



SECTOR RESEARCH BRIEF | WORKFORCE NEEDS OF SMALL BUSINESSES IN ADVANCED TRANSPORTATION

San Diego County

November 2015

Introduction

This research brief is one of the companion documents to *Workforce Needs of Small Businesses in San Diego*, a comprehensive labor market report developed and published in partnership between the San Diego and Imperial Counties (SDIC) Regional Consortium of Community Colleges representing the San Diego and Imperial Counties Community Colleges Association (SDICCCA), the Regional Center of Excellence for Labor Market Research (COE) and the San Diego Workforce Partnership (SDWP).¹ The comprehensive study examines the workforce needs of small businesses across San Diego County in general and specifically in priority and emergent sectors including Advanced Manufacturing, Health Care, Advanced Transportation, Life Sciences/Biotechnology (Biotech) and Information and Communication Technologies (ICT). The study combines secondary data analyses and the findings from the survey of 347 small businesses across the sectors in San Diego region.

This research brief summarizes survey findings for small businesses that operate within the Advanced Transportation sector. It presents information about current and projected employment for these businesses, skills and education requirements, training preferences and other workforce related topics.

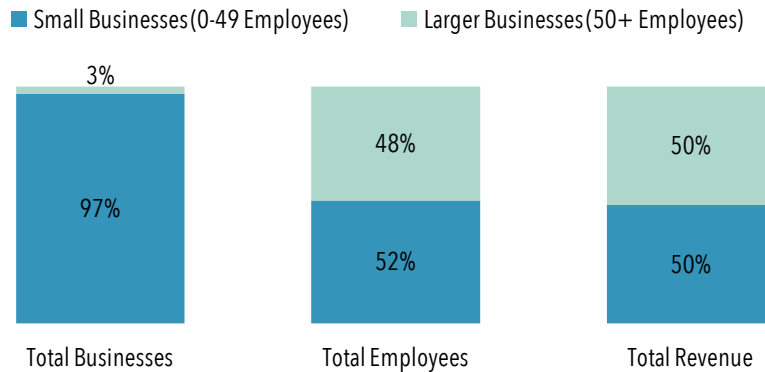
Impact of Small Businesses

There are estimated 3,900 small businesses operating in the Advanced Transportation sector in the San Diego area, which is about 4 percent of all small businesses. These businesses play a key role in Advanced Transportation, accounting for significant portions of businesses, employees and annual revenue.² As figure 1 demonstrates, 97 percent of all Advanced Transportation businesses are firms with fewer than 50 employees. Small businesses in this sector also account for 52 percent of all employees and for half of all generated annual revenue.

¹ Full study report and other sector-specific research briefs can be accessed at workforce.org/reports.

² This is the COE estimate based on the analysis of NAICS codes, business database from Infogroup, and survey incidence rates.

Figure 1. Small Business in Advanced Transportation, by Business County, Employment and Revenue

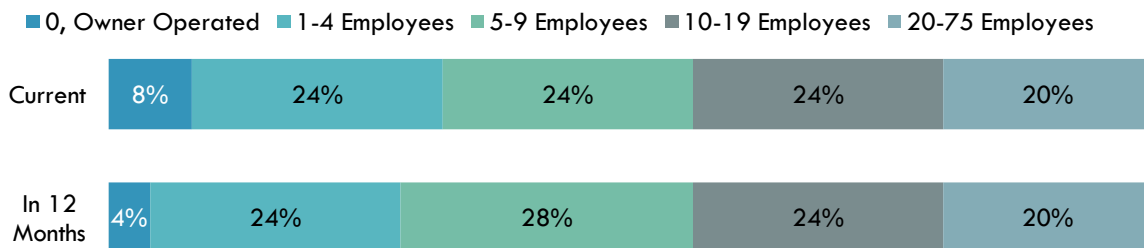


Current and Projected Employment

Of the 347 small businesses who participated in the survey, 25 were identified to be part of the Advanced Transportation sector based on their industry code.

Average employment for small businesses in Advanced Transportation was 11 workers per firm. Within the next 12 months, the average number of employees is expected to grow to 12. Employment growth is expected in the 5 to 9 employment size category (Figure 2).

Figure 2. Advanced Transportation Businesses by Employment Size



In 2015, Advanced Transportation small businesses (including owner-operated firms) are estimated to employ approximately 23,100 workers. By 2016, total employment in these small businesses is expected to grow by 15 percent, or 3,500 new positions (Table 1).

Table 1. Estimated Employment Projections for Advanced Transportation Small Businesses in San Diego into 2016

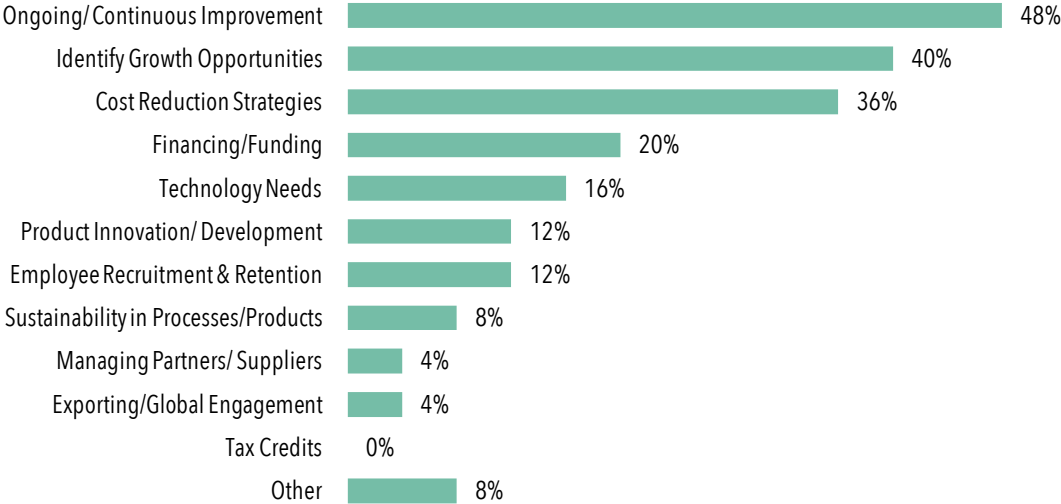
Size of Business	Current Employment	Employment in 12 Months	Change	% Change
0-4 Employees	4,300	5,700	1,400	31%
5-9 Employees	3,400	3,900	500	16%
10-19 Employees	5,000	5,600	600	12%
20-75 Employees	10,400	11,400	1,000	10%
Total	23,100	26,600	3,500	15%

As Table 1 shows, small businesses in Advanced Transportation with only 0-4 employees (with “0” indicating owner-operated establishments) are expected to grow at the fastest rate, adding approximately 1,400 jobs in the next 12 months in San Diego region. The initial small employment size attributes to this fast growth. For example, businesses with only one employee expecting to hire four new positions would see a 400 percent increase. The same four-person increase would be only 20 percent for a business with 20 employees.³

Challenges for Small Business

The Advanced Transportation small businesses anticipate that their top challenges over the next one to two years will include ongoing/continuous improvement (48 percent of firms reported this as one of their three top challenges), identification of growth opportunities (40 percent) and cost reduction strategies (36 percent). All three are the same top concerns as small businesses across all sectors report. (Figure 3).⁴

Figure 3. Top Challenges of Small Businesses in Advanced Transportation (n=25)



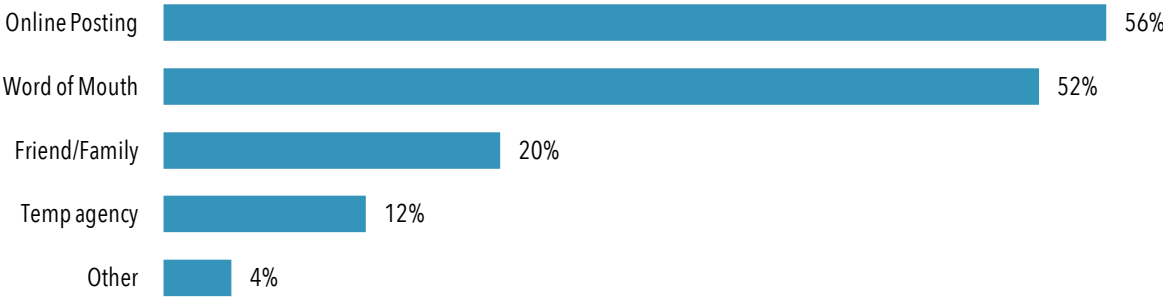
³ The complete methodology for how these estimates were obtained is available in Appendix A of *Workforce Needs of Small Businesses in San Diego* report.

⁴ Percentages will not add to 100 due to businesses selecting more than one option

Hiring Practices and Difficulties

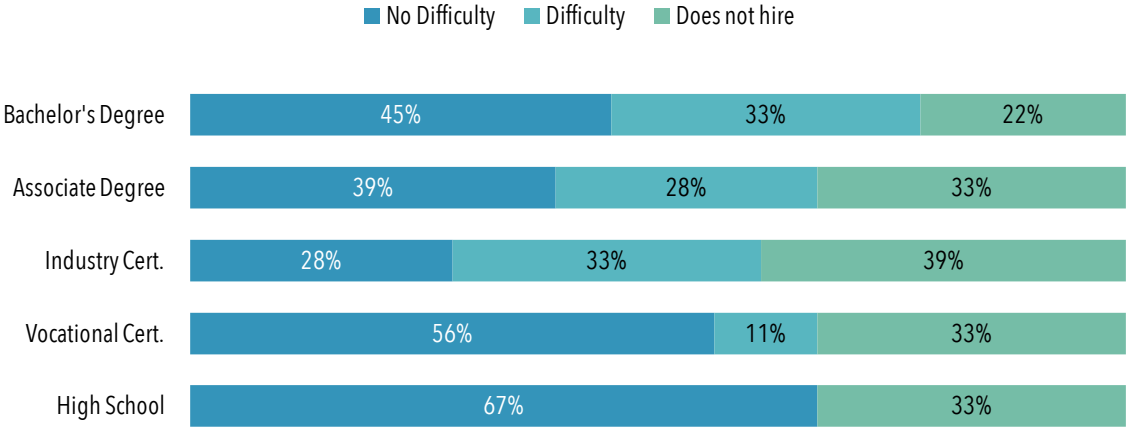
The most commonly-used method of recruiting used by Advanced Transportation businesses was online job posting (56 percent) followed by word of mouth (52 percent). The least commonly-used method was temporary (placement) agencies. Employers who selected “other” tended to use print media such as classified ads in newspapers and other local publications (Figure 4).

Figure 4. Methods of Seeking Qualified Job Applicants (n=25)



Many small businesses in the Advanced Transportation sector indicated that they do not hire individuals with a high school education (67 percent) and faced the most difficulty hiring those with a vocational certificate (Figure 5).

Figure 5. Hiring Difficulty by Education Level (n=18)



Thirty-nine percent of the Advanced Transportation employers had hired applicants with a degree or certificate from the California Community Colleges.

Opportunities and Resources for Small Businesses

Respondents were asked about the various resources that are available to small businesses and whether or not they access these resources. The majority of the small businesses in Advanced Transportation are unaware of the various resources available, with 11 of the small businesses surveyed not utilizing any of the resources listed (table 2). The most commonly accessed resources were the Better Business Bureau (5 businesses), Chambers of Commerce (4 businesses) and the U.S. Small Business Administration (4 businesses).

Table 2. Number of Small Businesses Utilizing Available Resources

Resource	Number of Businesses
Better Business Bureau	5
Chambers of Commerce	4
U.S. Small Business Administration	4
Governors' Office of Business	2
Small Business Development Council (SBDC)	1
Economic Development Council/Corporations (EDC)	1
Industry Incubators	1
San Diego Workforce Partnership or America's Job Center of California (AJCC)	0
San Diego Center for International Trade	0
ACCION	0
Asian Business Association	0
None	11

Workforce Needs of Small Business

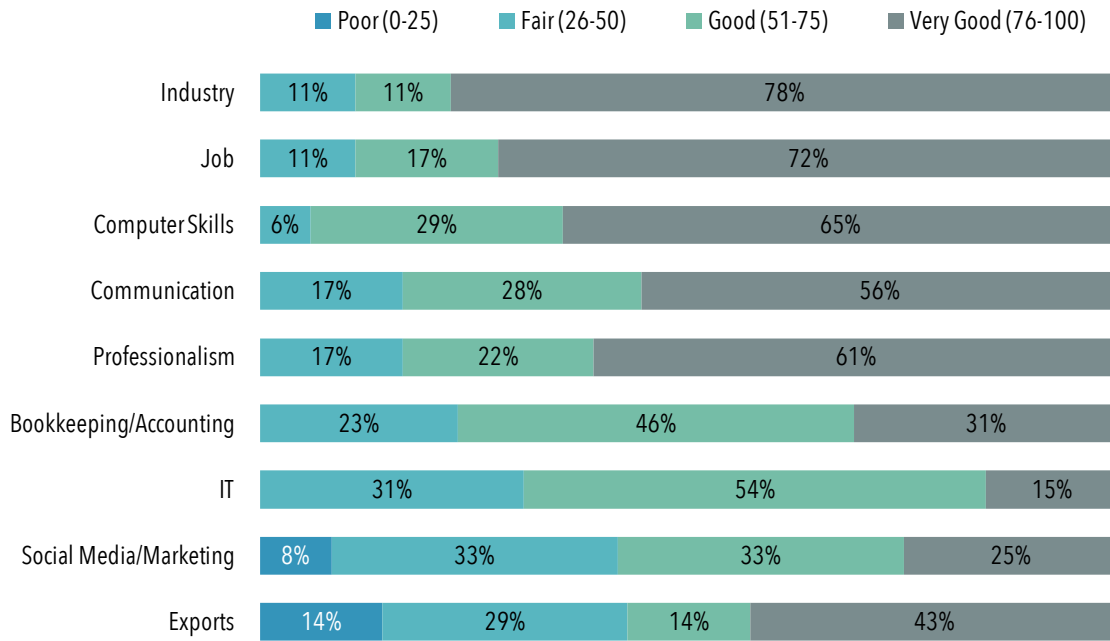
Advanced Transportation small businesses place the highest value on previous work experience in the applicants they hire. Soft and technical skills tied for second place. This is based on the responses from employers who ranked the following attributes of job candidates in order of importance: previous work experience, soft skills (e.g., written and oral communication), technical skills and post-secondary education (Table 3).

Table 3. Top Skills for New Hires (n=18)

Rank	Skill
1	Previous Work Experience
2	Soft Skills
2	Technical Skills
4	Post-Secondary Education

Small business employers in Advanced Transportation also ranked the proficiency of their employees in various skills. The skills were ranked from 0 to 100 (lowest to highest) where 0 to 25 is poor, 26 to 50 is fair, 51 to 75 is good and 76 to 100 is very good. Advanced Transportation small businesses felt their employees were proficient in their job and in the industry in general. The area they felt they could use improvement was exports, followed by social media/marketing and Information Technology (IT). Because small businesses have so few employees, it is important for the workers to possess knowledge and skills across multiple roles to help contribute to the business while keeping costs down (Figure 6).

Figure 6. Average Scores of Employees' Skills (n=18)



Business Owner Education & Skills

The small business owner respondents in Advanced Transportation represented all level of education, from high school diploma to graduate degrees, but only a few business owners opted in to provide such information (Table 4).

Table 4. Educational Attainment of Business Owners

Education Level	Number of Business Owners
High school diploma or equivalent	1
Post-secondary non-degree award	1
Associate degree	1
Bachelor's degree	1
Master's of Business Administration (MBA)	1
Other Master's degree or above	2

Advanced Transportation small business owners find that accounting, HR/employee recruitment and social media/marketing are the most useful knowledge areas and skills for starting a business. Unlike the findings for small business owners in other sector, accounting was a knowledge area that most advanced transportation business owners lacked when they launched their business (Table 5). As for small businesses across all sectors, small businesses in advanced transportation require workers, including the owner, to have strong competencies across all fields to keep the business running.

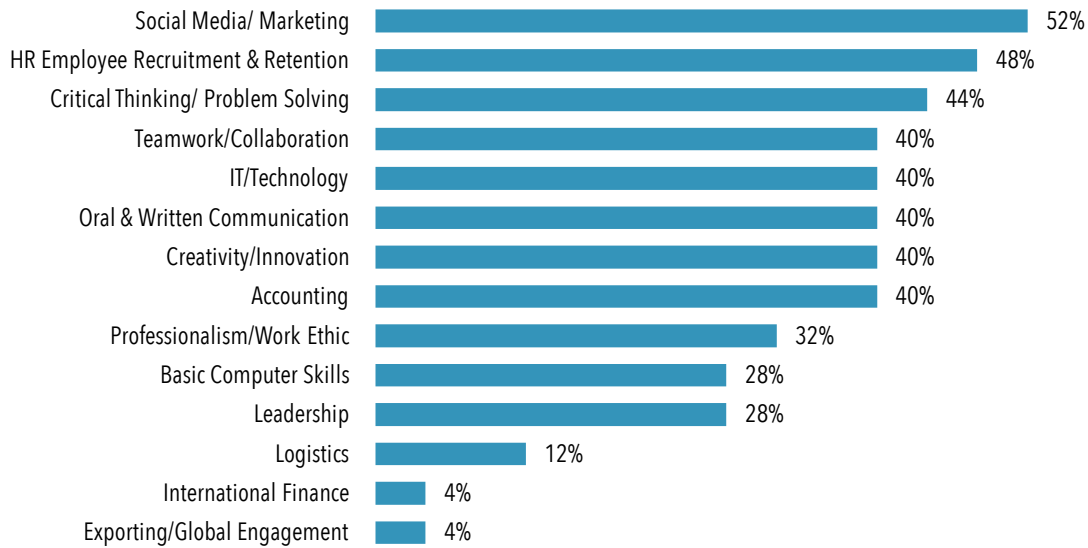
Table 5. Usefulness of Skills When Starting a Business

	Would have been useful	Already had necessary skills	Would not have been useful
Accounting	6	1	0
HR/Employee Recruitment	5	1	0
Social Media/Marketing	5	1	0
IT/Technology	4	2	0
Logistics	1	2	3
Exporting	0	0	6
International Finance	0	0	6

Training Needs

The top training topics of interest for Advanced Transportation small businesses are social media/marketing, HR/employee recruitment and retention, critical thinking/problem solving, teamwork/collaboration and IT/technology. While critical thinking, social media/marketing and teamwork are considered the most useful topics for future training among all small businesses, employee recruitment and retention were rated higher by small businesses in Advanced Transportation (Figure 7).

Figure 7. Useful Workshops for Advanced Transportation Small Businesses (n=25)



Since small businesses operating in Advanced Transportation industries generally show similar patterns in workforce and education/training needs, the same conclusions and recommendations as provided in the main report apply.⁵

⁵ The Conclusion and Recommendations section can be found on pages 20-22 of the Workforce Needs of Small Businesses in San Diego report (workforce.org/reports).