

Information for the AICP Advanced Specialty Certification Examinations

This bulletin contains valuable information regarding the AICP Advanced Specialty Certification examination. Read it and all forms and communications sent to you carefully before addressing questions to Prometric and AICP.



The American Planning Association's
professional institute
**American Institute
of Certified Planners**

BULLETIN

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GENERAL INFORMATION

American Planning Association

The American Planning Association (APA) brings together thousands of people—practicing planners, citizens, elected officials—dedicated to making great communities happen. APA is a nonprofit public interest and education organization committed to urban, suburban, regional, and rural planning. APA’s professional institute, the American Institute of Certified Planners (AICP), provides leadership in professional development, ethics, and the standards of planning practice.

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Prometric

APA works with Prometric to administer the Comprehensive Planning Examination and Advanced Specialty Certification Examinations. Prometric is the recognized global leader in testing and assessment services, providing computer-based, Internet, and paper-and-pencil testing solutions. It offers a fully integrated testing system that includes test development, test delivery, and data management capabilities. On behalf of more than 600 current clients in the academic, professional, government, corporate, and information technology markets, Prometric develops and delivers assessments through a global network of testing centers in 131 countries, as well as direct to candidates via the web.

Prometric
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www.prometric.com/AICP

AICP Certified Planners

AICP certified planners are members of APA’s professional institute, AICP. They have demonstrated a commitment to high standards of professional practice and a mastery of theories and tools of planning. To become certified, an APA member must meet requirements for education and experience, pass the AICP Comprehensive Planning Examination, and pledge to uphold ethical standards and engage in ongoing professional development. The AICP Code of Ethics and Professional Conduct helps certified planners uphold those ethical standards. AICP’s Certification Maintenance program helps them engage in ongoing professional development. Under the Certification Maintenance program, certified planners engage in 32 hours of professional development every two years.

Details about the AICP Code of Ethics and Professional Conduct are at www.planning.org/aicp.
Details about the Certification Maintenance program are at www.planning.org/cm.

Advanced Specialty Certification

Advanced Specialty Certification (ASC) enables AICP certified planners to be recognized for their knowledge, experience, and leadership skills in specialized areas of planning. These credentials recognize how the planning profession has evolved during the past several decades into various sub-specialties, much like the medical professions division into specializations as medical knowledge and expertise expand over time.

To earn an ASC designation, an AICP member must have at least eight years of experience in the chosen area of planning specialization and pass the Advanced Specialty Certification examination for that area of specialization. As AICP certified planners, ASC credentialed planners must engage in 32 hours of professional development every two years (including 1.5 credit hours of law and 1.5 credit hours of ethics); 10 of those hours must be dedicated to their chosen planning specialization.

Details about the Advanced Specialty Certification program are at www.planning.org/asc.

ADVANCED SPECIALTY CERTIFICATION EXAMINATIONS

The Advanced Specialty Certification examinations test the knowledge and skills of AICP–credentialed planners within a specialized area of planning. The ASC examinations have been developed by committees of experts within the relevant planning specializations with the help of Prometric test specialists. An examination task force will oversee the program to ensure its continuing professional relevance. The examinations are administered in a computer-based format at more than 300 Prometric test centers in the United States and Canada. The examinations are given once a year during a 14-day test window in May. The tests deal with the in-depth knowledge areas and skills of planners in their chosen planning specialization. The general content areas of each examination are outlined later in this bulletin. Questions from each area of knowledge are distributed randomly throughout the examination. The ASC examinations are timed and consist of both multiple choice and scenario-based questions.

Currently, AICP Certified Transportation Planner (AICP CTP), AICP Certified Environmental Planner (AICP CEP), AICP Certified Urban Designer (AICP CUD) are the only three ASC examinations offered. Other planning specializations are being considered.

STEPS TO APPLY

1. Be a current member of AICP
2. Have eight years of “advanced specialty” experience per the definitions on pages 5 and 6 when submitting the application
 - a. Work experience will be entered into the online application, part-time or prorated experience is allowed
3. Write three essays based on the criteria on pages 5 and 6 (three essays for the online application)
4. Pay the \$100 application fee
5. Wait seven to eight weeks for the AICP ASC peer reviewers to determine if the applicant is eligible to sit for the ASC exam
 - a. If denied, the applicant will have an opportunity to revise their essays based on the reviewer’s feedback and resubmit for the same exam window
6. Finally, if approved, pay the \$425 exam fee to sit for the exam (registration information will be sent to approved applicants)
 - a. Official scores will be emailed to examinees approx. 6-8 weeks after the exam window closes

Eligibility Requirements

All persons sitting for the Advanced Specialty Certification examinations will be required to have the AICP credential at the time of application and a total of eight years of experience in the area of planning specialization for which they will be tested.

Applicants may apply the years of experience required to take the basic AICP exam towards this total.

AICP Certified Transportation Planner (AICP CTP)

Advanced Specialty Certification in Transportation Planning recognizes an individual's in-depth knowledge, experience, and leadership skills in transportation planning.

AICP CTP Definition

AICP CTP recognition is awarded to certified professional planners who have achieved an exceptional level of expertise in the art and science of advanced transportation planning.

Applicants must write three 250-500 word essays (see criteria 1-3 below) to demonstrate their advanced transportation planning experience. This includes the years of experience that was applied towards the AICP exam. Experience dedicated towards the management of transportation projects or transportation planning employees should be considered towards your eight years of experience. Applicants engaged in part-time transportation planning experience may prorate that experience into a full-time equivalent. For example, a position in which the applicant worked 20 hours/week for six months in a transportation planning assignment may prorate that experience into the full-time equivalent of three months of transportation planning experience.

1. Criterion 1 - Explain how you contributed to the following decision-making and resolution processes of a complex transportation planning problem:
 - Describe how you evaluated competing alternatives or issues AND
 - Describe how you addressed challenging issues.
2. Criterion 2 - Explain how you coordinated across constituencies and disciplines to balance competing interests and build consensus to achieve mutually beneficial objectives in the following scenarios:
 - Discuss how you have influenced public decision making in the public interest while at the position or working on the project in question AND
 - Describe how you collaborated with other agencies, departments, municipalities, etc., while at the position or working on the project in question.
3. Criterion 3 - Demonstrate your expertise in efficiently integrating transportation systems into the full set of systems necessary for healthy and sustainable communities by:
 - Describing a project in which you efficiently integrated transport systems into the full set of systems necessary for healthy and sustainable communities. (e.g., Promote the use of public transportation and walking as alternatives to private vehicles.)

AICP Certified Environmental Planner (AICP CEP)

Advanced Specialty Certification in Environmental Planning recognizes an individual's in-depth knowledge, experience, and leadership skills in environmental planning.

AICP CEP Definition

AICP CEP recognition is awarded to certified professional planners, who have achieved an exceptional level of expertise in the art and science of advanced environmental planning.

Applicants must write three 250-500 word essays (see criteria 1-3 below) to demonstrate their advanced environmental planning experience. This includes the years of experience that was applied towards the AICP exam. Experience dedicated towards the management of environmental projects or environmental planning employees should be considered towards your eight years of experience. Applicants engaged in part-time environmental planning experience may prorate that experience into a full-time equivalent. For example, a position in which the applicant worked 20 hours/week for six months in an environmental planning assignment may prorate that experience into the full-time equivalent of three months of environmental planning experience.

1. Criterion 1 - Explain how you contributed to the following decision-making and resolution processes of a complex environmental planning problem:
 - Describe how you evaluated competing alternatives or issues AND
 - Describe how you addressed challenging issues.
2. Criterion 2 - Explain how you coordinated across constituencies and disciplines to balance competing interests and build consensus to achieve mutually beneficial objectives in the following scenarios:
 - Discuss how you have influenced public decision making in the public interest while at the position or working on the project in question AND
 - Describe how you collaborated with other agencies, departments, municipalities, etc., while at the position or working on the project in question.
3. Criterion 3 - Demonstrate your expertise in efficiently integrating environmental systems into the full set of systems necessary for healthy and sustainable communities by:
 - Describing a project in which you efficiently integrated natural systems into the full set of systems necessary for healthy and sustainable communities. (e.g., Promote integrated storm water solution strategies into the human landscape).

AICP Certified Urban Designer (AICP CUD)

Advanced Specialty Certification in Urban Design recognizes an individual's in-depth knowledge, experience, and application of design principles.

AICP CUD Definition

AICP CUD recognition is awarded to certified professional planners who have achieved an exceptional level of expertise in the art and science of advanced urban design.

Applicants must write three 250-500 word essays (see criteria 1-3 below) to demonstrate their advanced urban design experience. This includes the years of experience that was applied towards the AICP exam. Experience dedicated towards the management of urban design projects or urban design employees should be considered towards your eight years of experience. Applicants engaged in part-time urban design experience may prorate that experience into a full-time equivalent. For example, a position in which the applicant worked 20 hours/week for six months in an urban design assignment may prorate that experience into the full-time equivalent of three months of relevant urban design experience.

1. Criterion 1 - Explain how you contributed to the following decision-making and resolution processes of a complex urban design problem:
 - Describe how you evaluated competing alternatives or issues AND
 - Describe how you addressed challenging issues.
2. Criterion 2 - Explain how you coordinated across constituencies and disciplines to balance competing interests and build consensus to achieve mutually beneficial objectives in the following scenarios:
 - Discuss how you have influenced public decision making in the public interest while at the position or working on the project in question AND
 - Describe how you collaborated with other agencies, departments, municipalities, etc., while at the position or working on the project in question.
3. Criterion 3 - Demonstrate your expertise in efficiently integrating urban design systems into the full set of systems necessary for healthy and sustainable communities by:
 - Describing a project in which you efficiently integrated other planning elements such as transportation, green infrastructure, public space, cultural heritage, sustainability, and resiliency into the project designs.

APPLICATION INFORMATION

Application Process

1. Bring Your Memberships Up to Date

Only current AICP members in good standing are eligible to apply for the ASC examinations. Before you begin the application process, please make sure that your APA, local APA chapter, and AICP memberships are up to date.

2. Review the Eligibility Requirements

All applicants for the ASC examinations must be AICP members in good standing and must have at least eight years of experience in the area of planning specialization on which they will be tested. This total can include experience already used to qualify for the basic AICP exam. Please be sure to review AICP's definition of experience for your chosen specialization to determine if your experience is likely to qualify (www.planning.org/asc). All experience to be considered toward your eligibility must be completed *prior* to application submission.

3. Submit the Online Application and Pay Fees

Applications may be submitted only for the upcoming exam window. All applicants must complete and submit the online application prior to the application deadline for the upcoming exam window. The application fee will be collected online as the final step of application submission. All submissions are final.

4. Wait for Approval/Denial Notification

APA will begin reviewing your application to determine if you are eligible to sit for the ASC examination once your online application is received. All applicants will be notified of application approval or denial approximately six to eight weeks after submission. Please note that applications submitted on or near the application deadline may take longer to process and review (relevant deadlines are posted at www.planning.org/asc as they are set). Once your application is reviewed you will receive an e-mail notifying you of your application approval or denial.

5. Pay the \$425 exam fee online before the registration deadline. (See website for deadline dates.)

6. Schedule with Prometric

Approved applicants will receive an Eligibility ID via e-mail. Your Eligibility ID will include instructions for scheduling your test appointment at a Prometric testing center near you (choosing a test date, start time, and test center location). Two forms of ID are required to enter the test center.

7. Prometric Fees

Approved applicants will be charged a \$35 fee from Prometric if he or she tries to reschedule their exam appointment within 2-29 days of their scheduled exam appointment. The fee is collected by Prometric via credit card. Changes to an appointment within two (2) days of the exam are considered a "no show" and will result in the applicant forfeiting the exam fee (see No Show policy on page 12).

Application/Exam Fees

(Fees subject to change. See website for up-to-date information.)

	Application (New Applicants)	Exam (All Applicants)	Transfer Fee (All Applicants)
U.S. and Canada	\$100 (non-refundable)	\$425 (non-refundable)	\$100 (non-refundable)

Disapproved Applications

Disapproved applicants will receive notification via email. The email will include a message that addresses the specific reasons behind the denial decision. If denied, the applicant will have an opportunity to revise their essays based on the reviewer's feedback and resubmit for the same exam window. Depending on your situation, you may need to gain more experience within your chosen area of planning specialization or simply reapply with a new application containing more focused statements that better describe how your work experience meets the requirements. Your application will remain in our files, so if you choose to reapply, the online form will be pre-populated with your previous application information.

Disapproved applicants also have the right to appeal the denial decision. Appeals can take several months to process and therefore are not processed for the same exam window in which you applied. Appeals will be considered in cases where the denial reasons cited cannot be corrected by writing more focused statements that better describe how your work experience meets eligibility requirements. If you wish to appeal, please write a letter to address the denial reasons cited and e-mail it to ASC@planning.org by the deadline specified in your denial letter. Please include any supplemental information to address the denial reasons cited in the letter.

Application Lifespan (Returning Applicants)

The ASC examination is given once a year during a 14-day exam window in May. Approved applications have a lifespan of five years—the equivalent of five consecutive exam windows—or until the time that changes are made to the eligibility criteria. During the four subsequent exam windows, you are considered a returning applicant and you do not need to reapply (i.e., wait for application review and approval) unless changes are made to the eligibility criteria. Instead, you will need only to review the application we have on file for you, use the online application to register your intent to re-take the examination, and pay the exam fee before the application deadline. After an application expires (after five exam windows or five years) you must reapply even if you never took the examination. This includes submitting a new application and waiting for application review and approval.

Special Testing Arrangements

Candidates with documented visual, physical, hearing, or learning disabilities that would prevent them from taking an examination under standard conditions may request special testing accommodations and arrangements. Prometric requires written documentation of the disability from the candidate's doctor or another qualified medical professional. This written documentation should specify the accommodations needed by the applicant and must accompany the application form when it is submitted to AICP. Candidates requesting special testing accommodations should contact APA at 312-431-9100 prior to application to arrange documentation submittal. There is no extra fee for making these arrangements.

In considering a request from an applicant for special accommodations, APA and Prometric are guided by a sense of fairness. Special accommodations are granted to give a candidate the opportunity to be tested in an equivalent manner with other candidates, but not to provide an advantage over other candidates.

Additional Application Information

Complete the examination application online at the APA website at www.planning.org/asc. Before you begin the application process, please note the following:

1. Apply as early as possible before the scheduled deadline date. If you did not meet the deadline date for the upcoming exam window, you may apply for the next exam window. For more information please visit www.planning.org/asc.
2. It is very important that you complete the application form carefully and accurately. The contact information in your application should match the information in your APA record. AICP and Prometric will use the information you provide on this form to deliver your Eligibility ID and to inform you of your test results. Also, please make sure the name on your application matches the photo identification you will present at the test center.
3. By submitting the online application, you are authorizing Prometric to release your scores to APA.

SCHEDULING TEST APPOINTMENTS

Test Center Locations

All U.S. and Canadian candidates may schedule, reschedule and cancel appointments online at www.prometric.com/aicp. Please note that center locations change infrequently. The website lists current test center locations, contact information for each site, and directions.

Where to Take the Examination

Test centers are located throughout the United States and Canada. Review the test center list online at www.prometric.com/aicp and select the most convenient city, regardless of whether it is in the state where you live. Prometric will make every effort to assign you to the center of your choice. There may be times, however, when more examinees apply for one center than can be accommodated. Examination candidates who attempt to schedule at a test center already at capacity will have the opportunity to select another date within the exam window or a test center as near as possible to the requested location.

Scheduling Your Examination Appointment

You must have the information contained in the Eligibility ID and follow its instructions in order to schedule an appointment to take the examination. Candidates must take the examination during the testing window indicated on the Eligibility ID. Schedule your appointment in one of the following ways:

- First, attempt to schedule your appointment on Prometric's website at www.prometric.com/aicp. This site also includes directions to the test centers.
- If you are unable to schedule your appointment online, call either Prometric's Candidate Service Call Center (CSCC) at 800-796-9853 or the Prometric test center of your choice.

NOTES: Most candidates should schedule their exam appointment online at www.prometric.com/aicp. Prometric's online scheduling system is the most accurate, efficient, and effective way to ensure a candidate gets his or her first choice for an exam appointment. However, candidates who need to make special testing arrangements under ADA rules should first contact AICP staff to make sure the special accommodations request has been communicated to Prometric, and then schedule via telephone with Prometric's CSCC at 800-967-1139.

Applicants will be charged *a \$35 fee from Prometric* if he or she tries to cancel or reschedule their exam appointment within 2-29 days of their scheduled exam appointment. The fee is collected by Prometric via credit card. Changes to an appointment within two (2) days of the exam are considered a "no show" and will result in the applicant forfeiting the exam fee (see No Show policy on page 12).

Additionally:

- You must make your appointment at least 48 hours before the test window.
- The ASC examinations are not the only examinations administered at the Prometric testing centers, and seats fill quickly.
- Make sure you have your Eligibility ID on hand when you make your appointment because you will be asked to supply your candidate identification number.
- If you lose your Eligibility ID, contact APA at 312-786-6342 or ASC@planning.org to request your ID.
- Individual test center hours of operation typically range from 9 a.m. to 5 p.m. Monday through Friday. Saturday hours vary by test center.
- If your first test center choice is unavailable, you will be offered an alternative as close as possible to your first choice.
- Once your examination has been scheduled, you will receive a confirmation number via e-mail. You will not receive a confirmation of your appointment by regular mail. Do not lose this number as you will need it if you need to make any changes to your appointment.
- If you require directions to the Prometric testing center, you can call the Prometric automated direction line, 800-796-9853, or visit Prometric's website at www.prometric.com for door-to-door directions.

Additional Scheduling Information

1. Eligibility ID. AICP staff will e-mail an approved candidate an Eligibility ID after they have paid the \$425 exam fee. The Eligibility ID will include a list of instructions on locating and scheduling your appointment. Eligibility IDs for a particular testing window are not released until the previous window has passed and all administrative reporting has been completed. If you do not receive your Eligibility ID two weeks after paying the \$425 registration fee, please contact AICP via e-mail at ASC@planning.org.
2. Review your Eligibility ID carefully. Be certain all information is correct. This will facilitate rapid and efficient processing at your test appointment. Contact APA at 312-786-6342 or e-mail ASC@planning.org if you need a correction.
3. Prometric will charge APA for the number of candidates who schedule an appointment to test. If after scheduling an appointment, you do not take the examination during the assigned testing window, you will be required to pay the exam fee again in order to be rescheduled for the next testing window (see No Show Policy on page 12).
4. Please note that if you sign up for the exam, you are expected to sit for the test during that exam window. If you do not schedule an appointment to test and are not approved for a transfer to the next exam window by the relevant deadline, you will forfeit your full exam fee (see If You Never Schedule an Appointment on page 12).

TRANSFERS AND APPOINTMENT CHANGES

The following policies apply to rescheduling your test appointment within the same exam window or transferring to the following exam window. For the ASC May window, the following exam window is May of the next calendar year.

Changes to Your Test Appointment

To change an appointment date/time within the same exam window, you must cancel your scheduled appointment and reschedule your appointment through Prometric. Log onto www.prometric.com/aicp or contact the test center directly by noon (ET) at least two full business days prior to your scheduled appointment. You will not be permitted to cancel or reschedule your appointment if you miss this deadline (see No Show Policy below). Leaving a message on an answering machine is not an acceptable method of canceling or rescheduling your appointment to test.

Applicants will be charged a \$35 fee from Prometric if he or she tries to reschedule their exam appointment within 2-29 days of their scheduled exam appointment. The fee is collected by Prometric via credit card. Changes to an appointment within two (2) days of the exam are considered a “no show” and will result in the applicant forfeiting the exam fee (see No Show policy below).

Transfers to the Next Exam Window

Candidates who register to take an ASC examination are expected to test during the upcoming exam window. However, you are allowed to transfer to the following exam window within the 5 cycle pre-approved application. A **\$100 transfer fee** must be paid online when you register for the next consecutive exam (e.g., if you transfer your May 2016 exam registration, you must pay the \$100 transfer fee when registering for the May 2017 exam).

To request a transfer to the following exam window:

1. You cannot have a testing appointment scheduled with Prometric at the time that you request a transfer. If you already have a test appointment scheduled, you must cancel the appointment (see Changes to Your Test Appointment above).
2. You must request the transfer by APA’s transfer deadline. If you do not request a transfer by APA’s transfer deadline, you must either test or forfeit your exam fee (see Refunds below). APA’s transfer deadline is posted at www.planning.org/certification.
3. You must pay the \$100 transfer fee when registering for the next consecutive exam. Submit transfer requests to ASC@planning.org and include your name and APA ID number. Transfer requests submitted after the transfer deadline or submitted while you still have a test appointment scheduled will not be accepted.

Submit transfer requests to ASC@planning.org and include your name and APA ID number. Transfer requests submitted after the transfer deadline or submitted while you still have a test appointment scheduled will not be accepted.

No Show Policy

You will be considered a “no show” and will forfeit your full exam fee if:

- You miss your scheduled appointment.
- You cancel with Prometric less than two full business days prior to your scheduled appointment.
- You arrive 15 minutes or more past your scheduled appointment time.
- You do not bring acceptable ID with you to the test center and are denied admission (see Identification Requirements on page 12).

In the cases listed above, you will not be allowed to reschedule your examination within the current exam window, you will forfeit all fees paid, and you must remit another full exam fee to register for a future exam window.

If You Never Schedule an Appointment

Candidates who register to take the AICP ASC examination must schedule a test appointment and sit for the exam during the upcoming exam window. Candidates who register for the exam and do not test or transfer will forfeit their full exam fee (see Refunds below).

Refunds

No refunds will be given once the exam fee has been paid unless the application is denied or found to be incomplete by APA. Candidates who register for the exam must either test or use their one free transfer (see Transfers to the Next Exam Window above).

TAKING THE EXAMINATION

Identification Requirements

To be admitted to the examination, you must have two forms of identification bearing your name and your signature. One or more must be a primary form of identification and must include a recent photo.

- Primary forms of identification include: a valid passport, valid driver’s license, or a photo-bearing employee ID card.
- Secondary forms of identification include: military ID card, citizenship card, valid credit card with signature, Social Security Card, or bank automated teller card.
- You may not use a draft classification card or student identification.

Keep both forms of identification with you at all times. If you leave the testing room for any reason, you will be required to show the Test Center Administrator (TCA) your identification to be readmitted to the room.

If you do not bring the appropriate identification to the test center, you will not be able to test within that testing window. Please note that your name as it appears on your identification must match the name on the Eligibility ID. Therefore, if any information on your Eligibility ID is incorrect, contact AICP staff at ASC@planning.org or call 312-431-9100 prior to making your appointment to test.

Acceptable Differences in ID

Each candidate must bring two forms of ID on exam day, both containing signatures, one with a photo. If there is a discrepancy in a candidate’s name as it appears on the photo identification and the Eligibility ID, please refer to the examples of acceptable name variations listed below. If the name variation is listed, the candidate may call and make an appointment to test. If the name variation is not listed in the examples of acceptable name variations shown below, the candidate must contact AICP via e-mail at ASC@planning.org before making an appointment to test. AICP will update the candidate’s record and forward the updated record to Prometric. The candidate will be notified once the appropriate changes have been made.

Allowable Name Discrepancies	Examples
A single-letter discrepancy exists in examinee’s name.	<ul style="list-style-type: none"> • Single letter difference: Johnson vs. Johnson • Single letter transposition: Alexander vs. Alexandre • Single letter omission: Schultz vs. Shultz • Single letter addition: Miller vs. Mialler or Miler
One version of examinee’s name has a middle initial or middle name while other does not.	<ul style="list-style-type: none"> • John E. Smith vs. John Smith • Mary R. Abernathy vs. Mary Rose Abernathy
First name is provided formally on one document, but a typical variation is used on another document.	<ul style="list-style-type: none"> • Michael Jones vs. Mike Jones
Incorrect letters are used in a name on one document but correct letters are used on another document.	<ul style="list-style-type: none"> • Diller vs. Ditter • Dutton vs. Ditton
Maiden name is used as a middle name on one document, while given middle name is used on another document.	<ul style="list-style-type: none"> • Mary Elizabeth Smith vs. Mary Jones Smith
Names are shown in LastName, FirstName format.	<ul style="list-style-type: none"> • Russell, Evan vs. Evan Russell
Suffixes to name should be ignored.	<ul style="list-style-type: none"> • For example: Jr., Sr., II, III
<p>If the names on examinee’s record on computer and ID differ because examinee has made a legal name change, you must present one of the following:</p> <ul style="list-style-type: none"> • marriage certificate • divorce decree • legal name change 	
<p>Important: Substitution of another name for either the first or last name or both names (e.g., Smith to Jones or Smith to Smith-Jones, or John to James) is not permitted.</p>	

Exam Day

Arrive early and bring proper ID. You must arrive at the test center 30 minutes before your scheduled appointment to complete the required admission process before testing begins. Late arrivals will not be admitted. After you are admitted, the Test Center Administrator (TCA) will give you a short orientation then escort you to a work station. You will have access to a calculator on the computer. You must remain in your seat during the examination, except when authorized to leave by a test center staff member. Candidates may not leave the testing room without the TCA's permission. The TCA will provide you with scratch paper, which may be replaced as needed during testing. You may not remove the scratch paper from the testing room at any time. You will not be allowed to bring your own scratch paper, pencil, or calculator into the testing room.

Raise your hand if you:

- Have a problem with your computer.
- Need more scratch paper.
- Need to take a break (no extra time will be given to take the examination).
- Need the TCA for any reason.

When you have finished with the examination and a post-examination survey, the TCA will collect all your scratch paper.

Testing Procedures

To ensure that all candidates take the examination under comparable conditions and achieve fair and accurate results, a standardized testing environment will be maintained.

The following regulations and procedures will be observed at every test center:

- You must follow the instructions given by the TCA.
- You will be provided a multi-functioning calculator. It will be a basic, non-programmable, non-printing, four function calculator with percent and square root buttons. You must use this calculator during the examination. No other calculator will be allowed in the testing room.
- Do not bring books or other reference material into the testing room. The TCA will not permit anyone found possessing such materials to continue the examination.
- You will be provided a secured locker to store personal possessions and materials not allowed in the testing room. You may reclaim these items when you leave the test center.
- Visitors are not permitted at the test center.
- You may not bring scratch paper into the testing room. The TCA will give you scratch paper.
- If you wish to leave the room during the examination, you must secure the TCA's permission.
- You will not be permitted to continue the examination beyond the time limit. An on-screen clock will count down your time remaining.

Computer-based Examination Tutorial

A brief tutorial precedes the examination. The tutorial is designed to familiarize you with the computer and the testing software. You will have up to 15 minutes to complete the tutorial. This is in addition to the time allotted to take the examination. The tutorial will teach you how to select answers, move from one question to the next, and use testing features such as "Item Review," as well as how to use the mouse and keyboard. By familiarizing you with the operation of the computer, the tutorial will make it easier for you to concentrate on completing the examination. You do not need to be concerned with the answers you select during the tutorial; it is intended for practice only and there is no penalty for incorrect answers. Once you exit from the tutorial, you may not return to it. We strongly encourage you to take the tutorial.

Reporting Test Center Irregularities

While at the test center, should you experience a delay in taking your examination or encounter any technical problems, please make sure that this irregularity is documented by the TCA. The TCA will file a written report with Prometric and AICP.

Some Notes on Computer-based Testing

You do not need extensive computer experience to take the examination. On-site assistance includes:

- An online tutorial to guide you through how to use the computer.
- Computer workstations equipped with a mouse, standard keyboards, and 17-inch monitors for optimum viewing.
- Fully trained Test Center Administrators (TCAs) available during your examination for technical assistance. TCAs will not assist with examination content.

Among the benefits of computer-based testing are:

- Ability to mark questions for later review.
- Ability to track and display the time remaining on the examination.

Taking the Examination

You will have 15 minutes prior to the exam for an online tutorial and 15 minutes after the exam to answer a brief computer-administered exit survey at the end of the examination. During the examination, you will have the opportunity to review all questions. You may change answers or mark or skip questions and then go back to complete your answers. This system allows you to use your time efficiently. Answer the questions you are sure of first, leaving your remaining time for the more difficult questions. Should your time expire while taking the examination, all answers, regardless of how they are marked, will be calculated into your score. Once your allotted time has expired or you exit the examination, you cannot see or review the questions again.

Exit Survey

At the conclusion of the examination, you will be asked to complete a brief on-screen survey, which will provide APA and Prometric with an evaluation of your testing experience. All comments will be reviewed after the close of the testing window and will remain confidential.

Candidate Misconduct

The following are examples of behaviors that are considered to be misconduct and will not be tolerated:

- Giving or receiving assistance of any kind.
- Using any unauthorized references.
- Attempting to take the examination for someone else.
- Failing to follow testing regulations or the instructions of the Test Center Administrator.
- Creating a disturbance of any kind.
- Copying, removing, or attempting to remove examination questions or scratch paper from the testing room.
- Tampering with the operation of the computer or attempting to use it for any function other than taking the examination.
- Leaving the testing room without permission.
- Using electronic communications equipment.
- Bringing in a calculator or smart phone.

SCORING THE EXAMINATION

Score Validity Review

In the absence of observed misconduct, it should be noted that Prometric and APA routinely conduct post-test administrative review of the validity of the test scores. If irregularities are found as a result of these reviews, the candidate will be contacted and notified of procedures to resolve any validity issues concerning his or her score.

Score Reports

Your scores are confidential and are released to APA by Prometric. Unofficial score reports will be issued to candidates before leaving the test center. Your unofficial score report will show a total scaled score and will indicate whether you have passed or failed. To protect candidates' privacy and to maintain the confidentiality of test results, score information for individual candidates will not be given over the telephone. If you have specific questions or concerns about your scores, you may write to APA. Requests for duplicate score reports must be made in writing. Electronic score data files will be retained by Prometric for two years. APA retains this information in perpetuity. APA will mail out official score reports about six to eight weeks after the exam window closes.

Diagnostic Scores

For diagnostic purposes, failing candidates are informed of how many questions they answered correctly (raw score) in each of the examination content areas. Do not expect diagnostic scores to average out to the total score. Raw score information is intended only to assist the candidate in preparing for reexamination by indicating the areas in which the candidate had the most difficulty. Failing candidates should review those areas in which they scored comparatively low before retaking the examination.

Equating

The computerized version of the examination pulls the scored questions from a larger pool of questions, meaning that there are different versions of the examination. Equating makes statistical adjustments to test scores to compensate for differences in the relative difficulty of different versions of the examination.

Suppose you and your colleague are equal in your mathematical abilities. You both take a mathematics test. Both tests are intended to cover the same type of mathematics questions; however, the test you take is harder than the one your colleague takes. You answered 35 questions correctly on your test. Your colleague answered 40 questions correctly on his test. It would not be accurate or fair to conclude, on the basis of the test scores, that you were not as proficient in mathematics as your colleague. The difference in the scores was not due to your mathematical abilities, because our first assumption was that you and your colleague were of equal ability. The difference in your scores was due to the fact that one test was harder than the other. Equating allows us to determine that a 35 on the test that you took represents the same level of mathematical knowledge, skills, and abilities as a score of 40 on the test that your colleague took.

Scaling

Scaling allows scores to be reported on a common scale. For example, instead of having to remember that a 35 on the test that you took is equivalent to a 40 on the test that your friend took, we can use a common scale and report your score as a scaled score of 55. Since we know that your friend's score of 40 is equal to your score of 35, your friend's score would also be reported as a scaled score of 55.

Important note: Scaled scores are not percentage scores. They allow us to report different raw scores that represent the same kind of knowledge, skills, and abilities as the same scaled score.

NOTE: The scaled score ranges and passing scaled score for the ASC examinations are not available yet. More information will be provided later.

Reliability

Reliability is a concept that refers to the accuracy of test scores, such as the scaled scores derived for ASC examinations. All test scores are affected by sources of error to some extent; the smaller the effect, the higher the reliability. Examples of error sources include an unclearly worded test question or even a momentary spell of boredom. Hypothetically, if you could take the same test an infinite number of times, while remaining unchanged (physically and psychologically), your scores would vary. The average of these scores would be your true score, which would be free of error. If a test were perfectly reliable (not affected by error), each time you

took the test you would receive the same score and there would be no difference between your test scores and your true score. For a highly reliable test, your test scores would vary, but would all be close to your true score. The concept of reliability is expressed statistically as a reliability coefficient. Reliability coefficients range from 0 (absence of reliability) to 1 (perfect reliability).

Standard Error of Measurement

Since no measure of test performance is perfectly accurate, you might ask: “How accurate is my ASC Examination scaled score?” This question is not directly answerable since it requires knowing what your score should be (true score). Your true score can never be known. The difference between your actual test score and your true score would be the “error of measurement” associated with this administration of the examination. Because errors of measurement vary from one test administration to another, it would be convenient to estimate how much these errors can be expected to vary. Such an estimate can be calculated without administering the examination to any examinee more than once. This estimate is called the standard error of measurement (SEM). If a test could measure basic elements of the subject matter without error, the value of the SEM associated with that test would be zero, in scaled score units. Although the SEM will invariably exceed zero, its value should be small. APA and Prometric closely monitor the SEM of each test form to ensure reasonable accuracy for the ASC Examinations.

If You Have a Complaint

If you have a complaint or wish to make a comment about test center facilities or supervision, examination content, or any other matter related to the testing program, please write to APA at:

American Planning Association
205 N. Michigan Ave.
Suite 1200
Chicago, IL 60601
Attn: ASC Exam

p. 312-431-9100
f. 312-786-6700
ASC@planning.org

In all correspondence, be sure to give your name, address, and APA ID number. If your questions or comments concern an examination you already have taken, also include the name of the examination, the date you took the examination, the location of your test center, and your examination number. APA will investigate each complaint and respond within a reasonable amount of time.

If You Retake the Examination

If you decide to take the examination again, you should be aware that, without any change in your level of knowledge, your test score may increase or decrease slightly. This slight change may be caused by something as simple as the way you feel on the day of the test or the temperature of the room in which you take the test. To increase the probability of significantly improving your test score, increase your knowledge of the subject material. You cannot retake just one part of the examination; you must retake the entire examination again and pay the full examination fee.

EXAM OUTLINES

AICP Certified Transportation Planner (AICP CTP) Examination

The AICP CTP examination will consist of multiple choice and scenario-based questions on the subject matters listed below. The list is intended to be representative and not inclusive of all subject matter known to the field of transportation planning. Candidates should note that exam questions do not precisely follow the order listed below.

I. Integrating Transportation into Community Planning [30%]

A. Land Use/Urban Form and Transportation Interaction [10%]

1. Local laws and regulations (e.g., zoning tools and techniques, growth management, adequate public facilities)
2. Urban form characteristics (e.g., density, design, diversity, destinations, designation) and the impact on travel behavior, including history and theory
3. Roadway classification systems
4. Land based classification systems and allocation
5. Relationship of mobility and access
6. Factors affecting household and business location decisions
7. Effects of transportation decisions on socioeconomic and demographic conditions and land use patterns
8. Place making (e.g., TOD, context sensitive design, complete streets, walkable communities, sustainable design)

B. Environment and Transportation Interaction [7%]

1. Impacts of transportation on the environment (e.g., storm runoff, air quality, noise and vibration, land preservation, cultural resources, habitat, cumulative effects)
2. Design with nature (e.g., wetlands, threatened and endangered species habitats, aquifer recharge)
3. Climate change mitigation and adaptation (e.g., greenhouse gases, federal, state, and local regulations)
4. Environmental implications (e.g., suitability, carrying capacity, constraints)
5. Mitigation strategies (e.g., low impact development techniques, travel demand management, green infrastructure)

C. Economy and Transportation Interaction [7%]

1. Economic impacts of transportation investment (e.g., land values, development values, employment, income, cost recovery)
2. Externalities (i.e., other factors of social / economic value that are not incorporated in market prices)
3. Transportation benefits/costs allocations (e.g., tradeoffs, subsidies)

D. Distributional Effects Including Socio-Cultural, Economic, and Geographic [6%]

1. Socio-cultural impacts of transportation (e.g., community cohesion, archaeological sites)
2. Environmental justice (e.g., President Clinton's Executive Order 12898)
3. Progressive and regressive pricing structures
4. User and non-user benefits and burdens
5. Analytical ways to measure the impact on various groups in society of government projects, programs, policies, and financing mechanisms

II. Transportation Demand Analysis [12%]

- A. Concepts relevant to travel demand (e.g., latent demand, triple convergence, peak/off-peak, mode choice, impedance factors)
- B. Applications and limitations of four-step modeling (trip generation, allocation, mode choice, distribution and assignment, network development)
- C. Application and limitations of alternative models of estimating passenger and freight demand (e.g., simulation model, activity-based model, pivot point techniques)
- D. Land use scenario planning tools (e.g., visualization)
- E. Input data (e.g., assumptions, sources [e.g., Census Bureau, Bureau of Transportation Statistics, Transportation Research Board], reasonableness, comparability)
- F. Data collection methods (e.g., traffic counts, travel behavior surveys)
- G. Traffic impact analysis

III. Performance Measurement [15%]

- A. Mobility measures (e.g., level of service, travel time, delay, reliability, VMT, passengers per mile)
- B. Accessibility measures
- C. Safety measures
- D. Convenience measures (e.g., quality of service, crowding, reliability, on-time performance)

E. Connectivity measures

F. Efficiency, effectiveness, and productivity measures (e.g., cost per transit rider)

G. Measures of transportation effects (e.g., on land use, air quality, social equity, economic, environment, health)

H. Evaluation and weighting techniques (e.g., benefit cost analysis, cost effectiveness, matrix display, goals achievement matrix, multi-attribute utility analysis)

IV. Modal and Intermodal Planning [25%]

A. Pedestrian and Bicycle Planning [4%]

1. Walkability factors
2. Facility types (e.g., linkages, classifications, capacity, amenities)
3. Multi-modal quality of service (e.g., pavement condition, lighting, lateral separation)
4. Facility design and orientation (e.g., accessible paths, signage and marking, standards, on street/off street, way finding)
5. Bicycle and pedestrian programs (e.g., complete streets, safe routes to school, access to transit)
6. User characteristics (e.g., age, disability, experience level)
7. Education, encouragement, enforcement, engineering, events
8. Safety and liability

B. Streets and Highway Planning [4%]

1. Thoroughfare/network planning principles (e.g., connectivity, continuity, capacity, level of service, roadway spacing criteria, complete streets, context sensitive solutions)
2. Classification systems (e.g., accessibility and mobility trade offs)
3. Transportation system management (e.g., traffic control devices, traffic calming, ITS)
4. Special routes (e.g., truck, hazardous cargo, emergency evacuation)
5. Traffic safety
6. Access management
7. Design standards, flexibility and exceptions
8. Special lane designations (e.g., HOV/HOT, on-street parking, bicycle, bus)

C. Transit Planning [4%]

1. Development options and process (e.g., transit oriented development, mixed use, joint development)
2. Technology options (e.g., rapid transit, light rail, commuter rail, bus rapid transit, conventional bus, streetcar)
3. System planning and coordination/feasibility analysis
4. Market analysis/segmentation
5. Corridor alternatives analysis
6. Transit infrastructure and capital facilities (e.g., stops and stations, information systems)
7. Demand response (e.g., paratransit, dial-a-ride, and discount taxi programs)
8. Special needs (e.g., ADA compliance)
9. Transit operations (e.g., coordination among development, routing, scheduling, fare structures, quality of service, system coordination)
10. Bike and transit integration
11. Institutional structures, governance, and funding

D. Rail Planning [2%]

1. Demand estimation (for passenger only)
2. Station area planning
3. Rail implications for economic development (e.g., intermodal transfer centers, transit oriented development [TOD])
4. Community impact (e.g., grade crossing safety, quiet zones, traffic management, intermodal conflicts)
5. Corridor use alternatives (e.g., shared use [multimodal use of right-of-way], rail to trails, rail relocation)
6. Freight mobility
7. Technology options (e.g., inter-city rail, commuter rail, high-speed rail, light rail, streetcar)
8. Intermodal and multimodal facilities (e.g., distribution and goods movement)

E. Maritime Planning [2%]

1. Land use strategies and incentives
2. Seaport implications for economic development (e.g., industry clusters, cruise ship operations)
3. Community impact (e.g., traffic, environmental, land use)
4. Interface and accessibility (e.g., port-rail-highway)
5. Waterborne transportation planning (e.g., ferries, water taxis, barge, recreational boating)

F. Aviation Planning [2%]

1. Land use strategies and mitigation
2. Community impacts and constraints (e.g., noise, traffic, environment, height obstruction limitation, safety zone regulations)

3. Airport implications for regional economic development (e.g., international, national, and regional access; airport industrial parks; aviation related development)

G. Parking [2%]

1. Parking economics (e.g., supply, demand, pricing, elasticity, externalities, regulation, cash out)
2. Parking standards and incentives (e.g., shared parking)
3. Facility planning and regulation (e.g., site selection/location, modal relationships, parking technology, accessibility)

H. Intermodal and Multimodal Systems [5%]

1. Needs analysis
2. System planning, coordination/feasibility analysis, and operations planning
3. Facility master planning (e.g., transit transfer facilities, bicycle storage, intercity terminals, park and ride)
4. Right of way issues/competition for and ways to address limited transportation infrastructure capacity

V. Professional Practice [18%]

A. Transport Economics [4%]

1. Basic transport economic principles (e.g., supply, demand, elasticity, consumer surplus, life cycle costs, value of time, utility, behavioral factors)
2. Pricing strategies (e.g., tolling, managed lanes)

B. Transportation Finance [5%]

1. Federal, state, and local funding sources (e.g., taxes, user fees, special assessments, grants)
2. Financing techniques (e.g., bonds, TIF, impact fees, pay-as-you-go)
3. Cost estimating methods (e.g., capital, operations and maintenance, life cycle, present value/inflation)
4. Public-private partnership
5. Financial plan (e.g., CIP, pro forma financial analysis, project budget, financially constrained plan)
6. Property values and development exactions (e.g., considering the values of properties)
7. Development incentives (e.g., density bonuses)

C. Transportation Policy Programs and Regulation [5%]

1. Federal, state, and local transportation laws and regulations (e.g., climate change and energy, growth management, concurrency, national rail policy, ADA, civil rights, infrastructure revitalization)
2. Implications of ISTEA and subsequent laws (e.g., TEA-21, SAFETEA-LU) on planning, policy, and practice
3. Implications of NEPA on planning, policy, and practice
4. Metropolitan planning guidance and requirements
5. Institutional structures and governance (e.g., TMAs, transit authorities, special districts)
6. Best practices and emerging tools (e.g., livable centers initiative, sustainable communities)

D. Program and Project Management [4%]

1. Scope development/budgeting/ scheduling
2. Interdisciplinary project management
3. Data management and evaluation (e.g., statistics, GIS)
4. Stakeholder involvement and interagency coordination
5. Integration of transportation into comprehensive plans
6. Contract development and management (e.g., consultant selection, intergovernmental agreements)
7. Program funding and financial management
8. Standards of ethical practice

AICP Certified Environmental Planner (AICP CEP) Examination

The AICP CEP Examination will consist of multiple choice and scenario-based questions on the subject matters listed below. The list is intended to be representative and not inclusive of all subject matter known to the field of environmental planning. Candidates should note that exam questions do not precisely follow the order listed below.

I. Natural Systems Analytic Framework [30%]

- A. Aquatic systems (e.g., wetlands, rivers, streams, lakes)
- B. Atmospheric systems (e.g., air quality, climate change)
- C. Biotic systems (e.g., marine, riparian, upland habitat, species)
- D. Terrestrial systems (e.g., steep slopes, soil types, geology)
- E. Built environment impacts (e.g., pollution, habitat fragmentation)
- F. Data collection and inventory methods (e.g., baseline)
- G. Data management processing (e.g., GIS)
- H. Ecological principles, components, and characteristics (e.g., population, systems communities)
- I. Ecological restoration, preservation, and enhancement practices
- J. Ecosystem services benefits (e.g., pollination, ground water recharge, cooling, open space)
- K. Measurement parameters (e.g., population density, diversity, distribution, temperatures)
- L. Methods of ranking habitat function and value
- M. Physiographic boundaries (e.g., topography, geology, hydrology)

II. Integrating Environmental Planning into Community / Comprehensive Planning [30%]

- A. Best practices for climate change adaptation strategies
- B. Best practices for climate change mitigation strategies
- C. Best environmental practices for infrastructure systems (e.g., co-location, bioswales)
- D. Carrying capacity (resilience)
- E. Effects of built environment on public health (e.g., obesity, diabetes, asthma)
- F. Sources and effects of climate change (e.g., flooding, sea level rise, fires, smoke, food production, crop changes, droughts)
- G. Effects of specific land uses, place types, and human activities on natural systems
- H. Energy demand reduction methods (e.g., transportation, buildings, infrastructure)
- I. Environmental assessment of project plans (e.g., environmental checklists)
- J. Environmental justice principles (e.g., spatial and demographic distribution of benefits and burdens)
- K. Methods for applying best available science to environmental practices and strategies
- L. Green infrastructure types and practices (e.g., green roofs, bio-swales, urban tree canopy, reclaimed water)
- M. Recycling practices including source reduction
- N. Infrastructure systems (e.g., sewer water, solid waste, electricity)
- O. Methods for greenhouse gas generation measurement
- P. Methods of predicting localized climate change effects
- Q. Methods of quantification impact of human activities on the natural systems
- R. Scenario planning (quantitative and spatial)
- S. Sustainable/renewable energy systems (e.g., solar, wind, district heating/cooling)

III. Performance Measurement [15%]

- A. Best practices for development of benchmarks and performance measures for evaluating natural systems
- B. Public health indicators (e.g., noise, obesity, physical activity, respiratory disease)
- C. Social economic/race/ethnic equity indicators (e.g., excessive public health and environmental impacts on economically disadvantaged communities)

IV. Environmental Planning Practices [25%]

- A. Environmental project management (e.g., applicable scientific realms, selecting experts, interpreting scientific knowledge)
- B. Applicable legal and regulatory frameworks (e.g., NEPA, ESA, FEMA, state, regional, and local)
- C. Effective public and stakeholder engagement methods and techniques
- D. Funding resources (e.g., fee structures, public funding mechanisms, grant opportunities, public/private partnerships, NGOs/non-profits)
- E. Environmental risk management strategies and methodologies (e.g., natural hazards, man-made)
- F. Environmental models (e.g., air quality, integrated water management, habitat)
- G. Integration strategies for rural and urban natural systems (e.g., watershed management, TDRs, green belts, mitigation strategies)

- H. Operational cost estimation (e.g., monitoring cost, land management, public education, maintenance)
- I. Effective methods and techniques for interagency coordination
- J. Adaptive management practices (e.g., protocols to respond to unintended ecosystem consequences, changes, failures, and costs of responses)
- K. Ecologically sensitive site and infrastructure design (e.g., low impact design and context sensitive design, pervious surfaces)
- L. Land use regulations and incentives, emerging tools (e.g., environmental overlay zones, land banking, transfer of development rights, and purchase of development rights)
- M. Institutional structures and governance (e.g., watershed councils, air districts, metropolitan and basin planning organizations)
- N. Visual resource analysis (e.g., ridgeline protection, viewshed)
- O. Standards of ethical practice
- P. Natural system assessment and mapping (e.g., wetland delineation, stream classification, vegetation mapping, habitat mapping)
- Q. Resource management and extraction practices (e.g., forestry, mining, agriculture, fisheries, interbasin water transfer)

AICP Certified Urban Designer (AICP CUD) Examination

Advanced Specialty Certification in Urban Design recognizes an individual's in-depth knowledge, experience, and leadership skills in urban designing.

1. 3D DESIGN CREATIVITY AND CRITICAL INSIGHT [15%]

1. IMAGINATION
 - a. deconstruct and reconstruct (how to take apart and recreate designs or problems)
 - b. spatial properties and three dimensional design
 - c. investigation (query and probe into the unclear and unknown)
2. VISION OR PROJECTION
 - a. generate creative solutions (i.e. thinking in ways not yet apparent)
3. INITIATIVE
 - a. using professional judgment to make decisions based on incomplete information
 - b. taking proactive initiative (e.g. being entrepreneurial and resourceful)
4. STRATEGIC THINKING
 - a. integrating broader critical and imaginative thinking into logistical (physical) hypothesis
5. PATIENCE AND EMPATHY
 - a. understanding diverse perspectives and values
 - b. assimilating and translating diverse perspectives and values

2. SUSTAINABILITY [11%]

1. ENVIRONMENTAL
 - a. built environment (open spaces, infrastructures)
 - b. natural environment (water, land form, climate)
 - c. historic preservation
 - d. adaptive re-use
 - e. retrofitting buildings
 - f. energy (conservation, generation)
 - g. water, waste and recycling
2. SOCIAL
 - a. social equity
 - b. environmental justice
 - c. cultural associations (references)
 - d. sense of community identity
 - e. appreciation for traditional patterns, materials and practice
3. ECONOMIC
 - a. job creation (creating places that attract and sustain jobs)
 - b. value of land
 - c. community competitiveness
 - d. access to transportation
 - e. access to housing
 - f. jobs to housing balance
 - g. access to services

3. AGENCY [9%]

1. UNDERSTANDING AND MANAGING CHANGE
 - a. understanding how emerging trends influence design approaches
 - b. conserving places (irreplaceable assets)
 - c. responding to change in conditions by retrofitting and adapting
 - d. considering new influences to shape the built environment
2. INCLUSION
 - a. tools and techniques appropriate to the audience (e.g. social media, mainstream media, public presentation, engagement and education etc.)
 - b. Participatory processes of decision making
3. ACCESS
 - a. communicating benefits of urban design

- b. observing, analyzing and inspiring urban design outcomes
- 4. ANALYSIS
 - a. deconstruction (identifying the components in order to interpret and educate)
 - b. engaging in diagnostic activities
 - c. reconstruction (putting the components back together)
 - d. communication of implications and consequences
- 5. LEADERSHIP
 - a. Project management
 - b. conflict resolution
 - c. managing interdisciplinary teams
 - d. awareness of key players (ensuring key stakeholders are involved in the design process)
 - e. recommending action
 - f. advocacy
 - g. ethics
- 6. FACILITATION
 - a. ensuring all voices are heard and none dominate-including yours
 - b. communicating implication of choices
 - c. consensus building
 - d. building a sense of ownership by the stakeholders
- 7. COMMUNITY AND INDIVIDUAL QUALITY OF LIFE
 - a. aesthetics (sense of beauty)
 - b. fiscal impact
 - c. quality of life (sense of place)
 - d. improved health, safety and wellness
 - e. building a sense of ownership by the stakeholders
 - f. recognizing increase in diversity, and the need for connectivity and choices

4. CULTURAL HERITAGE: SENSIBILITY AND UNDERSTANDING [9%]

- 1. DEMOGRAPHIC TREND: RACE, CLASS, AGE AND GENDER
 - a. Spatial equity
 - b. use of a place (past, present and future)
 - c. competing economic interests
- 2. INTANGIBLE HERITAGE
 - a. memory and traditions including food, indigenous celebrations and music
 - b. COMPETING INTERESTS AND VALUES
 - c. political interests
 - d. cultural values
 - e. financial realities
- 3. DESIGN
 - a. historical urban patterns
 - b. traditional building styles, methods and materials

5. MOBILITY AND ACCESSIBILITY [8%]

- 1. ACCESS TO BASIC HUMAN NEEDS
 - a. access to food (including urban agriculture)
 - b. access to health care
 - c. access to open spaces, nature
 - d. access to jobs
 - e. access to education
 - f. public safety
- 2. STREETS/STREETSCAPES
 - a. appropriate hierarchy of street designs for all modes of travel
 - b. walkability
 - c. safety and security
 - d. identity
 - e. accessibility
 - f. connectivity

3. HEALTH AND WELLNESS
 - a. physical access to services
 - b. quality of choices of mobility
 - c. aesthetics
 - d. active living designs
4. MULTIMODAL ACCESS
 - a. complete streets
 - b. public transit
 - c. balance of movement and accessibility
 - d. paths, trails, water taxis, bicycles, shared cars
 - e. parking and parking management
5. ACCESS
 - a. concepts of universal access
 - b. application of state, federal, and local laws

6. URBAN FRAMEWORK [15%]

1. HISTORY AND PRECEDENTS
 - a. context
 - b. precedents
2. THEORY AND CITY FORM
 - a. settlement types and arranging forms
 - b. historical patterns and variations
3. NATURAL SYSTEMS
 - a. hydrology, geology and geomorphology
 - b. habitats and biodiversity
 - c. climate
4. LAND USE, DENSITY AND INTENSITY
 - a. integration of uses and mixed uses
 - b. compactness, transition, and economics
5. PUBLIC REALM
 - a. publicly accessible open spaces, streets, and orientation
 - b. civic and cultural facilities
6. STREETS/STREETSCAPES
 - a. dimensions
 - b. organizational systems
 - c. performance standards
 - d. urban forestry
 - e. personal safety as a consideration
 - f. way finding and commercial signage
 - g. active use of street and public spaces
7. PUBLIC TRANSIT
 - a. routes, stops, stations, shelters, systems and alignments
 - b. way finding, legibility and accessibility
8. Transit Oriented Development (TOD)
9. PUBLICLY ACCESSIBLE URBAN SPACE
 - a. visibility and access
 - b. safety and maintenance
 - c. vending and programming
10. URBAN TYPOLOGY
 - a. building function and typology
 - b. 3-dimensional form, massing, scale
 - c. dimensional characteristics of buildings
 - d. open space typology
 - e. block typology
 - f. street typology
11. QUALITY OF MATERIALS
 - a. type and quality of building materials

- b. streetscape materials
- c. landscape materials
- 12. UTILITIES AND INFRASTRUCTURES
 - a. power, water, storm-water, communication, gas
 - b. integrating natural systems as infrastructure
- 13. PUBLIC ART
 - a. understanding the role of arts in community and public places
- 14. PARKING
 - a. types, quantity and dimensions
 - b. location, operation and management
 - c. service access and characteristics

7. IMPLEMENTATION TOOLS [10%]

- 1. REGULATORY FRAMEWORK
 - a. plans
 - b. entitlements
 - c. design standards
 - d. types of land use and intensity of use
- 2. DESIGN STANDARDS AND URBAN DESIGN
 - a. building placement, massing and orientation
 - b. parking and service
 - c. dimensional parameters of streets, open spaces and buildings
 - d. management of visual character
- 3. CAPITAL IMPROVEMENT PROGRAMS
 - a. structures, streets, sidewalks and infrastructure
 - b. public institutions, facilities and government centers
 - c. understanding budgets, procurement and public processes
 - d. parks, squares, and playgrounds
- 4. INCENTIVES: PUBLIC, PRIVATE, INSTITUTIONAL
 - a. regulatory, bonus, public infrastructure
 - b. Tax Increment Financing (TIF), Business Improvement District (BID), financial incentives
- 5. PARTNERSHIPS
 - a. public benefits, organizations, non-profit organizations
 - b. strategic partnerships
 - c. working with community advocates
- 6. PUBLIC FINANCING
 - a. bonds, levies, impact fees
 - b. special assessments, local improvement districts
- 7. PRIVATE FINANCING
 - a. conventional financing, consortium, lending
 - b. return on investment, proforma, redlining
- 8. REAL ESTATE ECONOMICS
 - a. assessments, appraisals
 - b. feasibility, market demands, competitiveness, leakage
 - c. relationship of financing to entitlement
- 9. HEALTH IMPACT ASSESSMENT
 - a. Environmental Impact Settlement (EIS), National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA) (CA only), and State Environmental Policy Act (SEPA)-several states
- 10. ORGANIZATIONS: COMMUNITY DEVELOPMENT CORPORATION (CDC), NON-GOVERNMENTAL ORGANIZATION (NGO), BUSINESS IMPROVEMENT DISTRICT (BID)
 - a. identification and empowerment of stakeholders

8. DEVELOPMENT [8%]

- 1. PHASING
 - a. managing political process
 - b. building construction including phasing considerations
 - c. feasibility, impact and opportunities

2. STANDARDS
 - a. regional practices and resources
 - b. general knowledge of construction types
3. MEANS AND METHODS
 - a. construction impacts
4. COST
 - a. capital, operating, maintenance and lifecycle cost
 - b. value of existing structures and infrastructure

9. DEVELOPMENTAL ECONOMICS [4%]

1. General Real Estate Knowledge
 - a. ROI, payback periods, sources and uses, changing proformas
 - b. market conditions and consumer demands
 - c. regional trends

10. LEGAL [3%]

1. Property Rights
 - a. ownership rights
2. Sources of Legal Authority
 - a. Constitutions
 - b. Legislation
 - c. case law
 - d. land, building, fire and related codes

11. TOOLS OF TRADE [8%]

1. ANALYSIS
 - a. visual evaluation tools
 - b. digital tools
 - c. graphic presentation of quantitative information
 - d. info graphics
 - e. research
 - f. GIS
2. DESCRIPTION
 - a. language tools, narrative: writing, verbal
 - b. visualization tools
3. ENGAGEMENT
 - a. workshops
 - b. charrettes
 - c. social media
 - d. presentations
 - e. websites