

Construction Market Shifts, and What They Mean for Electrical Contractors

By Dr. Perry Daneshgari, Dr. Heather Moore, with contributions from Hannah Durant

Electrical contractors (ECs) take on risk with every job they get, gaining and fading primarily based on labor cost as the single largest variable. They also gamble with every bid, winning or losing sometimes due to relationship but often based on price. Pursuing work seems more like hand-to-hand combat than a battle plan, because “The Market” has so many variables and is in constant flux. Two decades ago¹, MCA, Inc. conducted research to develop a method for measuring the construction market that was:

- Economic, based on dollars of work available rather than workforce-based
- Unbiased, measured by a publicly available data source
- All-encompassing, including all dollars spent including in new markets
- Codified, by type of work that can be measured consistently at all geographical levels

This article provides an overview of this method, the construction markets and shifts since COVID, and explains the importance of codifying your own work to match the market as a reference point. We provide examples of how to do this, and how to use the data to increase your competitiveness and control your own destiny without having to feel like a gambler on a regular basis!

The Basis of the Method

Measuring how big the market is and how much of that pie your

slice represents is important for business planning. However, like any measurement method, the results depend on why, what, and how you are measuring. For example, if you measure market share using permits, you are liable to miss renovation and service / maintenance work. If you measure market share using solely hours worked, and you're less productive so you spend more hours to get the same amount of work done, you'll have an inflated market share. MCA, Inc.'s method, however, utilizes several sources — including government supplied data at the national, state, and county level and surveys local to associations, contractors, and distributors.

This method is able to analyze the overall market size, from the national level down to the state and political jurisdiction level and compare to the requestor's market control in that market. The market size can also be broken down into three segments, with 17 primary categories and 14 subcategories, as defined by the U.S. Census Bureau and demonstrated in **Figure 1**. These categories capture all of the work (100% of the market), including new markets. Once a type of work encompasses enough of the total market, the government separates it as its own category for measurement. The most recent addition is “Data Centers,” which were previously classified under “Warehouse” but, as of 2023, represented \$18 billion of the total construction market.

Since the method's official conception, MCA, Inc. has consistently and frequently evaluated the market size and share overall. This method has been used to conduct hundreds of market studies for associations, contractors, and distributors. The following section outlines a compilation of these observations and results.

Overview of Markets and Shifts

Around 1958, the national construction market began to shift from the majority of dollars being spent on industrial construction to the commercial and residential market segments, as shown in **Figure 2**. Mirroring the overall construction market, as shown in **Figure 3**, the dollars spent in the electrical construction market shifted from primarily

	Electrical Contracting Market Segments		
	Residential	Commercial	Industrial
Type of Work Detailed Categories	Residential Buildings - single family		
	Residential Buildings - multi family		
	Lodging		
	Office		
	Data Center		
	General Commercial		
	Automotive		
	Food / Beverage		
	Multi-retail		
	Other Commercial (beauty salons, veterinary clinics, florists, pawnshops, dry cleaners, post offices, etc.)		
	Warehouse (includes greenhouses and silos)		
	Healthcare		
	Educational		
	Religious		
	Public Safety		
	Amusement and recreation		
	Transportation - air		
	Transportation - land		
	Transportation - water		
	Communication (includes telephone, television, and radio, distribution and maintenance buildings and structures)		
	Power		
	Solar Power		
	Highway and Street		
	Sewage and waste disposal		
	Water Supply		
	Conservation & development		
	Manufacturing		

Figure 1

U.S. Total Construction Market Segment Trends

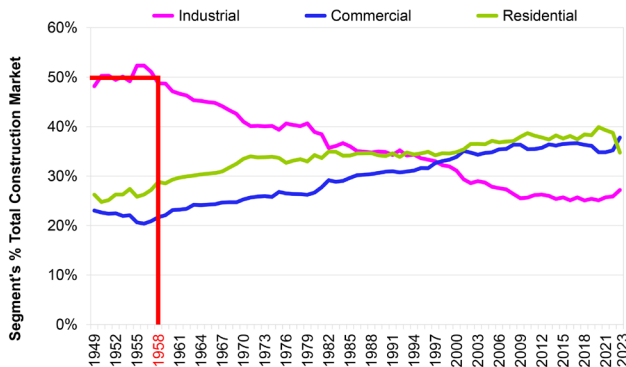


Figure 1

industrial to commercial and residential in the late 20th century. Outside influences, such as COVID-19, have had a tangible effect on the market size.

In our recently conducted market share study, MCA, Inc. observed several phenomena during and following 2020. In the overall construction market, the largest market segment shifted from residential to commercial. In the electrical construction market, the commercial segment slightly overtook the industrial segment, while residential saw a significant spike (from 16.8% in 2020 to 21.2% in 2023, or a 25% increase). It is likely that these shifts could have several factors, including the shift of working from home, and the increased need for medical spaces.

U.S. Total Electrical Construction Market Segment Trends

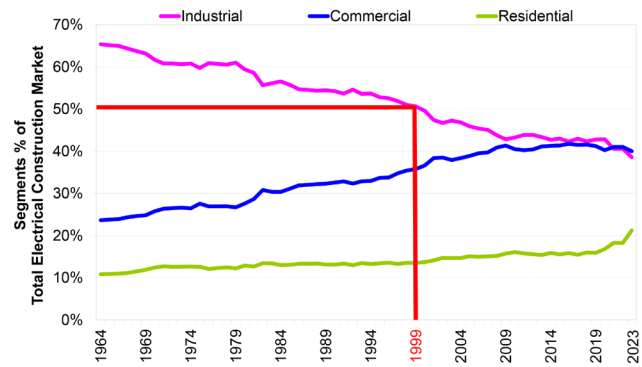


Figure 3

Figures 4 and 5 show a brief example of the detailed market category analysis, updated through 2023. In this specific company's location, the market size (defined as the total value of the electrical construction put-in-place (ECPIP), or dollars spent commissioning electrical construction projects) for the detailed category of "Healthcare" increased exponentially, while the company's control of that market varied over time with their market share reacting in turn. This company had several consistent healthcare customers, with consistent labor working on hospital renovations. Echoing the movement of the overall market due to COVID-19, we see a spike of Healthcare work in 2020, followed by a decline years after. A detailed analysis of their composite rate showed a small difference between

their own costs and the costs of their competitors. From these same results in several different detailed market categories, the company was able to weigh and decide which markets they wished to pursue — more details on this are included later in the article.

In addition to shifts because of world events, the amount of work available in markets may also be altered due to changes in:

- Innovation in and the availability of technology
- Ease of purchasing and distribution of material
- Advancements in and shifts in understanding of project management
- Required complexity of work; i.e., the shift of importance from technical skills to production

Healthcare Market Size and Control

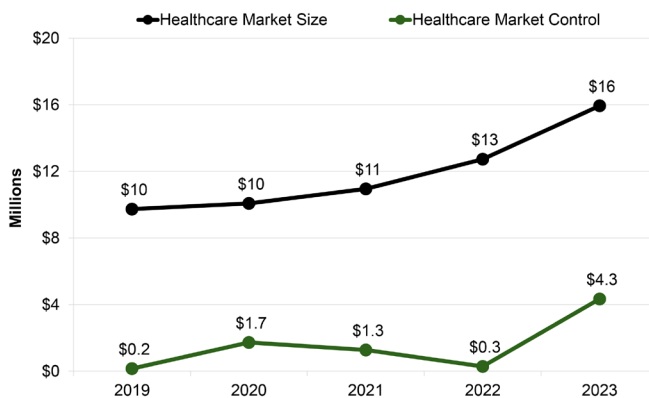


Figure 4

Healthcare Market Share

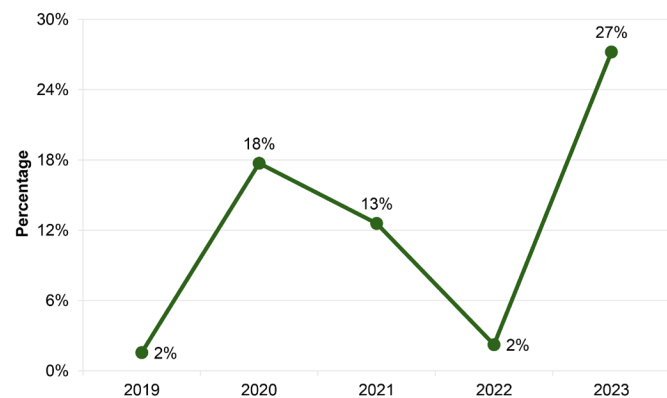


Figure 5

DCI® Construction Market Segment Charts

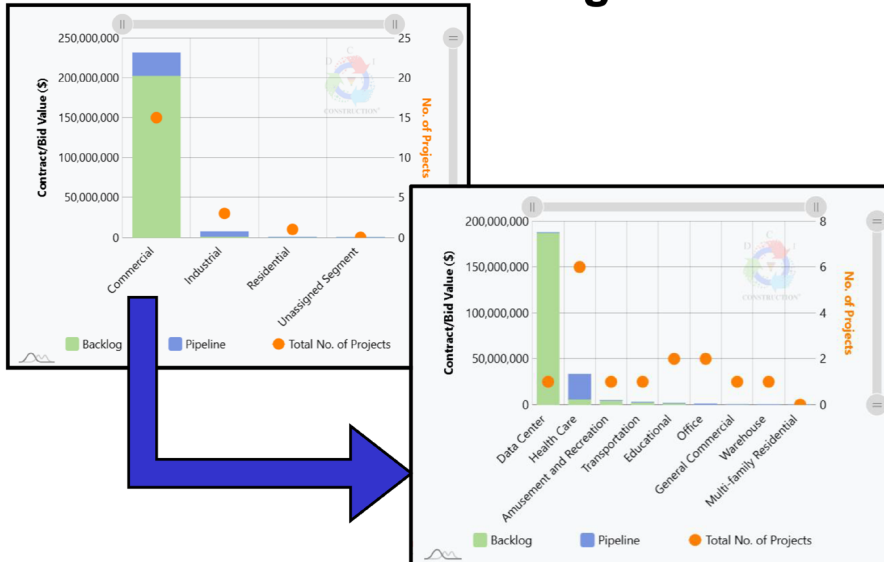


Figure 6

With these shifts in the market sizes comes a shift in market share, and ECs are forced to recognize, learn, and adapt to the new market expectations and availabilities. There may be newly blossoming markets to penetrate, such as Data Centers, or markets which you've had a historical stronghold in, but need to keep pace with the growth and changes.

Identifying Opportunities in the Market

If an EC wants to understand its position and opportunities in the market, they must categorize their work with a reference point to what is out there. In other words, by tracking your pipeline and backlog with the same codification as the market study method described earlier, an EC can measure and understand their position in the market in terms of:

- Market share; how much work you have vs. what is available per category
- Hit ratio; how much work you win vs. lose in each category
- Performance; what type of work has

most successful outcomes in terms of profitability

Knowing the above will help you strategically pursue markets where you can maximize your outcomes without having to work so hard to get, do, and collect on work. **Figure 6** shows a sample of how this is available using the Pipeline & Backlog module in DCI Construction®.

The Pipeline & Backlog module is an easily accessible way to track potential, upcoming, and in-progress projects as they progress through their project lifecycle. Through putting in a few key pieces of information, MCA, Inc. has compiled decades of research into being able to represent your projects over time, including the ability to select and customize labor loading curves in order to see manpower needs over time and anticipate peaks and valleys.

DCI Construction® also includes a way to categorize projects based on the category of work, using the government-defined categories and subcategories. This way, as you naturally track your work and use

the output of Pipeline and Backlog to foresee manpower planning, you also are able to track the amount of work you've done in each category and track your hit ratio in each individual category.

There is no reason to be a victim of the market. Through using data and MCA, Inc.'s experience, you can build a strategy annually on what markets to tackle and how to gain competitiveness. Depending on the available markets and the priorities of the contractor, there are several ways to increase market share. The two main factors which can reduce your labor costs are:

- Productivity
- Composite Crew Rate Cost

However, don't assume the only way to decrease labor cost is to lay off your crew. Through breaking down the job using a Work Breakdown Structure, Externalizing Work®, and utilizing lesser-skilled labor for less complex tasks (like material handling), costs naturally decrease. As the jobsite becomes more productive, throughput and dollars per head will increase, decreasing the overall effort and cost to complete the project.

The first step for every EC looking to increase their competitiveness and strategically target projects is to begin collecting data. Without giving yourself the ability to compare your work to the available market, you're left to gamble for your next project. MCA, Inc. and tools like the Pipeline and Backlog module of DCI Construction® can assist in collecting and analyzing this data, to help your company stay healthy and strong in constantly shifting construction markets. ⚡

References

Daneshgari, P., PhD. & White, H., & Wilson, M. (2008). *Developing a Format for Calculating Market Share*. ELECTRI International.