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EXECUTIVE SUMMARY

For many of the 582 respondents to Michigan State University's 2004-05 national college employment survey, the economy has finally begun to generate enough jobs to push the college labor market forward. Not all employers feel the economy is performing strongly; but they feel compelled to add workers after 3 ½ years of very limited hiring. Hiring is expected to increase by a robust 20% for associates, bachelors, and masters graduates. MBAs will experience their first expanding job market in four years at a more modest 7%. The expanding knowledge economy, as reflected in the growth of opportunities in the professional service sector, and the continued strength of retail services have pushed this expansion. Even in manufacturing where the economic climate is viewed as poor by respondents hiring is expanding among those active in the labor market. The good news continues with modest increases in starting salaries. MBAs, however, may not see increases as their salaries are still being held down by an over supply situation as well as continued labor substitution in positions once assigned to MBAs.

Key findings from this year include:

- 47% of respondents have set definite hiring targets for 2004-05, an improvement of 6% over last year; 72% will increase hiring or hire at the same levels as last year.
- Employers with definite plans to hire will stimulate a 23% expansion in job opportunities; those companies facing more uncertainty will actually decrease hiring by 20%.
- Among bachelor's graduates the most sought after majors are "all majors," accounting, marketing and all business. A growing number of sales positions await these graduates.
- Computer science graduates will find an expanding market for the first, even though the number of companies seeking them remains small compared to the dot.com craze. IT trained individuals are finding opportunities across all sectors of the economy. This pattern is good news for a segment of the labor market that has been misaligned for several years.
- Small employers are increasing their hiring after sitting out last year. These employers are still cautious; worried about rising health care costs and its impact on job growth.
- Public agencies will not expand hiring this year, except for security related positions. State agencies will continue to shrink employment opportunities.
- The MBA labor market shows signs of life after four terrible years. While the growth is not as robust as for other degrees, the modest expansion of 7% is welcome.
- Two key factors are shaping the labor market: productivity demands and skill requirements.
- Starting salaries will increase for associates and bachelor's degree graduates by 3% to 7%; MBAs will see little growth in salaries.

CURRENT CLIMATE

Feel like for every step forward you end up two steps back! The job market sputtered and started multiple times over the past year. One month the news would resonate with optimism about jobs; the next month job growth would disappear. Even with positive numbers, characteristics associated with those jobs were disappointing – many were low paying, temporary service jobs. The college market did begin to pick-up at the end of the second quarter 2004 with some positive news from the professional service sector. However, manufacturing job growth has remained sluggish all year.

We heralded the stabilizing of the labor market last year; but haven't seen much growth yet. This year we can expect a robust growth in opportunities. For many employers they simply cannot afford not to hire new talent after three and a half years of limited, spot hiring. Hiring opportunities are expected to grow for all degrees and all majors.

Seniors may be looking at the first expansion of technical jobs in four years, even though the number of employers in the hunt remains small. Another group enjoying modest success will be MBAs who have not fared well in recent years.

Behind our backs, fingers are crossed that the market will run true to these predictions. On the table, making them hard to avoid, are several factors that could potentially derail the train.

- Interest Rates. While interest rates in the US remain historically low, even with the recent increase to 2%, global interest rates are 3% to 4% higher. China's late October increase to 6% signals that inflation is not being tamed easily in that country. As inflation pushes higher, consumers will be pressed in terms of spending.
- Capital Accumulation. Companies are holding a lot of capital (e.g. Microsoft) and they do not know what to do with it. Traditionally, companies would have spent on capital assets and labor but there has been a hesitancy to do any type of investment.
- Job Formation. The numbers are mixed. Steven Roach of Morgan Stanley has shown that the jobs we are creating are mainly low-end service jobs; accompanied by an increase in part-time employment. Breakdown of college jobs suggest many are sales related; a significant shift away from the engineering/IT jobs associated with college recruiting.
- Health Care. Rising costs, the fourth year of double digit increases, dampen hiring expectations particularly among small employers. While attention has focused on the Medicare/Social Security conundrum, companies are having a difficult time meeting health benefit obligations. It's either jobs or benefits!
- Outsourcing. It's part of the global landscape and we have to accept the challenges it presents. There are opportunities as well as threats but they are harder to recognize when so many well educated individuals are misplaced in the labor market.
- Productivity. The mover and shaker in determining job growth. As William Baldwin, editor of Forbes, commented prior to the election, "Praise the Job Killers!" "Productivity means prosperity." Jobs are an evil; a necessary expense. The tremendous emphasis on productivity distorts tax policy, investment decisions, and business strategy. If you want a dramatic growth in jobs, this climate is not for you.

EMPLOYER PROFILE

This study captured the 2004-2005 hiring intentions of 582 employers who responded to a mail/web-based survey. A designated individual in the human resources or college relations department of the organization completed the survey. Complete details on the research strategy and variable definitions can be found in Appendix A.

BASIC PROFILE

These employers were primarily in the retail, finance, manufacturing, and professional services sectors of the economy, according to the North American Industrial Classification (NAIC) system that they provided or were listed in *Standard and Poor's Register of Corporations, Directors and Executives*. Fifty-eight percent (58%) were women representing units that ranged in size from approximately 10 employees to 1,100,000 employees. While 30% recruited in the Great Lakes region of the country, 31% recruited across the United States, 21% recruited internationally, recruiting within selected regions across the country varied from between 7% and 17%. These employers were less likely to recruit in the Northwest.

The primary strategies in recruiting were on-campus recruiting (45% of those who selected this approach placed it in their top 3), job fairs (31% put in top 3), organization's own website (44%), employee referrals (34%), and job listing services (45%).

A concerted effort has been made to broaden the sample of employers beyond those in the Midwest and who primarily rely on on-campus recruiting. The past couple years we have achieved these objectives. With the cooperation of MonsterTrak and Experience we were able to diversify the sample geographically and among economic sectors.

THE COLLEGE LABOR MARKET: EMPLOYERS' PERCEPTIONS

A quick snapshot on the strength of the labor market for new graduates is developed from the impressions of respondents as revealed in a series of questions on the national and regional labor markets. Respondents were asked to use their knowledge of national and industry specific labor markets information to rate the overall condition of these markets. They were also asked to provide a rating for each of the geographic areas in which their company recruits for graduating college students. The scale used for these ratings is a 5-point Likert scale from "excellent" (5) to "poor" (1).

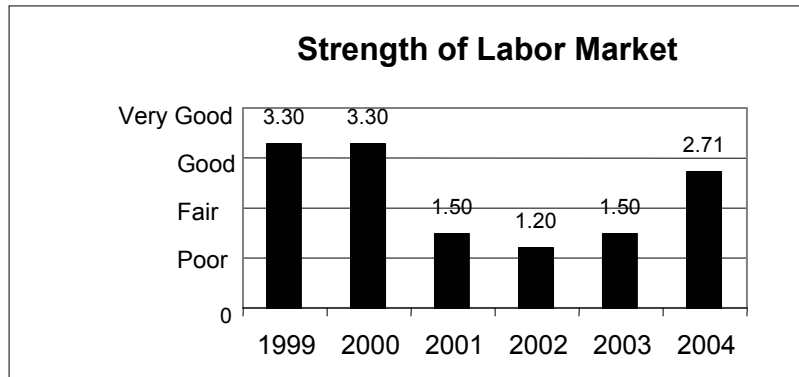
The following summary is based on the information provided in Table 1.

OVERALL JOB MARKET

Ratings improved sharply from last year, shifting from the "poor" to "fair" range to between the "fair" and "good" range. The nearly 25% improvement in the strength of the labor market is captured in these findings.

- 11% rated the overall labor market "very good" to "excellent" – 6% more than last year.
- 38% rated the market strength at "poor" to "fair" a decrease of nearly 50% from last year.

- The shift is captured in the following chart which monitors the strength of the market since 1999. Clearly the market is much stronger than in 2002 when it reached its lowest point.



INDUSTRIAL SECTOR

Respondents rated their own industrial sectors slightly stronger than the overall labor market. The mean of 3.06 suggests a “good” rating across all sectors.

- 30% rated their industry’s labor market as “fair” to “poor”; this compares to a 50% level reported last year.
- 28% rated their industry’s market as “very good” to “excellent”; nearly twice the number as last year.

REGIONAL MARKETS FOR INDUSTRIAL SECTORS OVERALL

In those regions of the country where a company recruited new talent, respondents rated the strength of regional labor markets. Across the entire country improvement was observed. The regional means suggest that the strength fell just shy of “good”.

- The strongest rating was for the Southeast (24% rated “very good” to “excellent”) followed by the Northeast and Southwest.
- The weakest region was the Upper Plains, followed by the Great Lakes states.

**Table 1. Job Prospects for College Graduates 2004-2005:
Impressions of Labor Market Reported by all Respondents (%)**

	Mean	Very good to Excellent	Good	Fair to Poor
Overall market	2.71	11	51	38
Industrial sector	3.06	30	42	28
Regional markets				
Northeast	3.00	23	51	26
Mid-Atlantic	2.98	22	53	25
Southeast	3.04	24	54	22
Great Lakes	2.88	19	50	31
Upper Plains	2.75	14	51	35
Southcentral	2.96	22	53	26
Southwest	3.00	23	53	24
Northwest	2.98	20	55	25

COMPARISONS BY INDUSTRIAL SECTOR

Appendix C-1 provides the tabular information on the labor market conditions by economic sector. A summary of the results show:

- The strongest overall labor markets were reported by respondents from retail, health, and professional organizations/non-profits.
- The weakest overall ratings were reported by utilities, educational services, finance/insurance, and real estate.
- When observing their own industry, those respondents expressing more confidence in the labor market were from retail, transportation, health, and real estate.
- Those industrial sectors reporting less optimistic labor conditions were from utilities, information services, public sector, and administrative services.

Even though the number of responses from manufacturing employers was smaller this year, a more detailed examination of the sub-sectors revealed:

- A general lack of strength in their sectors' labor market, with the exception of food/beverage products and chemicals/pharmaceuticals/plastics.

Regional variations occurred across most industrial classifications. The stronger and weaker sectors by region are:

Northeast (NE):	Stronger	Construction, wholesale, retail, transportation, professional services and health
	Weaker	Utilities, manufacturing, information, administrative services, and public agencies
Mid-Atlantic (MA):	Stronger	Construction, wholesale, retail, transportation, professional services, and health
	Weaker	Manufacturing, information, finance/insurance, public agencies

Southeast (SE):	Stronger	Construction, wholesale, retail, real estate, transportation, professional services, health, accommodations, and education services
	Weaker	Manufacturing, information, finance, administrative services, and public agencies
Great Lakes (GL):	Stronger	Wholesale, transportation, finance, health, accommodations, and real estate
	Weaker	Utilities, construction, manufacturing, information, Finance, administrative services, and public agencies
Upper Plains (UP):	Stronger	Retail, transportation, and health
	Weaker	Utilities, manufacturing, construction, finance, administrative services, information, professional services, and accommodations
Southcentral (SC):	Stronger	Construction, wholesale, retail, transportation, education services, health, and accommodations
	Weaker	Information, professional services, manufacturing, finance, administrative services, and public agencies
Southwest (SW):	Stronger	Construction, wholesale, retail, transportation, professional services, health, and accommodations
	Weaker	Information, finance, administrative services, Manufacturing, educational services, and public agencies
Northwest (NW):	Stronger	Construction, wholesale, retail, transportation professional services, health, and accommodations
	Weaker	Manufacturing, finance, information, administrative services, and public agencies

COMPANY SIZE

Size of company plays an important role in shaping the labor market. Smaller employers, especially those with fewer than 250 employees, are not as optimistic about the labor market with only 8% giving the overall market a “very good” to “excellent” rating. The situation improves somewhat for industry sector where approximately 25% provided the highest ratings. The largest companies expressed the most positive outlook for the labor market.

Table 2. Job Prospects for College Graduates 2004-2005 by Company Size (%)

	Mean	Very Good to Excellent	Good	Fair to Poor
Overall market				
<40	2.53	8	41	51
41-250	2.58	7	48	45
251-4,500	2.91	17	57	26
>4,501	2.81	12	58	30
Industrial sector				
<40	2.58	26	41	33
41-250	2.98	23	52	25
251-4,500	3.13	65	37	28
>4,500	3.18	37	38	25

Regional ratings varied slightly but approximately 15-18% rated “very good” to “excellent” while 20-25% felt the markets were only “poor” to “fair”. Regional specific figures can be found in Appendix C-2.

Companies <40	Strongest regions – Southeast and Southwest Weakest regions – Upper Plains and Southcentral
Companies 41-250	Strongest regions – Southeast and Southcentral Weakest regions – Great Lakes and Upper Plains
Companies 251-4,500	Strongest regions – Southeast, Southwest, Mid-Atlantic, and Northeast Weakest regions – Upper Plains
Companies >4,500	Strongest regions – Southeast, Southwest, Northwest, and Northeast Weakest regions – Upper Plains

CURRENT HIRING SITUATION

PRELIMINARY INTENTIONS

Before gathering specific hiring figures, respondents were asked to select whether they:

- 1) Would definitely hire new college graduates this year;
- 2) Had established preliminary hiring targets that included new college graduates;
- 3) Were uncertain about hiring intentions; and
- 4) Would not hire any new college graduates this year.

The percentage not hiring dropped nearly by half to 5% while those definitely hiring rose 6% to 47%. The number clustered in the preliminary – uncertain groups remained unchanged at approximately 48%. In this latter group, a shift occurred with fewer uncertain about hiring and more setting preliminary hiring targets. Only about one-fifth of the respondents remain uncertain about their hiring.

**Table 3. Hiring Intentions for New College Graduates
Comparison of 2003-04 to 2004-05 (%)**

	2002-2003	2003-2004	2004-2005
Not hiring	10	9	5
Uncertain	31	27	22
Preliminary	23	22	26
Definite hires	36	41	47

When hiring intentions were disaggregated by industry sector, transportation sector reported the highest level of hiring with 83% definitely hiring new college graduates. Other sectors with strong intentions to hire include real estate (70%), wholesale (59%), and retail (54%). In the case of retail, those who will definitely hire actually slipped from 72% reported last year. As will be seen in the next section, retailers who are hiring will add a significant number of positions this year.

Sectors still struggling to firm up hiring conditions include information (31% uncertain), manufacturing (26% uncertain) and public/government (27% uncertain).

Table 4. Hiring Intentions by Economic and Manufacturing Sectors (%)

	Definitely	Preliminary	Uncertain	Not
Ag/Utilities	50	25	25	--
Construction	41	29	12	18
Manufacturing	42	25	26	7
Wholesale	59	29	12	--
Retail	54	38	8	--
Transportation	83	17	--	--
Information	38	27	31	4
Finance/Insurance	49	26	20	5
Real Estate	70	30	--	--
Professional services	39	29	27	5
Administrative services	39	21	25	15
Education	64	18	18	6
Health	54	36	10	--
Entertainment/Accommodations	53	27	20	4
Non profit/Profit organizations	46	27	9	18
Public	40	20	27	13
<u>WITHIN MANUFACTURING</u>				
Food/beverage	25	75	--	--
Textile/apparel	25	--	50	25
Paper/printing	20	40	40	--
Chemicals/petro/plastics	63	13	13	11
Primary metals/fab metals	20	30	50	--
Machinery	57	43	--	14
Electronics/electrical	32	25	36	7
Automotive	50	50	--	--
Surgical equipment/other	33	17	50	--

Comparisons based on company size revealed that small companies (<250) will not change their hiring intentions: approximately one-third will definitely hire, one-third have preliminary plans while one-third remain uncertain or will not hire. Clearly, the largest companies have made definite plans to hire this year.

Table 5. Hiring Intentions by Company Size (%)

Size	Definite	Preliminary	Uncertain	None
<40	34	26	30	10
41-250	36	30	29	5
251-4,500	60	21	16	3
>4,500	58	26	13	3

A final comparison was made according to recruiting areas. The strongest commitment to hiring comes from companies recruiting internationally and through the entire US: nearly 60% have definite plans to hire. Regional intentions are not as strong, except in the Southcentral and Upper Plains regions, though definite hiring plans approach 50%. This upward shift marks an approximately 10% improvement over last year. Only respondents recruiting in the Southwest reported a low level of “definite” hiring and the highest level of not hiring (8%).

Table 6. Hiring Intentions by Recruiting Areas (%)

Location	Definite	Preliminary	Uncertain	None
International	59	19	14	8
Entire U.S.	57	26	15	2
Regions				
Northeast	48	31	17	4
Mid-Atlantic	47	21	28	4
Southeast	47	29	19	4
Great Lakes	48	27	21	3
Upper Plains	54	26	18	2
Southcentral	58	25	14	2
Southwest	36	30	26	8
Northwest	50	32	18	0

DIRECTION OF HIRING TARGETS

This section examines the direction that hiring will take. A company indicates that company plans call for definitely hiring this year. However, the company can actually hire fewer new graduates than during the previous year. By subtracting last year’s hiring level from this year’s projected hiring, the direction hiring will take can be determined. The sign indicates the direction of hiring: +, an increase; 0, no change; and -, a decrease in hiring. Overall, 50% will increase total hiring this year; an 11% improvement over last year. Approximately 22% (same as last year) will hire at the same level while 28% (down 12% from last year) will decrease hiring.

The direction does vary by degree level. Increased hiring intentions doubled among companies hiring associate degreed graduates and increased 11% (to 49%) for bachelors. The advanced degree levels showed modest improvement. The hiring intentions for MBAs remain

disappointing. While some companies reported that they will increase the number of MBAs hired; but movement was offset by a comparable increase among companies planning to hire fewer MBAs. The MBA market remains in flux, even with the additional hires being made this year.

Major differences were found when comparing direction across intentions. Among companies that will definitely hire, 59% will increase hires while only 20% will hire fewer graduates than last year. In contrast, companies uncertain about their hiring report that when they do hire 43% will hire fewer graduates while only 33% will either increase (51%) or decrease (30%) hiring for this year.

Table 7. Percentage of Employers Decreasing, Increasing, and Hiring at the Same Level Compared to Last Year (%)

	All graduates	Associates	Bachelors	MBAs	Masters	PhD/Prof.
Decreasing	28	29	27	36	30	32
Same level	22	31	24	26	31	53
Increasing	50	40	49	38	39	15
For those definitely hiring						
Decreasing	20	24	18	28	23	15
Same level	21	30	22	33	32	65
Increasing	59	46	59	39	45	20
Preliminary hiring targets						
Decreasing	30	29	27	44	36	43
Same level	19	29	26	19	24	43
Increasing	51	42	47	37	40	14
Uncertain hiring						
Decreasing	43	36	47	33	29	46
Same level	24	42	23	25	29	45
Increasing	33	22	30	42	42	9

A historical comparison tracks the continued strengthening of the college labor market since it tanked in the winter of 2001. From this perspective, the figures suggest that the market has moved beyond stabilization and is now poised to add jobs at a rather robust rate.

Table 8. Historical Comparison for Total Hire and Bachelor's Degrees (%)

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Total hiring							
Decreasing	24	18	16	44	45	40	28
Same level	24	21	26	24	17	21	22
Increasing	53	61	58	32	38	39	50
Bachelors hiring							
Decreasing	27	20	14	39	43	38	27
Same level	53	19	27	26	20	24	24
Increasing	50	61	59	35	37	38	49

COMPARISONS BASED ON COMPANY CHARACTERISTICS:

Sizes	Companies with more than 4,500 employees will increase hiring by 63%; smaller employers will likely hire the same or fewer graduates this year (Table 9).
Sector	Transportation companies indicate that they will increase hiring (80%) with gains also reported for retail (57%), information (57%) and health (56%). This is the second year in a row that retail has shown strong gains. Big gainers from last year, construction, finance, and administrative services are not increasing their hires at the same level as last year. Public sector remains troubled with few agencies increasing their hires; which is a noticeable shift from the previous two years (Table 10).
Recruiting Area	Those companies recruiting internationally and the Upper Plains region reported the highest percentages for increased hiring (Table 11). Only the Southwest and Northwest reported less than 50% increasing their hiring.

Table 9. Company Hiring Direction Compared to Last Year – Same, Increase, Decrease by Company Size (%)

Size	All	Assoc	Bachelor	MBA	Master	PhD
<40						
Decreasing	29	35	30	43	29	56
Same	26	22	23	14	33	44
Increasing	45	43	47	43	38	--
41-250						
Decreasing	30	25	28	44	25	20
Same	25	38	29	19	20	50
Increasing	42	37	42	37	55	30
251-4,500						
Decreasing	28	24	27	26	38	36
Same	21	29	21	47	27	43
Increasing	51	47	52	27	35	21
>4,500						
Decreasing	24	33	22	32	23	21
Same	17	36	21	26	37	71
Increasing	59	31	57	42	40	8

Table 10. Percentage of Companies by Sector Decreasing, Increasing and Hiring at the Same Level, Total Hires and Bachelor's Level (%)

Size	Increasing		Same		Decreasing	
	Total	BA/BS	Total	BA/BS	Total	BA/BS
	%	%	%	%	%	%
Ag/Utilities	50	50	50	50	--	--
Construction	43	33	21	25	36	42
Manufacturing	49	47	17	16	34	37
Wholesale	53	47	20	27	27	27
Retail	57	53	0	24	33	24
Transportation	80	80	--	--	20	20
Information	57	64	26	18	17	18
Finance	38	36	32	36	29	29
Prof. Services	53	54	21	21	26	25
Admin. Services	36	32	45	42	18	26
Health	56	68	25	20	19	13
Accommodation/ Entertainment	42	40	25	30	33	30
Prof. Org./Non Prof.	22	22	33	56	44	22
Public	15	13	31	25	54	58
Real Estate	100	100	--	--	--	--
Education Services	67	55	8	9	25	36

Table 11. Percentage of Companies by Recruiting Area Decreasing, Increasing, and Hiring at the Same Level, Total Hires and Bachelor's Level (%)

	Increasing		Same		Decreasing	
	Total	BA/BS	Total	BA/BS	Total	BA/BS
	%	%	%	%	%	%
International	63	62	23	24	15	14
Entire U.S.	56	59	23	22	21	19
Regions						
Northeast	57	55	20	28	23	17
Mid-Atlantic	56	51	20	24	24	24
Southeast	59	53	18	24	23	23
Great Lakes	50	46	19	23	31	30
Upper Plains	63	56	14	24	23	21
Southcentral	60	52	4	11	36	37
Southwest	45	44	16	19	39	37
Northwest	40	33	12	19	48	48

HIRING FOR 2004-2005

For this year's report, 492 employers provided hiring information (an improvement of 140 employers over last year). The remaining 90 respondents chose not to reveal their hiring numbers because of a) company policy or b) actual figures had not been established at the time the survey was completed.

Hiring figures provided by employers indicate that in 24,767 graduates will be hired this year compared to the 20,446 graduates hired during 2003-2004. Because more companies responded, total hires increased from the 16,450 reported last year.

This section will report hiring growth for 2004-2005. Comparisons will be made based on the key company descriptors: sector, size, major, hiring strategy and geographic area for recruiting.

Note: In providing hiring figures, some companies provided total anticipated hires. They did not disaggregate by degree level. While the total average hires and percentage may track the bachelors' figures (largest hiring group), this is not always true. The total (all) graduate figures do provide the most stability in generalizing to the broader population.

The information in Table 12 reveals:

- Overall hiring will expand by approximately 20% from last year. This change is significant and marks the first true expansion of the college labor market in four years.
- Leading the growth are increased demands for bachelors graduates, up 20%, associates graduates, up 24%, and masters graduates, up 25%.
- The market for MBAs is expanding at a more modest rate of 7%; but this news is wonderful given conditions in this market.
- Average number of total hires per company will be just shy of 50. This average is comparable to the reported last year (47).
- At the bachelor's level the average hires per company is approximately 29; a drop from last year's reported average of 40. However, nearly 125 additional companies reported hires this year and there are more small companies hiring this year.

Table 12. Hiring Changes Between 2004 and 2005 All Responses

All Responses	n	2003-04		2004-05	
		Average Hired	n	Average Expected Hires	Percent Change
All graduates	480	41.1	480	49.9	+21
Associates	172	10.3	172	12.9	+24
Bachelors	451	23.9	451	28.7	+20
MBAs	96	11.7	96	12.6	+7
Masters	107	10.7	105	13.7	+25
PhD/Prof.	46	4.4	46	4.0	-10

For those employers with definite plans to hire new graduates, the picture looks very bright with total hiring to expand by 23%. This expansion is being led by associates degrees (+38%) and bachelor's (+23%). The average total hires per company in this group is expected to be 79. Later the impact of company size will help explain these strong numbers.

Table 13. Hiring Changes Between 2004 and 2005 for Only Those Definitely Expecting to Hire in 2005 Academic Year

All Responses	n	2003-04 Average Hired	n	2004-05 Average Expected Hires	Percent Change
All graduates	237	64.6	237	79.3	+23
Associates	71	14.3	371	19.7	+38
Bachelors	223	42.3	224	51.9	+23
MBA's	48	19.0	49	19.4	+2
Masters	61	13.9	60	16.9	+21
PhD/Prof.	21	3.6	21	3.4	-5

The next two tables capture the impact of uncertainty on hiring. Employers who have set preliminary targets expect to expand their hiring by 20%. However, much of this expansion is driven by higher level degrees at the MBA and masters levels. Bachelors and associates hiring is only expected to expand by 12%. Average number of hires per company is anticipated to be 39.

For companies uncertain about their hiring intentions, hiring level will not change overall from last year. Hiring levels for associate's and bachelors will actually contract between 13% and 20%. In this group the average number of hires is only expected to be around 8.

Table 14. Hiring Changes Between 2004 and 2005 for Those with Preliminary Plans for 2005

All Responses	n	2003-04 Average Hired	n	2004-05 Average Expected Hires	Percent Change
All graduates	129	31.9	129	38.7	+21
Associates	63	9.2	63	10.3	+12
Bachelors	26	12.3	126	13.7	+12
MBA's	37	4.6	37	5.6	+24
Masters	25	8.6	26	11.1	+31
PhD/Prof.	15	6.7	14	6.8	-10

**Table 15. Hiring Changes Between 2004 and 2005
for Those Who Are Uncertain About Hiring for 2005**

All Responses	n	2003-04		2004-05		Percent Change
		Average Hired	n	Average Expected Hires	n	
All graduates	106	8.5	106	8.3		- 1
Associates	36	5.4	36	4.7		-13
Bachelors	94	5.2	94	4.1		-20
MBA's	12	4.4	12	4.7		+15
Masters	17	8.3	17	12.7		+49
PhD/Prof.	11	2.4	11	2.2		-12

HIRING BASED ON INTENTION

Those companies committed to expanding their hiring plans to expand hiring by more than 40% with bachelors expected to expand by 47% and associated by 76%. Likewise those companies that will decrease hiring will shrink employment opportunities by 30% (overall) with bachelors decreasing 36% and associates 42%.

**Table 16. Hiring Changes Based on Direction (Decrease, Increase)
Compared to Previous Year**

	n	<u>Decrease</u>		<u>Same</u>		<u>Increase</u>		Avg hires	
		Avg hires	Avg hires	Avg hires	Avg hires	Avg hires	Avg hires		
		03-04	04-05	03-04	04-05	03-04	04-05		
Associates	50	5.2	3.0	54	14.6	14.6	68	10.7	18.8
Bachelors	121	21.8	13.9	106	13.4	13.4	218	30.6	45.1
MBA's	33	4.5	2.9	25	33.4	33.4	36	3.8	7.7
Masters	31	16.8	12.7	33	8.1	8.1	41	9.2	18.9
PhD	15	4.5	2.9	25	5.1	5.1	6	1.5	2.5
All graduates	138	30.0	20.7	98	27.8	27.8	241	53.3	76.1

CHARACTERISTIC

SIZE OF COMPANY: After several years of carrying the college labor market, small companies actually contracted their hiring of new college graduates last year. In 2004-05 smaller companies have returned to an expansion mode. For companies with under 40 employees will expand bachelor's hiring by more than 100%. This large increase is a result of mathematically manipulating small numbers. A small company only has to add one or two employees to mathematically achieve a 100% growth rate. As size increased the rate of expansion ranges from 14% (largest) to 27% (41-250). Overall the MBAs show solid improvement.

Detailed figures from which Table 17 has been derived can be found in Appendix C-4.

**Table 17. Change in Hiring Expectations Between 2003-04 and 2004-05
Based on Size of Organizational Unit Respondent Recruiting For (%)**

	<40	41-250	251-4,500	>4,500
All Graduates	+ 85	+23	+ 9	+19
Associates	+ 34	+ 6	+12	+37
Bachelors	+122	+19	+21	+14
MBA's	+ 40	+26	+24	- 1
Masters	+ 65	+66	+35	+ 6
PhD/Professional	- 26	0	- 3	- 8

INDUSTRY SECTOR: The disaggregation by economic sectors resulted in small, unreliable sample sizes for several sectors. Figures for total hires and bachelors graduates tend to be more reliable. The percentage changes are reported in Table 20. A complete set of figures can be found in Appendix C-4.

- Total hiring is expected to be up in 14 of the 15 sectors. Only public agencies are reporting a decline in hiring.
- At the bachelor's level two sectors are reducing hiring – construction and public agencies.
- Several sectors are reporting modest overall gains (1% to 9%), including construction, wholesale, information services, and administrative services.
- The strongest gains in overall hiring were reported in manufacturing, professional services, entertainment/accommodations, and health services.
- Patterns are very similar for bachelor's degreed hiring with largest expansion in entertainment/accommodations, health services, and transportation. Modest gains were found in administrative services and finance.
- Separate review of the manufacturing sector showed that all sectors would increase hiring though food and metal fabrication/basic metals at the bachelor's level will contract.

**Table 18. Change in Hiring Expectations Between 2003-04 and 2004-05
Based on Economic Sector (% change)**

	n	All Graduates	Bachelors
Construction	14	+ 2	-40
Manufacturing	77	+30	+21
Wholesale	15	+ 1	NC
Retail	21	+16	+18
Transportation	6	+19	+28
Information	23	+ 1	NC
Finance	33	+8	+11
Real Estate	9	+20	+20
Prof. Services	95	+31	+20
Administrative Services	15	+ 8	+ 3
Entertainment/Accom.	12	+35	+47
Public	17	- 6	-10
Professional Org.	9	+ 4	+ 7
Health Services	18	+45	+64
Education Services	12	+78	+64

**Table 19. Change in Hiring Expectations Between 2003-04 and 2004-05
Based on Manufacturing Sector (% change)**

	n	All Graduates	Bachelors
Food/beverage	3	+ 7	- 16
Textile/apparel	3	+ 67	+ 85
Paper/printing	5	+ 12	+ 11
Chemical/petro/plastics	26	+ 8	+ 10
Metal fab/basic metals	6	+ 9	- 26
Machinery	6	+ 42	+ 29
Electronics/electrical	20	+ 9	+ 3
Transportation	4	+ 70	+ 70
Surgical Equipment	4	+100	+100

ACADEMIC MAJOR: Companies were sorted by the majors that they identified they would be seeking. This method of grouping permits an examination of companies likely to hire the majors within the discipline. Some companies hire a variety of majors and can be found in multiple categories.

- At the bachelor's level, companies hiring business graduates (highest number of students) are only expanding by 1%.
- Engineers will experience a modest expansion across all degrees. Computer science (bachelor) will witness the first expansion in several years.
- The biggest winners may well be from humanities, communication, and social sciences because of the increase in sales, retail, and educational services positions.

**Table 20. Change in Hiring Expectations Between 2003-04 and 2004-05
Based on Academic Majors (%)**

	Bus.	Engr.	Comp. Sci.	Soc. Sci.	Comm.	Bio/Physical Sciences	Allied Health	Hum.
All Grads	+13	+ 4	+24	+39	+60	+14	+10	+27
Associates	+13	+ 8	+12	+79	+ 6	+ 2	+10	--
Bachelors	+ 1	+22	+11	+34	+17	+17	+18	+26
MBA's	+ 9	+45	NC	--	--	--	--	--
Masters	0	+29	+82	--	--	+ 4	--	+32
PhD/Profs.	- 9	- 5	+12	--	--	- 4	- 8	--

Table 21. Hiring Changes for Selected Majors, 2004-05

	n	2003-04	2004-05	Change
Associates				
All Majors	24	5.8	8.2	+40
All Business	43	16.6	23.7	+43
All Liberal Arts	11	5.3	7.3	+38
Accounting	33	5.1	5.7	+11
Business Admin.	25	3.0	3.4	+13
Finance	12	2.0	2.9	+45
Marketing	34	7.0	7.8	+11
Communications	15	7.9	8.5	+ 8
Family/Comm. Svcs.	7	4.3	8.7	>100
Social Work Aid	5	9.4	13.0	+47

Electrical Engr.	20	5.3	6.0	+ 3
Mechanical Engr.	9	2.2	8.5	>100
Psych/Sociology	10	66.9	69.3	+ 8
Computer Science	16	13.0	13.0	0
Phys. Therapist Aide	8	12.2	14.6	+36
Nurses	9	19.6	21.2	+ 8
Bachelors	n	2003-04	2004-05	Change
All Majors	57	37.6	50.0	+ 33
All Technical	11	22.6	56.8	>100
All Business	76	28.4	37.7	+ 33
All Liberal Arts	26	15.5	30.7	+ 98
Accounting	81	2.2	2.3	+ 4
Business Admin.	72	12.4	16.5	+ 25
Finance	49	25.1	27.6	+ 10
Economics/Ag. Bus.	18	16.9	18.1	+ 7
Logistics/SCM	13	22.5	26.1	+ 16
Marketing	84	27.7	27.4	0
Hum Res/Management	18	15.1	17.7	+ 17
Advertising	13	21.8	22.6	+ 4
Communications	28	31.6	36.2	+ 25
Family/Comm Svcs.	8	28.6	56.0	+ 10
Chemical Engr.	28	11.5	12.9	+ 12
Civil Engr	11	16.0	14.5	- 9
Computer Engr.	17	13.9	22.2	+ 60
Electrical Engr.	47	13.8	15.5	+ 12
Industrial Engr.	10	22.9	21.6	- 6
Engr. Tech.	13	16.6	16.4	- 1
Mechanical Engr.	42	10.6	19.0	+ 79
English	11	53.0	54.5	+ 3
Psychology	12	113.2	150.0	+ 32
Computer Science	48	17.1	19.1	+12
Computer Prog.	16	6.6	8.2	+10
Information Science	11	9.4	10.2	+ 8
MIS	9	5.8	6.0	+ 3
Biology	8	29.6	30.5	+ 3
Mathematics	9	62.4	63.1	+ 1
Construction Mgt.	11	86.8	52.9	- 39
Allied Health	7	26.9	24.6	- 8
Physical Therapy	7	7.9	13.6	+ 72
Nursing	9	12.1	16.7	+ 38
Masters				
All Business	23	3.3	3.7	+ 12
Accounting	18	41.4	42.2	+ 2
Business Admin.	17	2.5	3.8	+ 52
Finance	19	36.3	38.2	+ 5
Marketing	24	4.9	7.4	+ 51
Chemical Engr.	10	4.7	4.5	- 4
Computer Engr.	9	9.1	15.8	+ 74
Electrical Engr.	16	7.3	10.2	+ 42
Mechanical Engr.	10	7.4	7.6	+ 3
Computer Science	18	9.3	14.5	+ 29

RECRUITING AREAS: An examination of where recruiters focused their recruiting activities revealed some variation across the country.

- Employers recruiting internationally will increase total hiring by 39% and bachelor’s hires by 61%.
- Bachelor’s hiring varies by region with gains in the Mid-Atlantic, Upper Plains and Southwest. However, the Northwest, Southcentral, Southwest, and Northwest actually reported contractions of 10% or more.
- Traditionally strong regions in the southern US reported the weakest regional markets, even if the figures suggest a small expansion.

Table 22. Hiring Changes Between 2003-04 and 2004-05 by Recruiting Area (%)

	Assoc.	BA	MBA	MS	PhD	Total Hires
International	+22	+61	+22	+71	- 2	+39
Entire U.S.	+35	+30	+12	+45	- 6	+28
Regions						
Northeast	+ 7	-23	+42	+ 1	- 5	-12
Mid-Atlantic	+11	+ 8	+47	+16	+ 37	+10
Southeast	+ 9	+ 3	+31	+14	+ 14	+ 7
Great Lakes	+15	- 1	+ 7	+16	+ 32	+ 3
*Upper Plains	+ 3	+14	+52	+84	+100	+17
Southcentral	+20	-13	+11	+ 5	+ 50	- 9
Southwest	+15	- 9	0	+15	- 8	- 3
*Northwest	+37	-32	+11	+ 2	+100	-25

*Small sample size except for total and BAs

HIRING STRATEGIES: Companies reported the three hiring strategies they relied on most in recruiting. Using these strategies we grouped companies into the strategies selected and examined how these strategies may influence hiring this year.

- Electronic methods, including company’s web page application, job listing services, and local job electronic boards will be heavily relied on to recruit bachelor’s graduates in particular. The shift in focus from last year may reflect the change in recruiter mix as a result of receiving support from MonsterTrak and Experience. Another explanation is that companies are more savvy in using these strategies.
- On-campus recruiting will produce good results for all majors with hiring up approximately 15% to 20% across all majors.
- Co-op and internships took a slump, particularly at the bachelor’s level. Later in this report we will see that internship programs are considered to be successful options for identifying and selecting new employees. The poor hiring outlook for candidates with internships may be due to the fact that some of the companies that widely use interns may not be in a position to hire many this year.
- Referrals from current employees remains the most effective method in hiring. The importance of social capital (networks) can not be overstated. Wise use of alumni, family and friends can be the best way to find employment.

Table 23. Hiring by Recruiting Strategy (%)

	On-Campus	Job Fairs	Co-op/Interns
Total	+20	+20	+12
Assoc.	+29	+24	+ 2
Bachelor's	+16	+19	- 4
MBA's	+15	+ 7	+100
MA/MS	+12	+20	+ 24

	Company's Web Postings	Job Listing Service	Local Job Boards
Total	+21	+36	+31
Assoc	+38	+38	+32
Bachelor's	+22	+37	+26
MBA's	+ 1	+ 6	+25
MA/MS	+48	+70	+75

	Ads	Consultants	Employee Referrals
Total	+34	--	+10
Assoc.	+ 7	--	+10
Bachelor's	+37	-10	+19
MBA's	- 2	--	+25
MA/MS	+ 5	--	+26

	Referrals (campus)
Total	+39
Assoc.	+ 4
Bachelor's	+19
MBA's	+33
MA/MS	+55

HIRING DATA NOT REPORTED: Companies that failed to provide hiring information, regardless of their hiring intentions, tended to be larger companies. The average size of companies not providing information was 25,235 (median = 1,000) while those reporting information was 17,554 (median = 270). In other words large companies (greater >4,500) were over-represented in not reporting data while small companies stood out as over-represented in supplying data. This omission may reflect the struggle manufacturing companies are having in creating/sustaining jobs in this economy. Companies from California and New York were more likely not to supply information of hiring. Recruiters who recruit internationally, across the US, in the mid-Atlantic states, the Southwest, and the Southcentral region were more likely not to provide data while the Northeast, Southeast, and Great Lakes were more likely to provide hiring information.

WHAT DO WE SEE SO FAR?

This year we are greeted by robust labor market improvements for nearly all majors and degree levels. The improvement in the professional services sector is particularly good news. This sector accounts for many college degreed employment opportunities. Also noteworthy is the gains made in the MBA market. While the number of employers seeking MBAs is fewer than the historical highs of the late 1990's, those recruiting MBAs are expanding opportunities.

The shift in the mix of employers responding to the survey reflects the overall shift in the economy. We can continue to expect fewer manufacturing companies in the future as the number of service companies grows. Similarly we have seen the emergence of “knowledge based” companies as the cornerstone of the economy. Many of companies classified as professional services describe themselves as knowledge/information purveyors focusing on managing specific dimensions of a business’ core expertise.

Even in this robust market, a number of red flags are evident to provide caution to the nature and extent of the growth in job opportunities. Hidden in the response patterns from employers are several important points to consider.

1. Types of jobs being created. With the high demand for all graduates and marketing graduates, the prevalence of sales positions can not be understated. Anecdotal evidence suggests that a number of employers who recently hired for a variety of positions within business and engineering are narrowing their focus to sales. There is nothing wrong with sales; in fact, many college graduates actually start in sales. However, many students are not thinking sales as a career option; reframing early career expectations may be necessary.
2. Slowdown in stronger sectors. Even though key sectors, such as construction and retail, will be hiring, their numbers are down from last year. Probably more significant is that their outlook on the economy has weakened.
3. Hiring out of necessity. Many companies have not hired much new talent over the past four years. This year they are forced to hire in order to sustain human capital development in their organizations. Take manufacturing as an example. Respondents’ outlook on the economy is poor; yet, they are making some significant hiring gains over previous years. This inconsistent pattern is not something you would normally see. These positions are vulnerable to being withdrawn should the economy slow in the spring.
4. Uneven hiring. The good news is that hiring has stabilized in the Great Lake states and will actually improve among states in the Upper Plains. Another area showing improvement is among the Mid-Atlantic states, thanks to hiring improvements around Washington, DC. The Southwest and California, in particular, continue to struggle in posting real positive job growth figures. Another region, the Southcentral states, that usually reports solid growth is not as strong this year.
5. Labor availability. There are still pockets of skilled, experienced labor that need to be absorbed into appropriate positions as the economy expands. Areas such as IT, advertising, and public relations, for example, will continue to see competitive markets. Once experienced professionals find appropriate positions, positions will open for new graduates.

Some additional information can be gleaned from the response patterns.

*Rise of the technologist. The new “blue collar” segment of the economy will be comprised of 2-year and 4-year technologists (from computers to health). This year’s impressive gains by 2-year graduates may be a sign of the emergence of the technology class (even though many of the jobs were business related). As this group grows we can anticipate continued labor substitution based on degree level.

*Techies have a chance. At long last the IT market seems to be correcting itself. While it is still soft, particularly in information services, its trained graduates are finding opportunities in a number of different sectors of the economy.

*No favorites. Okay, accounting graduates always seem to do well – good market, bad market! This year marketing has been tapped as the golden child; however it appears that there really are no favorites this year. Engineers will continue to struggle as their traditional base of employment, manufacturing, continues to shrink. Many graduates may become quickly disenchanted with their sales positions.

SHAPING THE JOB MARKET

A number of factors shape the formation of jobs by either dampening job creation or generating expanded opportunities. Last year the conversation was dominated by the outsourcing controversy, productivity considerations, and the collapse of the public sector. The public sector remains in a swoon; even the Federal agencies have slowed hiring, even though retirements continue. Outsourcing continues but seems to be an accepted part of the landscape. Internationally focused companies remain the most aggressive in finding new talent. Productivity does remain a strong influence on job growth. This year we return to examine several basic indicators to see what impact they were having on the labor market.

INTEREST RATES: At the low level of 2% (not your credit card or house mortgage rates) most companies have access to inexpensive capital. As U.S. interest rates move slowly upward, the consumer side will feel the pinch. With Americans saving less than ever (<1% of income) and no real salary increases to talk about, higher interest rates will eventually eat into consumption. If consumer spending slows considerably, the impact will be felt in sectors such as retail, finance, and entertainment/accommodations. Where interest rates increased are troubling for U.S. companies is in Asia, specifically China. China faces inflationary pressure. Their October rate adjustment to nearly 6% suggest that they are having problems getting inflation under control. Higher interest rates translates into higher costs in doing business in China which dampens economic activity of major global companies, and increases costs of exports, driving up prices in the U.S. If China continues to have problems controlling inflation by early spring, expect further action with interest rates. Higher rates will spread around the world. Projection: this year little impact on job formation but keep an eye on this one for next year.

ENERGY COSTS: Higher energy costs do have a positive side. Energy companies have the incentive to seek new sources of petroleum energy and develop alternative energy sources. As long as the barrel price of oil hovers around \$50 company activity will expand – hence a few more jobs. The manufacturing sector, agriculture, and other energy dependent sectors are not impacted significantly by higher oil prices because they have made energy efficiency adaptations over the past two decades. Only the transportation sector (airlines and truck delivery services) is being impacted negatively. The biggest losers are consumers who are paying at the pump and the thermostat. Continued high prices, particularly if the winter is cold, will influence purchasing behavior from cars to discretionary purchases. Projection: will slowly eat into consumers' pocketbooks slowing the consumer side of the economy. May see an impact as early as holidays but best bet is during first quarter of 2005.

RETIREMENTS: Boomers are not retiring as quickly as anticipated. Except for concerns over the pending doom of Medicare and Social Security, most observers have ignored the fact that boomers are delaying retirement. They can not afford it! They are anxious about health care coverage. Plan on boomers staying longer in their jobs. Projection: boomers will plug up the job pipeline for another 5 to 10 years. In the meantime, other factors (labor substitution, outsourcing, higher education levels) will mitigate huge disruptions anticipated by boomer exit from the labor market.

GLOBAL COMPETITION: Only a few sectors are isolated from the dynamics of the global economy. International is the name of the game. That is why it is interesting that many employers place such a low value on students' participation in foreign study (see below). Projection: will continue to define the structure of labor; there is a lot of well-educated, cheap labor around the world.

HEALTH CARE: For all the discussion in the media and at conferences, etc., health care hardly registered among respondents to this survey. That hardly seems logical given what is known about health care costs and job formation. Health costs are projected to increase 12% in 2005 – the fourth year of double digit increases. This increase will certainly impact job formation, unless many of the jobs being created are less than full-time (no benefits) or provide stripped down health care benefits. In probing into this question, we found:

- Small companies (<250) are very concerned about health care costs which for them holds back job creation.
- Employers in the Great Lakes states and the Northeast are more concerned about health care costs as they relate to job growth.
- Manufacturing employers are feeling the heat with rising costs, as are administrative services, educational services, health, and professional organizations/non-profits.

Projection: will continue to dampen job growth or lead to more part-time employment in service sector.

SKILL REQUIREMENTS: Skills are on the table again! For most service providers the skill sets still in demand focus on the people skills. For those companies dealing with “knowledge economy” more attention is on critical thinking and knowledge creation. Based on comments from this year's respondents, communication and computer literacy will be deciding factors on hiring. Beyond that employers are stressing the 3 I's: Integrity, Initiative, and Innovation.

Projection: shape of things to come.

PRODUCTIVITY: The only game in town is improving productivity. Everyone wants it from Wall Street to Main Street. Tax policy focuses on productivity asset depreciation not job generation. Productivity allows fewer workers to work more effectively and efficiently. Continue to see productivity improvement in system process work. Projection: increased productivity will decrease demand for labor in some sectors; leaving employment growth in personal services and creative endeavors.

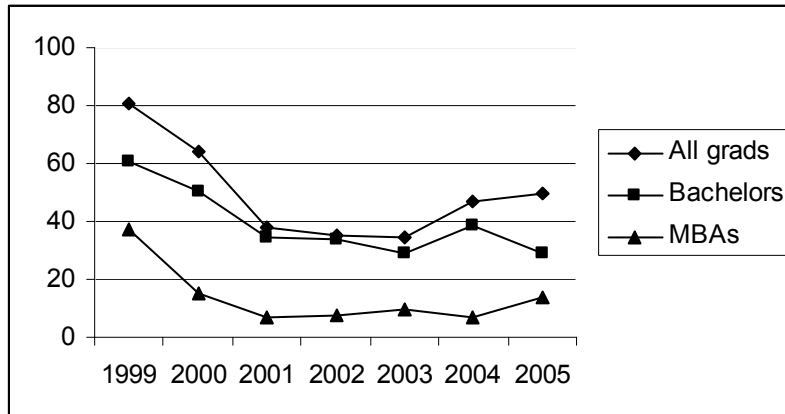
Table 24. Factors that Shape the Labor Market

	Mean	% Not – Somewhat	% Fairly	% Moderately - Extremely
Retirements	2.1	64	23	13
Skill/Competencies	3.6	17	41	41
Global Competition	2.3	58	22	20
Interest Rates	2.0	68	21	11
Energy Costs	1.9	71	20	9
Health care costs	2.5	49	26	24
Productivity requirements	3.3	21	31	48

TURNING THE CORNER

PAST PREDICTING THE FUTURE

To gain a visual insight into whether we have turned the corner, the average number of hires was plotted over time. The 2000-2001 year was adjusted to capture the dramatic decline witnessed during the second semester of that year (see 2001-2002 Recruiting Trends for calculations). Last year featured the first upward movement in several years with regards to hiring. Evidence from this year adds sustainability to the growth experienced at the end of the 2004 academic year. The trend lines may actually plateau this year due to a larger sample composed of small employers. The upward movement in the MBA market is a welcome sign.



Employers are beginning to hire now, but they were asked to pinpoint their hiring a little more closely. They were asked to rate hiring activity by economic quarter over the next year. Late second quarter into the third quarter will be the most active. This timeline will certainly allow the national economy time to solidify its recent rapid growth rates. If the growth rates can be sustained, possibly more employers will begin adding jobs.

Table 25. Level of Hiring Activity for College Entry Positions by Economic Quarter

	Mean	% None-Little Active	% Somewhat Active	% Fairly Active
Third 2004	2.8	40	40	20
Fourth 2004	2.9	35	41	24
First 2005	3.1	25	42	33
Second 2005	3.5	15	36	49
Third 2005	3.2	22	39	39

SALARY EXPECTATIONS

Respondents were asked to provide the starting salary ranges their companies offered in 2003-2004 and the ranges expected to be offered this year. Salary information was sought for each of the five key academic majors they were seeking. The information was further disaggregated to degree level (associates, bachelors, masters, and PhD). Tables have been provided for all degree levels. Salary ranges are offered for selected majors where sufficient number of observations were available to provide stable statistics. The ranges assist in accounting for regional salary differentials that arise from cost of living considerations and labor availability.

General findings, based on the information provided by these respondents:

- 55% indicated that they were holding starting salaries to the same level as last year (no change); 1% will decrease salaries; 44% will increase salaries.
- The only degreed graduates that will likely experience an erosion of their salary base will be MBAs. While the lower end of their salary range is holding, the top end is being pruned back by about 2%.
- Bonuses and other signing incentives will not likely be offered this year. An increase in the use of commission has been observed among employers recruiting on-campus, as the number of sales positions grow.
- Overall:
 - Associates' salaries can be expected to increase approximately 6%
 - Bachelors' salaries can be expected to increase approximately 2.5%
 - Masters' salaries can be expected to increase approximately 3%
 - MBA and PhD salaries can be expected to decline slightly (-2%) or remain the same.
- At the bachelor's level:
 - Business (all) will increase by 7%
 - Engineering (all) will increase by 5%
 - Computer Science will increase by 3%
 - Sciences will increase by 4%
 - Communication majors will increase by 3%
 - Humanities and Social Science majors will increase by an estimated 2% to 5%

- At the master’s level:
 - Business (all) will decline by 3%
 - Engineering will increase by 3%
 - Computer Sciences increased by 2%
 - Sciences increased by 1%
- At the Associate’s level:
 - Business (all) will increase by 8%
 - Engineering will increase by 6%
 - Allied Health will increase by 2%
 - Communication will increase by 9%
- Salary projections by industrial sector reveals (Table 28):
 - Most sectors expect to increase salaries by 2% to 7%
 - Manufacturing is reducing bachelor’s starting salaries by as much as 10%
 - MBA salaries will increase in manufacturing but decrease in professional services

Table 26. All Reported Starting Salary Ranges by Degree Level (2003-04 and 2004-05)

	n	2003-04 Range	2004-05 Range
Associates	251	26,400-32,300	27,800-34,200
Bachelors	825	35,200-42,400	36,500-43,500
Masters	265	42,800-53,100	44,400-54,700
MBA	112	49,600-64,100	48,500-63,000
PhD	97	60,000-79,400	62,400-78,200

All Reported Starting Salary Ranges by Major Academic Area by Degree

	n	2003-04 Range	2004-05 Range
Business			
Associates	78	26,000-32,300	26,900-35,000
Bachelors	288	34,100-37,100	33,300-39,700
MBAs	57	52,600-64,900	51,100-63,200
PhD	18	57,700-71,600	45,300-66,400
Communication			
Associates	22	25,800-34,100	27,600-37,100
Bachelors	45	28,800-35,700	28,900-36,700
Masters	12	31,100-44,600	32,300-49,400
Human Ecology			
Bachelors	12	29,300-30,500	26,900-28,400
Engineering			
Associates	28	25,500-30,800	27,600-32,800
Bachelors	180	42,700-47,800	44,300-50,000
Masters	79	50,500-58,800	52,400-60,700
PhD	28	71,100-86,500	67,300-84,100
Humanities			
Bachelors	16	30,400-32,300	32,800-33,000

Social Sciences			
Associates	10	22,800-27,800	24,800-29,500
Bachelors	17	27,000-29,300	27,500-30,800
Masters	9	29,400-30,600	30,500-31,700
Computer Sci			
Associates	10	27,900-36,400	28,300-36,700
Bachelors	63	37,700-45,900	39,300-47,400
Masters	22	44,700-55,600	46,700-56,600
Sciences			
Associates	14	22,500-26,400	223,800-26,900
Bachelors	44	33,800-40,900	34,600-42,700
Masters	26	42,100-52,200	42,800-52,400
PhD	18	64,600-83,700	68,500-89,000
Allied Health			
Associates	20	31,200-34,200	34,200-34,900
Bachelors	18	38,800-44,900	39,900-45,800
SELECTED MAJORS			
Associates			
All majors	18	28,100-39,600	29,000-40,000
Accounting	15	24,300-32,200	25,500-33,400
Business Admin.	21	25,000-29,400	26,500-32,700
All Business	63	26,900-33,700	28,500-36,900
Finance	14	25,300-30,200	26,400-33,900
Marketing	20	28,200-36,200	30,500-39,900
Communications	12	25,400-32,400	27,300-34,800
Electrical Engr	10	26,400-35,500	29,200-38,300
Computer Sci	7	26,300-30,300	27,100-31,300
Nursing	8	37,600-42,000	38,500-43,000
Bachelors			
All majors	46	30,000-38,800	34,800-43,000
All business	63	27,800-40,800	31,600-40,800
All liberal arts	20	29,200-33,600	29,400-35,000
Accounting	76	34,200-39,400	35,500-41,400
Business Admin.	45	31,900-37,300	32,500-37,600
Finance	41	33,800-40,800	35,600-42,900
Econ./Ag. Econ.	15	35,700-39,800	35,100-40,100
Logistics/SCM	14	37,900-40,700	39,200-41,700
Marketing	64	33,200-40,700	33,700-42,400
HR/Management	11	35,000-43,000	36,500-45,400
Hospitality	15	29,300-35,900	30,100-36,700
Advertising	13	28,000-35,100	28,800-36,500
Communications	25	29,500-36,400	29,600-37,200
Chemical Engr	14	45,900-51,900	46,600-52,200
Civil Engineering	27	38,900-40,000	41,000-42,600
Computer Engr	21	43,300-49,200	43,900-49,600
Electrical Engr	37	45,100-50,600	46,300-53,500
Eng. Technology	12	39,700-48,000	42,800-52,000
Eng. Arts/Gen.	8	43,500-49,100	44,700-51,000

Mechanical Engr	36	44,800-49,300	46,800-52,000
Computer Sci	40	39,900-49,000	41,300-50,300
Computer Prog	12	35,200-45,200	36,600-43,000
Information Sci	10	33,900-40,500	35,600-40,200
Biology	11	30,600-37,200	32,400-42,500
Chemistry	7	32,000-39,700	32,600-41,400
Mathematics	9	39,400-43,300	38,700-42,500
Construction Mgt.	10	39,600-45,700	40,600-46,400
Nursing	7	37,300-44,100	40,700-48,600
Masters			
All business	24	39,200-57,300	36,300-57,700
Accounting	32	43,400-49,700	39,500-48,700
Business Admin.	13	52,500-65,300	45,700-57,000
Finance	27	55,400-71,000	51,900-71,800
Marketing	28	41,700-52,200	46,500-58,800
Chemical Engr.	10	51,100-63,000	53,300-65,200
Civil Engineering	10	45,000-48,400	47,300-51,800
Computer Engr	10	52,700-68,000	54,300-67,500
Electrical Engr	20	56,800-71,100	57,000-70,000
Mechanical Engr	15	51,400-55,600	54,700-59,900
Computer Sci	23	48,800-58,000	49,300-57,400

Table 27. Expected Starting Salary Range for Industrial Classification

Seeking	n	Starting Salary Range 2003-04 (\$)	Expected Starting Salary Range 2004-05 (\$)
Construction			
AA	14	32,000-44,900	32,400-48,200
BA	35	37,000-47,700	37,900-51,200
MA	11	41,000-57,900	41,000-60,300
Manufacturing			
AA	25	24,300-28,600	27,400-30,700
BA	127	39,000-50,400	40,200-45,500
MA	28	47,700-52,000	49,100-54,000
MBAs	9	66,400-74,400	68,600-75,500
PhD/Prof.	13	73,200-83,200	75,900-88,700
Wholesale			
AA	10	28,300-38,500	29,200-40,500
BA	33	34,000-40,300	35,300-42,700
Retail			
AA	23	24,600-30,800	25,000-31,500
BA	41	32,100-37,900	34,600-42,200
Transportation			
BA	13	35,300-38,600	35,100-38,700
Information			
BA	28	35,200-42,200	38,400-46,900

Finance			
AA	10	32,000-45,700	32,700-44,400
BA	72	36,600-43,500	36,900-46,300
MA	19	47,100-61,500	49,931-46,300
MBA	21	46,700-60,000	39,000-56,600
Real Estate			
BA	17	30,000-31,700	29,900-31,700
Professional Services			
AA	37	25,200-29,200	26,700-31,700
BA	164	36,100-40,700	37,900-43,900
MA	68	41,100-50,200	44,200-53,400
MBA	13	56,000-64,400	49,200-56,200
Admin. Services			
AA	15	24,800-30,700	26,500-35,300
BA	35	31,900-37,400	33,400-39,200
MA	17	33,600-41,900	35,300-43,500
Education Services			
BA	16	29,300-35,700	28,600-35,400
MA	9	29,000-38,700	29,400-39,000
Health			
AA	21	29,000-33,100	30,400-35,400
BA	30	40,200-46,200	43,500-49,100
MA	22	46,100-55,400	48,100-55,000
Entertainment/Accom.			
AA	13	20,700-25,500	21,500-26,200
BA	20	24,900-31,300	26,100-31,850
Prof. Org./Non-Profits			
AA	6	24,700-27,500	26,500-27,600
BA	19	33,300-37,700	34,400-39,100
MA	5	53,800-58,800	51,000-56,200
Government/Public			
BA	34	38,000-40,600	41,700-43,400
MA	24	48,600-51,000	43,700-51,200
PhD	6	74,000-75,900	75,200-76,900

RECRUITING ISSUES

Our employer partners sought help in clarifying issues that concerned them as they started the recruiting season. First, internships are the staple of many organizations' recruiting efforts. The questions center on the company's ability to retain interns as permanent hires. Second, return on investment is always important when planning recruitment programs. Where is the bang for the buck? Third, how long does it take to contact candidates after key interactions in the interview process.

INTERNSHIPS AND CO-OPS: Approximately 78% of the respondents reported that their companies used internships as part of their employee development and hiring program. Most companies felt "moderately successful" in retaining interns as full-time employees. The average of 2.9 fell just shy of the moderate midpoint. Nearly one-third struggled to retain their interns, as the following information suggests.

Not very successful	Somewhat successful	Moderately successful	Very Successful	Extremely successful
18%	15%	36%	23%	8%

When examining by company characteristics, the impact of size becomes clear. Companies with fewer than 500 employees have a difficult time retaining interns as full-time employees (Pearson Chi Square = 38.38, .000). While statistics for economic sector are non-significant because of cell-size limitations, the pattern does suggest that manufacturing companies, health organizations, and public agencies are able to retain their interns at a much higher rate than other sectors. Professional services companies are evenly split between being successful and not successful. Sectors having trouble retaining interns included retail, finance, and administrative support companies.

When asked on what proportion of their new hires come from their internship pool, the information suggests that 75% or more of hires have internship experience.

	Average % of new hires
Hires with 2 or more internships with company	21%
Hires with 1 internship with company	26%
Hires with internship experience, not with company	39%

Only 68 of the companies that responded (12%) had formal co-op programs. Many of these companies were from the manufacturing sector. Co-op programs may not be as successful in retaining these students at full-time employees. Fewer company hires come from co-ops than internships. Only about 50% of hires come from co-op. Lower rates can be attributed to the small size of most co-op programs that contribute only a small number to total yearly hires. Also, co-op students have found success using their experiences as levers to better positions with other companies.

	Average % of new hires
Hires with 2+ terms of co-op with company	24%
Hires with 1 term of co-op with company	12%
Hires with 1 term of co-op with another company	18%

RECRUITING RESOURCES: New organizational commitment with regards to human resource management and the introduction of technically sophisticated recruiting tools have resulted in companies realigning resources allocated to hiring new personal. Return on investment becomes a major accountability tool in determining how resources are used. Respondents were queried on their recruiting budget allocations and their perceptions on the returns received from these investments.

Companies on average allocate about 20% of their human resource budget to recruiting new college-educated personnel. The range can run from 0% (about 10% of the respondents) to 100% (about 2% of respondents). The modes (largest groups) appear to be 5% and 10% with a median of 10%.

The available budget is spread over a number of activities. Table 28 illustrates how the budget is allocated. The largest recipients of resources are job listing services and on-campus recruiting with 29% and 21%, respectively. Ads in papers, journals, and other media also capture 19% of many budgets. The other areas received from 8% to 12% of the budget. (Note: these are rough estimates. Figures have not been adjusted to account for those who do not use specific strategies; nor have figures been corrected for any miscalculation – total more than 100%).

Table 28. Return on Investment and Budget Allocation to Various Recruiting Strategies

	Average % budget*	% Poor	Return on Investment		Mean
			% Good	% Excellent	
On-campus recruiting	21	24	41	35	3.1
Company's Web posting (HP)	8	34	47	19	2.8
Resume referral (campus)	8	27	51	22	2.9
Job fairs	14	28	47	25	2.9
Job listing services (Web)	29	23	42	35	3.1
Ads	19	38	42	20	2.7
Co-op/Internship	12	22	45	33	3.1
Staffing consultants	9	36	50	14	2.5
Local/regional job boards	11	27	50	23	2.9
Referrals (employees)	11	12	43	45	3.5

Return on investment appears to be “good” for all strategies except ads and staffing consultants. Money invested in employee referral programs received the highest returns on the money spent. Clearly social capital networks have distinct advantages in capturing new talent.

The two main workhorses of college recruiting – on-campus recruiting and job listing through web based providers – were seen as being good investments. The other workhorse, job fairs, was less enthusiastically endorsed. Interestingly, the company's own job center on their homepage is not viewed as a strong recruiting device.

HIRING TIMELINES: The time period between the first interview conducted on-campus or off-campus and the next decision in the hiring process can be painfully long for candidates. This question attempted to obtain a snapshot of the time interval between key decision points in the hiring process. While the wait may not seem long, two to three weeks, some companies drag out decisions for months.

Table 29. Length of Time Between Key Steps in Recruiting Process

Weeks	Average Weeks	Range	Median
Between 1 st interview (on-campus) – job offer (no 2 nd interview required)	2.8	1-16	2
Between 1 st interview (off-campus) – job offer (no 2 nd interview required)	2.7	1-24	2
Between 1 st interview – 2 nd interview	2.3	1-15	2
Between 2 nd interview – job offer	2.0	1-12	1

BRANDING: To be competitive in the “talent wars” companies most attract the attention of students. Branding a company image is an important ingredient for success. A variety of branding activities are available. The following table provides an indication on how many company’s use the strategy and when they begin targeting students.

Table 30. Participation in Branding Activities and Target Group

Method	% Participate	Target Group
Branding activities	32	Juniors
Information sessions (campus)	49	Juniors
Information sessions (off-campus)	9	Juniors
Sponsorship of events	34	Juniors
Sponsorship of career center	21	Freshman, Juniors
Participate – academic unit	41	Juniors
Participate – student org.	36	Junior
Direct marketing	12	Seniors

CAREER ADVISOR ISSUES

Our college panel requested feedback from employers on 1) value of student engagement, 2) emerging skills, 3) student preparedness for interviews, 4) quality of cover letters and resumes, and 5) impressions on the value on the growing presence of non-traditional educational options. Results showed that student activities are not all highly valued by employers; that students need to come to interviews better prepared and with higher quality resumes; and that non-traditional learning options have not made a big impression on many employers.

SKILLS AND COMPETENCIES

College students, even though career advisors stress them daily, struggle to grasp the importance of balancing core skills (mastery in a discipline) with the broader competencies required in the workplace, specifically communications, leadership, teamwork, and computer literacy. We asked respondents to go beyond this basic package of skills and competencies and identify emerging skills that will be critical for success in a knowledge-focused economy.

Respondents still wanted to stress the importance of the basic package, particularly communications (verbal and written) and computer literacy. Many commented that students were not proficient in basic applications (word processing, spreadsheets, presentations, and data management) but were failing to gain some mastery of advanced skills such as html/JAVA for managing web pages.

They reserved their strongest comments for college students’ communication skills. As one respondent stated, “I can’t tell you how many still can’t spell or put together a coherent sentence.” Others drew the connection between excellent writing and observed intelligence and performance in the workplace. Core communication skills do not meet today’s standards in the workplace.

Being able to manage information with advance critical thinking skills was mentioned frequently. Tasks associated with the skill set included synthesizing information into new terms to extend understanding; to be able to analytically manipulate data; to create new information through inquiry and self-learning. These higher order critical thinking strategies extend well beyond the interpretation and application strategies that most students engage in during college.

After sorting the comments, the focal point this year will be on the 3 I's:

- I**ntegrity
- I**nitiative
- I**nnovation

ENGAGEMENT: College students are encouraged to engage in co-curricular activities, which expands upon the knowledge learned in the classroom and provides opportunities to develop competencies not easily teachable in the classroom. Respondents were asked to consider six activities that students could involve themselves. In evaluating the student as a potential candidate, respondents were asked how much value they believe each experience added to the collegiate experience. The 5-point Likert scale went from 1- “no value” to 5 – “great deal of value.”

The results revealed that employers placed the highest value on participating in student professional organizations and involvement in community service. Student competitions (not athletic or performing arts) were also rated of moderate value. Participation in student government, athletics, and foreign study were least valued among those activities.

Table 31. Employer Perceptions on the Value Added by Various Activities to the College Experience

	Mean	None-Little	Moderate	Very Great
Student Prof. Org.	3.5	13	34	53
Community Service	3.3	19	41	40
Student Competitions	3.1	23	40	37
Student Government	2.9	28	45	27
Student Athletics	2.8	39	38	23
Foreign Study	2.7	44	31	25

Because so many colleges and universities are emphasizing study abroad experiences, this activity was examined more closely. Results revealed that:

- Employers recruiting internationally and throughout the US rated foreign study much higher at 3.3 and 2.9, respectively. The regions assigned the same rating, except of the Upper Plains where the rating was 2.2.
- The smallest employers (<40) believed study abroad had more value than larger employers.
- Respondents from professional organizations and non-profits (4.0) education services (3.1), entertainment/accommodations (3.1) and professional services (2.9) assigned higher value to study abroad while public agencies (2.1), agriculture (2.3), construction (2.3), real estate (2.3) and information services (2.4) assigned the lowest ratings.

PREPARATION FOR INTERVIEWS: The preparation of students for their interviews is of concern to career professionals. Respondents were asked to evaluate the quality of the resumes and cover letters they received from students. Resume quality can be viewed as average. Very few are below average (approximately 8%). Very few received the highest mark (3%); however, a significant group (37%) perceived resumes to be of high quality.

Cover letters are another matter. Slightly over 20% are below average while 55% are average. Only about one-fifth (22%) of the respondents rated cover letters of high quality.

When it came to student preparedness for on-campus employer visits and interviews, respondents found then only “somewhat” prepared. Students tended to be moderately prepared with regards to interview skills but not as well prepared in terms of knowledge of the company, the industry, and, particularly, compensation and benefits.

Table 32. Student Preparedness for Interviews (%)

	Mean	Not Prepared	Somewhat Prepared	Moderately Prepared	Well Prepared	Very Well Prepared
Interview skills	2.96	3	24	47	24	2
Knowledge of co.	2.43	17	36	35	11	2
Knowledge of industry	2.42	16	39	35	8	2
Locational opp.	2.51	13	35	42	10	1
Compensation benefits	2.37	21	32	36	9	2

Table 33. Quality of Resumes and Cover Letters (%)

	Mean	Very Poor	Poor	Average	High	Very High
Resume	3.3	1	7	52	37	3
Cover letter	3.0	3	20	55	21	1

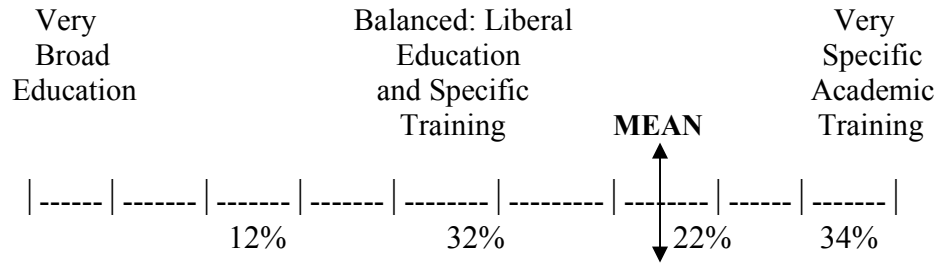
PROPRIETARY DEGREES: Over the past decade there has been a dramatic increase of proprietary (for profit) colleges and universities that frequently use non-traditional methods (on-line and distance learning, credit issued for life experiences, accelerated time to earn a degree) for earning a degree. As recruiters encounter these degrees during the recruiting process, the question arose as to whether they valued these degrees differently than degrees earned via traditional, residential institutions. Respondents were asked to compare non-traditional and traditional degrees awarded in IT, engineering, business, MBAs, and “other degrees” (not specifically listed).

Employers still favor traditional, residential degrees. About 5% across all degrees value non-traditional degrees more. About one-third treat the degrees as equivalent with the remaining 60% favoring traditional over non-traditional degrees.

THE “LIBERAL ARTS” GRADUATE: There continues to be evidence that the value of a “liberally educated” student continue to increase. This does not mean that a graduate with a liberal arts degree is better off – only if they are truly “liberally educated.” Too often a liberal arts degree and liberal education are assumed in the general media to mean the same thing.

What employers want to find are students who possess specific technical training balanced with a liberal education. The technical training could be engineering, computer related, media, research, business – any variety of disciplinary knowledge. But beyond that they seek some who has used the general university curriculum to understand the broader context for learning and how it applies in the world beyond college.

Since we inserted this question five years ago, the mean has continued to move toward a balanced liberal education. This year the mean was 6.6.



APPENDIX A RESEARCH METHODS

A list of potential employer contacts was constructed from employers who had responded to the 2003-2004 *Recruiting Trends* survey, employer members listed in organizational directories such as the Midwest Association of Colleges and Employers and the National Association of Colleges and Employers. After correcting for addresses and company changes, slightly more than 2,000 companies were contacted.

The initial mailing was sent in early September. For contacts which we had e-mail addresses, the survey was delivered via computer. Others received notification through MonsterTrak or Experience.

A final contact effort was made by telephone in mid-October to contact those who responded last year. From this effort, it was estimated that 45% of the contacts were either no longer in the identified position, telephone numbers had changed, or the company was no longer in the location listed in the directory (some merged and some went out of business).

Respondents had several options for completing the survey:

- a) On-line form, which about 75% opted to use.
- b) Fax the surveys or return as an attachment, which about 10% chose to do.
- c) Return paper form through the mail, which 15% elected to do.

To tell as complete a story as possible, employers were asked to complete as many questions as they could, realizing some companies may not have set hiring expectations or want to reveal salaries. We chose to accept only surveys that provided enough information to contribute to the results.

Key variable definitions that were used in this report are included to clarify the text.

- a. Academic majors: The list was taken from the National Association of Colleges and Employers major categories (a list familiar to many professionals). Added to the list were categories for “all majors,” “liberal arts,” “all majors in selected categories,” (technical, business, etc.) and majors omitted from their list, such as packaging engineer and supply chain management.
- b. Regions of the United States:

Northeast:	Maine, Vermont, New Hampshire, Rhode Island, Massachusetts, Connecticut
Mid-Atlantic:	New York, Delaware, New Jersey, Pennsylvania, Maryland, Virginia, Washington DC
Southeast:	North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Kentucky
Great Lakes:	Ohio, Indiana, Michigan, Illinois, Wisconsin
Upper Plains:	Minnesota, Iowa, Nebraska, North Dakota, South Dakota, Wyoming
Southcentral:	Oklahoma, Texas, Arkansas, Missouri, Louisiana, Kansas, Colorado
Southwest:	New Mexico, Arizona, Utah, Nevada, California, Hawaii
Northwest:	Montana, Idaho, Oregon, Washington, Alaska

- c. North American Industrial Classification (taken from Standard Industrial Classification):
- Agriculture and Natural Resources Services*: Establishments engaged in agricultural production, agricultural services, mining activities, forestry and logging, and oil and gas extraction.
 - Accommodation and Food Services*: Hotels; motels; food services; drinking establishments.
 - Non Profits*: religious; civic; private households; education.
 - Arts and Entertainment*: Performing arts; museums, amusement and recreation industries.
 - Construction*: Includes contractors and operative builders engaged in construction of residential, industrial, and commercial buildings; heavy construction, such as highways, bridges, etc. are also included; special trade contractors and service providers associated with construction.
 - Health Care*: Hospitals; ambulatory care services; nursing and residential care facilities; social assistance, service providers.
 - Information*: Publishing industry; broadcasting and telecommunication; motion pictures and sound recording; information services and data processing services, and software producers.
 - Administrative support services*: waste management; travel services; investigation and security services; services to buildings/dwellings, travel related services; document printing and preparation; telemarketing.
 - Manufacturing*: Establishments engaged in the mechanical or chemical transformation of materials or substances into new products; also include assembling of component parts and blending of materials.
 - Transportation and Warehousing*: All types of transportation services (air, rail, water, and truck), includes support services for transportation; couriers and messengers; storage services.
 - Wholesale Trade*: Establishments engaged in selling merchandise to retailers, other wholesalers, or business/industrial users.
 - Retail Trade*: Establishments engaged in selling merchandise for personal or household consumption and rendering services incidental to the sale of the goods.
 - Finance*: Establishments operating primarily in the fields of finance, insurance, and real estate.
 - Professional Services, Scientific and Technical Services*: Provide services to businesses and individuals including legal, accounting, architectural, engineering, design (computer systems and specialized), management consultants; marketing research, including public opinion polls; environmental consulting; scientific research; advertising.
 - Government*: Includes activities of federal, state, and local governments, including research by public agencies (space).
 - Utilities*: Electric power generation; national gas distribution.
- d. Company size. Respondents were asked to provide the size of the unit for whom they recruited. The range was reduced to four groups with each group containing approximately 25% of the sample.

All the analyses were conducted using the SPSS statistical package. Access to the data can be requested from the Director of Research, Dr. Philip Gardner.

APPENDIX B EMPLOYER PROFILE

The characteristics of the 456 respondents with complete information are provided in this appendix.

Respondents' Gender: 58% female, 42% male

Regional breakdowns based on mailing addresses:

Northeast:	Maine, Vermont, New Hampshire, Rhode Island, Massachusetts, Connecticut
Mid-Atlantic:	New York, Delaware, New Jersey, Pennsylvania, Maryland, Virginia, Washington DC
Southeast:	North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Kentucky
Great Lakes:	Ohio, Indiana, Michigan, Illinois, Wisconsin
Upper Plains:	Minnesota, Iowa, Nebraska, North Dakota, South Dakota, Wyoming
Southcentral:	Oklahoma, Texas, Arkansas, Missouri, Louisiana, Kansas, Colorado
Southwest:	New Mexico, Arizona, Utah, Nevada, California, Hawaii
Northwest:	Montana, Idaho, Oregon, Washington, Alaska

	n	%
Northeast	17	4
Mid-Atlantic	78	17
Southeast	47	11
Great Lakes	62	36
Upper Plains	16	3
Southcentral	30	7
Southwest	86	19
Northwest	9	2

Size of organization or size of unit (number of employees) are grouped by quartiles:

Organizational Size	n	%
<40	144	26
41-250	140	25
251-4,500	140	25
>4,500	139	25

Industrial Sector: For each respondent their major North American Industrial classifications (NAIC) code which, reflected their organizations' products and services was used to assign to industrial sector. Only the first three numerals were utilized. Some companies have more than one NAIC code. This year we chose to only assign the primary or major NAIC code. A computer manufacturer may build components (manufacturing) and sell computers (retail), for example. According to their responses, the group represented these industrial sectors:

Industrial Sector	n	%
Public Utilities/Ag.	4	1
Construction	17	4
Manufacturing	98	22
Wholesale	17	4
Retail	24	5
Transportation	6	1
Information	26	6
Finance, Insurance	39	9
Real Estate	10	2
Professional Services	108	24
Business Support Services	28	6
Health	22	4
Education Services	14	3
Entertainment/Accommodations	15	3
Professional Org./Non prof	11	2
Government	15	3

Recruiting Territory: Respondents were asked which areas of the United States that their organizations recruited candidates. They were allowed to check all the areas that applied.

Recruiting Areas	n	%
International	64	11
Entire United States	178	31
Northeast	53	9
Mid Atlantic	100	17
Southeast	94	16
Great Lakes	182	31
Upper Plains	42	7
Northwest	32	6
Southcentral	66	11
Southwest	94	16

Techniques and Strategies Used to Recruit College Graduates.

Respondents were asked to identify their top three recruiting strategies. All the strategies from the list provided appeared in the top three. About half of the respondents indicated on-campus recruiting and job listing services as their primary strategies; on-campus recruiting was listed by 27% as the top strategy. Four other strategies, job fairs, organizational web postings, co-op/internship program, and ads in newspapers or professional journals, elicited more support (referrals was very close). Regardless, the selected strategies were more distributed than in previous years.

Primary Strategy	n	% who put as top strategies	% total listed
On-campus recruiting	218	27	45
Job fairs	154	5	31
Organization's Web/Internet posting	218	15	44
Referrals by current employees	165	0	34
Co-op/internship program	137	6	27
Ads in papers, professional journals	159	11	32
Job listing service (Web)	221	19	45
Resume referrals (campus)	96	6	19
Local Internet boards	132	8	27
External staffing prof./consultants	43	1	9

Majors Sought: Respondents could identify the top five academic majors they were seeking in 2004-05. Employers identified specific majors, including all majors, all business majors, all technical majors, and all liberal arts. A combined 1,600 majors were (approximately three per response) identified, which represented approximately 80 individual majors. The top listed majors included:

Individual Majors	n	% of Total
All majors	71	4
All business	88	6
Accounting	90	6
Mechanical Engineering	44	3
Business Administration	66	4
Electrical Engineering	56	3
Finance	52	3
Marketing	90	6
Computer Science	51	3
Civil Engineering	30	2
Communications	29	2
Liberal Arts	27	

Majors Within Disciplines	n	% of Total
Ag/Nat Resources/Construction	32	2
Business	460	29
Communications	57	4
Engineering	257	16
Computer Science	92	6
Humanities/Liberal Arts		
Social Sciences	52	3
Biological, Physical, Math. Sciences	61	4
Allied Health	45	3
Human Ecology/Home Economics	18	1

APPENDIX C-1
Overall Job Market Rating by Economic Sector and Manufacturing Sector

	Mean	Very good – Excellent	Good	Fair – Poor
Ag./Utilities				
Overall	2.2	--	25	75
Industry	2.2	--	25	75
Construction				
Overall	2.8	21	43	36
Industry	3.1	33	33	34
Manufacturing				
Overall	2.6	12	43	45
Industry	2.8	24	35	41
Wholesale				
Overall	2.8	6	71	23
Industry	3.1	23	59	18
Retail				
Overall	2.9	9	74	17
Industry	3.6	56	35	9
Transportation				
Overall	2.8	20	40	40
Industry	3.6	60	40	--
Information				
Overall	2.6	9	39	52
Industry	2.8	18	45	36
Finance/Insurance				
Overall	2.5	6	47	47
Industry	3.0	27	46	27
Real Estate				
Overall	2.5	--	50	50
Industry	3.2	33	56	11
Professional Services				
Overall	2.6	8	49	43
Industry	2.9	25	42	33
Administrative Services				
Overall	2.7	9	52	39
Industry	2.8	17	48	35
Education Services				
Overall	2.1	--	22	78
Industry	3.0	34	33	33
Health				
Overall	3.4	45	50	5
Industry	3.8	65	35	--
Entertainment/Accommodation				
Overall	2.7	16	42	42
Industry	3.2	42	25	33

Prof. Org./Non profits				
Overall	3.0	22	56	22
Industry	3.2	33	56	11
Public				
Overall	2.8	14	43	43
Industry	2.6	29	14	57
<u>Manufacturing</u>				
Food Beverage				
Overall	3.0	25	50	25
Industry	3.5	50	25	25
Textile/Apparel				
Overall	2.7	33	--	67
Industry	3.0	33	--	67
Paper Printing				
Overall	2.7	25	25	50
Industry	2.7	25	50	25
Chemicals/Plastics				
Overall	2.9	25	46	29
Industry	3.1	44	20	36
Primary Metals/Fabricating				
Overall	2.6	10	40	50
Industry	2.5	--	60	40
Machinery				
Overall	2.7	--	71	27
Industry	2.9	25	50	25
Electronics/Electrical				
Overall	2.4	--	43	57
Industry	2.5	13	35	52
Automotive				
Overall	2.0	25	50	25
Industry	2.5	25	25	50
Surgical Equipment				
Overall	2.4	--	40	60
Industry	2.6	--	60	40

APPENDIX C-2
Overall Job Market Rating By Comparing Size and Region of the Country

	NE	MA	GL	UP	SE	SC	SW	NW
Companies <40								
Very good to excellent	17	18	15	8	16	11	14	13
Good	51	48	51	60	59	58	59	63
Poor-Fair	32	34	34	32	26	32	27	24
Companies 40-250								
Very good to excellent	16	13	8	6	17	18	15	11
Good	56	59	54	55	57	62	63	66
Poor-Fair	28	28	38	39	26	20	22	23
Companies 250-4,500								
Very good to excellent	26	29	24	19	28	23	28	25
Good	53	51	54	45	55	48	47	46
Poor-Fair	21	20	22	36	17	29	25	29
Companies >4,500								
Very good to excellent	31	27	29	20	33	31	36	32
Good	45	53	40	48	46	46	44	45
Poor-Fair	24	20	31	33	21	23	20	23

APPENDIX C-3
Regional Job Markets for Industrial Sector
as Reported by Economic Sector and Manufacturing Sector

	NE	MA	SE	GL	UPP	SC	SW	NW
Ag/Utilities	2.3	2.0	2.3	2.3	2.0	2.3	2.0	1.5
Construction	3.0	3.0	3.1	2.7	2.4	3.3	3.5	3.4
Manufacturing	2.6	2.5	2.6	2.8	2.3	2.6	2.8	2.6
Wholesale	3.1	3.2	3.2	3.4	2.6	3.0	3.3	2.9
Retail	3.3	3.4	3.5	2.9	2.9	3.5	3.5	3.5
Transportation	3.6	4.0	3.5	3.0	3.0	3.5	3.2	3.0
Information	2.7	2.8	2.7	2.3	2.4	2.3	2.4	2.4
Finance/Insurance	2.6	2.6	2.7	2.6	2.6	2.8	2.6	2.8
Real Estate	3.0	3.0	4.0	3.2	3.0	3.0	3.3	3.0
Professional services	3.2	3.1	3.1	2.7	2.7	2.8	3.0	3.0
Administrative services	2.7	3.0	2.6	2.6	2.1	2.5	2.6	2.7
Education services	3.0	3.0	3.5	2.7	2.0	3.0	2.0	2.0
Health	3.9	3.7	3.6	3.7	3.4	3.2	3.9	3.7
Entertainment/Accom.	3.0	3.0	3.7	3.0	2.7	3.3	3.0	3.0
Prof org/ Non profit	3.0	3.0	3.2	3.0	3.0	3.0	3.2	3.2
Public	2.2	2.0	2.2	2.6	2.3	2.3	2.7	2.2
Manufacturing								
Food/beverage	--	--	3.0	3.5	3.0	--	--	--
Textile/apparel	3.0	1.0	1.0	2.0	2.0	1.0	2.5	2.0
Paper/printing	3.0	4.0	4.0	3.5	3.0	4.0	4.0	4.0
Chemicals/petro/plastics	2.5	2.3	2.5	2.7	2.0	2.6	2.8	2.4
Primary metals/fab metals	2.0	2.2	2.5	2.6	2.0	2.0	2.0	2.8
Machinery	3.5	3.5	3.5	3.0	3.5	3.0	3.5	3.5
Computer/electrical	3.0	2.8	2.6	2.8	2.4	2.7	2.8	3.2
Transportation	2.5	2.0	2.3	2.0	2.5	2.5	2.5	2.5
Surgical equipment	--	3.0	3.0	2.0	--	--	--	--

*Direction of scale: "1" – Poor to "5" - Excellent

APPENDIX C-4
Hiring Patterns for Firms by Company Size and Degree Level (based on quartiles)

Firm Size	n	Average Hires Made 2003-04	Average Hires Expected 2004-05	Expected Change (%)
All graduates				
<40	130	5.4	10.0	+ 85
41-250	119	18.0	22.1	+ 23
251-4,500	122	33.0	38.3	+ 9
>4,500	110	121.2	144.7	+ 19
Associates				
<40	40	2.6	3.5	+ 34
41-250	48	7.7	8.2	+ 6
251-4,500	45		13.6	+ 12
>4,500	39	19.9	27.3	+ 37
Bachelors				
<40	115	3.1	6.9	+122
41-250	118	12.8	15.2	+ 19
251-4,500	112	19.7	23.9	+ 21
>4,500	104	69.1	79.1	+ 14
MBA's				
<40	22	1.5	2.1	+ 40
41-250	18	5.8	7.3	+ 26
251-4,500	19	3.3	4.1	+ 24
>4,500	40	24.2	24.1	- 1
Masters				
<40	21	1.7	4.5	+ 65
41-250	21	8.3	13.8	+ 66
251-4,500	26	11.5	15.5	+ 35
>4,500	37	18.3	19.4	+ 6
PhD				
<40	9	1.9	1.4	- 26
41-250	11	1.9	1.9	0
251-4,500	14	5.5	5.4	- 3
>4,500	14	6.4	5.9	- 8

APPENDIX C-5

	n	Average Hires 2003-04	n	Average Hires 2004-05	% Change
International					
Associates	22	8.45	22	10.32	+22
Bachelors	43	24.47	43	31.20	+27
MBA's	19	7.16	19	8.68	+21
PhD	7	3.57	7	3.43	- 4
Total	47	79.77	47	102.28	+28
Entire U.S.					
Associates	49	18.39	49	24.94	+36
Bachelors	130	34.77	130	45.16	+30
MBA's	42	7.79	43	8.63	+11
PhD	20	7.20	20	6.95	- 3
Total	142	57.00	142	72.79	+27
Northeast					
Associates	14	9.07	14	9.93	+ 9
Bachelors	40	31.88	40	24.50	-23
MBA's	10	5.90	10	8.40	+42
PhD	10	1.90	10	2.00	+ 5
Total	44	37.05	44	31.41	-15
Mid-Atlantic					
Associates	23	14.22	23	15.87	+12
Bachelors	74	35.69	74	38.58	+ 8
MBA's	12	5.50	12	8.08	+47
PhD	6	1.33	6	2.17	+63
Total	79	40.57	79	44.63	+10
Great Lakes					
Associates	50	11.64	50	13.26	+14
Bachelors	146	26.11	146	26.00	0
MBA's	21	33.57	21	36.40	+ 8
PhD	7	1.29	7	1.57	+22
Total	152	36.36	152	37.26	+ 2
Upper Plains					
Associates	14	17.36	14	18.00	+ 4
Bachelor	34	33.56	34	38.26	+14
MBA's	6	9.50	6	14.50	+53
PhD	2	1.50	2	3.00	+100
Total	35	45.83	35	51.89	+13
Southeast					
Associates	31	10.52	31	11.68	+11
Bachelors	79	36.53	80	37.78	+ 3
MBA's	16	4.5	15	5.93	+32
PhD	7	2.0	8	1.88	- 6
Total	83	41.47	83	44.13	+ 6
Southcentral					
Associates	17	5.53	17	6.74	+22
Bachelors	46	51.39	46	44.55	-13
MBA's	16	1.62	16	1.81	+12
PhD	2	2.0	2	2.5	+25
Total	51	51.92	51	46.53	+10

Southwest					
Associates	31	9.00	31	10.45	+16
Bachelors	70	31.29	70	28.73	- 8
MBA's	18	2.44	18	2.50	+ 2
PhD	12	2.00	12	1.67	-16
Total	75	35.81	75	34.13	- 5
Northwest					
Associates	6	2.67	6	4.00	+ 50
Bachelors	22	66.45	22	45.41	- 31
MBA's	4	2.25	4	2.50	+ 12
PhD	1	2.0	1	4.0	+100
Total	6	71.04	26	50.35	- 29

APPENDIX C-6

	n	Average Hires 2002-03	Average Hires 2003-04	% Change
Business				
Total	371	50.3	56.4	+13
Associates	137	5.2	5.9	+13
Bachelors	353	28.2	28.5	+ 1
MBA's	95	17.6	19.2	+ 9
Masters	61	24.5	24.6	NC
PhD/Prof.	21	8.1	7.3	- 9
Engineering				
Total	226	20.0	20.9	+ 4
Associates	73	3.4	6.3	+ 8
Bachelors	219	16.0	19.5	+22
MBA's	53	3.8	5.5	+45
Masters	70	6.4	8.2	+29
PhD/Prof.	41	2.6	2.5	- 5
Computer Sci.				
Total	87	53.4	66.0	+24
Associates	28	8.2	9.2	+12
Bachelors	84	19.8	22.1	+11
MBA's	13	13.9	13.8	NC
Masters	26	9.7	17.7	+82
PhD/Prof.	13	5.2	5.8	+12
Humanities				
Total	23	85.6	109.3	+26
Bachelors	23	71.3	89.9	+27
Social Sciences				
Total	29	275.2	382.8	+39
Bachelors	26	119.0	159.3	+34
Sciences				
Total	55	69.5	79.5	+14
Associates	16	17.7	18.1	+ 2
Bachelors	46	67.8	79.1	+17
Masters	18	10.4	10.8	+ 4
PhD/Prof.	13	7.1	6.8	- 4
Allied Health				
Total	34	34.0	37.6	+10
Associates	30	16.4	18.1	+10
Bachelors	32	16.0	18.9	+18
PhD/Prof.	11	7.0	6.4	- 8
Communications				
Total	56	72.0	92.1	+28
Associates	26	17.8	28.4	+ 6
Bachelors	54	36.8	43.0	+17

APPENDIX C-7
Hiring Patterns by Industrial Sector

	n	Average Hires 2002-03	Average Hires 2003-04
Construction			
Total	14	198.6	202.4
Bachelors	13	73.8	43.0
Manufacturing			
Total	77	26.6	34.8
Associates	25	15.1	25.3
Bachelors	72	21.1	25.5
MBAs	18	2.7	4.2
Masters	15	5.1	4.1
PhD/Prof.	13	2.8	2.3
Wholesale			
Total	15	30.5	30.9
Bachelors	15	17.9	17.9
Retail			
Total	12	7.5	8.2
Associates	21	50.9	59.0
Bachelors	21	38.8	45.9
Transportation			
Total	6	29.3	34.8
Bachelors	6	23.7	30.3
Information			
Total	23	27.3	27.5
Bachelors	22	12.9	12.8
Finance			
Total	22	16.0	17.3
Bachelors	21	11.8	13.1
MBAs	8	4.6	5.0
Real Estate			
Total	9	53.3	64.1
Professional Svc.			
Total	95	39.5	51.8
Associates	20	9.6	10.8
Bachelors	88	9.0	10.8
MBAs	13	5.6	8.6
Masters	22	11.8	18.9
PhD/Prof.	7	2.3	2.6
Admin. Support			
Total	21	27.1	29.3
Bachelors	19	22.4	23.2
Health Care			
Total	14	11.9	14.8
Associates	18	41.9	60.7
Bachelors	17	24.1	39.6
Entertainment/ Accommodations			
Total	12	117.2	159.3
Bachelors	10	105.8	156.4

Prof. Org./Non-			
prof.			
Total	9	78.7	12.2
Bachelors	9	75.7	80.9
Public			
Total	13	119.5	112.8
Bachelors	13	60.6	54.7