LABOR DEMAND SURVEY IN THE ST. LOUIS METROPOLITAN STATISTICAL AREA

CONSTRUCTION 2006

Public Policy Research Center

Metropolitan Information and Data Analysis Services (MIDAS)

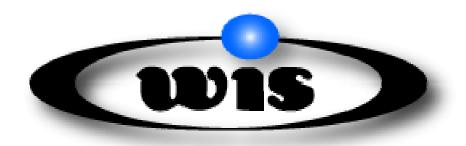




Table of Contents

Executive Summary	4
About the Surveys	5
Survey Results	7
Financial Health and Profitability	7
Selling Products/Services	7
Get Their Supplies	7
Last Year's Sales Trends	8
Sales Expectation in the Coming Year	9
Sales Expectation Over the Next Five Years	9
Company Financial Health and Profitability	10
Industry Financial Health and Profitability	11
Greatest Challenges to Continued Company Growth	12
Employment Trend	13
Company Employment Recruitment	14
Job Vacancies	15
Industry	15
Experience	16
Education	17
Wages	18
Benefits and Training	19
Incentives	19
Reading and Math Requirements	20
Applicants' Skills Compared to Job Requirements	20
Difficulty Finding Applicants	21
Shortcomings of Recent Applicants	21
Workplace Competencies	22
Thinking Skills	22
Occupations	23

Appendix	Α	24
Appendix	В	26
Appendix	С	30
Appendix	D	36
Appendix	E	37
Appendix	F	41
Appendix	G	42
Appendix	Н	43

Executive Summary

In the spring of 2006, the Public Policy Research Center (PPRC) at the University of Missouri - St. Louis conducted a Labor Demand Survey for the construction industry in the St. Louis Metropolitan Statistical Area (MSA). The survey is designed to provide both a barometer of the construction industry's financial and employment outlook and a current estimate of labor demand. The estimates of labor demand include detailed occupation information relating to wages paid, experience and education required and other skill and employee attribute information

The results of the survey indicate that there were an estimated 1,619 job vacancies in construction for the St. Louis MSA: 722 in *Construction of Buildings*; 197 in *Heavy and Civil Engineering Construction*; and 700 in *Specialty Trade Contractors*. The majority of the estimated job vacancies are *full-time*, require *experienced* (more than one year of experience) workers, and call for a *high school diploma or less*.

Overall, the results of the survey show that 86.6 percent of companies sell their product or service within the St. Louis MSA and that 76.8 percent get their supplies from the St. Louis MSA. A majority of the companies (81.8%) anticipate that sales will grow modestly or strongly in the coming year, with another 10.1 percent to remain the same. Even more encouraging, a large portion of the construction companies did not experience employment declines and many anticipate maintaining the current level of employment one year into the future. Approximately 8 in 10 companies reported good, very good, or excellent financial health and/or profitability. At the same time, 7 in 10 companies rated the industry's overall health and profitability as good, very good, or The greatest reported challenge to company growth was excellent. finding qualified labor. Construction companies reported using referrals, *newspaper*, and the *internet* as the methods most often implemented for employee recruitment.

About the Survey

Although commonly reported labor-related economic indicators such as the unemployment rate, the level of employment, and new job creation have been used to measure and track the local economy and trends in labor force participation, they often do not have direct utility for planning workforce development. The Labor Demand Survey provides both an indepth look into the financial health and profitability and a current estimation of job vacancies of a particular industry within the St. Louis MSA.¹ The information can be used to direct the planning and allocation of training and education resources to better prepare the local workforce to meet existing local demand in the construction industry (see Appendix A).

The Labor Demand Survey concentrates on company and industry health and profitability, sales and employment trends, where construction companies get their supplies and sell their products, challenges to continued growth, and their recruitment methods (see Appendix B).

Secondly, the Labor Demand Survey provides an estimate of job vacancies. Along with the estimated job vacancies the survey also makes available focused information about the reported occupations, including the necessary skills, education, desired years of experience, math and reading level requirements, and required/desired personal attributes (see Appendix C).

This Labor Demand Survey focuses on the construction industry within the St. Louis MSA. The survey uses the North American Industry Classification System definition of the construction industry (see Appendix D). "Construction companies" will be used throughout this

¹ In 2001 when this survey effort began, the St. Louis MSA consisted of Clinton, Jersey, Madison, Monroe, and St. Clair Counties in Illinois, and Franklin, Jefferson, Lincoln, St. Charles, St. Louis and Warren Counties and the City of St. Louis in Missouri. As of 2003, the Census Bureau's official definition of the St. Louis MSA has expanded to include Bond, Calhoun, and Macoupin Counties in Illinois and Washington and the Sullivan City portion of Crawford Counties in Missouri. However, this new definition is not used in this survey effort.

report to represent the companies in the St. Louis MSA that have been identified using this definition and that responded to this survey effort.

Survey Results: Financial Health and Profitability

Where construction companies in the St. Louis MSA sell their products/services:

Construction companies (see Appendix E) were asked to describe what proportion of their company's products/services where *sold in the St. Louis MSA*, *sold outside of the St. Louis MSA but within the United States*, and *outside the United States*. Overall, the survey results show that the majority of construction companies sell their products/services *in the St. Louis MSA* as indicated by the mean value of 86.6 percent.

Mean of Companies Product(s) or Service(s) Sold by Region in the Construction Industry, 2006

	Mean
In St. Louis MSA	86.6
Outside St. Louis MSA (in the US)	12.8
Outside US	0.3

Where construction companies in the St. Louis MSA get their supplies:

Construction companies were also asked to describe what proportion of their company's goods/materials, are *supplied from in the St. Louis MSA*, *supplied from outside of the St. Louis MSA but within the United States*, and *supplied from outside the United States*. Overall, the survey results show that the majority of companies get their goods/materials *from within the St. Louis MSA* as indicated by the mean value of 76.8 percent.

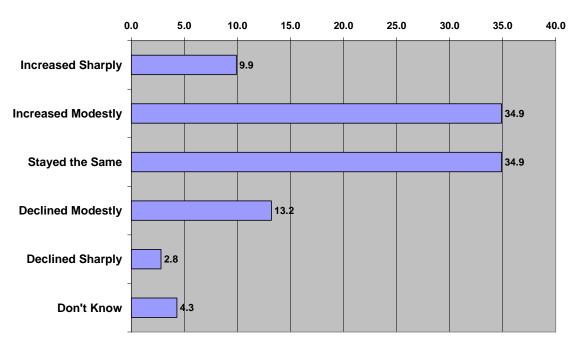
Mean of Companies Suppliers by Region in the Construction Industry, 2006

	Mean
In St. Louis MSA	76.8
Outside St. Louis MSA (in the US)	21.7
Outside US	0.9

Last Year's Sales Trends

Construction companies were asked to describe the sales of their company over the past year. Overall, 79.7 percent of these companies reported sales that either *stayed the same* (34.9%) or *increased*, with 44.8 percent of these companies showing either a *moderate* (34.9%) or *sharp* (9.9%) increase.²



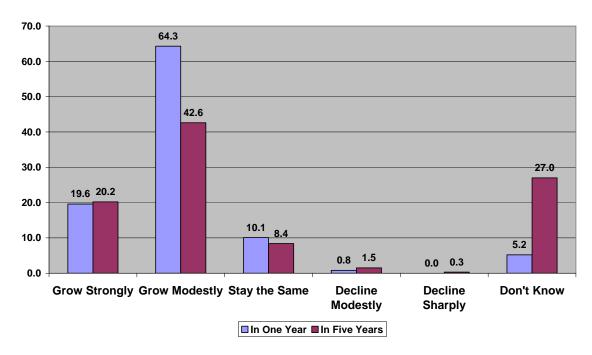


² Percentages based on the number of respondents to the questions regarding past year's sales (n=359).

Sales Expectations for the Coming Year and Over the Next Five Years

Construction companies were asked to describe their sales expectations for the coming year and over the next five years. Overall, these companies were optimistic with 83.9 percent expecting *strong* or *modest* growth over the next year while another 10.1 percent responded that they thought their sales would *stay the same*.³ The majority of these companies had positive expectations for their company's growth five years into the future, with 42.6 percent expecting to *grow modestly* and another 20.2 percent expecting to *grow strongly* over the next five years.⁴

Percent Sales Expectations in One Year and in Five Years in the Construction Industry, 2006



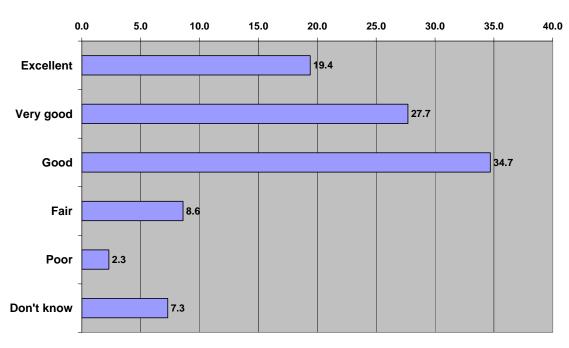
³ Percentages based on the number of respondents to the questions regarding coming year's sales growth (n=387).

⁴ Percentages based on the number of respondents to the questions regarding sales growth in the next five years (n=392).

Company Financial Health and Profitability

Construction companies were asked to describe their company's financial health and profitability. In general, ratings were high with 81.8 percent of construction companies rating their company health *excellent*, *very good* or *good*.⁵



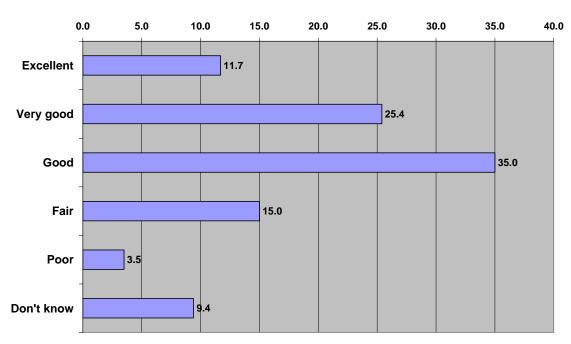


⁵ Percentages base on the number of respondents to the questions regarding company's financial health and/or profitability (n=386).

Industry Financial Health and Profitability

Construction companies were asked to describe their industry's financial health and/or profitability. In general, ratings were high with 72.1 percent of construction companies also rating their industry's health as excellent, very good or good.6



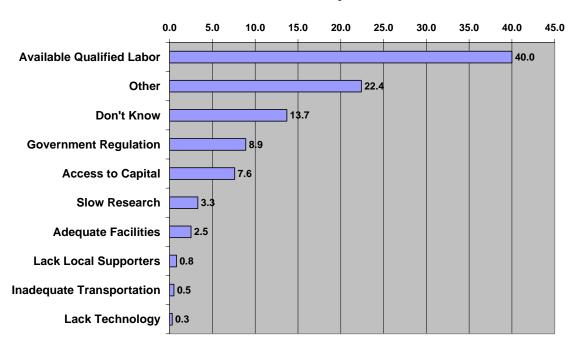


⁶ Percentages base on the number of respondents to the questions regarding industry's financial health and/or profitability (n=394).

Greatest Challenges to Continued Company Growth

Construction companies were asked to choose, from many options, what they believed posed the greatest challenge to their continued growth.⁷ *Availability of qualified labor* (40.0%) was cited most.⁸

Percent of Challenges to Growth in the Construction Industry, 2006



⁷ See Appendix F for a list of *other* challenges to continued growth (22.4%).

⁸ Percentages based on the number of respondents to the questions regarding challenges to company's continued growth (n=395).

Employment Trend

Construction companies were asked a series of questions relating to their level of employment. They were asked how many people they currently employ, followed by questions relating to past (one year ago) and future employment (in one year and five years).

For most companies, the employment picture is expected to remain relatively unchanged one year into the future. Overall, there is greater uncertainty five years out as seen by the large number of responses not provided to this question.⁹

Percent of Companies by Employee Level Current, In One Year, In Five Years in the Construction Industry, 2006

Employee Level	One Year Ago	Current	In One Year	In Five Years
51+ Employees	12.6	13.8	13.1	5.9
26-50 Employees	14.1	11.9	11.9	8.1
11 to 25 Employees	29.9	30.6	30.9	14.1
6-10 Employees	25.4	25.4	23.2	10.4
Up to 5 Employees	15.1	16.5	9.6	5.4
Not Provided	3.0	1.7	11.4	56.0

_

⁹ Percentages based on n=405.

Recruitment

Construction companies were asked to describe what methods they employ to fill job vacancies. The most common methods used were *referral, newspaper,* and the *internet.*¹⁰

Preferred Recruitment Methods in the Construction Industry, 2006

	%
Referral/Word of Mouth	65.8
Other	40.2
Newspaper	38.2
Internet	14.1
Employment Agencies	8.3
Recruiters	5.5
Colleges & Universities	5.0
Trade Publications	4.8
In-House Promotion	3.0
Job Fairs	2.8
State Employment Agencies	2.8
High Schools	2.5

_

 $^{^{10}}$ Percentages based on the number of respondents to the questions regarding preferred recruitment methods, n=398. See Appendix G for a list of *other* methods of recruitment (40.2%).

Survey Results: Job Vacancies

The survey results show that there are 1,619 estimated job vacancies in the construction industry in the St. Louis MSA.

Estimated Job Vacancies in the Construction Industry, 2006

	Total	%
Full-Time	1,488	91.9
Part-Time	124	7.7
Not Provided	7	0.4
Total	1,619	100.0

Industry Sectors

Estimated Job Vacancies by Sector in the Construction Industry, 2006

Sector	Total	%
Construction of Buildings	722	44.6
Specialty Trade Contractors	700	43.2
Heavy and Civil Engineering Construction	197	12.2
Total	1,619	100.0

Experience

Over half (56.8%) of estimated job vacancies in the construction industry require *experienced* workers (*1-3 years:* 23.5%; *4-10 years:* 7.7%; *10+ years:* 0.4%), while 33.1 percent of the estimated job vacancies require *entry-level* (*less than 1 year or no experience*) workers.

Estimated Job Vacancies by Experience Required in the Construction Industry, 2006

	Entry-Level		I Experienced		d All Other*	
	Total	%	Total	%	Total	%
Construction	536	33.1	919	56.8	164	10.1

^{*} All other includes other experience, don't know/not sure and refused to answer

Estimated Job Vacancies by Experience Required in the Construction Industry, 2006

Industry	Entry-Level		Experienced		All Other*	
Industry	Total	%	Total	%	Total	%
Construction of Buildings	283	39.2	439	60.8	0	0.0
Specialty Trade Contractors	168	24.0	399	57.0	133	19.0
Heavy and Civil Engineering Construction	85	43.1	81	41.1	31	15.7

^{*} All other includes other experience, don't know/not sure and refused to answer

Education

The majority of estimated job vacancies in the construction industry (65.7%) require a high school diploma or less. Another 20.6 percent of estimated job vacancies require special, technical or professional certification, and 7.4 percent of estimated job vacancies require an associate's degree or higher.

Percent of Estimated Job Vacancies by Preferred Education in the Construction Industry, 2006

	High school or Less	AA Degree - Graduate Degree	Certification	All other*
Construction	65.7	7.4	20.6	6.3

^{*} All other includes other education, don't know/not sure and refused to answer

Percent of Estimated Job Vacancies by Preferred Education in the Construction Industry, 2006

Experience Required	High school or Less	AA Degree - Graduate Degree	Certification	All other*
Entry-Level	88.1	6.3	0.0	5.6
Experienced	48.7	9.4	35.6	6.3
All Other**	87.2	0.0	4.3	8.5

^{*} All other includes other education, don't know/not sure and refused to answer

Percent of Estimated Job Vacancies by Preferred Education in the Construction Industry, 2006

Sector	High school or Less	AA Degree - Graduate Degree	Certification	All other*
Construction of Buildings	50.0	15.5	33.2	1.3
Specialty Trade Contractors	78.0	1.0	10.0	11.0
Heavy and Civil Engineering Construction	79.2	0.5	12.2	8.1

^{*} All other includes other education, don't know/not sure and refused to answer

^{**} All other includes other experience, don't know/not sure and refused to answer

Wages

Of the estimated job vacancies in the construction industry, 61.9 percent offer \$15.00 or more per hour, while 32.1 percent offer \$8.00 - \$14.99 per hour. Another 6.0 percent of estimated job vacancies offer less than \$8.00 per hour.

Estimated Job Vacancies by Wage in the Construction Industry, 2006

Wage	Total
< \$8.00	42
\$8.00- \$14.99	225
\$15.00+	433
Total	700

Estimated Job Vacancies by Wage and Experience Required in the Construction Industry, 2006

Wage	Entry-Level	Experienced	All Other*
< \$8.00	0	35	7
\$8.00- \$14.99	112	85	28
\$15.00+	48	378	7
Total	160	498	42

^{*} All other includes other experience, don't know/not sure and refused to answer

Percent of Estimated Job Vacancies by Wage and Experience Required in the Construction Industry, 2006

Wage	Entry-Level	Experienced	All Other*
< \$8.00	0.0	7.0	16.7
\$8.00- \$14.99	70.0	17.1	66.7
\$15.00+	30.0	75.9	16.7
Total	100.0	100.0	100.0

^{*} All other includes other experience, don't know/not sure and refused to answer

18

_

¹¹ Percentages based on the total number of estimated job vacancies where wage was reported (n= 700).

Benefits and Training

In terms of benefits and training offered, 51.5 percent of estimated job vacancies in construction provide *on-the-job training*. A majority of estimated job vacancies provide medical (67.5%) and vacation (59.1%) benefits. Only 9.2 percent of estimated job vacancies provide no benefits.¹²

Estimated Job Vacancies by Benefits and Training Offered in the Construction Industry, 2006

Benefit and Training	%
Medical	67.5
Vacation	59.1
On the Job Training	51.1
Dental	47.6
Mentoring	11.7

Incentives

In terms of incentives offered, 58.2 percent of estimated job vacancies in construction provide *bonuses*. Less than half of the estimated job vacancies provide 401k (42.4%), *ongoing training* (40.1%), *pension* (32.1%), and *tuition reimbursement* (28.6%) benefits. Only 4.4 percent of estimated job vacancies provide no incentives.¹³

Estimated Job Vacancies by Incentives Offered in the Construction Industry, 2006

Incentives	%
Bonus	58.2
401K	42.4
Ongoing Training	40.1
Pension	32.1
Tuition	28.6
Stock	21.1
Commission	4.1

¹² Percentages based on the total number of estimated job vacancies in which one or more of the benefits and training offered was reported (n= 1,537).

¹³ Percentages based on the total number of estimated job vacancies in which one or more of the incentives offered was reported (n= 1,537).

Reading and Math Requirements

Nearly all of the estimated job vacancies required reading skills (98.2%)¹⁴ and math skills (91.2%)¹⁵ at 10th grade or higher.

Percent of Estimated Job Vacancies by Reading and Math Skills Required in the Construction Industry, 2006

Skills required	Reading	Math
>10th grade	75.6	65.1
10th grade	22.6	26.1
< 10th grade	1.8	3.5
No Skills Required	0.0	5.3
Total*	100.0	100.0

Applicants' Skills Compared to Job Requirements

When asked to compare applicants' skills with the skills required for the job vacancies, employers in the St. Louis MSA reported that for 54.9 percent of the estimated job vacancies, skills *matched somewhat*, *matched very little* or *matched not at all*. For 45.1 percent of the estimated job vacancies, applicants' skills and required job skills *matched well or matched very well*. ¹⁶

Estimated Job Vacancies by Applicant and Job Requirement Match in the Construction Industry, 2006

Skill Match	%
Matched Very Well	9.6
Matched Well	35.5
Matched Somewhat	30.9
Matched Very Little	24.0
Matched Not At All	0.0
Total	100.0

¹⁴ Percentages based on the total number of estimated job vacancies in which reading skills required were reported (n= 1,575).

¹⁵ Percentages based on the total number of estimated job vacancies in which math skills required were reported (n= 1,589).

Percentages based on the total number of estimated job vacancies in which there was a response to the question "Have applicants met job requirements?" (n= 860).

Difficulty Finding Applicants

Employers in the construction industry reported that for the majority of estimated job vacancies, they had *some difficulty* (59.6%) or *great difficulty* (27.1%) finding qualified applicants. For 13.3 percent of the estimated job vacancies, they indicate *no difficulty* finding qualified applicants.¹⁷

Percent of Estimated Job Vacancies by Difficulty Finding Qualified Applicants and Experience Required in the Construction Industry, 2006

	Entry-Level	Experienced	Total
Great Difficulty	37.4	25.0	27.1
Some Difficulty	53.8	60.0	59.6
No Difficulty	8.8	15.0	13.3
	100.0	100.0	100.0

Shortcomings of Recent Applicants

The most frequently cited shortcoming of recent applicants is *poor work ethic skills.*¹⁸

Percent of Estimated Job Vacancies by Shortcomings of Recent Applicants in the Construction Industry, 2006

Shortcomings	%
Poor Work Ethic Skills	60.1
Lack of Industry Knowledge	31.3
Lack of Positive Attitude	25.5
Poor Communication Skills	12.9
Poor Customer Service Skills	12.6
Poor Technical Skills	9.5
Inability to Understand Written Information	8.7
Poor Writing Skills	7.1
Poor Basic Math	3.9
Lack of Computer Skills	1.7

¹⁷ Percentages based on the total number of estimated job vacancies in which there was a response to the question "Is this position difficult to fill with the required experience needed?" (Entry-Level n=238; Experienced n=580; Total n=968).

¹⁸ Percentages based on the total number of estimated job vacancies in which one or more of the workplace competencies and/or skills were reported in the Shortcomings Category (n=887).

Workplace Competencies

The following table lists personal attributes considered *important* to the job performance of a worker in the construction industry.¹⁹

Percent of Estimated Job Vacancies by Workplace Competencies Rated as Important in the Construction Industry, 2006

Workplace Competencies	%
Team Skills	96.7
Work Habits	96.0
Managing Time Wisely	95.0
Job Specific Skills	92.6
Acquiring and Using Information	92.3
Leadership	78.0
Computer Literacy	35.9

Thinking Skills

The following table lists thinking skills considered *important* to the job performance of a worker in the construction industry.²⁰

Percent of Estimated Job Vacancies by Thinking Skills Rated as Important in the Construction Industry, 2006

Thinking Skills	%
Learning New Skills	99.0
Critical Thinking	98.6
Decision-Making	95.4
Understanding Charts	45.5

²⁰ Percentages based on the total number of estimated job vacancies in which one or more of the personal attributes were reported in the Thinking Skills Category (n=1,619).

¹⁹ Percentages based on the total number of estimated job vacancies in which one or more of the workplace competencies and/or skills were reported in the Workplace Competencies Category (n=1,619).

Occupations

Twelve occupations in the St. Louis MSA represent 76.3 percent of the estimated job vacancies for the construction industry.²¹

Percent of Estimated Job Vacancies by Selected Occupations in the Construction Industry, 2006

Occupation	%
Retail Salespersons	16.2
Construction Carpenters	13.8
Construction Laborers	10.5
Painters, Construction and Maintenance	10.4
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	4.7
Construction Managers	4.3
Heating and Air Conditioning Mechanics	3.5
Plumbers	3.2
Cabinetmakers and Bench Carpenters	3.0
Truck Drivers, Heavy	2.5
Roofers	2.2
Construction and Building Inspectors	2.0
Total	76.3

For more detailed information for the Construction Labor Demand Survey, please visit http://pprc.umsl.edu/wis/.

_

²¹ For a listing of all recorded occupation see Appendix H

Appendix A

<u>Methodology</u>

Using the INFOUSA employer database, a universe of 3,018 companies was identified based on the construction related NAICS code designations (see Appendix D).-22 A random-stratified sample of 900 companies was drawn for this surveying effort to reach the 400 completed survey goal. The research design included three phases and employed multiple methods. ETC institute attempted to contact a random -stratified sample of 400 companies out of the 905 companies and asked if they were a construction company. If the company answered yes, they were asked to complete a seventeen (17) question survey regarding the company's and industry's financial health and profitability and employment outlook. If the company responded yes to the final question of whether they had current job openings, they were asked to complete a Job Vacancy Survey (JVS).

Survey Response Construction Industry, 2006

	Total
Financial Health and Profitability	405
Job Vacancy	402

A 95% level of confidence with a precision of at least +/-5%.

Weighting Procedures

To estimate the number of job vacancies for the total population, weights are created that take into account the stratification of the construction companies. Therefore, the businesses responding to the survey (both with openings and no openings) are stratified by 3-digit NAICS and company size and are applied to the total construction population to estimate the number of jobs available in the St. Louis MSA. This is accomplished by dividing total business responses into the total business population for

²² Only companies with 5 or more employees where included in the sample.

each corresponding cell created by the stratification. For example, if the total business population with 5-9 employees for construction of buildings is 100 and the responses were 80 the resulting stratified cell weight would be 1.25.

This stratified cell weight is then linked to each survey record in its equivalent stratified cell. This weight is multiplied against the number of reported openings, either full-time or part-time for each of these survey records. Once these estimates are computed they can be aggregated to the industry level.

Appendix B

Labor Demand Survey of Construction Industry Companies

Interviewer:	
Name of Person Interviewed:	Phone:
Company:	
This is I am calling St. Louis, Public Policy Research Center issues related to Construction Industry Co to identify anticipated employment nee availability of qualified labor in the future someone in your organizations who is fameeds (YOU) to discuss a few some of the facility.	The control of the co
ONCE YOU ARE CONNECTED WITH THE INFORMATION ABOVE SUBSTITUTING TO	
Does your company provide any services or reprocesses, methods or technologies that could	
IF YES, CONTINUE IF NO,	, END INTERVIEW
WOULD YOU HAVE ABOUT FIVE MINU ABOUT YOUR FIRMS WORKFORCE NEI IF THE RESPONDENT HAS TIME I	EDS?
IF THE RESPONDENT IS BUSY: C complete? Fax Number:	ould I Fax you a copy of the interview to
Part I. Market Condition of I'm going to begin by asking you a few general q	
1. In what year was your company (or operation)	tion/department) founded?
2. What is your primary product(s) or service	e(s)?

<i>3</i> .	What proportion of your product or service is sold
	(1) In the St. Louis region
	(2) Outside the region in the US
	(3) Outside the US
4.	What proportion of your goods or materials are supplied
	(1) In the St. Louis region
	(2) Outside the region in the US
	(3) Outside the US
<i>5</i> .	During the past year, have your sales:
	(1) Increased sharply (increased 15% or more)
	(2) Increased modestly (increased 4 to 14%)
	$\underline{\hspace{1cm}}$ (3) Stayed about the same (-3% to +3%)
	(4) Declined modestly (dropped by 4% to 14%)
	(5) Declined sharply (dropped 15% or more)
	(9) Don't know
6.	How would you rate YOUR COMPANY'S financial health/profitability?
	(1) Excellent
	(2) Very Good
	(3) Good
	(4) Fair
	(5) Poor
	(9) Don't Know
7.	What are the expectations for your company's sales growth in the coming year?
	(1) Grow strongly (+15% or more)
	(2) Grow modestly (+4% to +14%)
	(3) Stay about the same (-3% to 3%)
	(4) Decline modestly (-4% to -14%)
	(5) Decline sharply (-15% or more)
	(9) Don't Know
8.	What are the expectations for your company's growth over the next five years?
	(1) Grow strongly (+15% or more per year)
	(2) Grow modestly (+4% to +14% per year)
	(3) Stay about the same (-3% to 3% per year)
	(4) Decline modestly (-4% to -14% per year)
	(5) Decline sharply (-15% or more per year)
	(9) Don't Know

continued growth for your company? (Check One) (1) Adequate facilities (2) Access to capital (3) Availability of qualified labor (4) Government regulation (5) Slow research developments (6) Lack of technological innovations (7) Lack of local suppliers (8) Inadequate transportation (9) Other: (10) Don't Know 11. How many employees does your company CURRENTLY employ in the metropolitan area? employees 12. How many employees did your company employee in the St. Louis area employees 13. How many employees do you think your company will employee in the St year from now? employees	9.	How would rate the financial health/profitability of your company's INDUSTRY?
		(1) Excellent
		(2) Very Good
		···
continued growth for your company? (Check One) (1) Adequate facilities (2) Access to capital (3) Availability of qualified labor (4) Government regulation (5) Slow research developments (6) Lack of technological innovations (7) Lack of local suppliers (8) Inadequate transportation (9) Other: (10) Don't Know 11. How many employees does your company CURRENTLY employ in the metropolitan area? employees 12. How many employees did your company employee in the St. Louis area employees 13. How many employees do you think your company will employee in the St. year from now? employees 14. How many employees do you think your company will employee in the St. years from now?		
	10.	
		•
(9) Other:(10) Don't Know 11. How many employees does your company CURRENTLY employ in the metropolitan area? employees 12. How many employees did your company employee in the St. Louis area employees 13. How many employees do you think your company will employee in the St. year from now? employees 14. How many employees do you think your company will employee in the St. years from now?		
(10) Don't Know 11. How many employees does your company CURRENTLY employ in the metropolitan area? employees 12. How many employees did your company employee in the St. Louis area employees 13. How many employees do you think your company will employee in the St. year from now? employees 14. How many employees do you think your company will employee in the St. years from now?		
 11. How many employees does your company CURRENTLY employ in the metropolitan area? employees 12. How many employees did your company employee in the St. Louis area employees 13. How many employees do you think your company will employee in the Syear from now? employees 14. How many employees do you think your company will employee in the Syears from now? 		
metropolitan area? employees 12. How many employees did your company employee in the St. Louis area employees 13. How many employees do you think your company will employee in the St. year from now? employees 14. How many employees do you think your company will employee in the St. years from now?		(10) Doll t Kilow
 12. How many employees did your company employee in the St. Louis area employees 13. How many employees do you think your company will employee in the Syear from now? employees 14. How many employees do you think your company will employee in the Syears from now? 	<i>11</i> .	How many employees does your company CURRENTLY employ in the St. Louis metropolitan area?
 employees 13. How many employees do you think your company will employee in the Syear from now? employees 14. How many employees do you think your company will employee in the Syears from now? 		employees
 13. How many employees do you think your company will employee in the Syear from now? employees 14. How many employees do you think your company will employee in the Syears from now? 	12.	How many employees <u>did</u> your company employee in the St. Louis area <u>one year ago</u> ?
 year from now? employees 14. How many employees do you think your company will employee in the Syears from now? 		employees
14. How many employees do you think your company will employee in the Syears from now?	13.	How many employees do you think your company will employee in the St. Louis area one year from now?
years from now?		employees
employees	14.	How many employees do you think your company <u>will</u> employee in the St. Louis area <u>five</u> <u>years from now</u> ?
		employees

<i>15</i> .	How does your company currently	recruit employees? (C	heck all that apply.)
	(01) Newspaper		
	(02) Employment Agencies (03) Job fairs		
	(03) Job Talls (04) High Schools		
	(04) Tigil Schools (05) Recruiters		
	(05) Recruiters (06) State employment agencie	A.C.	
	(00) State employment agence(07) Colleges and Universities	23	
	(08) Trade Publications		
	(09) In-House Promotion		
	(10) Referrals/Word of Mouth		
	(10) Referrals/ Word of Moduli (11) Internet		
	(11) Internet (12) Other		
	(12) Other		
16.	Does your company current have a(1) Yes(2) No	ny job openings?	
	If Yes:		
	16a. Approximately how many different types of job openings do you have?		
	In order to help us identify the employment needs of companies in consturction industry in the St. Louis Area, we have a short, 1-page questionnaire that we would like to fax you about your current job openings. Would you be willing to complete the questionnaire if I sent it to you it to you later today?		
	If yes, what is your fax number: _		
<i>17</i> .	What is your mailing address:		
	Street:		
	City:	State:	Zip:

Thank you for your time, this concludes the survey

Appendix C Job Vacancy Survey

Job Vacancy Survey	
Step 1.	
Enter your 9 digit Business ID sent to you by mail: * disabled in preview	(check to autofill next time*)
Step 2. Do you currently have job openings:	
Step 3. Your responses on this form will apply to this job title:	
Check here if you could <u>not</u> find a suitable job title. You w	rill be prompted to enter a title.
 You'll be asked a series of questions for each job title w Please complete a new survey for each unique job title o If there are openings for both full time and part time for questionnaire for full time and one for part time Only include openings for jobs located in the St. Louis 	(regardless of the number of openings): the same position, please complete one
PART I. Salary, Benefits, and Incentives	
These responses are for the (full time part time (repeat survey if you have both full time and part time opening	opening(s) s for the same job title)
Number of openings:	
Is position(s) year round? Yes No What is the salary of job opening(s)?	
From: \$ (do not enter \$ sign or	commas)
(these figures are): Hourly Monthly Yearly	

What benefits and training options does your company offer? (check all that apply) Paid vacation and holidays Medical insurance Dental insurance Child care Transportation assistance On-the-job training Internships Mentoring Other, please specify: None
Paid vacation and holidays Medical insurance Dental insurance Child care Transportation assistance On-the-job training Internships Mentoring Other, please specify:
Paid vacation and holidays Medical insurance Dental insurance Child care Transportation assistance On-the-job training Internships Mentoring Other, please specify:
Medical insurance Dental insurance Child care Transportation assistance On-the-job training Internships Mentoring Other, please specify:
Dental insurance Child care Transportation assistance On-the-job training Internships Mentoring Other, please specify:
Child care Transportation assistance On-the-job training Internships Mentoring Other, please specify:
Transportation assistance On-the-job training Internships Mentoring Other, please specify:
On-the-job training Internships Mentoring Other, please specify:
Internships Mentoring Other, please specify:
Mentoring Other, please specify:
Other, please specify:
E
None
Don't know/not sure
What financial incentives are offered? (check all that apply)
Pension program
401K
SAR/SEP (401K for small business)
Stock options
Tuition reimbursement
On-going training
Bonuses
Base plus commission based on sales quota
Other, please specify:
None
Don't know/not sure

What	II. Job Requirements is the minimum level of experience required?
	No experience required
	Less than 1 year
	1-3 years
	4-10 years
	10+ years
	Other, please specify:
	Don't know/not sure
	is the minimum level of education required?
	Some high school
	High school diploma
	Two year associate degree
	Four year college degree
	Graduate or professional degree
	Professional certification
	Technical certification
	Special training certification
	Other, please specify:
	None
	Don't know/not sure

What BASIC SKILLS does this position require? (check all that apply)
Reading C None Less than 10th grade level Greater than 10th grade level Don't know/not sure Mathematics None Less than 10th grade level At 10th grade level Greater than 10th grade level Don't know/not sure
Additional
Listening/following instructions
Speaking/communicating clearly
Other, please specify:
None
Don't know/not sure
What THINKING SKILLS does this position require? (check all that apply)
Problem solving/critical thinking
Decision-making
Ability to learn new skills
Understanding charts and graphs
Other, please specify:
None
Don't know/not sure

What	are the shortcomings of applicants? (check all that apply) Poor work ethic Communication/interpersonal skills Basic math skills Writing skills Technical skills Understanding written information Lack of computer skills Positive attitude Customer service skills General knowledge of business or industry Other, please specify: None Don't know/not sure
Made Click 1	Thank you for your participation! errors and want to start over? here:
2. 3.	For questions or contact information <u>click here</u> . *Cookies must be enabled to have Business ID autofilled Questionnaire responses of individual companies will be held in strict confidence and no data will be released which identifies individual firms. right © 2000-2007 MIDAS unit of PPRC, University of Missouri-St. Louis

Appendix D Construction Industry Classification

NAICS	
Code	Industry
236	Construction of Buildings
23611	Residential Building Construction
23621	Industrial Building Construction
23622	Commercial and Institutional Building Construction
237	Heavy and Civil Engineering Construction
23711	Water and Sewer Line and Related Structures Construction
23712	Oil and Gas Pipeline and Related Structures Construction
23713	Power and Communication Line and Related Structure
23721	Land Subdivision
23731	Highway, Street, and Bridge Construction
23799	Other Heavy and Civil Engineering Construction
238	Specialty Trade Contractors
23811	Poured Concrete Foundation and Structure Contracto
23812	Structural Steel and Precast Concrete Contractors
23814	Masonry Contractors
23815	Glass and Glazing Contractors
23816	Roofing Contractors
23817	Siding Contractors
23819	Other Foundation, Structure, and Building Exterior
23821	Electrical Contractors
23822	Plumbing, Heating, and Air-Conditioning Contractor
23829	Other Building Equipment Contractors
23831	Drywall and Insulation Contractors
23832	Painting and Wall Covering Contractors
23833	Flooring Contractors
23834	Tile and Terrazzo Contractors
23835	Finish Carpentry Contractors
23839	Other Building Finishing Contractors
23891	Site Preparation Contractors
23899	All Other Specialty Trade Contractors

Source: http://www.census.gov/epcd/www/naics.html

Appendix E

Construction Companies

A BROOKS PLUMBING CO A M RICHARDS GLASS CO INC

A MAID & MORE A S & W WHOLESALE

A1 INTERSTATE MECHANICAL LLC
AAA ACECO PLUMBING-HEATING & AC

AAA APPLIANCE

A-AAA QUICK PLUMBING A-AGE ELCTRICAL CO INC AALCO MANUFACTURING CO

ABC MASONRY

ABDELMALEK & ASSOC ACCENT WINDOWS ACCORD ELECTRIC

ACCURATE ASPHALT PAVING CO ADVANCED DRYWALL SYSTEMS AFFINITY ELECTRICAL CONTRACTING

AFFTON HEATING & AC INC AIR CLEANING SPECIALISTS INC

ALBERS PAINTING CO INC

ALBERT ARNO INC AL-DON SERVICES INC

ALL AMERICAN PAINTING COMPANY

ALL PURPOSE ERECTORS

ALL SEASONS HEATING & COOLING ALLIANCE ELECTRICAL CONTRACTORS

ALLIED BUILDERS CORP ALL-METRO SVC INC

ALL-SYSTEMS WATERPROOFING INC

ALSIDE SUPPLY CENTER ALSIDE SUPPLY CENTER ALTMAN CHARTER CO

ALTON PUBLIC WORKS DEPARTMENT

ALTON SHEET METAL CORP

ALWINS INC
AMC TILE SUPPLY

AMERICAN BUILDING CONTRACTORS AMERICAN HOME HEATING & AC AMERICAN ROOFING & EXTERIORS AMF ELECTRICAL CONTRACTORS

AMHERST CORP

ANDERSIEN ROOFING & CONSTRUCTION

APPLETREE CONSTRUCTION INC

ARCHADECK

ARCHWAY INDUSTRIAL COATINGS ARCHWAY PLUMBING & MECHANICAL ARCO CONSTRUCTION COMPANY

ARCO REFRIGERATION

ARNOLD CITY PUBLIC WORKS DEPT

ARROW DRILLING

ARROW TRENCHING & EXCAVATING

AS HEATING & COOLING AUGUSTINE PLUMBING AUTHORIZED ELEVATOR

AUTOMATIC CLIMATE CONTROL HEATING

AVAILABLE ASPHALT

AVERILL HEATING & AIR CONDITIONING

B&D PAVEMENT MAINTENANCE B&K TUCK POINTING & CAULKING

B&L ASPHALT PAVING

BADE ROOFING & SHEET METAL CO

BAILEY EXCAVATING

BANTA & STUDE CONSTRUCTION CO BARTHELMASS PAINTING CORP

BAY TECH ROOFING DIV BECKS CARPET & TILE BECKYS CARPET & TILE BECKYS CARPET & TILE

BECKYS CARPET & TILE SUPERSTORE BECKYS CARPET & TILE SUPERSTORE

BELLEVILLE MECHANICAL INC
BELLON WRECKING & SALVAGE CO

BEL-O SALES & SVC INC BEL-O-COOLING & HEATING

BENDLER BOILER & MECHANICAL COMPANY

BERRETT HEATING & COOLING INC

BESEDA PRO FLOORING
BEST STEEL ERECTORS INC
BIG JOHNS REMODELING INC
BILL DYE PLUMBING COMPANY INC

BI-STATE POOL & SPA BI-STATE UTILITIES CO

BLANDS SEWER & WATER INC BLUE CASTLE CONTRACTING INC

BOARDWALK HARDWOOD FLOORS WEST

BOB METAL FABRICATORS INC
BOB RAEKER PLUMBING COMPANY

BOSKO MACHINERY BRASE ENTERPRISES BRAUER SUPPLY COMPANY BROADVIEW SCREEN CO

BRUOHN INC

BSI CONSTRUCTORS INC BUILDERS BLOC INC

BULTER HOME IMPROVEMENT BUSKEN CONSTRUCTION INC

BUTLER ELECTRICAL CONTRACTING

C & S POOL CONTRACTORS

C&C CONCERNS

CALDWELL CONTRACTING

CAPITAL RESTORATION & PAINTING

CAPRI POOLS

CARDINAL ACCOUSTICS

CARPENTERS DISTRICT COUNCIL

CARPET MART INC CARRIER CORP

CARTER-WATERS CORP

CASEY ELECTRIC

CBA SEWER SERVICE INC

CDE INC

CEC ELECTRIC CONTRACTING

CECO CORP
CEILING SYSTEMS
CENTIMARK CORP
CENTRAL FENCE CO

CENTRAL STATES WATERPROOFING CENTURY SERVICE & CONSTRUCTION INC

CERAMIC TILE LIBRARY CHAMBERS EXCAVATING

CHANTILLY CABINET & FIXTRURE
CHARLES F VATTEROTT FAMILY CO
CHESTERFIELD SERVICE INC
CHUGACH-MCKINLEY SERVICE

CKC WOODWORKS CLASSIC POOLS

CLASSIC WOODWORKING CLEAN SWEEP SERVICE CO

CNC ELECTRIC

COATINGS APPLICATION CO COATINGS UNLIMITED INC

COBAK TOOL & MANUFACTURING CO COLLINSVILLE CUSTOM KITCHENS

COMMERCIAL COILS INC COMMERCIAL FABRICATIONS

COMMERCIAL STEAM CLEANERS INC COMMERCIAL WOODWORKING COMPANY COMPLETE COMFORT HEATING & COOLING

COMPLETE ROOFING CO

CONSOLIDATED CONSTRUCTION GROUP CONTEMPORARY CARPET CONTRACTOR

CONTI ELECTRIC INC

CONTRACT PAINTING SERVICES COOL RUNNING AC & HEATING

COOLAIRE CO

CORDRAY WOOD & CHAINLINK CORNERSTONE FLOORING

CORVERA ABATEMENT TECHNOLOGIES

COX & SONS

CRAFTSMEN INTERIORS INC CREATIVE FLOORING BY DESIGN CROWN ELECTRICAL CONTRACTING

CROWN REINFORCING INC

CULLEN CONCRETE

CURRAN CO

CUSTOM CONCEPTS

CUSTOM PAINTING & DRYWALL INC CY WUEBBELS & SONS PAINTING

D & K BACKHOE

DAECH & BAUER ROOFING
DAN MILBOURN CONSTRUCTION
DAVID HACKETT & ASSOC INC
DAVID J HYDE & ASSOC INC

DEGENHARDT HEATING & COOLING

DEIBERT ELECTRICAL INC DEP BUILDERS SUPPLY DESCO SYSTEMS

DESIGN AIRE INC HEATING&COOLING

&FRANK F

DICKHERBER ELECTRIC INC

DIERKES PLUMBING & HEATING CO INC DIPPEL PLUMBING & HEATING CO

DIRTBUSTERS INC

DIVERSIFIED COATINGS INC DIVERSIFIED CONTRACTORS

DKI MFG

DNR ELECTRIC

DON KISKER GRADING & EXCAVATING

DORVIN ELECTRICAL INC
DOUG WHITE LUMBER INC
DRDA ELECTRIC CONTRACTING
DRURY DEVELOPMENT CORP

DUANES CABINETS INC

DUKES GROUP

DULLE CONSTRUCTION

EBTECH INDUSTRIAL OFFICES ECKELKAMP ELECTRIC CO

EDS PAINTING

EDWARD SIMON PAINTING CO

EF STABLER EHRLICHS

KITCHEN&BATH/HEATING&COOLING

EL AUSTIN PLUMBING INC ELESTIZELL OF ST LOUIS INC

EMBASSY ARCHITECTURAL WOODWORK

EMERGENCY HEATING & COOLING ENGINEERED DESIGNED FACILITIES

ENGLISH SWEEP

ENVIRONMENTAL OPERATIONS INC

ERNST HEATING COOLING EXECUTIVE HOMES INC

EXECUTIVE WOOD PRODUCTS
FABRICATION SPECIALIST
FACCIN CONSTRUCTION CO
FARMERS CO-OP ELEVATOR ASSN

FASZOLD SERVICE CO FAWCETT CORP FCS CONSTRUCTION

FDL MECHANICAL CONTRACTORS

FINNTERIORS INC

FISCHER & FRICHTEL INC FISCHER OIL COMPANY FITZGERALD ROOFING CO

FLOWER HOMES FLYNN DRILLING CO FONTANA ASPHALT

FRANCE MECHANICAL CORPORATION

FRANK C MITCHELL CO

FRAZIER DAVIS CONSTRUCTION FRED TERBROCK & SONS INC

FRED WEBER INC

FREDERIC ROOFING & SHEET METAL

FREISE CONSTRUCTION CO

FRU-CON CONSTRUCTION CORPORATION FURNACE MAN HEATING & COOLING

FUTURE AIRE G&W ROOFING

GA CHOTT & ASSOC INC GAINES HVAC INC GARDNER ELECTRIC

GATES MANUFACTURING CO

GATEWAY CO

GATEWAY ELECTRIC INC GATEWAY ELEVATOR INC GATEWAY FABRICATORS LLC

GATEWAY GUNITE CONSTRUCTION INC

GATEWAY ROOFING LLC

GBI INC

GCO CARPET OUTLET
GEEDING CONSTRUCTION
GEORGE A COLLINS & SONS INC
GEORGEWITZ CONTRACTING CO
GERARD CHIMNEY COMPANY
GH REICH CORDIA PLUMBING INC

GH VOSS CO INC

GL WARREN CONSTRUCTION
GLEESON ASPHALT INC

GOAD COMPANY

GOODWIN BROTHERS CONSTRUCTION CO

GOULD FLOORING SERVICE INC GROSSMAN ROOFING INC GT LAWLOR CONSTRUCTION CO GUARANTEE INTERIORS INC

HACKMANN LUMBER & HOME CENTER

HAMILTON ROOFING HANCO INSULATION INC

HANKINS CONSTRUCTION COMPANY

HARKE HEATING & AC HARRIS DRILLING SVC INC

HARSTER HEATING & AIR HARTFORD PUBLIC WORK DEPT

HAVENS CONTRACTING

HEINTZ STEEL & MANUFACTURING

COMPANY

HELMKAMP CONSTRUCTION COMPANY HERB YATES ROOFING COMPANY

HIGHWAY DEPT

HIMSTEDT ROOFING INC HIRTH PLUMBING & HEATING

HOLLAND CONSTRUCTION SERVICES

HOLLAND HINRICHS INC HOLLARAN CONTRACTING

HOUSE DOCTORS HANDYMAN SERVICE

HOUSEMAN SUPPLY INC HOWELL & SONS GRADING

HUBBARD CONSTRUCTION COMPANY INC

HUDSON SERVICES INC INDIAN HILLS SWIM CLUB INTEGRA CONSTRUCTION INC

INTERIOR BY DESIGN
INTERIOR CONSTRUCTION

J & J BORING J F ELECTRIC

JA MILLS BUILDER INC

JA WACHTER

JACOBSMEYER-MAULDIN CONSTRUCTION

JANSCO STEEL INC
JDS MASONRY INC

JE FOSTER BUILDING COMPANY JEFFERSON COUNTY PUBLIC WORKS

DEPARTMENT

JENNINGS STREET DEPARTMENT GARAGE JERRYS AIR CONDITIONING COMPANY JERRYS QUALITY WOODWORKS

JET AEROBICS INC

JETCO HEATING & AIR CONDITIONING

JIM DROSTE CARPENTRY INC JIMS HEATING & COOLING JJ KOKESH & SON CO

JOHNS CRANE & EQUIPMENT CO JOLTRAN COMMUNICATIONS INC

K BATES STEEL SERVICE KARSTEN EQUIP CO KATSAM ENTERPRISES

KENRICK DESIGN CONSTRUCTION

KEVMAR KONE

L KRUPP CONSTRUCTION INC LANGHAUSER SHEET METAL CO LAUNER VOSS STEEL FABRICATORS

LAWN SYSTEMS INC LEMAY PLUMBING INC LENNOX INDUSTRIES INC LIMITED LEASING

LINCOLN COUNTY HWY DEPARTMENT

LINDA M ROMBACH CLEANING LINDBERG WATERPROOFING INC LONG PAVING & EXCAVATION

LOWES LOWES LOWES

LUHR BROTHERS INC

M J BEHLMANN CONSTRUCTION COMPANY MADISON COMPANY ROOFING & HOME

MALONE CONSTRUCTION

MANCHESTER ELECTRICAL CONTRACTORS

MANUFACTURED HOME CENTER

MCBRIDE & SON

MID-RIVER ASPHALT INC

MILLER PLUMBING & TUBLINERS
MISSISSIPPI VALLEY ROOFING INC
MISSOURI BRICK & SUPPLY CO
MODERN KITCHENS & BATHS
MONTEREY HOMES INC
MOSBY BUILDING ARTS LTD
MULLIGAN CONSTRUCTION INC
MUNIC LEISURE CENTER INC
NATIONAL KITCHEN & BATH
NELSON DEVELOPMENTS

NOECKER HOME IMPROVEMENT
ODESCO INDUSTRIAL SERVICES INC

OFALLON PLUMBING INC

OH TOOLS

ON POINT CONTRACTORS

ONEIL BUILDINGS

ONYX PRECISION SERVICE PAUL DAVIS RESTORATION PERFORMANCE ROOFING INC

PERNIKOFF CONSTRUCTION COMPANY

PHELPS CONSTRUCTION

POENITSKE FLOORING & REMODELING

PORTA FAB CORP

QUALITY CONSTRUCTION

ROBERTS ENVIRONMENTAL DRILLING INC

ROTO-ROOTER SERVICES COMPANY

SCHINDLER ELEVATOR CORP SCHLUETER PAINTING INC

SCHMEERBAUCH CONTRACTING INC SCHNEIDER HEATING-COOLING &

PLUMBING SCOBIS CO

SEALS ENTERPRISES INC SEILING SUPPLY INC SENCO SERVICES CORP SEPTIC SERVICES INC

SERVICE NOW & RICOTTA MECHANICAL

SEVERN TRENT PIPELINE SERVICE INC

SEYER INDUSTRIES INC SHAFERS EXCAVATING SHARP ERECTORS INC SHAWS CUSTOM CABINETS SPECTRA PAINTING INC

SPRINGMAN INC

ST ANN PUBLIC WORKS GARAGE ST CHARLES HARDWOODS INC

ST CHARLES PUBLIC WORKS WATER ST CLAIR ALUMINUM & CONSTRUCTION INC

ST CLAIRE TOWNSHIP ROAD DEPARTMENT ST JOHN DEVELOPMENT CORPORATION

ST LOUIS ELEVATOR ST LOUIS PAVING INC

ST LOUIS ROOFING COMPANY

STEVENS PAINTING

STILLWATER TRAILER MANUFACTURING STOFFMEYER BRICK & STONE INC

STUART DEAN CO SUNDERMEYER LIMITED T J AHRENS EXCAVATING TAYLOR EXCAVATION

TERMINUS TECHNOLOGIES INC

THE TILE SHOP

THUNDER ELECTRIC INC
THYSSEN KRUPP ELEVATOR
TISHLER INDUSTRIES INC
TOENJES BRICK CONTRACTING

TOENNIES SERVICE COMPANY

TRIAD INDUSTRIES

TRIO PLUMBING COMPANY

UNIVERSE CORP

VIKING STEEL ERECTION CO INC WARD HEATING & COOLING INC WARNECKE BUILDING RESTORATION

WC BEISER CONCRETE CO

WEGMAN ELECTRIC

WEGMAN ELECTRICAL CO WEIR HEATING & COOLING WEIS COMFORT SYSTEMS INC WHOLESALE WINDOW & DOOR WILLIAM MAHN PLUMBING INC

Appendix F

"Other" Challenges to Continued Growth

The table below summarizes the respondent "Other" challenges to continued growth responses into categories.²³

"Other" Challenges to Growth in the Construction Industry, 2006

Category	%
Competition	29.1
Economy	28.6
Industry Issues	13.2
Cost to Run Company	12.1
No Challenges	7.9
Cost of Fuel	6.6
Not Specified	2.5

²³ "Other" challenges to continued growth (n=89). Percentages based on those respondents that gave further information (n=87). Two responded other but gave no further detail.

Appendix G

"Other" Recruitment Methods

The table below summarizes the respondent "Other" preferred recruitment methods into categories.²⁴

"Other" Preferred Recruitment Methods in the Construction Industry, 2006

Category	%
Union/Contractor/Trade Organization	83.1
In Office/Walk-Ins	7.5
Tech Schools	3.8
None/Don't Know	2.5
Other Agencies	2.5
Elected Personnel	0.6

-

²⁴ "Other" methods of recruitment (n=160)

Appendix H

Vacancies by Occupation in the Construction Industry, 2006

41-2031.00	Retail Salespersons	263
47-2031.01	Construction Carpenters	223
47-2061.00	Construction Laborers	170
47-2141.00	Painters, Construction and Maintenance	168
37-2011.00	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	76
11-9021.00	Construction Managers	69
49-9021.01	Heating and Air Conditioning Mechanics	57
47-2152.02	Plumbers	52
51-7011.00	Cabinetmakers and Bench Carpenters	49
53-3032.01	Truck Drivers, Heavy	41
47-2181.00	Roofers	35
47-4011.00	Construction and Building Inspectors	32
47-2111.00	Electricians	30
51-4121.00	Welders, Cutters, Solderers, and Brazers	28
43-5081.03	Stock Clerks- Stockroom, Warehouse, or Storage Yard	28
47-4071.00	Septic Tank Servicers and Sewer Pipe Cleaners	28
47-2073.01	Grader, Bulldozer, and Scraper Operators	24
27-1025.00	Interior Designers	18
43-9061.00	Office Clerks, General	18
47-2221.00	Structural Iron and Steel Workers	17
49-3042.00	Mobile Heavy Equipment Mechanics, Except Engines	16
49-9052.00	Telecommunications Line Installers and Repairers	15
49-9042.00	Maintenance and Repair Workers, General	14
43-4171.00	Receptionists and Information Clerks	14
29-9012.00	Occupational Health and Safety Technicians	9
13-1051.00	Cost Estimators	9
53-7032.01	Excavating and Loading Machine Operators	8
47-2011.00	Boilermakers	8
53-3032.02	Tractor-Trailer Truck Drivers	7
29-9011.00	Occupational Health and Safety Specialists	7
43-6011.00	Executive Secretaries and Administrative Assistants	7
33-9032.00	Security Guards	7
47-2051.00	Cement Masons and Concrete Finishers	7
47-2073.02	Operating Engineers	7
51-4031.03	Press and Press Brake Machine Setters and Set-Up Operators, Metal and Plastic	7
47-2081.02	Drywall Installers	7
53-7051.00	Industrial Truck and Tractor Operators	7
47-2211.00	Sheet Metal Workers	7
47-3013.00	HelpersElectricians	7
49-1011.00	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	7
49-2022.00	Telecommunications Equipment Installers and Repairers, Except Line Installers	7
51-9198.01	Production Laborers	7
51-8031.00	Water and Liquid Waste Treatment Plant and System Operators	1
33-0011 00	Animal Control Workers	1

The Workforce Information System is a project of the MIDAS unit of the PUBLIC POLICY RESEARCH CENTER, UNIVERSITY OF MISSOURI – ST. LOUIS One University Boulevard, St. Louis, Missouri, 63121-499 Phone: 314.516.5273 Fax: 314.516.5268 Email: pprc@umsl.edu Visit our webpage to learn more about our current projects: http://www.umsl.edu/services/pprc/index.htm