

Use of the CPA Exam as a Direct Measure of Assessment

FRED MITTELSTAEDT UNIVERSITY OF NOTRE DAME

MARK ULRICH ST. JOHN'S UNIVERSITY

JAMES SUH NASBA

Standard 4: [Student Admissions, Progression, and Career Development]

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Basis for Judgement

- ▶ In addition to public disclosure information required by national or regional accreditors, schools provide reliable information to the public on their performance, including student achievement **information** as determined by the school. **Examples of such information include: attrition and retention rates; graduation rates; job placement outcomes; certification or licensure exam results; and employment advancement.** This information should be available on the school's website as well as by other means determined by the school. Schools are expected to make this information available on the school website by July 1, 2016.

Discussion Overview

Mark Ulrich

Why focus on
CPA Exam

Data Driven
Curricular
Changes

Challenges
and Next
Steps

James Suh

Changes to
CPA Exam
Reporting

General
Trends and
Content Area

Candidate
Behavior and
Pipeline

Fred Mittelstaedt

Implementing
a Data
Approach

Program
Statistics

Degree
Performance

Finding Value in CPA Exam Data



Mark Ulrich, St. John's University

Department of Accounting and Taxation

- ▶ Main campus in Queens, New York City
- ▶ Approx 25 full-time faculty (plus adjuncts from Big-4 firms)
- ▶ Approx. 800 majors
- ▶ Campus in Manhattan, Staten Island, Rome
- ▶ Double AACSB Accreditation
- ▶ UG Accounting and Combined Degree programs (BS/MS)
- ▶ MS and MBA Accounting, MS and MBA Tax, MS and MBA ERM



Mission Statement

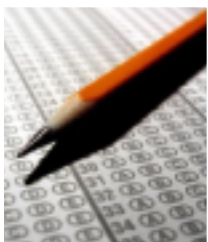
- ▶ “The Department of Accounting and Taxation prepares students for professional **careers in accounting**, taxation, enterprise risk management, and related fields and serves as a center for academic research...”



Strengthening the argument for exam focus



Repositioning the Strategic Plan—August 2011



“Develop plan within The Peter J. Tobin College of Business to significantly increase the CPA pass rate to above the industry average.”

Assurance of Learning

AICPA Core Competency Framework and Educational Competency Assessment – used to help develop AOL objectives at St. John's

AICPA adapted this for the CPA exam as the Skill Specific Outline (SSO)

Skills are compatible with our mission.

We can now use CPA exam as a measurement tool for these skill areas



CPA Exam skill areas directly link to the AACSB Skills Expectations

Skill Specification Outline (AICPA)	AACSB Standard #9 General Skill Areas
Written Communication	Written and Oral Communication
Apply knowledge of professional standards and laws, as well as legal, ethical, and regulatory issues. (under Complex Problem Solving and Judgment)	Ethical Understanding and Reasoning
Analysis, Complex Problem Solving and Judgment, Decision Making	Analytical Thinking
Application of Technology	Information Technology
Develop detailed work plans, schedule tasks and meetings, and delegate assignments and tasks. (under Organization, Efficiency, and Effectiveness)	Interpersonal Relations and Teamwork
Exchange technical information and ideas with coworkers and other professionals to meet goals of job assignment. (Under Written Communication)	Diverse and Multicultural Work Environments
Decision Making, Complex Problem Solving and Judgment	Reflective Thinking
Research, Complex Problem Solving and Judgment	Application of Knowledge



Select Curricula Changes and Initiatives

Curricula Changes

Auditing course in Bachelor only program

Financial reporting sequence

Cost accounting sequence

Initiatives

Increased GMAT score for admission

Subsidized CPA Exam Review Courses

CPA advisement/planning sessions





Thinking about the future

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- ▶ Use content specific performance for directed (course level) curricula changes
- ▶ Continue working with NASBA, along with other schools, to improve data collection and reporting methodology
- ▶ Plan for 2017 changes to the CPA examination ([CSO/SSO to Blueprint](#))



CPA Exam Statistics: A Fresh Look

James Suh, NASBA

History of CPA Exam Reporting

Internal Development

- **2011**
- Limited data knowledge
- CPB version 1
- Wet noodle approach

Initial User Feedback

- **2012**
- Mixed response
- Increased knowledge
- SPB version 1
- Custom Prototype

Nashville Data Summit

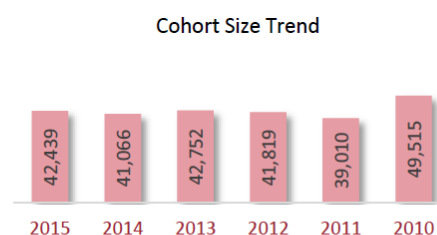
- **2013**
- Stakeholder Involvement
- Refined Custom
- Research Data

St. John's & Notre Dame

- **2014-2015**
- Content Area
- Collaboration
- CPB/SPB v2
- Integrated Reports
- Closing Data Gaps
- Marketing (UTK)

CPB Redesign: General Statistics

	Exam Type			Exam Section			
	Overall	FT	RE	AUD	BEC	FAR	REG
Candidates	93,693	70,209	49,319	51,777	46,468	50,087	47,295
Sections	240,886	140,101	100,785	65,379	55,036	61,173	59,298
% Pass	49.8%	55.0%	42.5%	47.3%	56.5%	46.8%	49.4%
Avg Score	71.9	72.6	70.9	72.7	73.8	70.0	71.3
Avg Age	28.9	27.8	30.4	28.9	29.2	28.9	28.8



	Gender*		Residence		Cohort Year				Age at Time of Examination						
	Female	Male	U.S.A.	Int'l	2015	2014	2013	Other	<22	22-23	24-25	26-27	28-29	30-34	35+
Candidates	47,693	44,250	85,158	8,645	42,439	24,826	10,219	16,209	1,605	23,846	21,290	14,147	10,307	15,803	16,844
Sections	120,771	113,269	218,183	22,703	107,442	66,479	25,878	41,087	3,234	61,494	47,692	30,729	22,485	36,582	38,666
% Pass	47.2%	52.8%	50.6%	41.8%	55.6%	51.8%	40.8%	34.7%	66.0%	61.8%	48.5%	46.9%	46.9%	45.1%	39.1%
Avg Score	71.0	73.0	72.3	68.4	72.9	72.7	70.1	68.5	77.2	75.6	71.5	70.9	71.0	70.5	68.6
Avg Age	28.8	28.9	28.7	31.5	27.2	28.4	29.9	36.2	21.7	23.1	24.9	26.9	29.0	32.2	42.1

CPB Redesign: Pipeline Statistics

Pipeline: Cohort Activity, Attempts, Passing 4

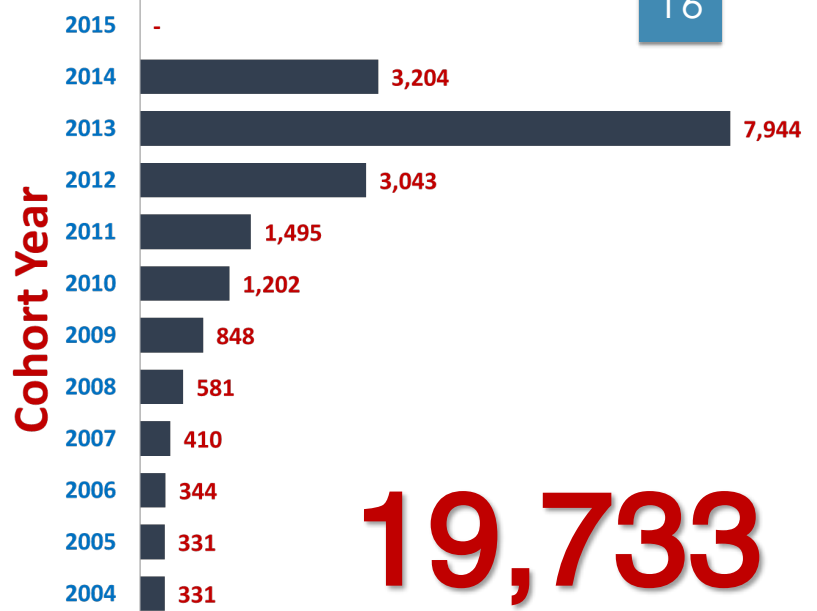
Cohort: Activity & Lost Credit					From 1st Section: Attempted					From 1st Section: Pass 4 Parts						
	2015	2014	2013	Other		Cand	Secs	% Tot	% Pass	Score		Cand	Secs	Sec/Cd	% Tot	% Pass
Pass 4	6,925	11,750	3,812	3,625	<6	51,570	109,759	45.6%	55.6%	72.9	<6	1,326	5,432	4.10	5.1%	97.6%
Active	33,736	11,498	5,518	11,050	<12	25,797	40,355	16.8%	53.9%	73.3	<12	5,599	24,061	4.30	21.4%	93.1%
Inactive	1,778	7,789	3,244	5,225	<18	17,100	26,571	11.0%	48.4%	72.0	<18	7,177	35,529	4.95	27.5%	80.8%
Drop	0	3,204	7,944	8,585	<24	8,779	14,253	5.9%	40.1%	69.9	<24	4,573	27,223	5.95	17.5%	67.2%
Lost Cd	0	1,271	3,319	3,598	>24	20,929	49,948	20.7%	37.1%	69.2	>24	7,437	77,331	10.40	28.5%	38.5%
					Total	93,693	240,886	100%	49.8%	71.9	Total	26,112	169,576	6.49	100%	61.6%

- ▶ “From 1st Section” acts as a proxy for Graduation Date
- ▶ Roughly **60-62%** of candidates ultimately **pass 4 parts** of exam
- ▶ Candidates lost **8,188** total credits in 2015 (**~6.8% of credits earned**)

Examination Drop-Outs

A candidate who has not passed all 4 parts of the examination AND has not sat for a section in the past 18-months

The data represents candidates from each Cohort who went from Active to Drop-Out status in the 2014 Exam year

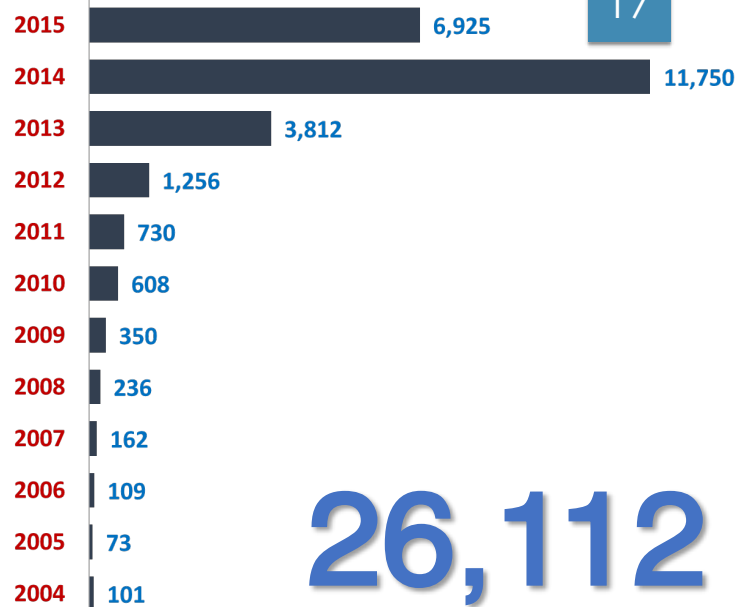


Passing 4th Section

A candidate who has passed all 4 parts of the examination in the 2014 Examination Year

Well over half of the exam takers pass 4 parts within the 18-month window

Cohort Year



CPB Redesign: Section Statistics

Cohort Performance: Section, Content Area, Skills Area

	AUD				BEC				FAR				REG			
	Cand	Secs	%P	Score	Cand	Secs	%P	Score	Cand	Secs	%P	Score	Cand	Secs	%P	Score
Overall	51,777	65,379	47.3%	72.7	46,468	55,036	56.5%	73.8	50,087	61,173	46.8%	70.0	47,295	59,298	49.4%	71.3
2015	25,057	28,927	51.5%	73.4	21,875	23,666	65.5%	75.6	27,481	30,946	52.5%	70.9	21,126	23,903	54.6%	72.1
2014	13,795	18,827	48.6%	73.3	12,491	15,160	59.9%	74.6	10,712	13,960	47.2%	70.5	13,926	18,532	52.1%	72.3
2013	4,979	6,908	40.1%	71.0	4,395	5,955	43.8%	71.5	4,563	6,333	38.1%	68.4	4,756	6,682	41.5%	69.7
Other	7,946	10,717	37.0%	70.2	7,707	10,255	34.4%	68.9	7,331	9,934	31.7%	66.6	7,487	10,181	35.7%	68.1

CBTe Content Area

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AUD

Accounting and Review Services(12-16%)
Evaluation and Reporting(16-20%)
Procedures and Evidence(16-20%)
Professional Responsibilities(16-20%)
Understanding the Engagement (12-16%)
Understanding the Entity (16-20%)

BEC

Corporate Governance (16-20%)
Economic Concepts and Analysis (16-20%)
Financial Management (19-23%)
Information Systems (15-19%)
Operations Management (12-16%)
Strategic Planning (10-14%)

FAR

Financial Statement Accounts (27-33%)
Framework and Standards (17-23%)
Governmental (8-12%)
Not-for-Profit (8-12%)
Specific Transactions/Events (27-33%)

REG

Business Law (17-21%)
Ethics & Legal Responsibilities (15-19%)
Federal Tax Process (11-15%)
Taxation on Entities (18-24%)
Taxation on Individuals (13-19%)
Taxation on Property Transactions(12-16%)

CPB Redesign: Content Area Statistics

AUD	Un Eng	Un Ent	Pro Evi	Evl Rpt	Acc Rev	Pro Res	Sim
Overall	65.3%	59.6%	59.4%	60.3%	61.1%	62.0%	53.6%
2015	67.3%	62.5%	62.3%	62.4%	61.1%	64.0%	55.2%
2014	66.0%	60.9%	60.1%	61.0%	62.0%	63.6%	55.1%
2013	62.0%	55.3%	55.1%	55.9%	61.0%	58.7%	49.2%
Other	59.9%	51.0%	51.9%	55.0%	59.7%	55.3%	48.6%

FAR	Frm Std	Fin Sta	Spc Trn	Gov't	NFP	Sim
Overall	54.6%	49.2%	50.5%	59.0%	59.5%	48.2%
2015	58.1%	54.9%	55.2%	62.5%	61.1%	51.3%
2014	54.3%	49.4%	50.7%	59.6%	60.2%	48.5%
2013	49.7%	40.3%	43.8%	54.9%	56.9%	41.9%
Other	44.6%	33.1%	36.8%	47.5%	54.4%	39.6%

BEC	Crp Gov	Eco Con	Fin Mgt	Info Sy	Str Pla	Op Mgt	Writ
Overall	64.6%	61.0%	57.5%	66.5%	59.1%	60.0%	70.1%
2015	67.0%	65.5%	63.3%	68.8%	65.3%	64.8%	77.0%
2014	66.6%	63.4%	60.2%	67.1%	61.3%	62.3%	70.7%
2013	60.3%	53.7%	48.5%	61.8%	51.1%	54.3%	61.8%
Other	56.6%	48.5%	41.8%	61.6%	42.4%	46.0%	54.6%

REG	Eth Leg	Bus Law	Fed Tx	Tx Pro	Tx Ind	Tx Ent	Sim
Overall	70.8%	60.5%	63.0%	60.6%	58.0%	55.4%	49.0%
2015	70.7%	64.4%	64.5%	63.8%	60.3%	59.1%	52.1%
2014	72.1%	62.8%	64.1%	63.0%	58.9%	57.9%	51.4%
2013	70.9%	54.7%	60.8%	55.9%	54.5%	50.0%	44.2%
Other	68.4%	48.9%	58.0%	50.0%	52.0%	43.9%	38.8%

North Carolina Univ: Testing Patterns

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National

Pipeline: Cohort Activity, Attempts, Passing 4

- ▶ Attempt timing notably earlier than National
- ▶ 66% Eventually Pass 4 in NC
- ▶ Timing of Passing 4 Parts (Key Metric)

Cohort: Activity & Lost Credit					From 1st Section: Attempted					From 1st Section: Pass 4 Parts						
	2015	2014	2013	Other		Cand	Secs	% Tot	% Pass	Score		Cand	Secs	Sec/Cd	% Tot	% Pass
Pass 4	6,925	11,750	3,812	3,625	<6	51,570	109,759	45.6%	55.6%	72.9	<6	1,326	5,432	4.10	5.1%	97.6%
Active	33,736	11,498	5,518	11,050	<12	25,797	40,355	16.8%	53.9%	73.3	<12	5,599	24,061	4.30	21.4%	93.1%
Inactive	1,778	7,789	3,244	5,225	<18	17,100	26,571	11.0%	48.4%	72.0	<18	7,177	35,529	4.95	27.5%	80.8%
Drop	0	3,204	7,944	8,585	<24	8,779	14,253	5.9%	40.1%	69.9	<24	4,573	27,223	5.95	17.5%	67.2%
Lost Cd	0	1,271	3,319	3,598	>24	20,929	49,948	20.7%	37.1%	69.2	>24	7,437	77,331	10.40	28.5%	38.5%
					Total	93,693	240,886	100%	49.8%	71.9	Total	26,112	169,576	6.49	100%	61.6%

North Carolina Universities

Pipeline: Cohort Activity, Attempts, Passing 4

Cohort: Activity & Lost Credit					From 1st Section: Attempted					From 1st Section: Pass 4 Parts						
	2015	2014	2013	Other		Cand	Secs	% Tot	% Pass	Score		Cand	Secs	Sec/Cd	% Tot	% Pass
Pass 4	235	205	59	61	<6	1,006	2,558	53.3%	59.8%	74.8	<6	26	107	4.12	4.6%	97.2%
Active	603	181	89	182	<12	496	761	15.9%	58.2%	74.3	<12	209	914	4.37	37.3%	91.5%
Inactive	18	136	53	82	<18	299	474	9.9%	48.1%	72.4	<18	108	574	5.31	19.3%	75.3%
Drop	0	37	122	134	<24	145	229	4.8%	36.2%	70.0	<24	97	566	5.84	17.3%	68.6%
Lost Cd	0	29	51	56	>24	351	774	16.1%	41.6%	70.1	>24	120	1,208	10.07	21.4%	39.7%
Total						1,710	4,796	100%	54.3%	73.5	Total	560	3,369	6.02	100%	66.5%



UNIVERSITY OF
NOTRE DAME

New Perspective on AoL using CPA Exam Stats

Fred Mittelstaedt, University of Notre Dame

Program Overview

S
d

Undergraduate accounting



National student body



Average 15 hours of AP Credit



Few first generation students



Graduate approximately 160 students per year

MSA program



International student body



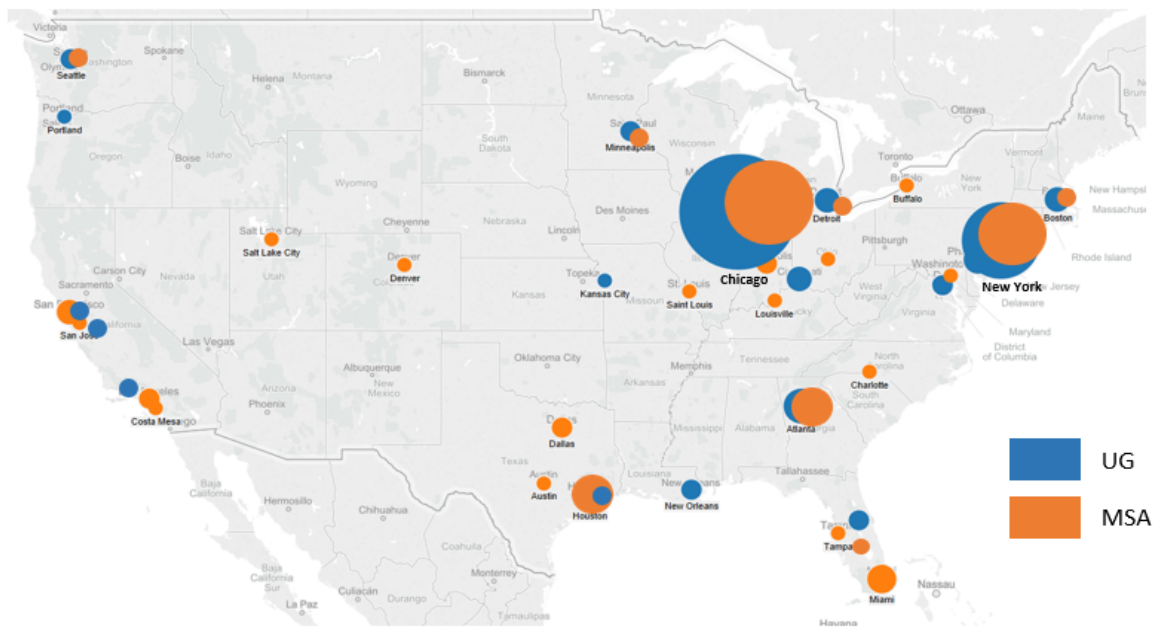
40% to 50% of the students come from the ND undergraduate program



Graduate approximately 100 students per year

2015 UG and MSA Placement

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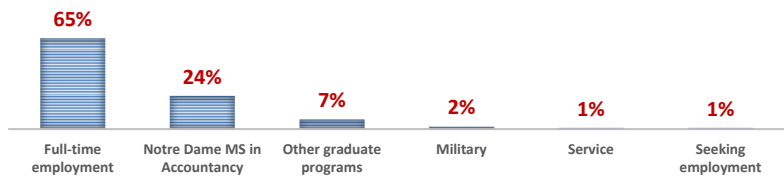


Graduate Profile

Student Demographics

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GRADUATION PLANS (168 STUDENTS)



EMPLOYER TYPE (109 STUDENTS)

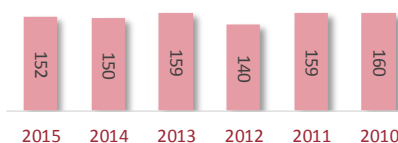


Standard CPA Exam Report

2015 Univ Notre Dame

	Exam Type			Exam Section			
	Overall	FT	RE	AUD	BEC	FAR	REG
Candidates	252	207	96	175	156	177	189
Sections	789	592	197	203	161	207	218
% Pass	76.8%	84.1%	54.8%	77.3%	93.2%	71.5%	69.3%
Avg Score	80.7	82.9	74.0	82.4	84.5	78.7	78.1
Avg Age	24.5	23.9	26.3	24.4	24.1	25.0	24.5

Cohort Size Trend



	Gender*		Residence		Cohort Year				Age at Time of Examination						
	Female	Male	U.S.A	Int'l	2015	2014	2013	Other	<22	22-23	24-25	26-27	28-29	30-34	35+
Candidates	109	141	249	4	152	62	19	19	11	160	59	20	13	16	6
Sections	355	431	783	6	522	162	47	58	22	496	139	51	27	39	15
% Pass	79.7%	74.3%	77.0%	50.0%	84.9%	68.5%	53.2%	38.9%	81.8%	83.9%	65.5%	58.8%	74.1%	59.0%	53.3%
Avg Score	80.9	80.5	80.7	76.7	83.3	76.5	74.5	72.9	84.5	82.6	77.2	76.2	76.9	76.5	77.4
Avg Age	23.9	25.0	24.5	25.2	23.7	24.9	26.3	30.6	21.7	23.0	24.8	27.0	28.6	32.4	39.8

Name Matched CPA Exam Report

Comparing two Degrees

A U D	Secs	%P	Un Eng	Un Ent	Pro Evi	Evl Rpt	Acc Rev	Pro Res	Sim
Nat ('15)		47.3%	65.4%	59.7%	59.4%	60.2%	61.2%	62.2%	53.5%
BBA Only	405	73.3%	78.7%	83.4%	75.9%	73.0%	71.5%	82.9%	78.2%
MSA Program	421	75.1%	77.7%	85.9%	80.6%	78.2%	72.2%	86.6%	74.6%
BBA/MSA Delta		1.7%	-1.0%	2.5%	4.6%	5.2%	0.7%	3.7%	-3.6%

B E C	Secs	%P	Crp Gov	Eco Con	Fin Mgt	Info Sy	Str Pla	Op Mgt	Writ
Nat ('15)		55.5%	64.6%	60.9%	57.2%	66.4%	59.0%	59.9%	70.1%
BBA Only	337	94.1%	88.7%	86.6%	83.6%	80.4%	86.3%	82.4%	96.4%
MSA Program	351	94.9%	88.8%	87.6%	90.8%	83.9%	87.1%	86.8%	95.4%
BBA/MSA Delta		0.8%	0.1%	1.0%	7.2%	3.6%	0.8%	4.3%	-1.0%

Name Matched CPA Exam Report

Comparing two Degrees

F A R	Sections	% Pass	Frm Std	Fin Sta	Spc Trn	Gov't	NFP		Sim
Nat ('15)		46.8%	54.5%	49.0%	50.4%	58.9%	59.4%		48.1%
BBA Only	413	67.8%	64.3%	69.7%	72.1%	72.1%	71.6%		64.6%
MSA Program	393	79.6%	79.5%	80.8%	81.0%	80.5%	78.2%		72.8%
BBA/MSA Delta		11.8%	15.2%	11.1%	8.9%	8.4%	6.6%		8.3%

R E G	Secs	%P	Eth Leg	Bus Law	Fed Tx	Tx Pro	Tx Ind	Tx Ent	Sim
Nat ('15)		49.4%	63.6%	60.1%	61.1%	56.6%	58.8%	53.4%	50.8%
BBA Only	421	68.9%	83.6%	81.0%	76.0%	73.8%	69.8%	66.2%	66.4%
MSA Program	420	73.1%	86.1%	81.3%	77.0%	78.7%	77.3%	73.9%	69.1%
BBA/MSA Delta		4.2%	2.6%	0.4%	1.1%	4.9%	7.5%	7.7%	2.7%

Completing the CPA Exam

BBA

	Cand	% Of	% Tot	Secs	% Pass
Pre	4	1.6%	1.6%	105	99.0%
<3m	26	10.2%	11.7%	243	97.1%
<6m	59	23.0%	34.8%	164	92.7%
<9m	38	14.8%	49.6%	91	79.1%
<12m	18	7.0%	56.6%	209	78.5%

MSA

	Cand	% Of	% Tot	Secs	% Pass
Pre	10	2.9%	2.9%	327	94.5%
<3m	77	22.2%	25.1%	486	93.8%
<6m	114	32.9%	57.9%	161	84.5%
<9m	34	9.8%	67.7%	69	81.2%
<12m	14	4.0%	71.8%	118	78.0%

Using CPA Exam Stats for AoL

Year by year analysis

Analyze all students in MSA program

Separate analysis of the MSA Tax and Financial concentrations

Formal incorporation of CPA results into our AoL plan

Summary and Closing