*Redesigning Program Review to Align Academic Programs with Workforce Demand*

Cory Clasemann-Ryan
Assistant Vice President for Student Success

Who is Ivy Tech

- Nation's largest singly-accredited statewide community college

- 32 degree granting locations

- Classes in 75 communities

- Serving 170,000 students annually

- More than 600 programs statewide
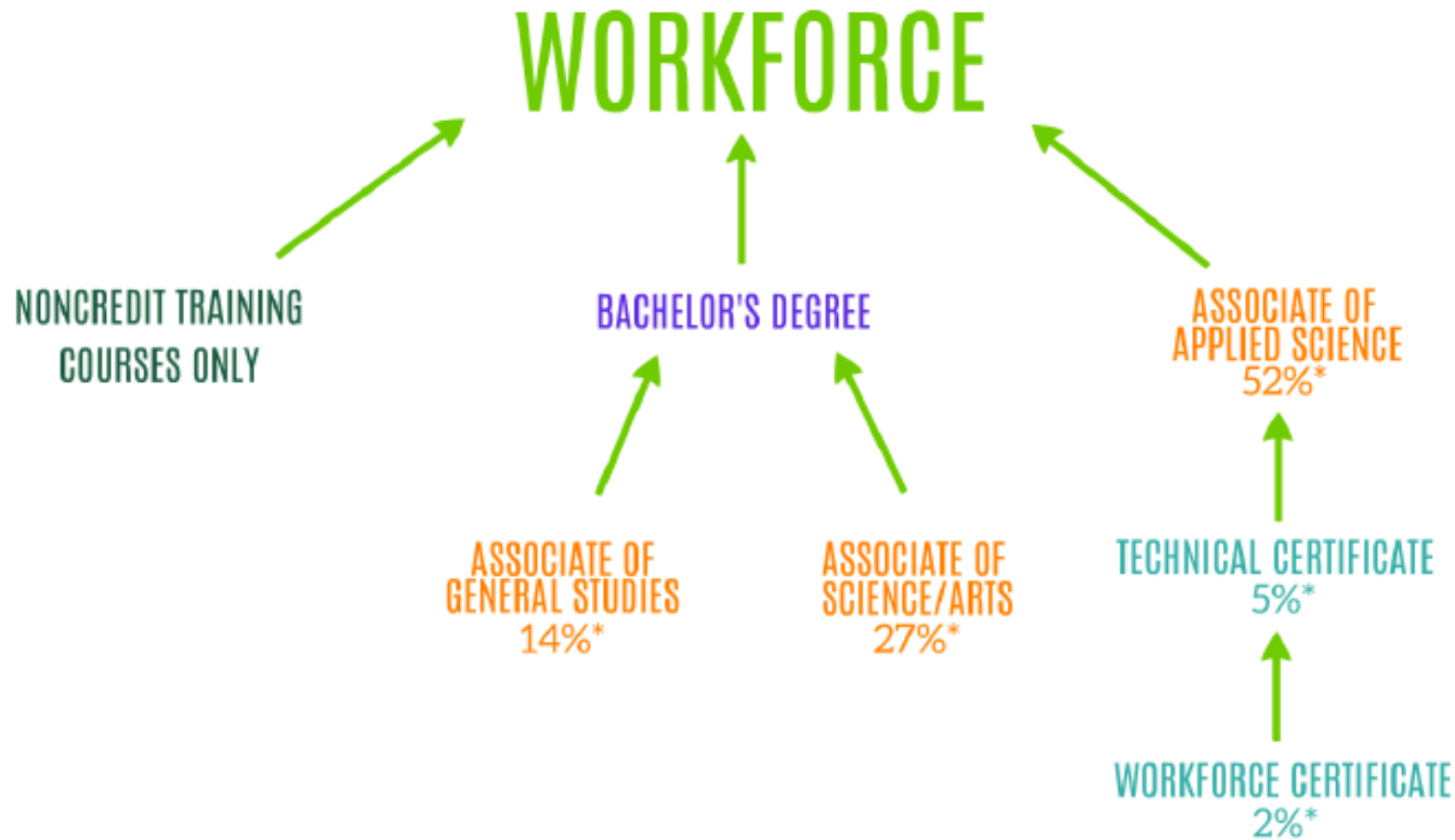

IVY TECH
COMMUNITY COLLEGE
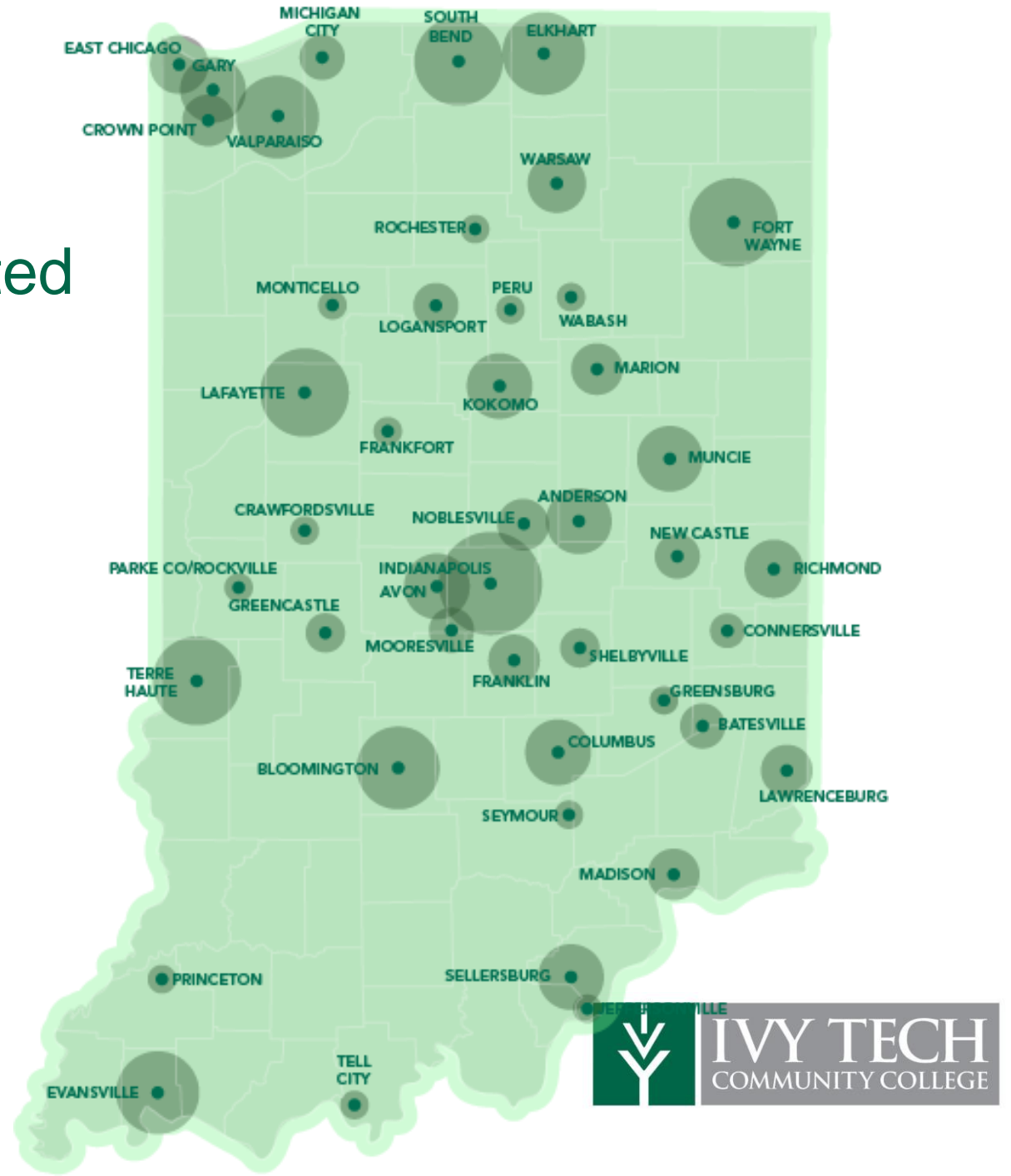
Ivy Tech – This is Your Life

- Programs previously reviewed on a 3-year cycle
- Mixture of system data and anecdotal data
- Not connected to larger institutional processes

2013 – The Big Changes Begin

- President asks for changes
- Every program reviewed every year
- Focus on data and student success needs
- Explicitly connected to budget cycle

IVY TECH
COMMUNITY COLLEGE

Align Structure with Student Needs

WORKFORCE

NONCREDIT TRAINING COURSES ONLY

BACHELOR'S DEGREE

ASSOCIATE OF APPLIED SCIENCE 52%*

ASSOCIATE OF GENERAL STUDIES 14%*

ASSOCIATE OF SCIENCE/ARTS 27%*

TECHNICAL CERTIFICATE 5%*

WORKFORCE CERTIFICATE 2%*

*Percentage of credit enrollment, Fall 2016 for Primary Educational Objective

IVY TECH COMMUNITY COLLEGE

Divisions

- University Transfer

- Healthcare

- Technology

- Business and Public Services

Ivy Tech system high in grads, low in graduation rates

June 24, 2013 | IBJ Staff and Associated Press

COMMENTS   PRINT   f ▼ in ✉ +

Ivy Tech Community College ranks first among two-year educational institutions nationwide for the number of associate degrees it awards, the college announced Monday.

However, Indiana's community college system, already grappling with a $68 million deficit, is facing scrutiny over its graduation rates as it works to shore up its role as the linchpin needed to close the state's skilled-worker gap.

Ivy Tech said an annual study by Community College Week ranked it tops in degrees conferred, with 8,940 awarded in the 2011-12 academic years, an increase of 12 percent over the previous year.

Despite the high number of degrees, many more students are failing to obtain the diploma in a desired amount of time, critics say.

Just 4 percent of students at Ivy Tech graduate within two years and only 23 percent earn diplomas in six years, according to state data. And that's making state officials wary of pumping more money into the system if the results don't improve.

Ivy Tech Officials Say Graduation Rate Overblown

June 25, 2013

By Ken Hartman

Recent newspaper articles in the Lafayette Journal & Courier and Indianapolis Star have been critical of the graduation rates by Ivy Tech Community College students. The reports said that only 4 percent of the full time students at the school graduate on time. However, Director of Marketing and Communications Tom McCool said the school has a very diverse study body and most come in for various reasons before they transfer elsewhere. McCool added a lot of students use Ivy Tech to get on track academically before going to a four-year school which means they don't always graduate from Ivy Tech.

IVY TECH
COMMUNITY COLLEGE

2015 – Legislature Debates 2-Year Budget

- Ivy Tech seeks funding for new building on Muncie campus…

House Enrolled Act 1001-10, 2015

SECTION 234. IC 21-18-9-10.5 IS ADDED TO THE INDIANA CODE AS A **NEW** SECTION TO READ AS FOLLOWS [EFFECTIVE JULY 1, 2015]: **Sec. 10.5. (a) The commission shall review the programs offered by Ivy Tech Community College that have low graduation rates.**

(b) Based on the results of the review under subsection (a), the commission may do any of the following regarding such a program:

(1) Require the restructuring of the program, based on information from other programs that are successful.

(2) Eliminate the program.

(3) Take no action concerning the program.

Strengthening Indiana's Community College System: A Report in Response to House Enrolled Act 1001- 10, 2015

ADOPTED BY THE INDIANA COMMISSION FOR HIGHER EDUCATION
DECEMBER 10, 2015

INDIANA COMMISSION for HIGHER EDUCATION

- Focus resources on programs that demonstrate demand and success
- Provide predictable schedules and structured pathways for every student
- Target student interventions and advising to ensure completion
- Smooth the transition from Ivy Tech to four-year colleges
- Improve Ivy Tech's data system capabilities
- Better embrace Ivy Tech's diverse mission in public reporting and performance funding

IVY TECH COMMUNITY COLLEGE

On-going Reporting

- Required two reports from Ivy Tech each year
  - Program review – due March 1
  - Restructuring student support – due Nov. 1
- Established metrics
  - On the ground reality vs. political reality

	2016	2017	2018	2019	2020	2021
Student Demand	Enrollment of at least 30 students per program, per region					
Employer Demand	Job placement measurement not available		Job placement rate of at least 60%		Job placement rate of at least 75%	
Effectiveness (2-year degrees)	25% within 6 years	30% within 6 years	35% within 6 years	25% within 3 years	35% within 3 years	50% within 3 years
(shorter-term credentials)	For sub-associate programs, the time horizon for the effectiveness metric should be equal to 300% of published program length (2016-2018) and 150% of program length (2019-2021)					

Ivy Tech may elect to utilize additional criteria, such as the Aspen Institute's metric of degree production per full-time equivalent, to use in its ongoing program review.

Scorecard

Program Review Scorecard - AY2014-2015
Commission for Higher Education
Regional Level Results: Northwest

Region	Program	Annual Enrollment 2014-15 Enrollment	Initial Cohort	Completed at Ivy Tech within 300%	Completed at Another Institution within 6 Years	Total Completers within 300%	300% Completion Rate	Job Placement 1 Year Placement Rate	Program Review Action Plan
Northwest	Accounting	335	141	78	1	79	56.0%	N/A	
Northwest	Advanced Automation/Robotics Technology	30	4	1	0	1	25.0%	N/A	
Northwest	Apprentice Tech Boilermaker	107	46	2	0	2	4.3%	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Bricklayer	32	13	4	0	4	30.8%	N/A	See statewide comment on apprenticeship program stricture.
Northwest	Apprentice Tech Carpenter	703	60	9	0	9	15.0%	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Electrician	335	40	28	0	28	70.0%	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Ironworker	115	95	76	0	76	80.0%	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Millwright	75	28	5	0	5	17.9%	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Painter	80	1	0	0	0	0.0%	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Plumber Pipefitter	31	25	16	0	16	64.0%	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Roofer	0	0	0	0	0	Zero N	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Sheet Mtl Wrk	78	59	50	0	50	84.7%	N/A	See statewide comment on apprenticeship program structure.
Northwest	Apprentice Tech Telecom Tech	11	0	0	0	0	Zero N	N/A	See statewide comment on apprenticeship program structure.
Northwest	Automotive Technology	130	94	13	3	16	17.0%	N/A	Using block scheduling to make more classes available to students. Need qualified instructors-hired additonal adjunct instructors
Northwest	Building Construction Management	8	6	0	0	0	0.0%	N/A	Converting to statewide online in fall 2016. Industry has expressed increased need for graduates in this field and possible future partnerships.

2016 - The "Ivy Tech Bill"

Senate Enrolled Act 301-2016

Ivy Tech Community College to leverage demand-driven data to inform and support the workforce alignment strategy

IVY TECH
COMMUNITY COLLEGE

SEA301 Key Points

- Ivy Tech will have 2 VPs, 1 for workforce and 1 for academics and transferability

- Expand program review to include development of courses and programs meeting workforce needs

- Submit annual facilities utilization report (enrollment, square feet, and operating/overhead costs)

IVY TECH
COMMUNITY COLLEGE

In Response

- New President (former Lt. Governor) starts July 2016

- Hires Senior Vice President for Workforce Alignment
  - Subsumes former Corporate College
  - Realigned to include "workforce" VPs – Now sector VPs
    - Manufacturing
    - Healthcare
    - Information Technology
    - Logistics and
      Supply Chain Management
    - Agriculture

- Need to align program offerings to local workforce demand

Workforce Alignment Tool
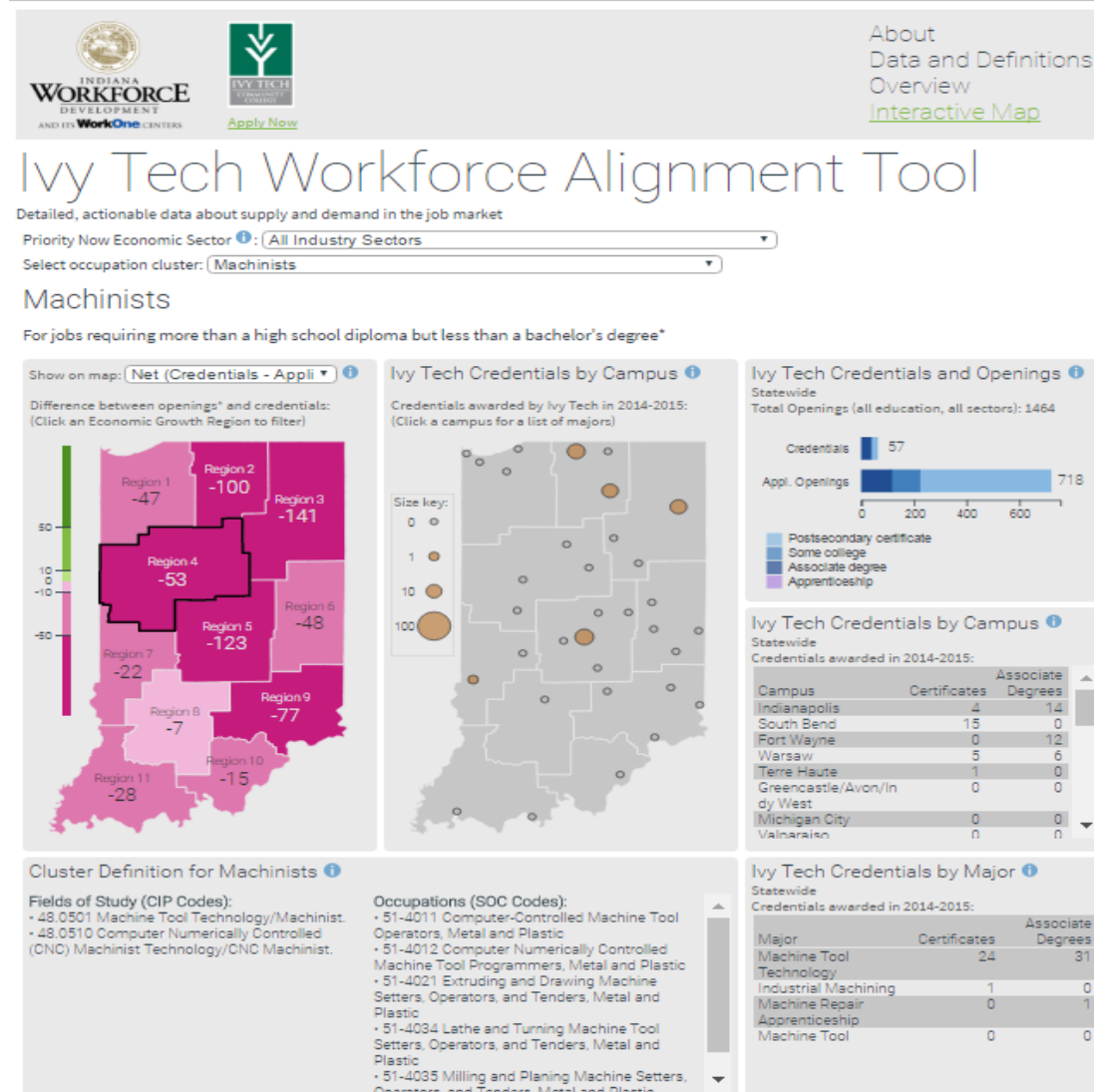
The Need to Go Further

- We know where we offer programs…where should we be offering them?
- Desire to incorporate into program review
  - Demonstrate commitment to workforce alignment
  - Fulfill spirit of "job placement" metric of CHE report
- Data challenges

Aligning CIP and SOC

- Needed to create program CIP-SOC Alignment
- Began with NCES/DOL crosswalk
- Added additional SOC codes
- Vetted, revetted, and revetted (and revetted)

IVY TECH
COMMUNITY COLLEGE

Program Group Name (Nov 2016)	SOC CODE	SOC TITLE
Accounting (Certs & AAS)	43-3021	Billing and Posting Clerks
Accounting (Certs & AAS)	43-3031	Bookkeeping, Accounting and Auditing Clerks
Accounting (Certs & AAS)	13-2072	Loan Officers
Accounting (Certs & AAS)	43-3051	Payroll and Timekeeping Clerks
Accounting (Certs & AAS)	13-2082	Tax Preparers
Accounting (Certs & AAS)	13-2081	Tax Examiners and Collectors and Revenue Agents
Accounting (AS - Transfer)	13-2031	Budget Analysts
Accounting (AS - Transfer)	13-2041	Credit Analysts
Accounting (AS - Transfer)	13-2061	Financial Examiners
Accounting (AS - Transfer)	13-2011	Accountants and Auditors
Accounting (AS - Transfer)	13-2051	Financial Analysts
Accounting (AS - Transfer)	13-2052	Personal Financial Advisors
Accounting (AS - Transfer)	13-2099	Financial Specialists, all other
Advanced Automation / Robotics Technology	17-3024	Electro-Mechanical Technicians
Advanced Automation / Robotics Technology	17-3026	Industrial Engineering Technicians
Advanced Automation / Robotics Technology	17-3029	Engineering Technicians, Except Drafters, All Other
Advanced Automation / Robotics Technology	51-9199	Production Workers, All Other
Agriculture	11-9013	Farmers, Ranchers, and Other Agricultural Managers
Agriculture	19-4011	Agricultural and Food Science Technicians
Agriculture	37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers
Agriculture	37-3011	Landscaping and Groundskeeping Workers
Agriculture	45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers

Data Sources

- Indiana Department of Workforce Development Occupational Demand Report
  - 10 year job opening projections by SOC (annualized)
- Burning Glass
  - Job postings by SOC for last year
- All completions – not just cohort

Data Sources

- Separate transfer degrees (AA, AS, etc.) from workforce degree/certificates (AAS and certificates)

- Included salary info (not used)

- Required education for position
  - Workforce (AAS and certificates) – more than HS, less than 4-year degree
  - Transfer – 4-year degree or more

- Tried for a quantitative approach – supply to demand ratio
  - Determined more art than science
  - "Eye test" – how do completions and demand compare

Right Program, Right Size, Right Place

Quadrant 1:
Demand > Supply

Ivy Tech has Excess Capacity, High Workforce Demand

Quadrant 2:
Demand > Supply

Ivy Tech at Capacity, High Workforce Demand

Quadrant 3:
Supply > Demand

Ivy Tech High Enrollment, Low Workforce Demand

Quadrant 4:
Supply ≈ Demand

At equilibrium

Initiatives

- **Increase enrollment where workforce demand is high and supply is low**

- **Resource and facilities allocation**

- **Employer engagement**

- **K-12 outreach**

- **Support for increased completions in Quad 1**

IVY TECH COMMUNITY COLLEGE

Program	Annual Enrollment 2015-16 Enrollment	Workforce Supply 2015-16 Completersq	2015-16 Completers / Enrollment Ratio	Average Annual Openings (More than HS, less than 4-year degree)	Average Annual Openings (4-year degree or more)	Job Postings (More than HS, less than 4-year degree - POSTED REQUIREMENT)	Job Postings (4-year degree or more - POSTED REQUIREMENT)	Supply to Demand Ratio (2015-16 Compl. / ODR Demand)	Program Quadrant Placement	Placement Notes
Accounting (ALL)	158	38	24.1%	28	55	143	240	1.4	1	Based on BG
Accounting (AS - Transfer)	34	7	20.6%	3	46	44	168	0.2	4	
Accounting (Certs & AAS)	125	31	24.8%	25	9	99	72	1.2	1	Based on BG
Advanced Automation / Robotics Technology	8	0	0.0%	5	2	92	26	0.0	1	Based on BG
Apprentice - Industrial	4	0	0.0%	68	2	170	31	0.0	1	
Automotive Technology	3	0	0.0%	24	0	99	32	0.0	1	Based on BG
Biotechnology	52	2	3.8%	4	11	48	60	0.5	1	Based on BG
Business Administration (ALL)	510	74	14.5%	24	64	732	406	3.1	1	Based on BG
Business Administration (Certs & AAS)	326	55	16.9%	16	20	146	150	3.5	1	Based on BG
Business Administration (Transfer)	189	19	10.1%	8	47	121	283	0.4	1	Based on BG
Business Operations, Applications, and Technology	65	10	15.4%	27	14	174	85	0.4	1	
Computer Science* (Transfer)	39	1	2.6%	4	21	62	237	0.0	1	Based on BG
Criminal Justice	196	28	14.3%	19	6	18	17	1.4	3	Low Demand
Cyber Security / Information Assurance*	49	2	4.1%	11	16	79	177	0.2	1	
Database Management & Administration*	16	0	0.0%	1	1	13	39	0.0	4	Low Supply/Low Deman

Rollout

- Central Office reps met with leadership in each region
- Received regional scorecard before visit
- Explained alignment need, process, and next steps
- Given 2 years to fully implement plans

Key Discussion Points

- How do we involve advisors?

- Are we losing our transfer mission?

- What about programs that are high completion/low demand that have low overhead costs that support expensive programs like nursing?

- How do we expand nursing, which has a great workforce need, when limited by clinical locations?

- What about programs we don't even offer?

Region	Program	Annual Enrollment 2015-16 Enrollment	Completion Rate 6-Year (300%) Completion Rate Initial Cohort	Completed at Ivy Tech within 300%	Completed at Another Institution within	Total Completers within 300%	300% Completion Rate	Program Quadrant Placement	Program Review Action Plan	Program Advisory Committee Notes	Status
Kokomo	**QUADRANT 1: Number of completions of Ivy**										
Kokomo	Accounting (AS - Transfer)	22	N/A	N/A	N/A	N/A	N/A	1			OK
Kokomo	Apprentice - Building Trades	45	9	5	0	5	55.6%	1	Apprenticeship program	Largest advisory board in the community, very	Apprenticeship
Kokomo	Apprentice - Industrial	22	5	0	0	0	0.0%	1	Apprenticeship program	Trade shortage recognized, advisory board very	Apprenticeship
Kokomo	Business Administration (ALL)	339	236	50	4	54	22.9%	1			Under Review/Action Plan Submitted
Kokomo	Business Administration (Transfer)	133	N/A	N/A	N/A	N/A	N/A	1			Under Review/Action Plan Submitted
Kokomo	Business Operations, Applications, and Technology	74	81	33	0	33	40.7%	1			OK
Kokomo	Computer Science* (Transfer)	4	1	0	0	0	0.0%	1	New program that started at Ivy Tech less than 6 years ago. Students in cohort transferred into the program after it started.		New Program
Kokomo	Criminal Justice	127	164	24	3	27	16.5%	1			Under Review/Action Plan Submitted
Kokomo	Early Childhood Education (ALL)	105	79	13	1	14	17.7%	1	Enrollment numbers are up. With increased enrollment, we have created co-horts which should eventually increase completion rate.	Advisory Board has been supportive of increase in enrollment, along with created co-horts which should increase graduation rates.	Under Review/Action Plan Submitted
Kokomo	Early Childhood Education (Certs & AAS)	46	N/A	N/A	N/A	N/A	N/A	1			Under Review/Action Plan Submitted
Kokomo	Early Childhood Education (Transfer)	59	N/A	N/A	N/A	N/A	N/A	1			Under Review/Action Plan Submitted
Kokomo	Education (Transfer)	90	98	18	5	23	23.5%	1			Under Review/Action Plan Submitted
Kokomo	Human Services (Transfer)	68	N/A	N/A	N/A	N/A	N/A	1	Apprentice program; enrollment will stay low. Completion required.	Half of advisory board are machinist and want the program.	Under Review/Action Plan Submitted
Kokomo	Industrial Technology	151	104	34	0	34	32.7%	1	Originates out of Indianapolis. No local programming.	Does not exist, program dropped.	OK

Next Steps

- Define quantitative approach
- Create index to determine which programs at which location
  - Administration
  - Faculty
  - Staff
  - Community and business leaders
- Define approach to identify new programs for campuses

Scorecard in Real Life

Questions?

Cory Clasemann-Ryan

317-968-1536

cclasemann@ivytech.edu