

**Summary of Uniform CPA Examination
Candidate Test-Taking and Pass-Fail Patterns
in the First Ten Windows of
Computer-Based Testing (CBT)
(04Q2-06Q3)**

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Abstract

This study provides an analysis of candidate data in the first ten testing windows of the computerized Uniform CPA Examination in order to uncover general patterns in test-taking behavior and pass-fail status of CPA candidates. Unique individual candidates were identified and their behavior analyzed across sections within a window, across windows within a section, and across windows and across sections. Results show that in recent windows, more and more candidates took one section only, and the likelihood of passing that section has been increasing. More than 70,000 unique individual candidates¹ have taken each section since April 2004, and the cumulative pass rate is nearly 60%. The majority of candidates passed a section by taking it once or twice, while a few took a section 10 times in a row without passing. A total of 100,000 unique individual candidates have taken one or more sections since the launch of Computer-Based Testing (CBT) and about 20% of them have passed all four sections. The study identified candidates who passed a section more than once, sometimes in adjacent windows. Finally, depending on how to characterize candidates who gave up on the certification process, the study shows an estimated drop-out rate either 10% or 17.5%.

¹ Candidates take the CPA Exams in up to four sections and they may take each section more than once. The term “unique individual candidates” is used in this document when the candidates who took the test multiple times or in multiple sections are counted only once.

Introduction

The computerized Uniform CPA Examination was launched in the second quarter (04Q2) of 2004. The examination consists of four sections, Auditing and Attestation (AUD), Business Environment and Concepts (BEC), Financial Accounting and Reporting (FAR), and Regulation (REG). In order to qualify as CPAs, candidates are required to pass all four examination sections in addition to meeting other requirements.

With computerized testing, candidates enjoy the option of taking the examination eight months of the year (in four two-month testing windows). They may choose to take all four sections in one testing window, or any one, two, or three sections in one window, and the rest in subsequent windows, depending on test-taking strategies. If they fail sections, they can retake them until they pass all sections within an 18- month period.

Since the beginning of Computer-Based Testing (CBT), state boards of accountancy have required that candidates pass all four sections within an 18-month period. Candidates who fail to pass all sections within that period lose credit for the first section they passed, and have to retake and pass that section in order to meet the requirement. For example, a candidate who passed AUD but did not pass the other three sections by the end of the 18- month period would need to pass AUD again before losing credit for additional sections.

Candidates may give up on the certification process without passing all four examination sections. They may do this because they failed or kept failing one or more sections, or because they lost motivation due to a career change or life events, among other causes.

At the time of writing, we have accumulated ten windows (04Q2 to 06Q3) of candidate data. We are now in a position to conduct a longitudinal study that tracks candidates' behavior since the launch of CBT. This analysis combines candidate data across the ten windows to uncover some general patterns of taking and retaking examination, passing or failing, and remaining in or dropping out of the certification process.

Data Analysis

For each window and each section, the National Association of State Boards of Accountancy (NASBA) assigns each candidate an Exam Section ID (ESI) unique for that window and that section. To be able to track candidates across sections in one window or across windows, NASBA assigns another code called the Fake National ID (FNI) that can be used by NASBA to link to the true identity of each candidate. This link is unique and consistent throughout the whole CPA certification process for an individual test taker.

This study used the Fake National ID as the index variable to link candidates as well as to combine and merge data of the past 10 windows (04Q2 to 06Q3). Candidates who have no FNI or an invalid FNI were excluded. For each candidate, the major information of interest is what section he or she took in which window, and whether the candidate passed or failed. Descriptive analyses were performed from the following three perspectives.

First, we inspected the data across four sections within each window, to find out how many section(s) candidates chose to take in one window, and the proportion of candidates who passed each.

Second, we inspected the data across windows for each section, to find out how many times candidates took a particular section and whether they passed. We also looked at how many candidates passed a section but had to retake it to satisfy the 18-month requirement.

Third, we summarized the data across all windows and all sections, to find out how many times candidates tested until they passed the section, and finally, how many candidates dropped out of the certification process, and how many sections they took or passed before they dropped out.

For this study, a drop-out is defined as a candidate who did not pass all four sections of the computerized CPA Examination, and did not test in the last six windows. It should be noted such candidates might drop out because they lost all credit for the sections they passed, but they could come back and start all over again. It should also be noted that we are currently unable to identify directly candidates who had passed one or more sections in the paper-and-pencil format prior to 2004 and completed passing the examination in CBT. These candidates could be included in this analysis and flagged as drop-outs.

Results

Within-Window Across-Section Analyses

Results from the within-window, across-section analysis are summarized in Table 1 and Table 2. Table 1 provides the window-by-window statistics. For each window from 04Q2 to 06Q3, Table 1 gives the number of unique individual candidates across four sections and the percentage of candidates taking one, two, three, or four sections. For a group of candidates who

took a given number of sections, Table 1 also provides the percentage of candidates (numbers in italics) who passed none, some, or all of the sections they took. Table 2 re-summarizes the data by averaging values in Table 1, first over all ten windows, and then over the windows in each calendar year, 2004, 2005, and 2006.

In any given window, over 90% of candidates took one or two sections, of whom around 70% took only one section. The percentage taking only one section was always higher in the first two quarters of a calendar year, possibly due to the busy season of accounting work. At the same time, the percentage of candidates taking all four sections gradually dropped over the windows.

Table 1: Candidates by Number of Sections Taken and Number of Sections Passed in Each Window from 04Q2 to 06Q3

	Number of Sections Taken			
	1	2	3	4
04Q2 (Total N = 15245)				
Pct. of Candidates	65.93	25.99	2.16	5.92
Pct. Passing 0 Section*	53.39	42.48	31.93	24.94
Pct. Passing 1 Section	46.61	28.12	17.17	13.53
Pct. Passing 2 Sections		29.40	16.57	14.30
Pct. Passing 3 Sections			34.34	15.85
Pct. Passing 4 Sections				31.37
04Q3 (Total N = 23458)				
Pct. of Candidates	58.13	31.56	5.47	4.84
Pct. Passing 0 Section	57.19	43.57	35.12	35.95
Pct. Passing 1 Section	42.81	26.73	17.60	17.36
Pct. Passing 2 Sections		29.70	16.74	11.89
Pct. Passing 3 Sections			30.53	11.63
Pct. Passing 4 Sections				23.17
04Q4 (Total N = 26450)				
Pct. of Candidates	59.01	31.01	5.34	4.64
Pct. Passing 0 Section	59.54	48.45	43.03	43.23
Pct. Passing 1 Section	40.46	25.38	22.08	14.60
Pct. Passing 2 Sections		26.16	15.71	10.93
Pct. Passing 3 Sections			19.18	12.81
Pct. Passing 4 Sections				18.43
05Q1 (Total N = 21522)				
Pct. of Candidates	67.52	25.36	3.91	3.22
Pct. Passing 0 Section	57.37	50.71	46.14	49.93
Pct. Passing 1 Section	42.63	24.68	23.07	15.15
Pct. Passing 2 Sections		24.61	16.05	12.12
Pct. Passing 3 Sections			14.74	8.37
Pct. Passing 4 Sections				14.43
05Q2 (Total N = 24131)				
Pct. of Candidates	68.02	24.78	4.74	2.46
Pct. Passing 0 Section	56.41	45.67	37.29	41.99
Pct. Passing 1 Section	43.59	26.25	19.48	15.85
Pct. Passing 2 Sections		28.08	14.50	11.64
Pct. Passing 3 Sections			28.73	13.32
Pct. Passing 4 Sections				17.20

* Proportion of passing zero or any section(s) are based on the number of candidates taking a given number of sections, not the total number of candidates.

Table 1 (continued): Candidates by Number of Sections Taken and Number of Sections Passed in Each Window from 04Q2 to 06Q3

	Number of Sections Taken			
	1	2	3	4
05Q3 (Total N = 29846)				
Pct. of Candidates	59.59	31.38	5.87	3.16
Pct. Passing 0 Section	53.41	41.09	33.16	34.99
Pct. Passing 1 Section	46.59	25.58	21.12	14.53
Pct. Passing 2 Sections		33.33	16.78	11.98
Pct. Passing 3 Sections			28.94	10.92
Pct. Passing 4 Sections				27.57
05Q4 (Total N = 32282)				
Pct. of Candidates	59.78	31.65	5.45	3.13
Pct. Passing 0 Section	55.35	45.66	43.46	44.20
Pct. Passing 1 Section	44.65	26.09	20.08	15.56
Pct. Passing 2 Sections		28.25	16.72	11.30
Pct. Passing 3 Sections			19.74	11.00
Pct. Passing 4 Sections				17.94
06Q1 (Total N = 26161)				
Pct. of Candidates	68.66	25.26	3.68	2.40
Pct. Passing 0 Section	55.58	46.39	47.71	48.41
Pct. Passing 1 Section	44.42	25.87	23.60	17.04
Pct. Passing 2 Sections		27.73	16.01	13.69
Pct. Passing 3 Sections			12.68	11.31
Pct. Passing 4 Sections				9.55
06Q2 (Total N = 29967)				
Pct. of Candidates	66.16	26.55	4.57	2.73
Pct. Passing 0 Section	55.25	44.21	39.25	41.37
Pct. Passing 1 Section	44.75	26.74	22.66	15.18
Pct. Passing 2 Sections		29.04	16.52	12.85
Pct. Passing 3 Sections			21.56	11.26
Pct. Passing 4 Sections				19.34
06Q3 (Total N = 31800)				
Pct. of Candidates	62.76	29.47	5.63	2.15
Pct. Passing 0 Section	52.91	40.15	33.02	43.05
Pct. Passing 1 Section	47.09	27.82	19.89	15.08
Pct. Passing 2 Sections		32.03	16.20	9.22
Pct. Passing 3 Sections			30.89	11.86
Pct. Passing 4 Sections				20.79

Table 2: Candidates by Number of Sections Taken and Number of Sections Passed Averaged for All Windows and By Calendar Year

	Number of Sections Taken			
	1	2	3	4
All Windows (04Q2-06Q3) Average Total N = 26086				
Pct. of Candidates	63.56	28.30	4.68	3.47
Pct. Passing 0 Section	55.64	44.84	39.01	40.81
Pct. Passing 1 Section	44.36	26.33	20.68	15.39
Pct. Passing 2 Sections		28.83	16.18	11.99
Pct. Passing 3 Sections			24.13	11.83
Pct. Passing 4 Sections				19.98
Year 2004 (04Q2-04Q4) Average Total N = 21718				
Pct. of Candidates	61.02	29.52	4.32	5.13
Pct. Passing 0 Section	56.71	44.83	36.69	34.71
Pct. Passing 1 Section	43.29	26.74	18.95	15.16
Pct. Passing 2 Sections		28.42	16.34	12.37
Pct. Passing 3 Sections			28.02	13.43
Pct. Passing 4 Sections				24.32
Year 2005 (05Q1-05Q4) Average Total N = 26945				
Pct. of Candidates	63.73	28.29	4.99	2.99
Pct. Passing 0 Section	55.64	45.78	40.01	42.78
Pct. Passing 1 Section	44.37	25.65	20.94	15.27
Pct. Passing 2 Sections		28.57	16.01	11.76
Pct. Passing 3 Sections			23.04	10.90
Pct. Passing 4 Sections				19.29
Year 2006 (06Q1-06Q3) Average Total N = 29309				
Pct. of Candidates	65.86	27.09	4.63	2.43
Pct. Passing 0 Section	54.58	43.58	39.99	44.28
Pct. Passing 1 Section	45.42	26.81	22.05	15.77
Pct. Passing 2 Sections		29.60	16.24	11.92
Pct. Passing 3 Sections			21.71	11.48
Pct. Passing 4 Sections				16.56

* Proportion of passing 1 or more sections are based on the number of candidates taking a given number of sections, not the total number of candidates.

When numbers are averaged by calendar year, Table 2 shows a steady increase in the percentage of candidates taking one section only, and a steady decrease in the percentage taking two or four sections. In particular, the averaged percentage taking four sections in the first year seemed to be much higher than those of the second and third years. Results also show larger fluctuations in the percentages taking three sections.

The percentages of candidates passing one or more sections demonstrate more variation as expected. When averaged, Table 2 indicates that, in general, candidates taking three or four sections were more likely to pass those sections all at once in earlier windows than in later windows. On the other hand, as more candidates tended to take one section only per window, the likelihood of passing that section increased steadily over the years.

Within-Section Across-Window Analyses

Results from the within-section, across window analysis are presented in Tables 3 to 9. Table 3 provides the cumulative pass rates of unique candidates in each section. Results show that BEC attracted more unique individual candidates (73,911) than the other three (around 70,000). BEC and FAR had slightly higher cumulative pass rates (59%) than AUD and REG (57%).

Table 3: Cumulative Pass Rates by Section (04Q2-06Q3)

Status	AUD		BEC		FAR		REG	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Fail	29573	42.46	30109	40.74	28063	40.66	29816	42.55
Pass	40080	57.54	43802	59.26	40958	59.34	40265	57.45
Total	69653	100	73911	100	69021	100	70081	100

Table 4: Candidates by Number of Tests They Took in Each Exam Section (04Q2-06Q3)

Number of Tests	AUD		BEC		FAR		REG	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1	52274	75.05	56491	76.43	51352	74.40	50653	72.28
2	12463	17.89	11989	16.22	12116	17.55	13256	18.92
3	3519	5.05	3566	4.82	3833	5.55	4292	6.12
4	1003	1.44	1222	1.65	1168	1.69	1321	1.88
5	268	0.38	450	0.61	393	0.57	380	0.54
6	97	0.14	138	0.19	115	0.17	123	0.18
7	23	0.03	43	0.06	30	0.04	38	0.05
8	3	0.00	12	0.02	8	0.01	14	0.02
9	3	0.00			4	0.01	3	0.00
10					2	0.00	1	0.00
Total	69653	100	73911	100	69021	100	70081	100

Table 4 gives the number and percentage of unique individual candidates in each section by the number of tests they took up to 06Q3. Results show that around 75% (72% for REG) took one section, and over 90% took one or two sections. For each section, a number of candidates took the test many times – up to 10 times for FAR and REG, 9 for AUD and 8 for BEC.

Table 5: Successful Candidates by Number of Tests to Pass a Section (04Q2-06Q3)

Number of Tests Until Pass	AUD		BEC		FAR		REG	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1	31640	78.94	35918	82.00	31669	77.32	30261	75.15
2	5735	14.31	5121	11.69	6042	14.75	6292	15.63
3	1976	4.93	1839	4.20	2306	5.63	2600	6.46
4	534	1.33	623	1.42	674	1.65	834	2.07
5	136	0.34	223	0.51	208	0.51	198	0.49
6	49	0.12	62	0.14	46	0.11	54	0.13
7	9	0.02	14	0.03	11	0.03	18	0.04
8	1	0.00	2	0.00	2	0.00	7	0.02
9							1	0.00
Total	40080	100	43802	100	40958	100	40265	100

Table 6: Unsuccessful Candidates by Number of Tests Failed (04Q2-06Q3)

Number of Tests Failed So Far	AUD		BEC		FAR		REG	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1	22108	74.76	21730	72.17	20971	74.73	21973	73.70
2	5290	17.89	5743	19.07	4808	17.13	5420	18.18
3	1512	5.11	1696	5.63	1514	5.40	1658	5.56
4	464	1.57	598	1.99	485	1.73	484	1.62
5	132	0.45	227	0.75	185	0.66	182	0.61
6	48	0.16	76	0.25	69	0.25	69	0.23
7	14	0.05	29	0.10	19	0.07	20	0.07
8	3	0.01	10	0.03	6	0.02	7	0.02
9	2	0.01			4	0.01	2	0.01
10					2	0.01	1	0.00
Total	29573	100	30109	100	28063	100	29816	100

Table 5 provides a summary by the number of tests taken by candidates before they passed a section. Results show that over 75% of candidates were able to pass a section on their first attempt and over 90% after one or two attempts. It appears that BEC candidates were more likely (82%) to pass on the first attempt.

Table 6 gives a summary by the number of tests taken by candidates who have not yet passed a section. As in Table 5, results show over 90% of them tested one or two times only, while some candidates have failed many times – again up to 10 times for FAR and REG, 9 for AUD and 8 for BEC. In other words, in FAR and REG there were a few candidates testing in every window since the launch of CBT and still failing the exam.

The analysis identified some candidates who took the test a second time after they had passed it. Most of them passed again but some did not. Table 7 gives the number of candidates who passed a section before but failed when they tested again, and the percentage of such people among all unique individual candidates of that section. It seems that such failures tended to

frequent in REG (116 cases, 0.17%) more than FAR (40 cases, 0.06%), while AUD and BEC fell in between.

Some candidates passed a section twice. Table 8 provides the number of those candidates and separates them into two groups by the length of intervals, i.e. the number of windows between their first pass and second pass. Again, the percentages in Table 8 are of the total number of unique individual candidates taking a section. The first group passed a section six or more windows after they passed the first time. This group seemed to be impacted by the requirement to pass all sections within an 18-month period. There were over 200 such candidates in AUD and BEC, 144 in REG, and only 60 in FAR.

Table 7: Candidates Who Passed a Section But Failed When Taking the Same Section Again (04Q2-06Q3)

AUD (Tot N = 69653)		BEC (Tot N = 73911)		FAR (Tot N = 69021)		REG (Tot N =70081)	
N	Pct.	N	Pct.	N	Pct.	N	Pct.
95	0.14	97	0.13	40	0.06	116	0.17

* Percentage is out of total N.

Table 8: Candidates Who Passed a Section Twice (04Q2-06Q3)

Number of Windows Apart	AUD (Tot N = 69653)		BEC (Tot N = 73911)		FAR (Tot N = 69021)		REG (Tot N =70081)	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
6+ Windows	223	0.32	200	0.27	60	0.09	144	0.21
0-5 Windows	14	0.02	3	0.00	16	0.02	4	0.00
Total	237	0.34	203	0.27	76	0.11	148	0.21

* Percentage is out of total N.

Table 9: Candidates by Number of Windows between Last Two Tests before Passing a Section, Organized by Number of Tests to Pass Exam (04Q2-06Q3)

Number of Intervals	AUD		BEC		FAR		REG	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Passed on 2 nd Test								
0	1566	27.37	1859	36.38	1712	28.37	1933	30.75
1	1971	34.45	1573	30.78	2102	34.83	2204	35.06
2	997	17.42	842	16.48	1062	17.60	957	15.22
3	650	11.36	431	8.43	615	10.19	654	10.40
4	274	4.79	217	4.25	274	4.54	278	4.42
5	151	2.64	104	2.04	157	2.60	132	2.10
6	76	1.33	51	1.00	76	1.26	69	1.10
7	27	0.47	27	0.53	31	0.51	49	0.78
8	10	0.17	6	0.12	6	0.10	11	0.17
Total	5722	100	5110	100	6035	100	8267	100
Passed on 3 rd Test								
0	991	50.20	1057	57.48	1318	57.23	1460	56.18
1	661	33.49	476	25.88	642	27.88	768	29.55
2	226	11.45	221	12.02	239	10.38	251	9.66
3	68	3.44	60	3.26	81	3.52	90	3.46
4	21	1.06	15	0.82	16	0.69	20	0.77
5	5	0.25	8	0.44	6	0.26	7	0.27
6	1	0.05	2	0.11	1	0.04	3	0.12
7	1	0.05						
Total	1974	100	1839	100	2303	100	2599	100
Passed on 4 th Test								
0	377	70.60	466	74.80	493	73.15	622	74.58
1	114	21.35	113	18.14	141	20.92	156	18.71
2	34	6.37	34	5.46	32	4.75	37	4.44
3	9	1.69	8	1.28	5	0.74	15	1.80
4			1	0.16	3	0.45	4	0.48
5			0	0.00				
6			1	0.16				
Total	534	100	623	100	674	100	834	100

The second group, however, took and passed a section twice in adjacent or close-by windows, apparently unmotivated by the 18-month requirement. Although the second group was very small (0.02% at most), it may reflect either a data problem (such as inaccurate Fake National IDs) or candidates who retested without realizing they already passed. Further investigation of this group of candidates is needed.

Table 9 provides a more detailed picture of groups of candidates listed in Table 5. For candidates who passed a section at their second, third, or fourth attempt, Table 9 further divides them by the number of windows between their last two tests. In other words, this table gives an idea of the typical “waiting time” before a failed test and a passed test in each section. In this table, an interval of zero window means candidates passed in the next window following the last failed test. Candidates who passed on their fifth or subsequent attempt were not included because they made up less than 1% of candidates of each section. Candidates who passed on their first attempt were not included either.

For those who passed by their second test, Table 9 shows that more candidates tended to retake the test in the very next window after they failed in BEC (36%) than in other sections, possibly because more candidates of BEC were included in the first round of score release. In AUD, FAR, and REG more candidates (around 35%) tended to wait for one window before they retook the test. For those who passed by their third attempt, over 50% of candidates took their last two tests in adjacent windows. For those who passed by their fourth attempt, over 70% took their last two tests in adjacent windows and over 90% took their last two tests within three windows. Table 9 also indicates that, compared with the other three sections, AUD candidates who passed were less likely to take their last two tests in adjacent windows, but more likely to do so in the second window after their last failure.

Across-Window Across-Section Analyses

Tables 10 through 14 summarize the data across all windows and all sections. Table 10 shows that, up to 06Q3, a little more than 100,000 unique individual candidates took one or more sections of the computerized CPA Examination, and 40% of them took all four sections.

Table 11 shows how many candidates passed how many sections, organized by the number of sections they took. We can see that more than half of the candidates who took four sections have passed them all. In other words, slightly over 20% of all unique individual candidates have passed all four examination sections since the launch of CBT. Among those who took two or three sections, around 30% have passed either both or all three sections. For those who took only one section so far, 41% passed and 59% failed.

Table 10: Candidates by Number of Sections They Took (04Q2-06Q3)

Number of Sections	N	Pct.
1	26043	24.70
2	24386	23.13
3	12129	11.50
4	42866	40.66
Total	105424	100

Table 11: Candidates by Number of Sections Passed and by Number of Sections Taken (04Q2-06Q3)

Sections Passed	4 Sections Taken		3 Sections Taken		2 Sections Taken		1 Section Taken	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
0	7622	17.78	4287	35.35	11744	48.16	15255	58.58
1	3973	9.27	2482	20.46	4583	18.79	10788	41.42
2	3705	8.64	1909	15.74	8059	33.05		
3	4684	10.93	3451	28.45				
4	22882	53.38						
Total	42886	100	12129	100	24386	100	26043	100

Table 12: Candidates by Number of Tests before Passing All Sections They Took (04Q2-06Q3)

Tests before Passing All Sections Taken	4 Sections Taken		3 Sections Taken		2 Sections Taken		1 Section Taken	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1							8101	75.09
2					4767	59.15	1827	16.94
3			2485	72.01	1624	20.15	595	5.52
4	11467	50.11	539	15.62	895	11.11	189	1.75
5	4379	19.14	217	6.29	433	5.37	63	0.58
6	2654	11.60	133	3.85	182	2.26	9	0.08
7	1662	7.26	49	1.42	96	1.19	4	0.04
8	1067	4.66	17	0.49	38	0.47		
9	697	3.05	4	0.12	19	0.24		
10	388	1.70	3	0.09	3	0.04		
11	232	1.01	3	0.09	1	0.01		
12	149	0.65	1	0.03	1	0.01		
13	94	0.41						
14	45	0.20						
15	20	0.09						
16	17	0.07						
17	6	0.03						
18	2	0.01						
19	2	0.01						
20	0	0.00						
21	0	0.00						
22	1	0.00						
Total	22882	100	3451	100	8059	100	10788	100

Candidates who passed all of the sections they took are then reanalyzed by the number of times they tested. Results are presented in Table 12. We can see that 50% of the candidates who passed all four sections accomplished that in four sessions, i.e. they passed each section on the first attempt. For those who took and passed three sections, 72% passed each section on a single appointment. The percentage of passing on the first attempt is 75% for those who took one section only. Interestingly, for those who took and passed two sections, only 59% tested for each section only once. Table 12 also shows that some candidates took up to 22 tests to pass all four sections.

Candidates were flagged as drop-outs if they did not pass all four sections of the CPA Examination, and did not take any section in the last six windows. A total of 18446 such candidates were identified, which leads to a possible drop-out rate of 17.5%. Results of the drop-out analysis are captured in Table 13, where drop-outs are cross-tabulated by the number of sections they took and by the number of sections they passed.

Table 13: Drop-out Candidates by Number of Sections They Took and by Number of Sections They Passed (04Q2-06Q3)

Section(s) Taken	Section(s) Passed								Total
	0		1		2		3		
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
1	4235	45.00	5176	55.00					9411
2	2811	49.96	479	8.51	2337	41.53			5627
3	716	62.26	181	15.74	45	3.91	208	18.09	1150
4	1614	71.48	325	14.39	89	3.94	230	10.19	2258
Total	9376	50.83	6161	33.40	2471	13.40	438	2.37	18446

* Percentage is out of the total in the last column.

Table 14: Drop-out Candidates by Number of Times They Failed in Each Section (04Q2-06Q3)

Test(s) Failed	AUD		BEC		FAR		REG	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1	5258	94.36	4720	94.42	4504	95.3	5162	95.01
2	285	5.11	262	5.24	202	4.27	253	4.66
3	25	0.45	16	0.32	19	0.40	18	0.33
4	4	0.07	1	0.02	1	0.02	0	0.00
Total	5572	100	4999	100	4726	100	5433	100

From the last column of Table 13, we can tell that half of the drop-outs took one section only and about 12% of them took all four sections. The last row of the table shows that, overall, half of the drop-outs did not pass any section, and the percentage of failing all increased with the number of sections taken, from 45% to 71%. Some of them (2.37%) took three or four sections and passed three sections before they left the process.

Caution is needed in drawing conclusions about drop-outs. Some candidates who passed some sections in the paper-and-pencil format may have been flagged here as drop-outs. From Table 13, we know that some drop-outs passed all the sections they took (numbers in italics in Table 13). We may want to label such individuals (N = 7721) as candidates who carried over credit from the paper-and-pencil format into CBT. If we exclude them from analysis, we could reduce the number of potential drop-outs to 10725 and the drop-out rate to 10%.

Finally, the number of times drop-out candidates tested before they failed a section is presented in Table 14. For each section, 95% of drop-outs took and failed the test only once. From Table 14 and Table 13 (ignoring the numbers in italics) we may conclude that the major reason for some candidates' decision to drop out of the examination seems to be the (mostly one-time) failure in all the sections they had taken up to that point.

Summary

This study summarizes the test-taking and pass-fail patterns of the computerized CPA Examination by tabulating data from the first ten testing windows (04Q2 – 06Q3). Using Fake National IDs provided by NASBA, we identified and analyzed unique individual candidates across sections within a window, across windows within a section, and across windows and across sections. Some highlights of the results are recapitulated as follows.

Within any given window, most candidates chose to take one section only. Some took two sections but very few took three or four. As time went by, this pattern strengthened, since in later windows more and more candidates took one section (especially in the first two quarters of a year), and the likelihood of passing that section increased. On the other hand, fewer candidates ventured to take four sections during one window after the first year of CBT, and their probability to pass all four went down. In general, this confirms that most candidates have been taking advantage of the flexibility of the CBT Examination to schedule one test at a time to be more concentrated when preparing for the examination.

More than 70,000 unique individual candidates tested in each section, and the cumulative pass rate since the launch of CBT is nearly 60%. The majority of candidates passed a section by taking the test once or twice. BEC candidates were more likely to pass in one attempt only. Some candidates tested many times without passing a section, and in FAR and REG a few candidates failed in every window up to 06Q3.

A small number of candidates took a section again after they passed that section. Most of them retested after six windows after their initial pass, possibly to meet the requirement of passing four sections within 18 months. However, a few candidates passed a section twice either

in adjacent windows or within 5 windows apart, which requires further investigation. Some candidates who passed once failed to pass again when they retook a section.

When all windows and all sections were analyzed together, results suggest that a total of 100,000 unique individual candidates have taken one or more sections since the launch of CBT and about 20% of them have passed all four sections.

When we flag candidates who did not pass all four sections but failed to test in the last six windows, we have an estimated drop-out rate of 17.5%. When we exclude those who passed all sections they took since the launch of CBT as transitioning from the paper and pencil era, the new drop-out rate is 10% among all candidates. The true drop-out rate may stand somewhere between these two numbers, most likely close to the lower one.

This report is purely descriptive and meant to take a snapshot of what has been happening among CPA candidates since the launch of CBT. The statistics generated should be used cautiously to help predict volume changes in future administrations and make policy decisions.