## THE 2011 IUPUI UNDERGRADUATE ALUMNI SURVEY SUMMARY REPORT FOR THE SCHOOL OF ENGINEERING AND TECHNOLOGY

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## INTRODUCTION

The IUPUI Undergraduate Alumni Survey began in 1992 with funding IUPUI received as part of the 1990 Perkins Vocational and Applied Technology Act. In 2011, the survey was revised to incorporate items on community service and social responsibility and focus on outcomes most pertinent for assessment purposes. The current iteration of the IUPUI Undergraduate Alumni Survey was created by staff in The Office of Information Management and Institutional Research (IMIR) with feedback from Deans, Associate Deans, and the Center for Service and Learning, and Career Services. Currently, the Undergraduate Alumni Survey has 4 sections focusing on graduates' satisfaction with their overall IUPUI experience, the impact of IUPUI on their learning, further education, and current employment.

A sample of 5,674 undergraduate students who graduated with an Associate's or Bachelor's degree from any Indiana University or Purdue University school located on the IUPUI or IUPUC campus between Spring 2008 and Summer 2010 was provided to The Office of Information Management and Institutional Research (IMIR) by the Indiana University Alumni Association. Every alumnus in this sample was sent an e-mail inviting them to participate in the survey. 804 of those had invalid e-mails and three declined, leading to an adjusted sample size of 4,867. Reminder e-mails were sent to nonrespondents two, four, and six weeks following the initial e-mail. A total of 511 alumni responded to the survey for a response rate of 10.5%. Demographic and academic characteristics of Engineering and Technology and all respondents appear in Tables 1 and 2 below.

The following is a report of the 84 respondents who received a Bachelor's degree from the School of Engineering and Technology at IUPUI. In order to demonstrate the extent of the difference between the scale means of schools and the scale mean for all IUPUI respondents, effect sizes were generated. Effect sizes represent the number of standard deviation units between the school and campus means. In general, an effect size with an absolute value of less than 0.2 of a standard deviation is seen as "trivial," and an effect size with an absolute value of 0.2 or greater is meaningful. Prudence should be considered when interpreting these results, as the low response rate for this survey may have led to results not consistent with the entire IUPUI population. For further information, including other reports derived from the 2011 IUPUI Graduate and Undergraduate Alumni Surveys, please consult the Alumni Surveys section of the IMIR website, located at imir.iupui.edu/surveys/alumni.

	Engineering and Technology Respondents	All Bachelor's Degree Respondents
Gender	Perce	entages
Female	21.4	58.2
Male	78.6	41.8
Ethnicity <sup>a</sup>		
African-American	7.1	10.4
Asian-American/Pacific Islander	6.0	3.8
Caucasian	76.2	80.6
Hispanic	1.2	1.5
Native American/Alaska Native	1.2	0.4
International Student	6.0	1.7
Unknown	2.4	1.7
Age at graduation <sup>b</sup>		
Less than 25 years of age	45.2	47.0
25 – 29	20.2	19.0
30 – 39	17.9	19.4
40 years of age or older	16.7	14.6

## Table 1Demographic Characteristics of Respondents

<sup>a</sup> Since most participants graduated before the most recent ethnic codes were implemented, pre-2010 ethnic codes were used in this analysis.

<sup>b</sup> For spring semester graduates, age is calculated as of the day of commencement. For fall and summer graduates, age is calculated as of the degree date provided by their school. For most schools, the date is December 31 for fall graduates, June 30 for summer I graduates, and August 31 for summer II graduates (though there is variation between schools).

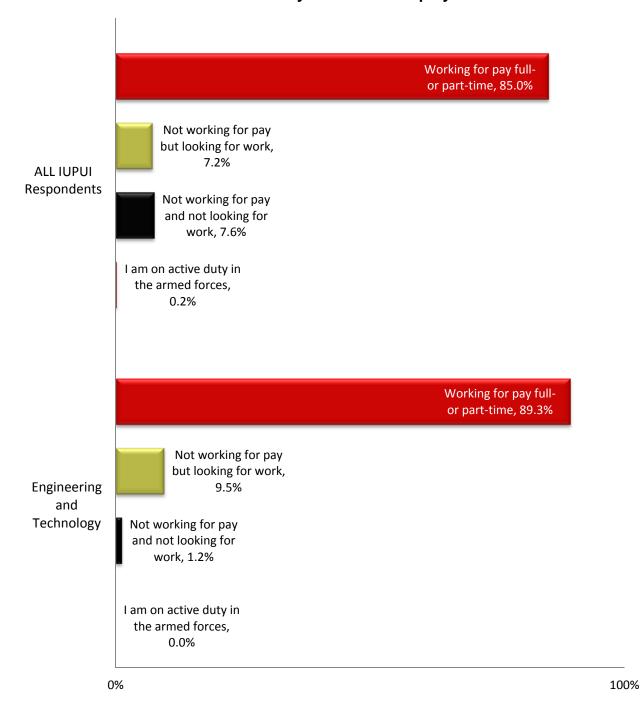
	Engineering	All Bachelor's		
	and Technology	Degree		
	Respondents	Respondents		
A and a min want of another tion	Percentages			
Academic year of graduation	10.0	40.0		
2007-2008	19.0	19.2		
2008-2009	36.9	35.9		
2009-2010	44.0	44.9		
Transfer status				
No hours transferred	28.6	43.6		
Transferred less than 15 credit hours	9.5	11.3		
Transferred 15 credit hours or more	61.9	45.1		
Program GPA <sup>a</sup>				
3.50-4.00	28.6	33.8		
3.00-3.49	35.7	36.4		
2.50-2.99	28.6	23.2		
2.49 or lower	7.1	6.6		

# Table 2Academic Characteristics of Respondents

<sup>a</sup> GPA earned for classes completed at an Indiana University campus that would count towards the students' degree. Does not include grades earned in classes transferred from outside of Indiana University.

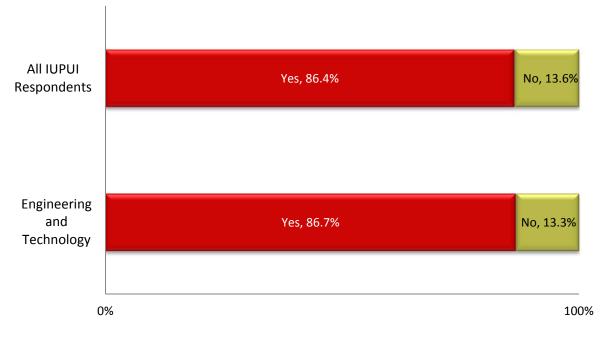
#### SECTION 1: CURRENT EMPLOYMENT

### Figure 1 Which best describes your current employment status <sup>a</sup>



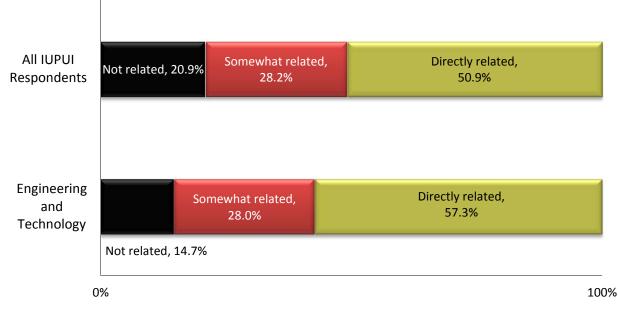
<sup>a</sup> All IUPUI N = 474 Engineering and Technology N = 84

Figure 2 Are you working in Indiana <sup>a</sup>



<sup>a</sup> Of respondents indicating they are working full- or part-time. All IUPUI N = 398; Engineering and Technology N = 75

Figure 3 How closely does your job relate to your IUPUI major area of study? <sup>a</sup>

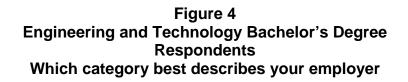


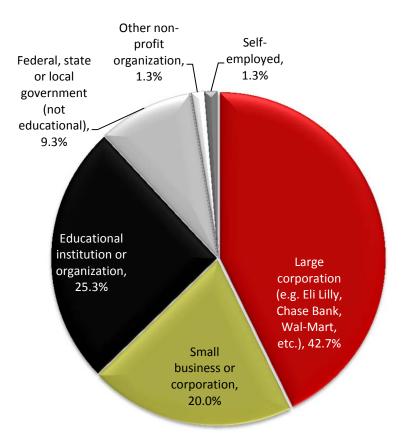
 $^{\rm a}$  Of respondents indicating they are working full- or part-time. All IUPUI N = 398; Engineering and Technology N = 75

Please indicate how satisfied you are with each of the following aspects of your IUPUI experience	N	Mean	STD Percentag	Standard Error	IUPUI Mean	Effect Size
How well did your IUPUI education prepare you for this job	75	2.21	0.64	0.07	2.29	-0.12
How well do you think your IUPUI education enhanced your prospects for future advancement	75	2.35	0.56	0.06	2.41	-0.10

## Table 3 IUPUI Education and Work<sup>a</sup>

<sup>a</sup> 3-point scale in which "Very Well" = 3, "Somewhat" = 2, and "Not at all" = 1. Of respondents indicating they are working full- or part-time.





### Figure 5 All IUPUI Bachelor's Degree Respondents Which category best describes your employer

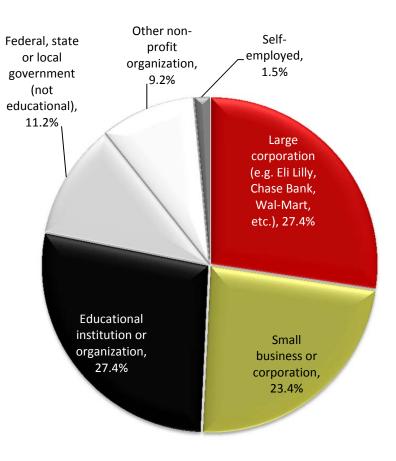
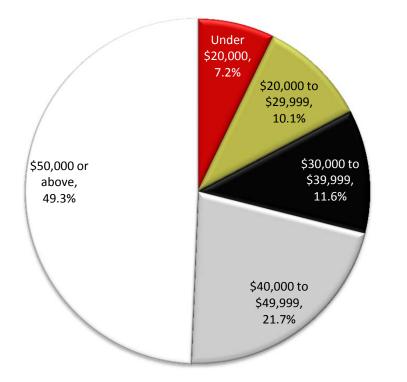
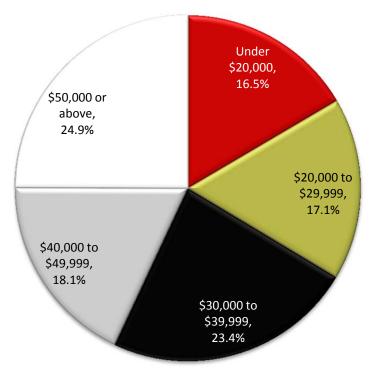


Figure 6 Engineering and Technology Bachelor's Degree Respondents Within which category does your personal annual gross salary fall?

#### Figure 7 All IUPUI Bachelor's Degree Respondents Within which category does your personal annual gross salary fall?

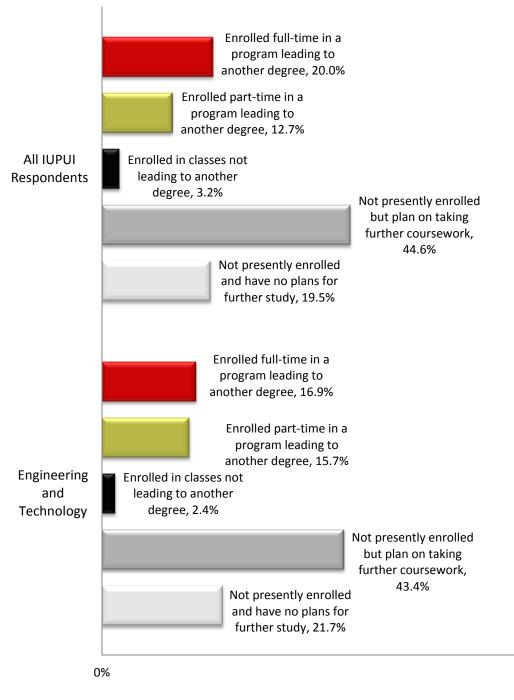




IUPUI N = 381 Education N = 69

#### SECTION 2: FURTHER EDUCATION

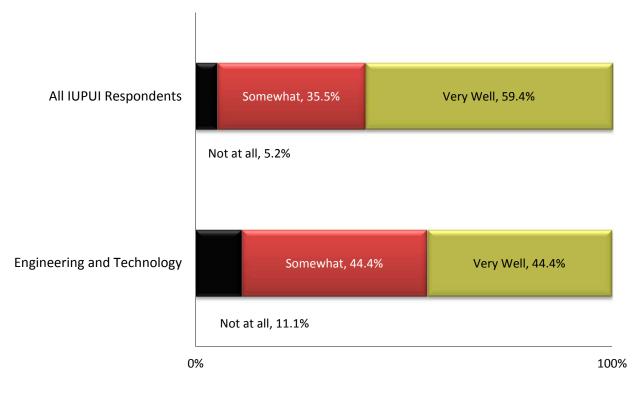
## Figure 8 Which of the following best describes your current educational status?<sup>a</sup>



<sup>a</sup> All IUPUI N = 474

Engineering and Technology N = 83

Figure 9 How well did your IUPUI education prepare you to pursue this degree?<sup>a</sup>



<sup>a</sup> Of respondents indicating they are enrolled full or part-time in a program leading to another degree All IUPUI N = 474 Engineering and Technology N = 27

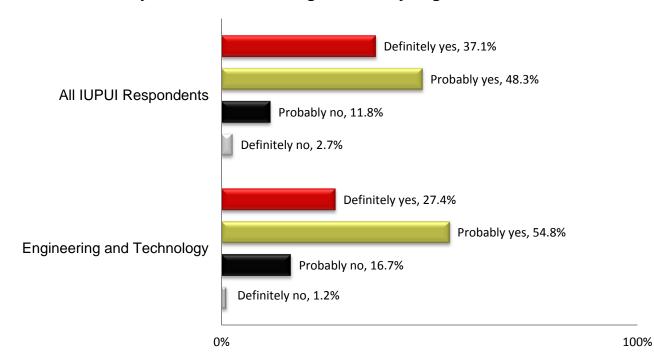
### SECTION 3: IUPUI'S IMPACT ON LEARNING AND SATISFACTION WITH IUPUI

Table 4Impact of IUPUI on Your Learning <sup>a</sup>						
Indicate how effectively you can perform each of these skills using the scale below.	N	Mean	STD	Standard Error	IUPUI Mean	Effect Size
Speaking clearly and effectively	84	3.39	0.64	0.07	3.47	-0.12
Writing clearly and effectively*	84	3.49	0.64	0.07	3.57	-0.27
Quantitative reasoning*	84	3.62	0.54	0.06	3.47	0.23
Identify sources of information that are most appropriate for a project	84	3.60	0.58	0.06	3.59	0.01
Thinking critically and analytically*	84	3.75	0.44	0.05	3.64	0.20
Applying what I learned in college to issues and problems I face every day	84	3.23	0.77	0.08	3.30	-0.10
In-depth understanding of my major field of study	84	3.20	0.65	0.07	3.27	-0.09
See the relationships among local, national, and global issues	84	3.13	0.76	0.08	3.27	-0.18
Work effectively with people of different races, ethnicities, and religions	83	3.63	0.69	0.07	3.64	-0.02
Exercise my responsibilities as a citizen (e.g., voting, actively participating in community and political issues)*	84	3.07	0.89	0.10	3.24	-0.20
Develop a personal sense of values and ethics	83	3.54	0.619	0.07	3.60	-0.09
Use the knowledge I gained in college to address social issues or problems*	83	2.77	0.87	0.10	3.12	-0.39
Understand contemporary social issues*	83	3.08	0.77	0.08	3.29	-0.27

<sup>a</sup> 4-point scale in which "Very Effective" = 4, "Effective" = 3, "Somewhat effective" = 2, and "Not at all effective" = 1.

\* Effect size greater than 0.2 or less than -0.2

Figure 10 If you could start over again, would you go to IUPUI?<sup>a</sup>



<sup>a</sup> Bachelor N = 474, Mean = 3.20, Std. Dev. = 0.75 Engineering and Technology N = 84 Mean = 3.08, Std. Dev. = 0.70, effect size = 0.16

General Satisfaction <sup>a</sup>							
Please indicate how satisfied you are with each of the following aspects of your IUPUI experience	N	Mean	STD	Standard Error	IUPUI Mean	Effect Size	
Overall quality of the education you received at IUPUI	84	3.26	0.69	0.07	3.36	-0.17	
Quality of teaching by faculty in your major area*	84	3.20	0.62	0.07	3.39	-0.29	
Academic advising in your major department*	84	2.96	0.78	0.09	2.97	-0.01	
Quality of courses in your major area*	84	3.06	0.66	0.07	3.25	-0.30	
Personal attention from those in your major department	84	3.26	0.73	0.08	3.24	0.02	
Opportunities to engage in community service*	84	2.86	0.58	0.06	3.08	-0.32	
Opportunities to participate in faculty members' research	82	2.72	0.81	0.09	2.65	0.08	

#### Table 5 General Satisfaction

<sup>a</sup> 4-point scale in which "Very Satisfied" = 4, "Satisfied" = 3, "Dissatisfied" = 2, and "Very dissatisfied" = 1.

\* Effect size greater than 0.2 or less than -0.2

## SECTION 4: EXPERIENCE AT IUPUI

Participation in Experiences at IUPUI							
Which of the following did you do before you graduated from IUPUI?	N	Done	IUPUI % Done	Effect Size			
		Perc	entages				
Practicum, internship, field experience, co-op experience, or clinical assignment	84	58.3	56.3	0.04			
Work on a research project with a faculty member outside of course or program requirements	84	22.6	21.0	0.04			
Study abroad	84	8.3	8.9	-0.02			
Freelance or consulting work	84	20.2	16.3	0.11			
On-campus employment	84	36.9	36.1	0.02			
Federal Work-Study program	84	13.1	16.1	-0.08			
Community service or volunteer work as part of a course*	84	15.4	48.8	-0.67			

#### Table 6 Participation in Experiences at IUPUI

\* Effect size greater than 0.2 or less than -0.2

# Table 7Career Explorations Opportunities a

Please indicate how satisfied you are with each of the following aspects of your IUPUI experience	N	Mean	STD	Standard Error	IUPUI Mean	Effect Size
Career Services	83	2.69	0.84	0.09	2.71	-0.02
Career fairs	82	2.76	0.71	0.08	2.70	0.08

<sup>a</sup> 4-point scale in which "Very Satisfied" = 4, "Satisfied" = 3, "Dissatisfied" = 2, and "Very dissatisfied" = 1.