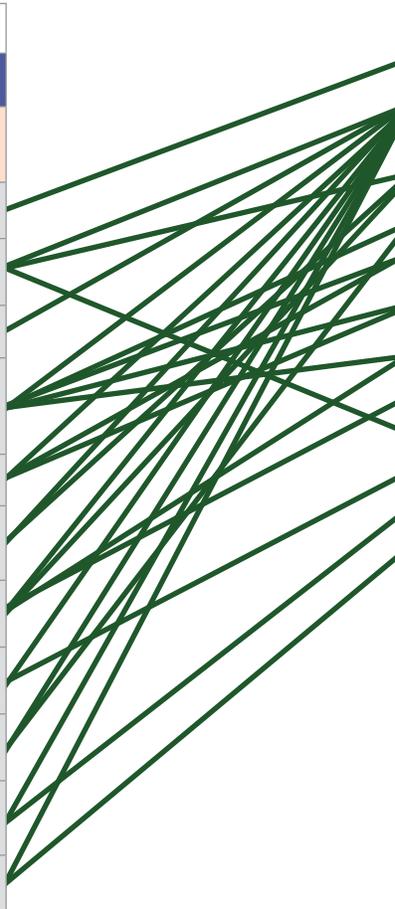
- Programming and Site Analysis
- Building Systems and Integration
- Codes and Standards
- Contract Documents 40%

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Assessment Objectives Comparison-NCARB Construction & Evaluation

NCARB	
Construction & Evaluation	
80	Interpret the architect's role and responsibilities during preconstruction, based on delivery method.
81	Analyze criteria for selecting contractors.
82	Analyze aspects of contract or design to adjust project costs.
83	Evaluate the architect's role during construction activities.
84	Evaluate construction conformance with contract documents, codes, regulations, and sustainability requirements.
85	Determine construction progress.
86	Determine appropriate additional information to supplement contract documents.
87	Evaluate submittals including shop drawings, samples, mock-ups, product data, and test results.
88	Evaluate the contractor's application for payment.
89	Evaluate responses to non-conformance with contract documents.
90	Apply procedural concepts to complete closeout activities.
91	Evaluate building design and performance.

IDPX - Interior Design Professional Exam	
71	Contractors / construction managers
106	Project management (e.g., schedule, budget, quality control)
107	Forms (e.g., transmittals, change orders, bid/tender, addenda, bulletin, purchase orders)
108	Punch list/deficiency lists
109	Site visits and field reports
110	Project meetings / meeting management / meeting protocol and minutes
111	Shop drawings and submittals
112	Construction mock-ups
113	Value engineering
115	Contractor pay applications
116	Project close-out
117	Post-occupancy evaluation



IDPX Interior Design Professional Exam Knowledge Areas

- Project Coordination
- Contract Administration

- Definite Similarity
- Some Similarity
- No Similarity Identified For This Task

Assessment Objectives Comparison - CIDQ Interior Design Fundamentals Exam

CIDQ - IDFX		NCARB	
DESIGN COMMUNICATION			
1	Functional parti diagrams	41	Identify and prioritize components of the building program.
2	Models (e.g., physical, virtual)	42	Assess spatial and functional relationships for the building program.
3	Rendering (e.g., 2-D, perspective)	45	Analyze graphical representations regarding building analysis and building programming.
4	Material finish presentations (e.g., boards, binders, digital)	56	Determine building configuration.
5	Bubble diagrams	58	Integrate program requirements into a project design.
6	Adjacency matrices	60	Evaluate design alternatives based on the program.
7	Charts (e.g., flow chart, Gantt chart)		
8	Stacking/zoning diagrams		
9	Block plans/square footage allocations		
10	Floor plans		
11	Mock-ups and prototypes		

HUMAN BEHAVIOR / DESIGN ENVIRONMENT			
12	Influences (environmental, social, psychological, cultural, aesthetic, global)	30	Evaluate site-specific environmental and socio-cultural opportunities.
13	Human factors (e.g., ergonomics, anthropometrics, proxemics)	59	Integrate environmental and contextual conditions in the project design.
14	Sensory considerations (e.g., acoustics, lighting, visual stimuli, color theory, scent, tactile)		
15	Universal Design		
16	Special population considerations (e.g., Aging in Place, pediatric, special needs)		

BUILDING SYSTEMS AND CONSTRUCTION			
17	Building construction types (e.g., wood, steel, concrete)	55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
18	Building components (e.g., doors, windows, studs)	57	Integrate building systems in the project design.
19	Mechanical systems	63	Analyze the integration of building materials and systems.
20	Electrical systems	66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
21	Lighting systems (e.g., zoning, sensors, daylighting)		
22	Plumbing systems		
23	Structural systems		
24	Fire protection systems		
25	Low voltage systems (e.g., data and communication, security, A/V)		
26	Acoustical system		

- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Interior Design Fundamentals Exam

CIDQ - IDFX		NCARB	
FURNITURE FIXTURES EQUIPMENT LIGHTING			
27	Life safety (e.g., flammability, toxicity, slip resistance)	2	Apply the regulations and requirements governing the work environment. (U/A)
28	Textiles	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
29	Acoustics	26	Apply procedures required for adherence to laws and regulations relating to the project.
30	Wall treatments	50	Apply building codes to building design.
31	Floor coverings	51	Integrate multiple codes to a project design.
32	Ceiling treatments	54	Determine special systems such as acoustics, communications, lighting, security, conveying, and fire suppression.
33	Window treatments	55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
34	Lighting (e.g., light sources, fixtures, calculations, distribution color rendering)	63	Analyze the integration of building materials and systems.
35	Furniture and equipment (e.g., types, uses, space needs)	66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.

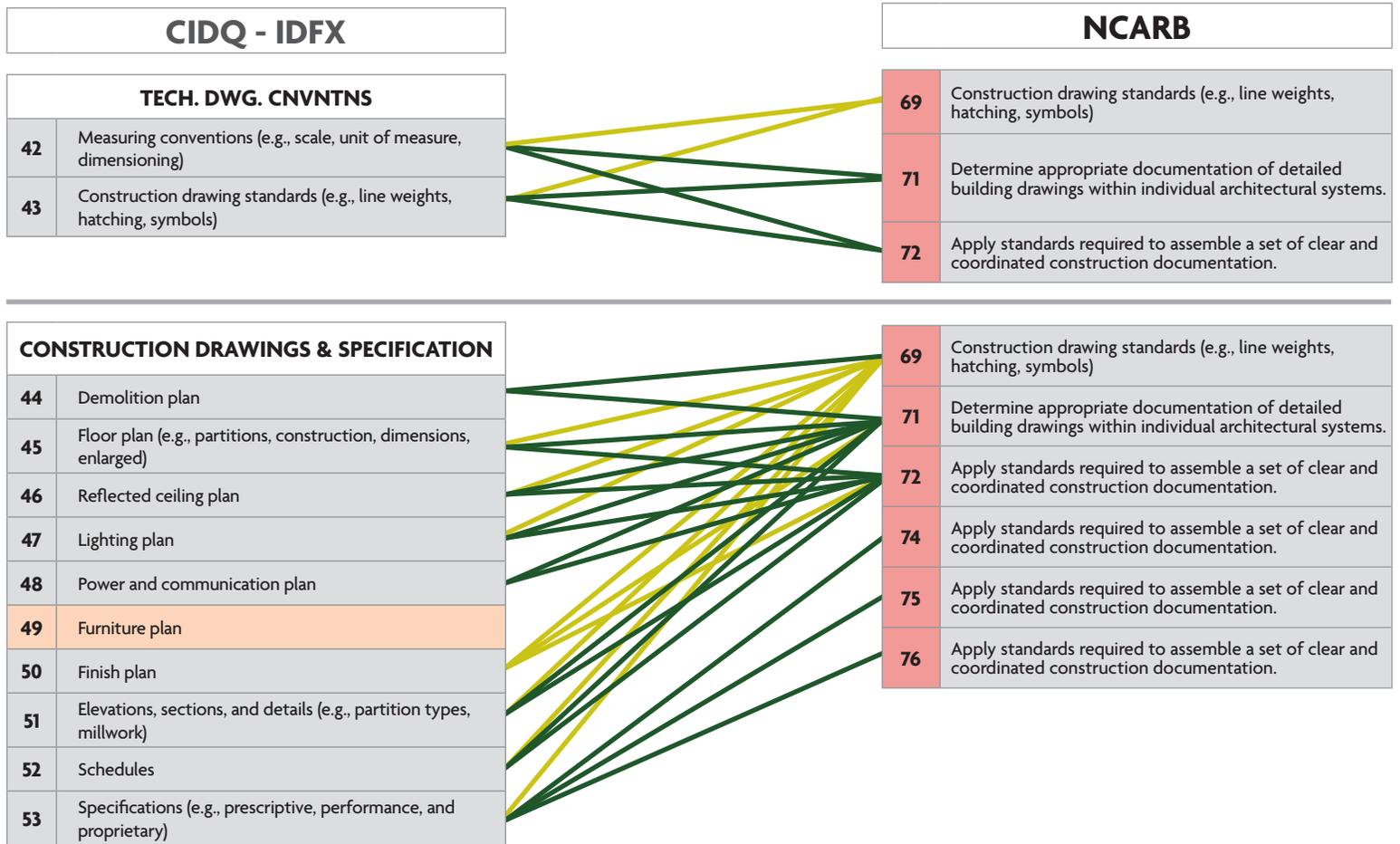
PROGRAMMING AND SITE ANALYSIS			
36	Research methods (interviewing, surveying, case studies, benchmarking/precedent)	32	Determine optimal use of onsite resources by incorporating sustainability principles.
37	Analysis tools (e.g., spreadsheets, site photographs, matrices, bubble diagrams)	36	Analyze graphical representations regarding site analysis and site programming.
38	Project context (e.g., space use, culture, client preference)	38	Analyze graphical representations regarding site analysis and site programming.
39	Site context (e.g., location, views, solar orientation)	39	Evaluate relevant qualitative and quantitative attributes of a new or existing building as they relate to the program.
40	Existing conditions	40	Evaluate documentation, reports, assessments, and analyses to inform the building program.
41	Sustainable attributes (e.g., indoor air quality, energy conservation, renewable resources)	41	Identify and prioritize components of the building program.
		42	Assess spatial and functional relationships for the building program.
		47	Determine sustainable principles to apply to design.

- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Interior Design Fundamentals Exam



- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Planning & Design
- Project Management
- Project Development & Documentation
- Programming & Analysis
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Interior Design Professional Exam

CIDQ - IDPX		NCARB	
PROFESSIONAL AND BUSINESS PRACTICE		1	Assess resources within the practice. (A/E)
54	Scope of practice	2	Apply the regulations and requirements governing the work environment. (U/A)
55	Proposals (e.g., time and fee estimation, RFP process, project scope)	3	Apply ethical standards to comply with accepted principles within a given situation. (U/A)
56	Budgeting principles and practices (project specific)	4	Apply appropriate Standard of Care within a given situation. (U/A)
57	Contracts	6	Identify practice policies and methodologies for risk, legal exposure, and resolutions. (U/A)
58	Phases of a project	7	Select and apply practice strategies for given business situation and policy. (U/A)
59	Business Licenses (e.g., sales and use tax, resale certificates)	8	Analyze and determine response for client services requests. (A/E)
60	Accounting principles (office / business)	9	Analyze and determine response for client services requests. (A/E)
61	Legal considerations (e.g., liabilities and forms of business)	10	Determine potential risk and/or reward of a project and its impact on the practice. (A/E)
62	Insurance	11	Analyze the impact of practice methodologies relative to structure and organization of the practice. (A/E)
63	Professional licensure, certification, registration		
64	Economic factors		

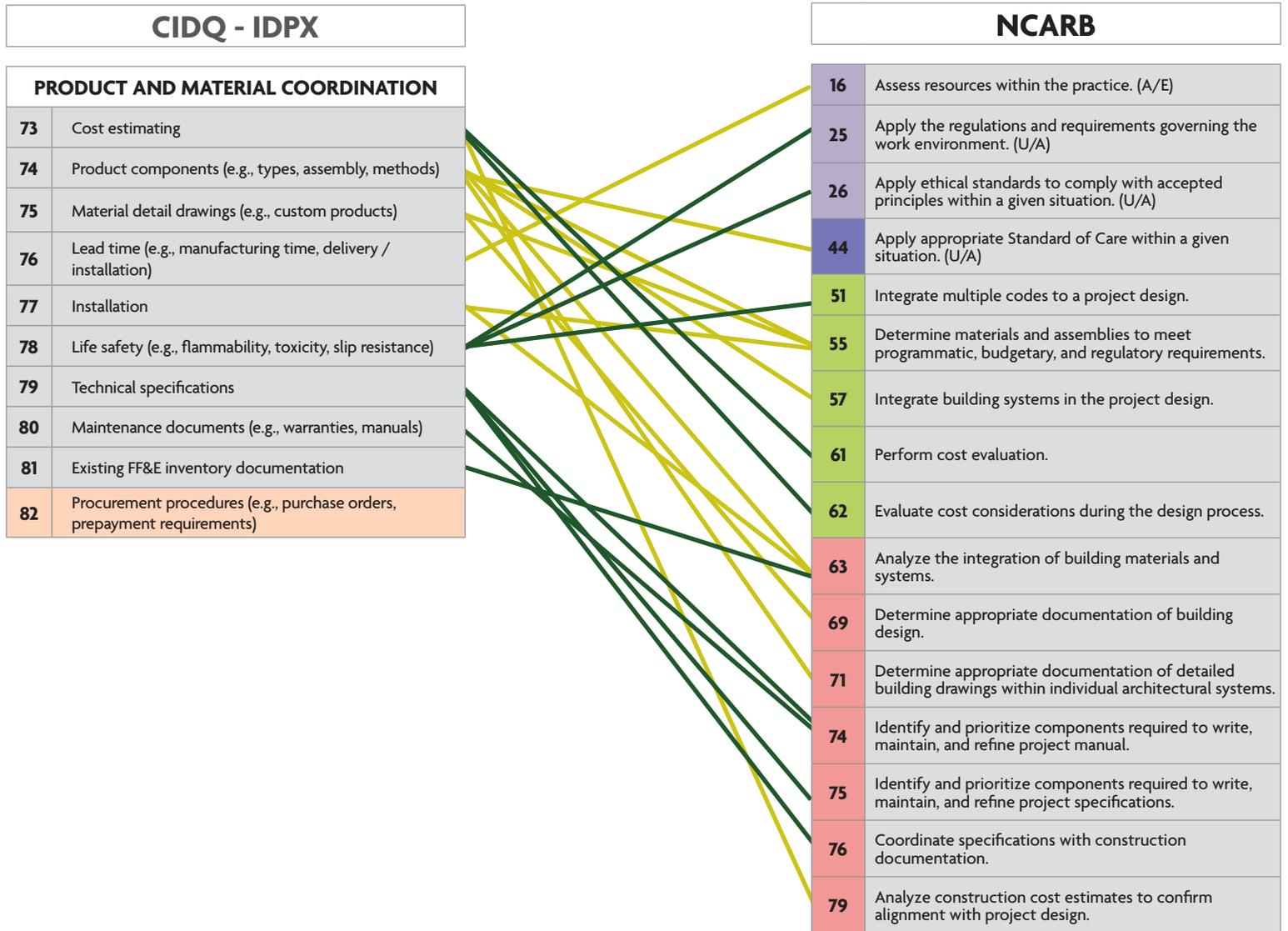
PROJECT COORDINATION		13	Determine criteria required to assemble team. (U/A)
65	Critical path (i.e., design milestones, sequencing)	14	Assess criteria required to allocate and manage project resources. (A/E)
66	Project team dynamics	15	Develop and maintain project work plan. (U/A)
67	Project budgeting / tracking during design phases	16	Determine criteria required to develop and maintain project schedule. (A/E)
68	Architects	17	Determine appropriate communication to project team - owner, contractor, consultants, and internal staff. (U/A)
69	Engineers (e.g., electrical, structural, mechanical, civil)	19	Interpret key elements of, and verify adherence to architect/consultant agreement.
70	Specialty consultants (e.g., landscape, lighting A/V, acoustical, food service, graphics/signage)	20	Interpret key elements of the owner/contractor agreement.
71	Contractors / construction managers	21	Interpret key elements of the owner/consultant agreement to integrate the consultant's work into the project.
72	Real estate professionals (e.g., realtor, landlord, leasing agent, developer, property owner)	22	Evaluate compliance with construction budget.
		23	Evaluate and address change in scope of work and scope creep.
		24	Evaluate project documentation to insure it supports the specified delivery method.
		43	Recommend a preliminary project budget and schedule.
		81	Analyze criteria for selecting contractors.

- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Interior Design Professional Exam



- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Planning & Design
- Project Management
- Project Development & Documentation
- Programming & Analysis
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Interior Design Professional Exam

CIDQ - IDPX		NCARB	
BUILDING SYSTEMS AND INTEGRATION			
83	Building construction types (e.g., wood, steel, concrete)	25	Apply the regulations and requirements governing the work environment. (U/A)
84	Building components (e.g., doors, windows, wall assemblies)	26	Apply ethical standards to comply with accepted principles within a given situation. (U/A)
85	Mechanical systems	33	Identify relevant code requirements for building and site types.
86	Electrical systems	35	Identify relevant local and site-specific requirements.
87	Lighting systems (e.g., zoning, sensors, daylighting)	51	Integrate multiple codes to a project design.
88	Plumbing systems	54	Determine special systems such as acoustics, communications, lighting, security, conveying, and fire suppression.
89	Structural systems	57	Integrate building systems in the project design.
90	Fire protection systems	63	Analyze the integration of building materials and systems.
91	Low voltage systems (e.g., data and communication, security, A/V)		
92	Acoustical systems		
93	Sequencing of work (e.g. plumbing before drywall)		
94	Permit Requirements		

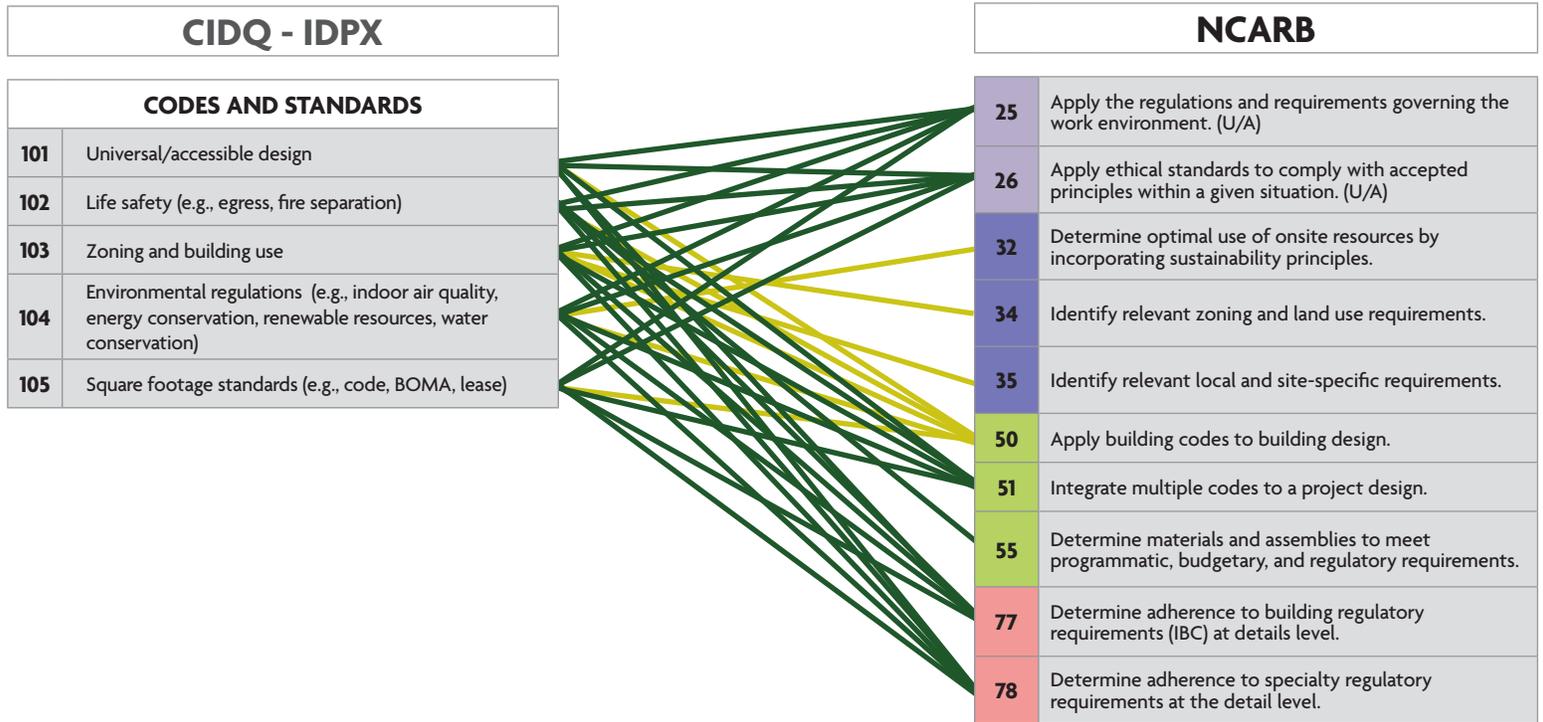
CONTRACT DOCUMENTS			
95	Cover Sheet (e.g., General Conditions and Notes, drawing index)	12	Evaluate design, coordination, and documentation methodologies for the practice. (A/E)
96	Code required plans (e.g., egress, accessibility, specialty codes)	24	Apply ethical standards to comply with accepted principles within a given situation. (U/A)
97	Elevations, sections and details (e.g., partition types, millwork)	28	Perform quality control reviews of project documentation throughout life of the project.
98	Consultant drawings (e.g., MEP, structural, security, specialty consultants)	51	Integrate multiple codes to a project design.
99	Specification types (e.g., prescriptive, performance and proprietary)	66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
100	Specification formats (e.g., divisions)	68	Coordinate mechanical, electrical, plumbing, structural, and specialty systems and technologies.
		72	Apply standards required to assemble a set of clear and coordinated construction documentation.
		75	Identify and prioritize components required to write, maintain, and refine project specifications.
		76	Coordinate specifications with construction documentation.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.

- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Interior Design Professional Exam

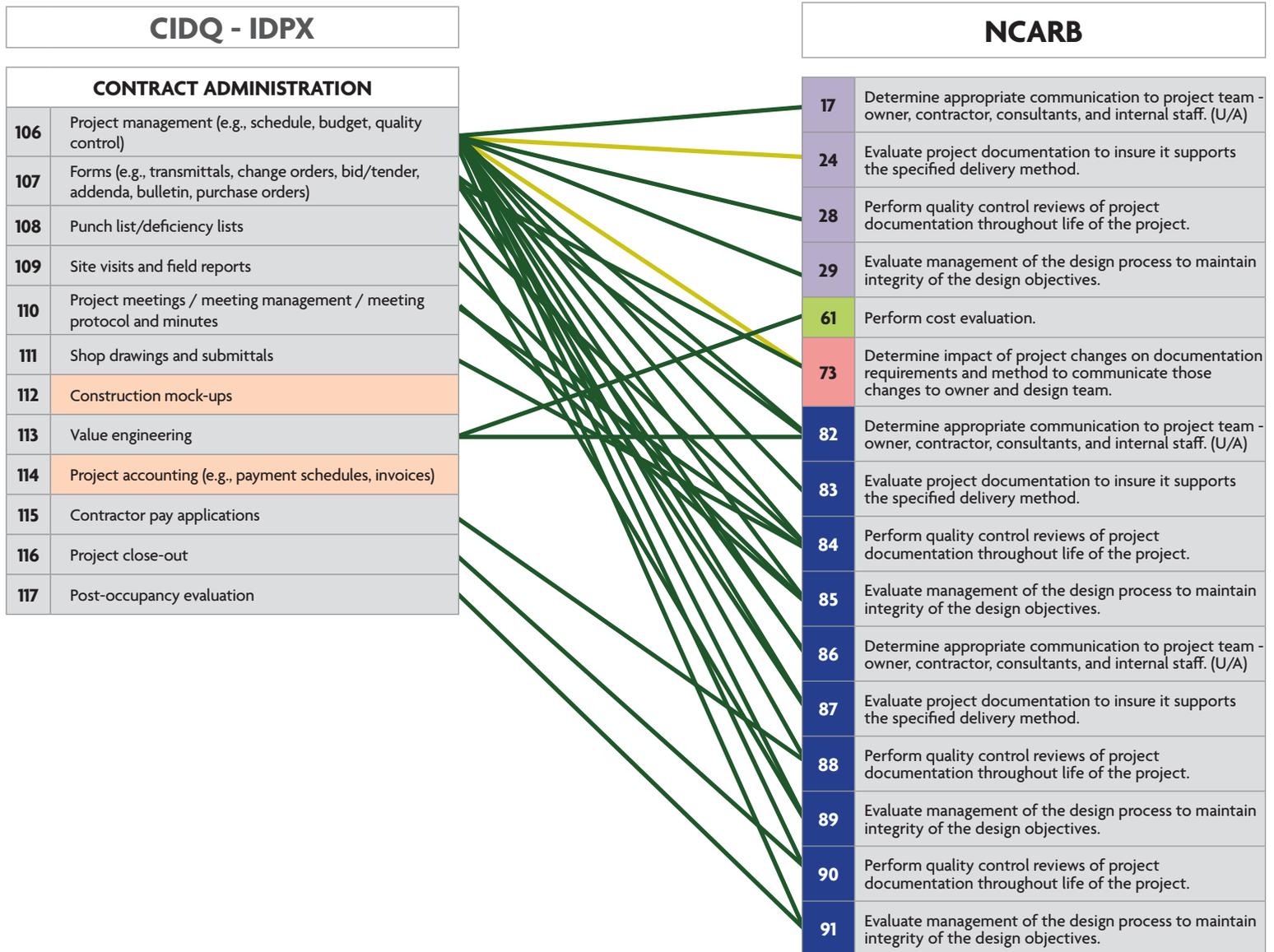


- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Interior Design Professional Exam



- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Practicum Exam

CIDQ - PRAC		NCARB	
PROGRAMMING AND SITE ANALYSIS			
118	Analyze relevant qualities of interior space as they relate to a program	35	Identify relevant local and site-specific requirements.
119	Determine appropriate block plans / square footage allocations	39	Evaluate relevant qualitative and quantitative attributes of a new or existing building as they relate to the program.
120	Identify necessary adjacencies and demonstrate appropriate use of bubble diagram, matrices and renderings	40	Evaluate documentation, reports, assessments, and analyses to inform the building program.
121	Assess human factors related to the interior space (e.g., ergonomics, anthropometrics, proxemics)	41	Evaluate documentation, reports, assessments, and analyses to inform the building program.
122	Demonstrate understanding of zoning and building use requirements	45	Analyze graphical representations regarding building analysis and building programming.
		51	Integrate multiple codes to a project design.
		56	Determine building configuration.
		58	Integrate program requirements into a project design.

BUILDING SYSTEMS AND INTEGRATION			
123	Demonstrate knowledge of and application of relevant consultant drawings such as MEP, structural, security and specialty consultants	33	Identify relevant code requirements for building and site types.
124	Demonstrate knowledge of and application of relevant building components such as doors, windows, and wall assemblies	55	Determine materials and assemblies to meet programmatic, budgetary, and regulatory requirements.
125	Demonstrate knowledge of and application of relevant building construction types such as wood, steel, and concrete	63	Analyze the integration of building materials and systems.
126	Determine appropriate lighting systems for interior spaces such as zoning, sensors, and daylighting	66	Integrate specialty systems such as acoustics, communications, lighting, security, conveying, and fire suppression to meet project goals.
127	Integrate fire protection systems into design	67	Determine how to detail the integration of multiple building systems and technologies.
		68	Coordinate mechanical, electrical, plumbing, structural, and specialty systems and technologies.
		71	Determine appropriate documentation of detailed building drawings within individual architectural systems.

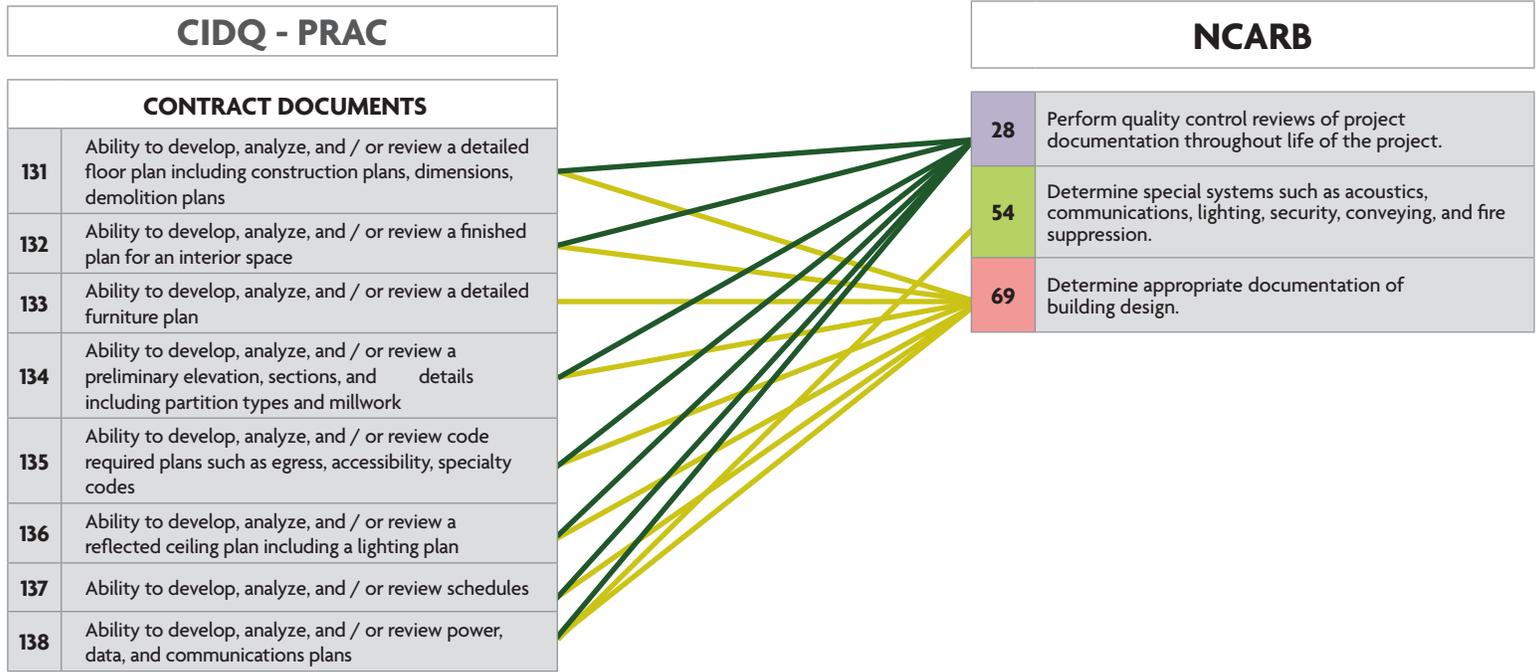
CODES AND STANDARDS			
128	Demonstrate understanding of universal / accessible design standards	25	Identify and conform with the requirements set forth by authorities having jurisdiction in order to obtain approvals for the project.
129	Demonstrate understanding of square footage standards (e.g., code, BOMA, lease)	26	Apply procedures required for adherence to laws and regulations relating to the project.
130	Integrate life safety elements into design such as paths of egress and fire separation	33	Identify relevant code requirements for building and site types.
		50	Apply building codes to building design.
		51	Integrate multiple codes to a project design.
		77	Determine adherence to building regulatory requirements (IBC) at details level.
		78	Determine adherence to specialty regulatory requirements at the detail level.

- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Planning & Design
- Project Management
- Project Development & Documentation
- Programming & Analysis
- Construction & Evaluation

Assessment Objectives Comparison - CIDQ Practicum Exam



- Definite Similarity
- Some Similarity
- No similarity identified for this assessment objective across any of the six NCARB Practice Areas

NCARB Practice Areas

- Practice Management
- Project Management
- Programming & Analysis
- Project Planning & Design
- Project Development & Documentation
- Construction & Evaluation

APPENDICES

3. A Comparison of CIDQ's 2014 & 2019 Practice Analyses Results

February 16, 2021

APPENDIX 3: A Comparison of CIDQ's 2014 & 2019 Practice Analyses Results

In 2019 CIDQ commissioned a new practice analysis study to identify changes in knowledge, skills, and tasks that have evolved within the practice of the interior design profession since the previous *2014 Practice Analysis for Interior Design*. The results of the *Analysis* defined the “Tasks” (competencies) and “Knowledge Areas” within the practice of interior design used to identify the assessment objectives of the three sections of the *NCIDQ Examination* (IDFX, IDPX and PRAC).

While the *NCIDQ Examination* has always addressed the health, safety, and welfare (HSW) of the public, the approach taken with the *2019 Practice Analysis for Interior Design* was to specifically look at each “Knowledge Area” with a focus on how important those areas are in relation to HSW.

With that in mind, below are some examples of the specific additions to the assessment objectives identified as a result of the *2019 Practice Analysis* compared to the *2014 Practice Analysis*.

New “Knowledge Areas” added:

- Professional Ethics (e.g., code of ethics, consumer protection, health, safety, welfare, social responsibility)—**IDFX exam *NEW “Knowledge Area” (Professional Development & Ethics)***
- Professional Development (e.g., professional organizations, continuing education)—**IDFX exam *NEW “Knowledge Area” (Professional Development & Ethics)***

Reorganized and increased assessment of “Knowledge Areas” within existing examination:

- Reference Standards and Guidelines (e.g., ADA/Accessibility, BIFMA, ASHRAE, OSHA, NFPA, IBC)—**IDPX exam & PRAC exam (*Code Requirements, Laws, Standards and Regulations*)**
- Permit Requirements (e.g., processes, timing, awareness of jurisdictional differences)—**IDPX & PRAC exam (*Code Requirements, Laws, Standards and Regulations*)**
- Analysis Tools (e.g., spreadsheets, site photographs, matrices, bubble diagrams, graphs, behavioral based analytics)—**PRAC exam (*Programming, Planning, and Analysis*)**
- Existing Conditions Analysis (e.g., hazardous materials, seismic, accessibility, construction type, occupancy type)—**IDPX & PRAC exam (*Project Assessment & Sustainability / Programming, Planning, and Analysis*)**
- Allied Professionals’ Drawings (e.g., mechanical, electrical, and structural engineering, architecture, security, specialty consultants)—**IDPX & PRAC exam (*Project Process, Roles, and Coordination / Contract Documents*)**

In addition to the above examples of changes, additions or shifts of content from one exam section to another, there is an increased emphasis on code requirements, laws, standards, and regulations added to the IDPX exam. Additionally, a shift away from utilizing the *NCIDQ Exam Building Codes (Q-Codes)* which were specifically developed for the PRAC exam, is being implemented. Beginning in 2021, the *NCIDQ Examination* will reference the *International Building Code (IBC)* family of codes to evolve and increase the rigor of assessment using internationally recognized building codes.