

Applying Demand Analysis and Benchmarking in Strategically Resourcing Academic Programs

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Panelists: Dr. Lou Guthrie, Director of the National Higher Education Benchmarking Institute

Dr. Tony Honeycutt, Provost, Somerset Community College



Why Benchmark?





Find out about the Cost and Productivity Project

The Cost and Productivity Project allows community college planners to measure and compare their instructional costs and faculty workload to those of other institutions across the country.

[Learn more](#)

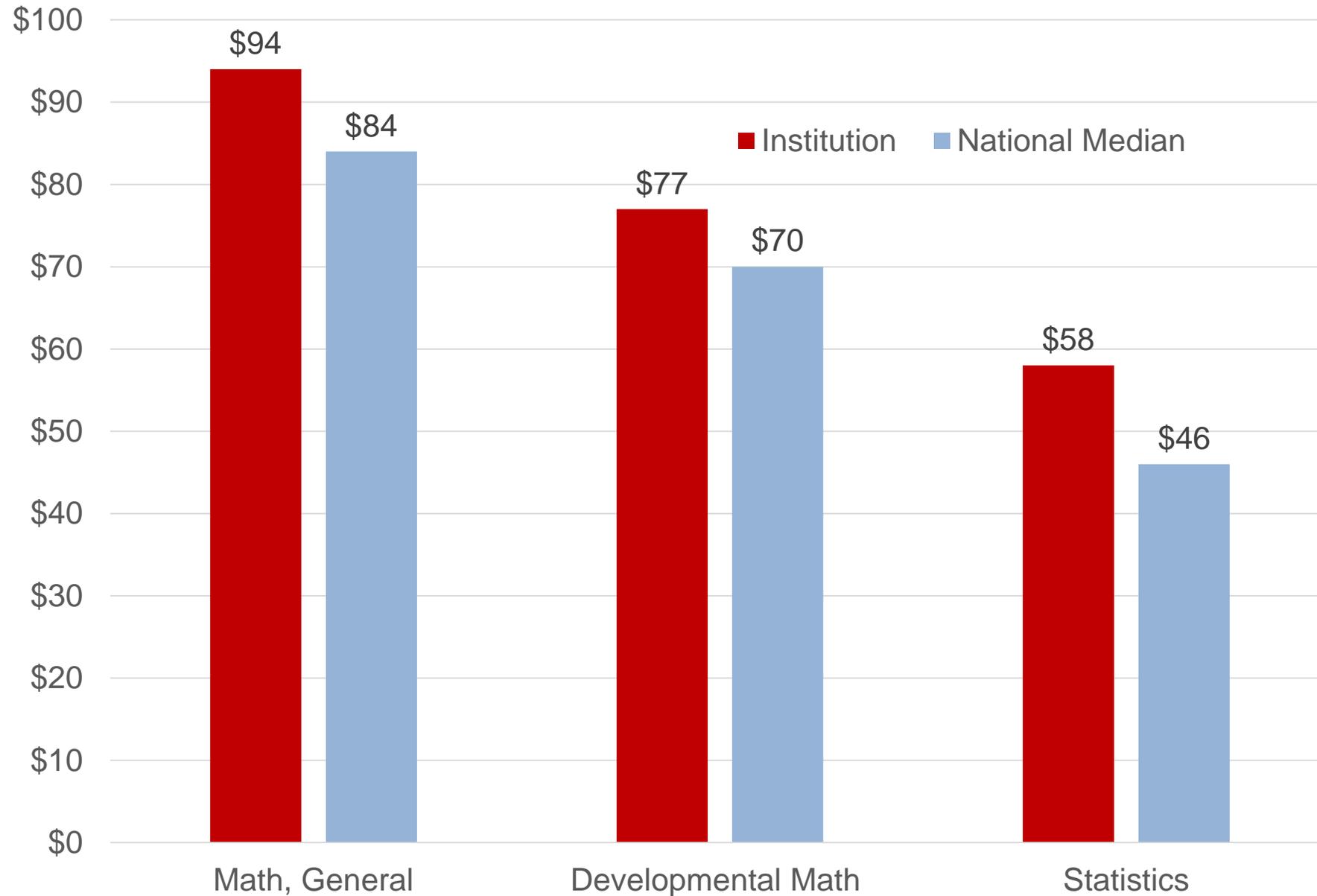
Cost Benchmarking

- Provides presidents, chief academic officers, deans and institutional researchers with benchmarks at the discipline level
 - Instructional costs (salaries and benefits)
 - Faculty workload
 - Class size

What benchmarking program costs?

- Gain a better understanding of costs
- Reallocation of resources
- Determine tuition pricing
- Adjust class capacities
- Staffing and faculty workload planning
- Program review
- Accreditation – empirical data linked to planning
- Strategic management decisions
- Accountability (Trustees, Taxpayers, Accreditors)

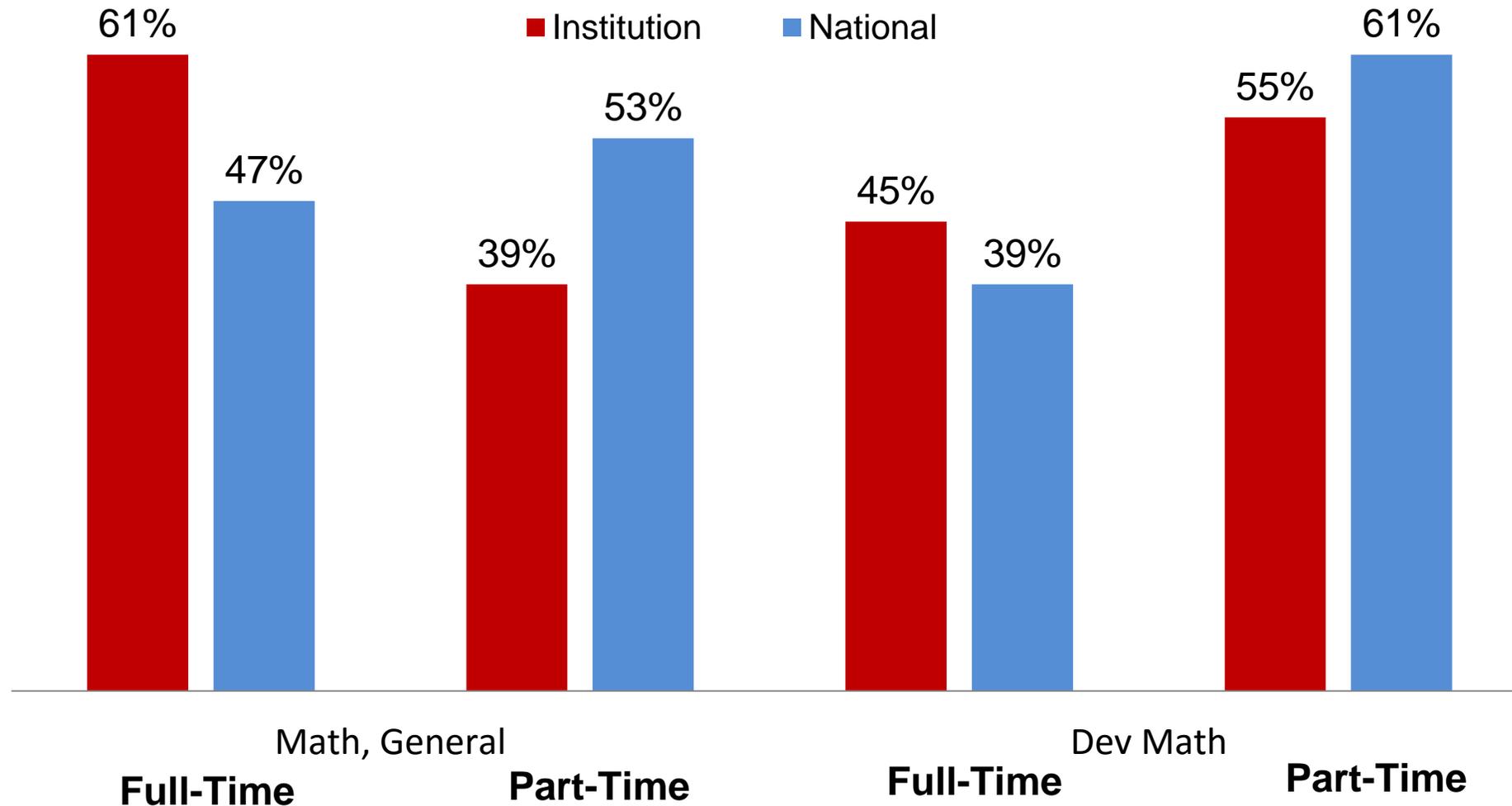
Cost Per Student Credit Hour



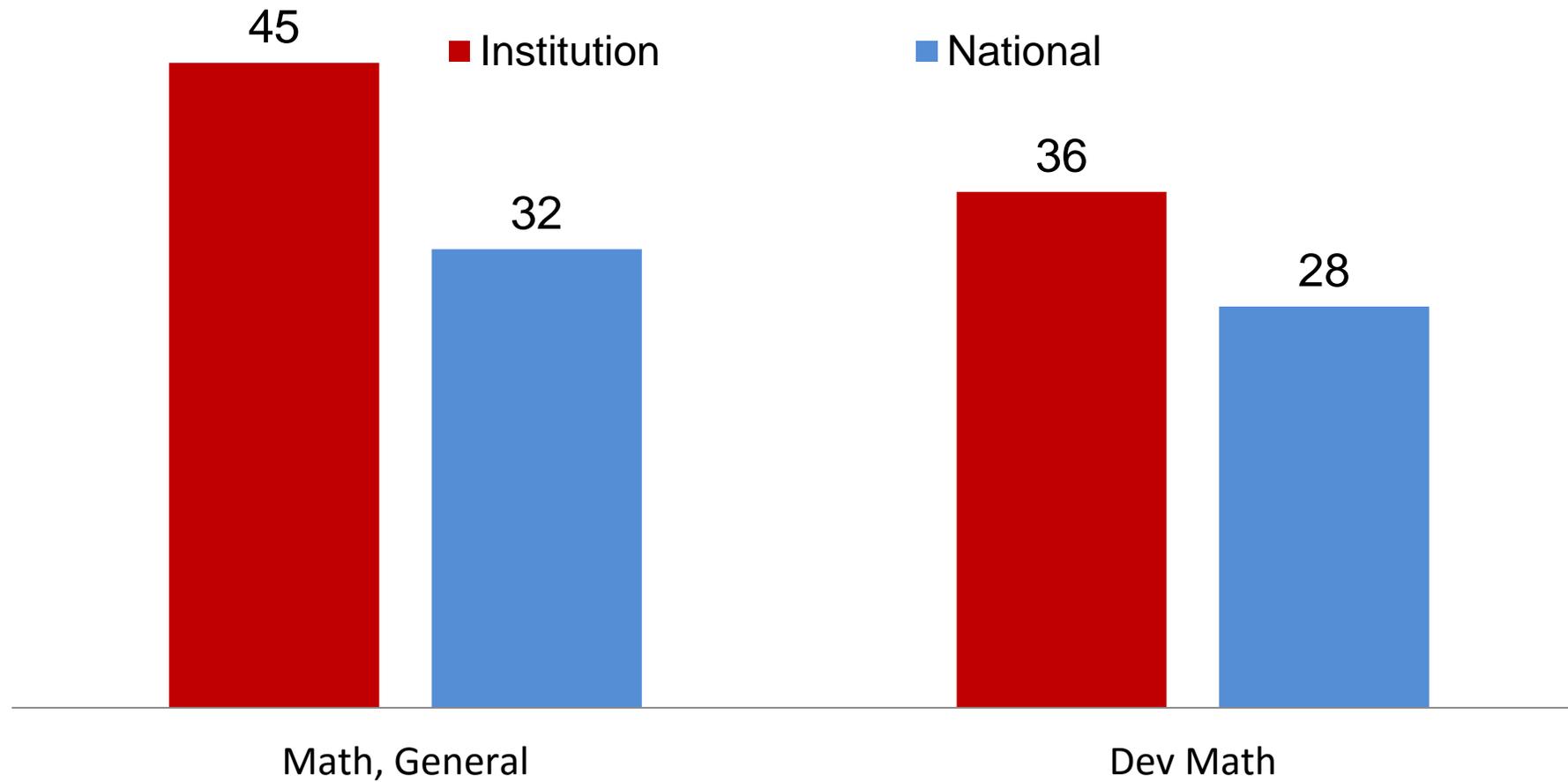
Instructional Expenditures Per Student Credit Hour



Teaching Loads by Type of Faculty

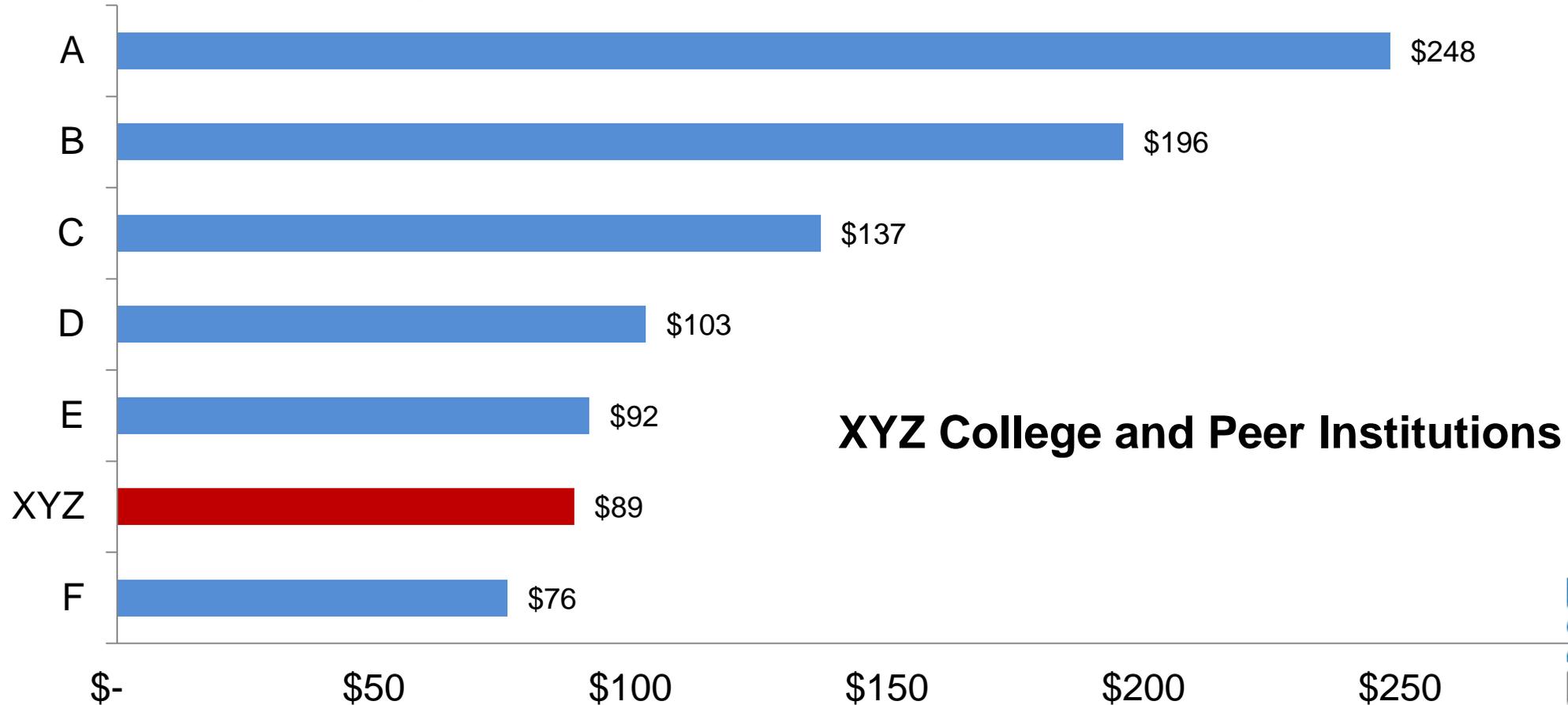


Student/Faculty Ratios



Peer Comparisons

Cost per Credit Hour - Math, General



XYZ College and Peer Institutions



Where a Community College Situation is Similar

- Finite number of instructional classrooms
- Finite capacity for each instructional space
- Growing online enrollments
- Graduation/completion rates dropping—
student loan debt rising
- Less state funding support—more tuition
dependent
- More state/federal accountability & reporting
pressure



Somerset Community College

- Located in south central Kentucky
- Two full service campuses located in Somerset and London, four education centers located in Casey, Clinton, McCreary, and Russell counties
- Primary service area covers 13 counties
- 3rd largest of the 16 KCTCS colleges
- Selected as a Best Place to Work in KY for the past 10 years



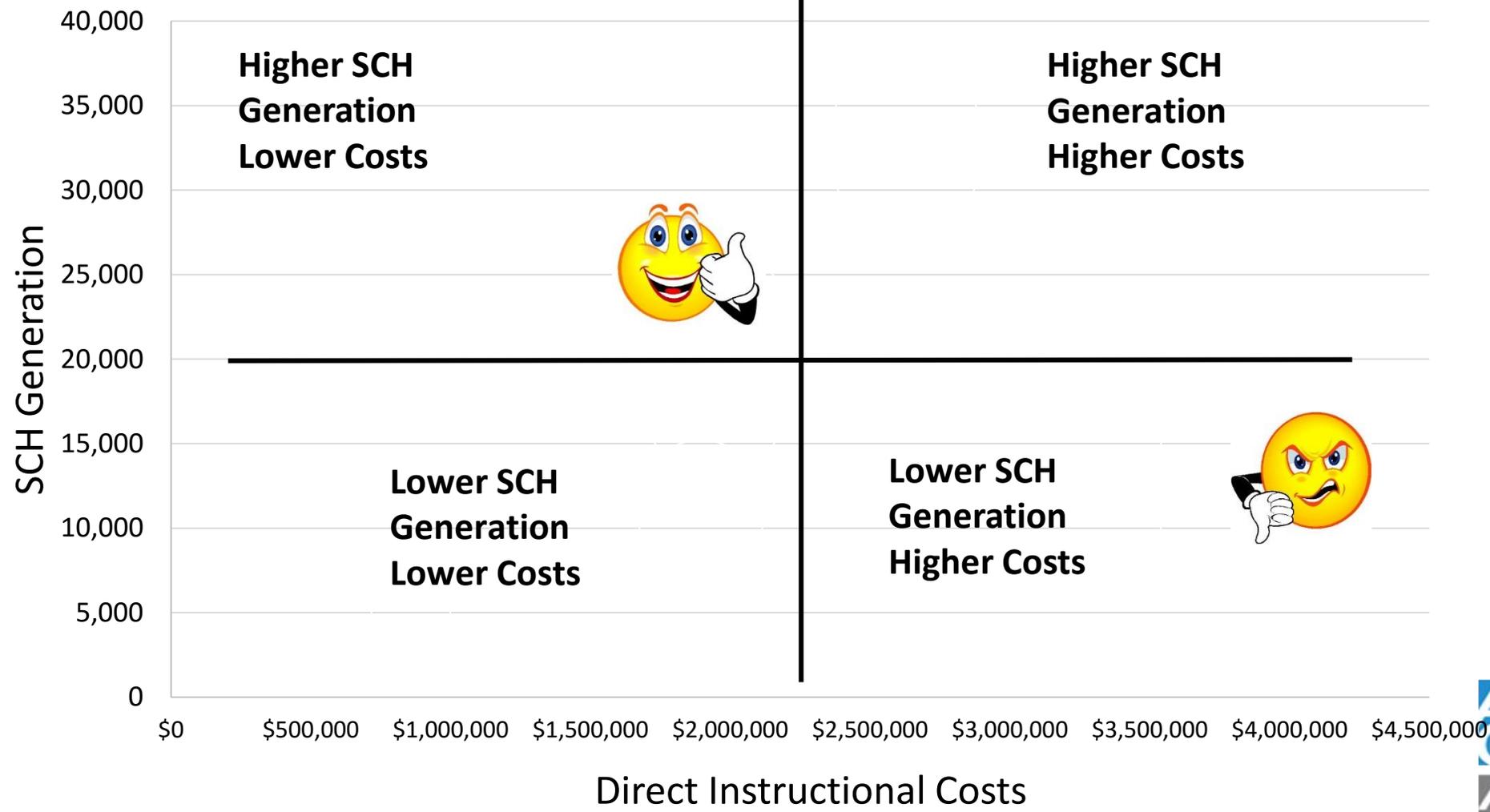
PTA program

<i>Faculty</i>	<i>SCH/Fall</i>	<i>SCH/Spring</i>	<i>Total SCH</i>	<i>Salary</i>	<i>Benefits</i>	<i>Individual ROI</i>
Faculty	107	85	192	\$ 110,418.95	\$ 44,830.10	18.2%
Faculty	119	310	429	\$ 92,979.22	\$ 37,749.56	48.2%
Faculty	110	94	204	\$ 44,560.12	\$ 18,091.41	47.9%
<i>PT-Faculty</i>						
Totals	336	489	825	\$ 247,958.30	\$100,671.07	
			<i>SCC Summary Data</i>	<i>NCCBP Mean</i>		
Tuition Revenue = SCH x \$147.00			\$ 121,275.00			
Faculty Costs (Salary + Benefits)			\$ 348,629.36			
FT Overloads + benefits			\$ -			
Clinicals & adjuncts+benefits			\$ -			
Other than Personnel (Supplies)			\$ 5,580.00			
Percentage of SCH taught by FT			100%	73%		
Percentage of SCH taught by PT			0%	27%		
SCH taught by FT faculty			112	139		
SCH taught by PT faculty			0	247		
Student Faculty Ratio			7/1	15/1		
Instructional cost/SCH			\$ 429.34	\$ 283.00		
Margin (Revenue-Costs) =			\$(232,934.36)			
ROI/% Efficiency (Revenue/Costs) =			34.24%			

<i>Criminal Justice</i>						
<i>F-T Faculty</i>	<i>SCH/Fall</i>	<i>SCH/Spring</i>	<i>Total SCH</i>	<i>Salary</i>	<i>Benefits</i>	<i>Individual ROI</i>
Faculty	434	492	926	\$ 59,576.00	\$ 24,187.86	162.5%
Faculty	312	384	696	\$ 36,210.00	\$ 14,701.26	201.0%
<i>P-T Faculty</i>						
Adjunct	57		57	\$ 1,650.00	\$ 142.23	467.5%
Adjunct	201	216	417	\$ 7,425.00	\$ 640.04	760.1%
Adjunct	84	90	174	\$ 6,600.00	\$ 568.92	356.8%
Totals	1088	1182	2270	\$ 111,461.00	\$ 40,240.30	
			<i>SCC Summary Data</i>	<i>NCCBP Mean</i>		
Tuition Revenue = SCH x \$147.00			\$ 333,690.00			
Faculty Costs (Salary + Benefits)			\$ 151,701.30			
FT Overloads + benefits			\$ 7,008.91			
Other than Personnel (Supplies)			\$8,277.00			
Percentage of SCH taught by FT			69%	31%		
Percentage of SCH taught by PT			36%	64%		
SCH taught by FT faculty			373	253		
SCH taught by PT faculty			342	382		
Student Faculty Ratio			24/1	23/1		
Instructional cost/SCH			\$ 73.56	\$ 79.00		
Margin (Revenue-Costs) =			\$ 166,702.79			
ROI/% Efficiency (Revenue/Costs) =			199.83%			

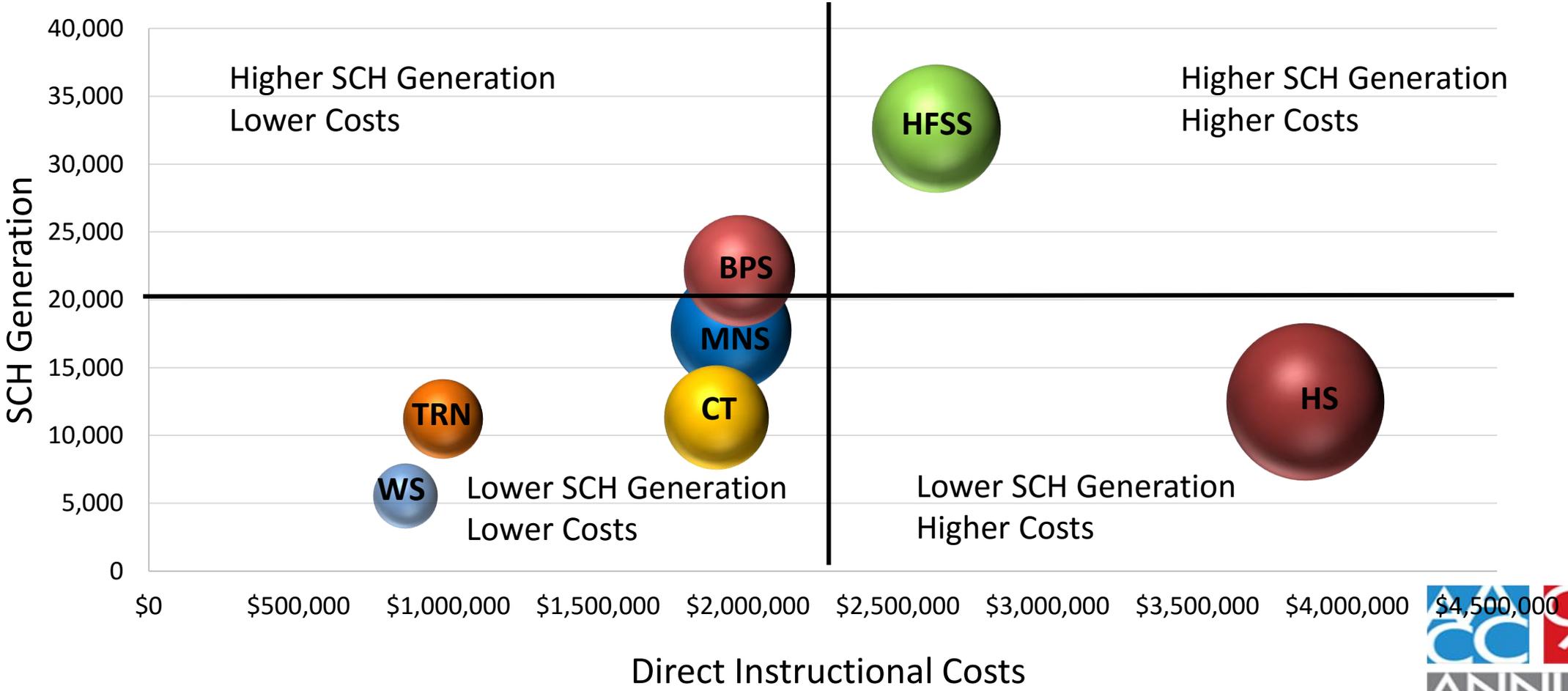
Cost & Productivity/Academic Divisions

Quadrants



Cost & Productivity/Academic Divisions

Quadrants



Course Demand Forecasting for Resource Allocation/Scheduling

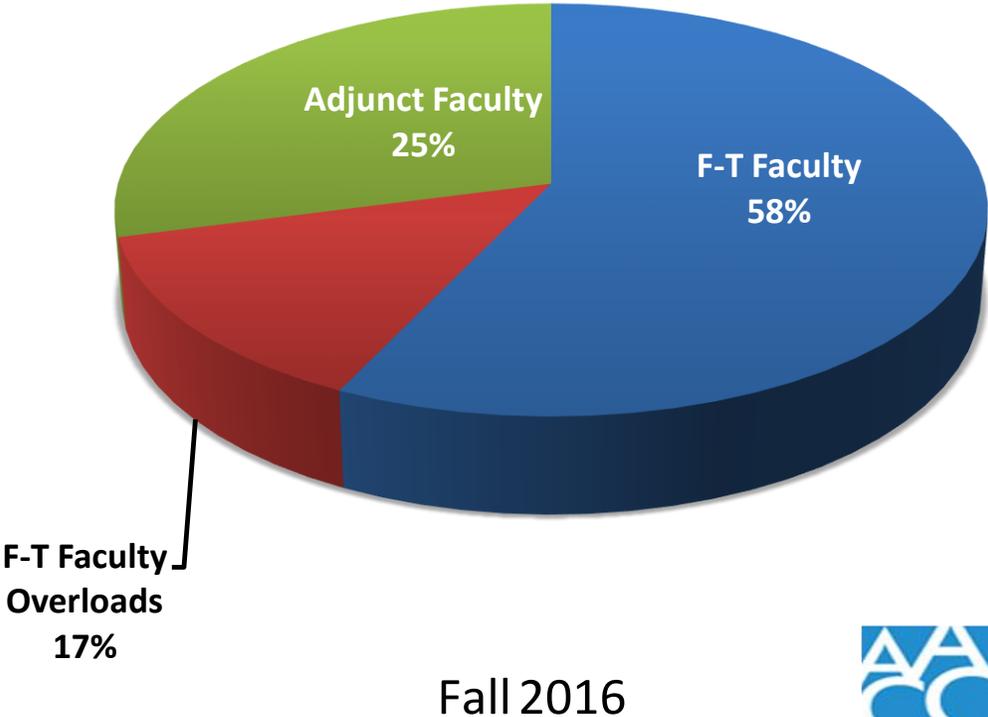
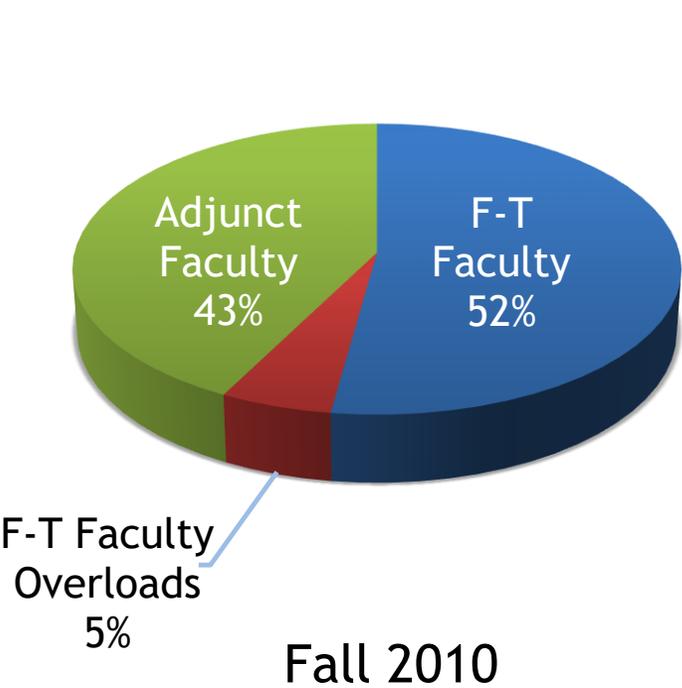
		55 TOP CANDIDATES			81% ENROLLMENT RATIO		4,630 UNMET REQUIRED SEATS		\$5,366,658 MARGIN	
	Subject	Course	Title	Candidate Type	Sections	Sections Needed	Candidates	Seats	Seats Needed	
+	✓+	MIS	201	Intro to Mgt Info Systems	Addition	9	18.7	10	270	560
+	✓+	MIS	201	Intro to Mgt Info Systems	Addition	1	18.7	18	270	560
+	✓+	LAW	250	Legal Environment of Business	Addition	7	9.0	2	231	297
+	✓+	MKT	295	Fundamentals of Marketing	Addition	9	9.9	1	308	337
+	✓+	CET	113	Intro Information Processing	Addition	0	10.6	11	60	211
+	✓+	CET	113	Intro Information Processing	Addition	3	10.6	8	60	211
+	✓+	AC	531	Acctng Info for Decision Makg	Elimination	1	0.4	-1	25	9
+	✓+	AC	540	Global Financial Reprting Anlys	Elimination	1	0.2	-1	25	5
+	✓+	FIN	320	Financial Markets/Institutions	Reduction	2	0.9	-1	54	25
+	✓+	MKT	380	Market Data Analysis	Reduction	2	0.9	-1	56	25
+	✓+	TM	362	Leading Project Teams	Time Change	2	2.0	1	48	49
+	✓+	ED	592	Curriculum Instr/Assess II	Reduction	2	0.8	-1	31	13
+	✓+	ME	216	Manufacturing Engineering Proc	No Action	2	1.9	0	41	41
+	✓+	PE	299	Psycho-Soc Aspects of Phys Ed	No Action	1	0.6	0	25	15
+	✓+	CS	502	Computing and Commctns Tech	Addition	0	0.8	1	0	12

Impact on Instructional Budget

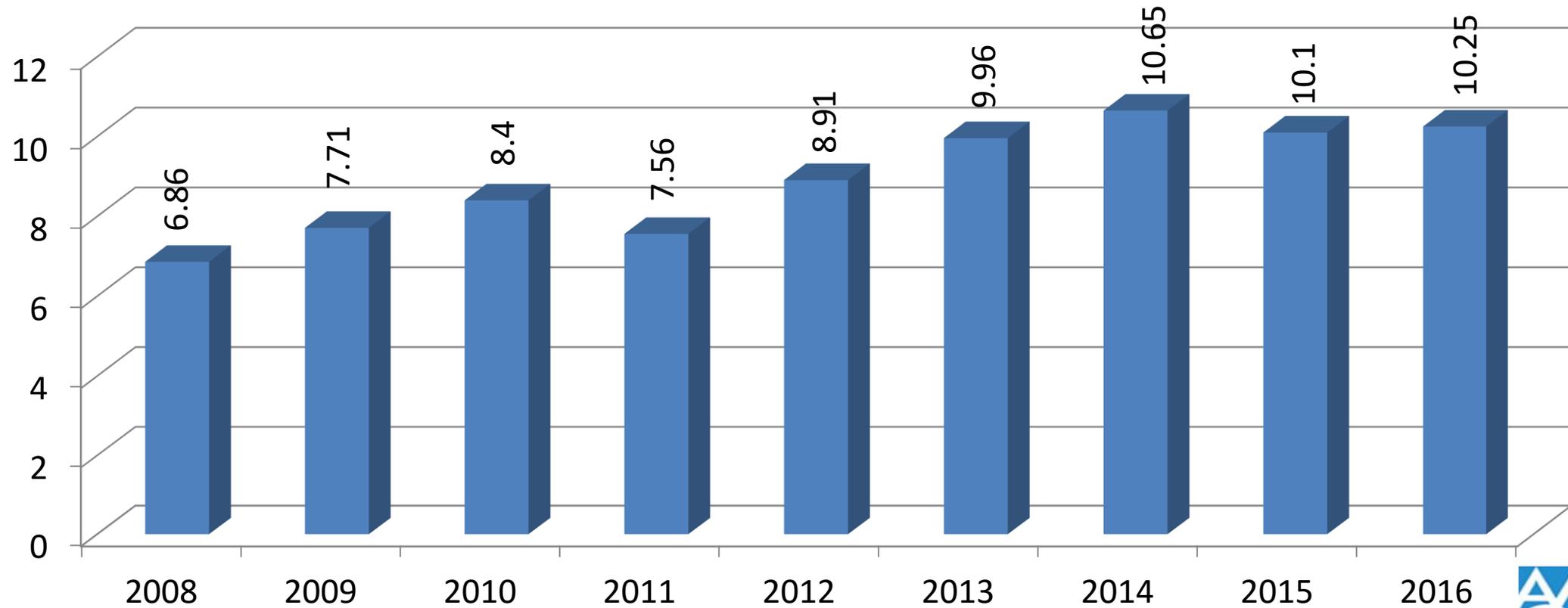
- Altering the scheduling trend in 2010 resulted in a savings in excess of \$3.4 million dollars in projected instructional cost (cost avoidance)
- Improvements in scheduling efficiency has saved SCC over \$1,988,593 in direct instructional costs



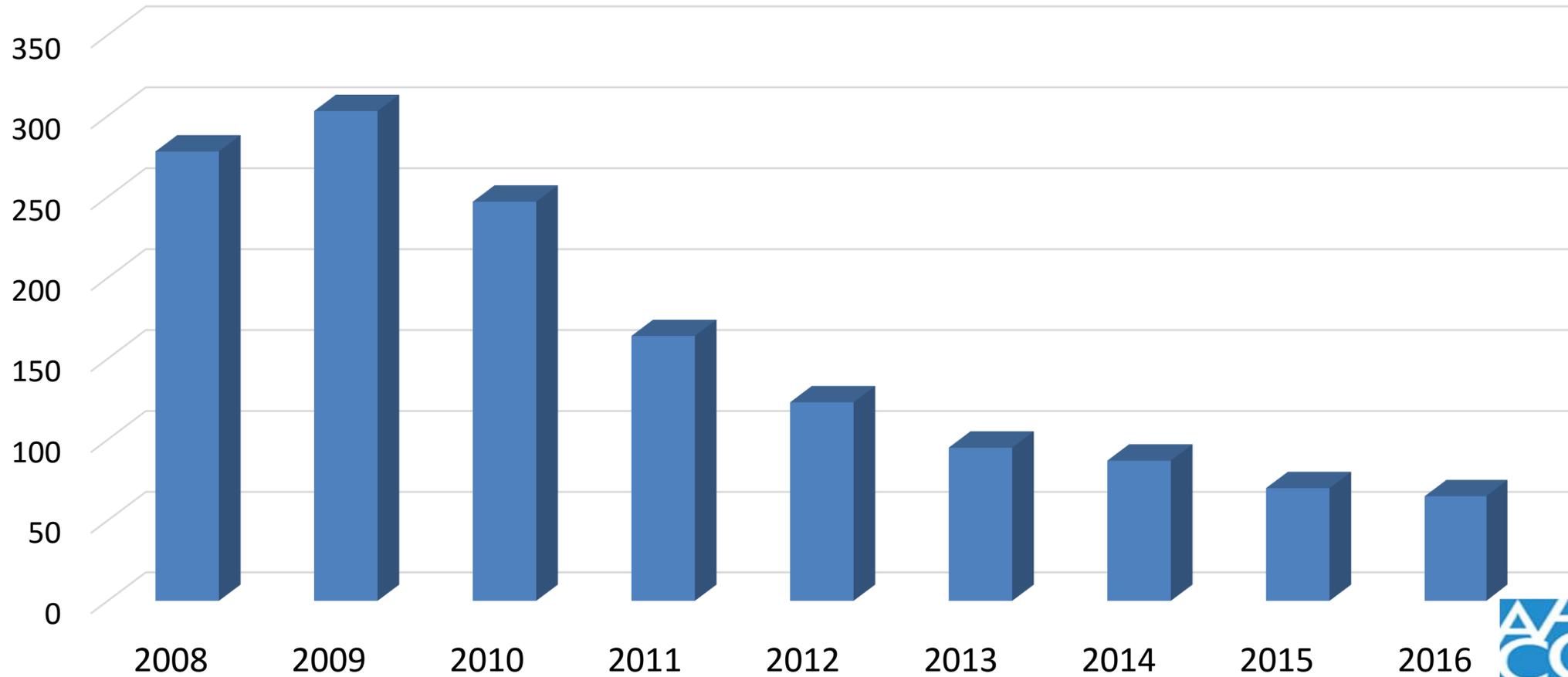
Instructional Load (Student Credit Hours)



Average Credit Hours per Student



Reduction in # of Canceled Sections



Average Credit Hours per Student

- A 48% increase in the average credit hours per student since 2008
- The 1.11 credit hour increase/student from '13 to '14 generated 8,868 additional credit hours/\$1,276,962 in tuition
- Increases velocity toward completion/graduation
- Aligns with Kentucky's "15 for 4" initiative to increase graduation rates
- More efficient use financial aid funds
- Reduces student loan debt



Learn More about Benchmarking and Best Practices



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Questions for the Panelists?

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