ETOP 600

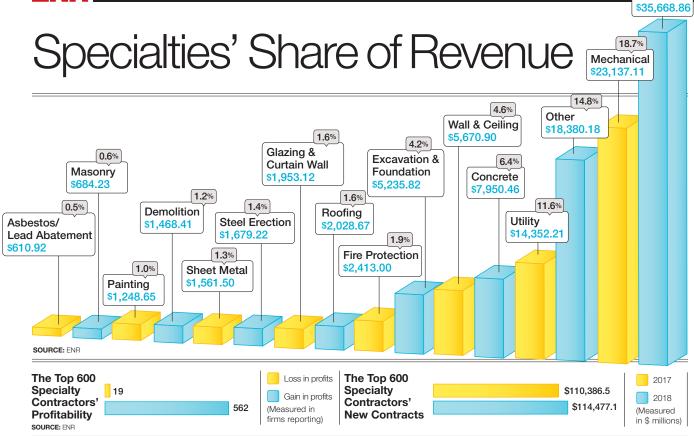
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Dealing With a Hot Market

The industry is experiencing a generational high market, and specialty contractors are reaping the benefits. But who will do all the work? By Gary J. Tulacz





The construction industry is in the enviable position of not having to scramble for new work. Instead, firms can now decide how much work they should take on, with their primary concern finding the most efficient way to do it. For most specialty trade contractors, there seems to be no signs of the market running out of steam over the next 12 to 18 months.

The impressive strength of the market can be seen in the results of this year's ENR Top 600 Specialty Contractors list. As a group, the Top 600 generated revenue of \$124.04 billion in 2017, up 10% over the \$112.72 billion in 2016, and a 23.5% hike from \$100.43 billion the year before. Top 600 revenue now has risen for seven straight years.

Subcontractors and specialty trade contractors in most disciplines and in most sectors say markets are hot and keep going from strength to strength. Few industry experts see the boom ending. "The only note of caution I hear from our members is that this market can't last, but no one is predicting a market downturn in the next year or so," says John Grau, CEO of the National Electrical Contractors Association (NECA), Bethesda, Md.

Most firms agree. "There are firms out there experiencing 15% to 20% growth," says Courtney Little, president of Ace Glass Construction Corp. and of the American Subcontractors Association,



"The only note of caution I hear from our members is that this market can't last, but no one is predicting a market downturn in the next year or so."

John Grau, CEO, National Electrical Contractors Association Alexandria, Va. But he also cautions that firms can enjoy too much of a good thing: "The level of growth in the market can be hard on your cash flow, so you have to manage your growth as well as your work," Grau points out

28.8%

Electrical

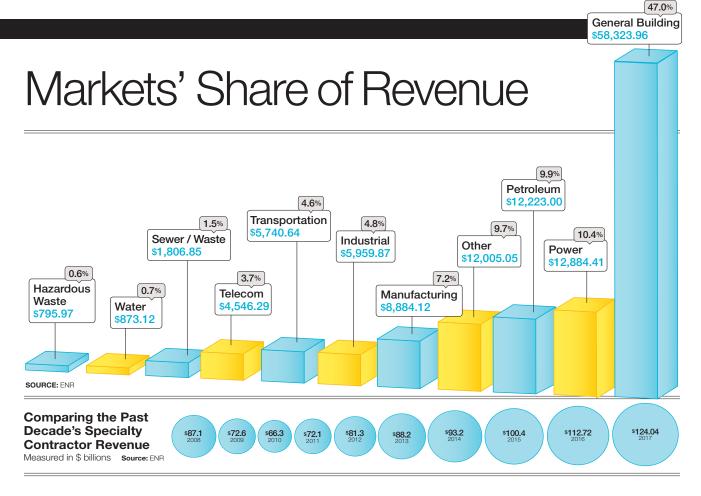
For many firms, the market is at a nearly optimum level. "From an organic growth perspective, you can grow your business as fast as you want, subject only to your human capital," says Charles A. Bacon III, CEO of Limbach Facility Services. He says the value of jobs in the firm's targeted pipeline rose to \$3.4 billion this year from \$3.1 billion last year.

Urge To Merge

Acquisitions of specialty trade contractors are on the rise. Five firms that were ranked on last year's Top 600 list have been acquired.

One of the biggest mergers was the combining of Brand Energy and Infrastructure Services and Safway to form BrandSafway. "We've brought together the best people, processes, and behaviors from two outstanding companies to form our '1BrandSafway' team," CEO Bill Hayes contends. He says the deal is working out very well, "but we've got more to do."

Limbach has been in the hunt for acquisitions



after going public last year. However, the firm is being cautious in doing its due diligence. "We have two basic requirements—that the target firm takes care of its people and that it has a pipeline of repeat customers," Bacon says.

Southland Industries also is on the acquisition trail. But the strong market has driven up prices of firms to buy. "We have been very active in looking for firms to acquire, but the market is very competitive with large firms and private equity firms shopping as well," says Ted Lynch, CEO. He believes consolidation among specialty trade contractors will continue.

EMCOR Group has been very active in the mergers and acquisitions area. "We are always looking," says CEO Anthony Guzzi. But he agrees that prices for some firms may be unrealistic. "When it comes to acquiring contractors, private equity firms can make some stupid decisions because they don't know the industry," he says.

Strategies for a Hot Market

Despite the strong specialty contracting market, the volume of opportunities brings its own challenges. Many firms are carefully mapping out the terrain in the year to come as they continue on a growth strategy and try to take market share.

542
Firms on the list that sent in a survey in 2017

68.3% Firms that increased revenue in 2017 from 2016

30.3% Firms that had lower revenue in 2017 than in 2016

But many companies are concerned that the opportunities exceed their ability to execute projects. "Companies need to continue to be aware of their current work secured and monitor their capacity," says Lithko Contracting President Robert Strobel.

Brightview is another firm that is being careful in what work it can afford to take on. "It is critically important that we use discretion to choose the right opportunities," says Tom Donnelly, Brightview president of landscape development. "We're focused on projects that position us for success and don't overtax our people, who are in high demand."

Pan-Pacific Mechanical is up front with its clients on the limits of its current resources. "We are open with our clients about what our capabilities are and will not take on work that we cannot service at the level that is expected of us. While there are companies that seem to take on work for the sake of volume, we remain disciplined and our clients respect us for that," says Reed McMackin, senior vice president.

Murphy Co. also is being selective within its customer base in taking on new work. "We are prioritizing our pursuits on our long-term customers with ongoing repeat business," says Mark Bengard, senior vice president. "If we have resources available, we will respond to other projects and customers if they

Earthworks

Reflections of a Guitar



Brightview Landscapes (No. 33) is building a 10-acre pool complex that includes a lagoon pool, "Bora Bora" pools, a river pool, a VIP-suite pool and multiple waterfalls at the Hard Rock Hotel & Casino in Hollywood, Fla. •

have the potential to become a long-term partner."

On the other hand, there are firms that have a conservative view of the market, and are not taking chances in case of a downturn. Gaylor Electric Inc. is one. "From what we have gleaned from market analysts and forecasters, there is a definite possibility of a slight slowdown in 2019 that could last a year. Armed with this information, we have focused on securing projects in the 18- to 24-month range that will take us through to the other side," says Chuck Goodrich, CEO.

Competition Still Hot

Competition is not abating, even in a busy and growing market. In the most recent ENR Construction Industry Confidence Index survey (ENR 10/8 p. 24), as many specialty trade contractors said that competition has increased over the past year—16.9%—as those who said it was decreasing.

"Competition will always be there, regardless of whether the market is up or down, but the quality of our people and the depth and breadth of our capabilities ensure that we will be able to compete successfully," says John Hansen, northern region president of ACCO Engineered Systems.

Many firms say the hot market has drawn in marginally qualified firms. "When there's an overabundance of work, you get people who are maybe not as qualified and don't have the proper training and leadership, or with the appropriate skill sets and amount of labor," contends Ryan Foley, vice presi-



"The level of growth in the market can be hard on your cash flow, so you have to manage your growth as well as your work."

Courtney Little, President, Ace Construction Corp. and current President. American Subcontractors Association

dent of field operations at H.J. Martin and Son. He also is seeing more firms biting off more than they can chew or who aren't qualified to be doing the work taken on.

Another area of competition is from general contractors themselves. Many large GCs are beginning to self-perform selected trades, believing this gives them more control over the construction process and is a way to retain revenue.

But GCs performing their own work in the trades does not always prove to be a successful strategy. "Most general contractors are trying to expand their bottom line by providing more scope than they once did," says James "Pepper" Rutland, CEO of MMR. "In our case, that would be the [electrical/instrumentation] services. Some are successful, but most seem to struggle with the added work and are changing back to one that subcontracts out noncore scopes."

Contractors in some trades are finding new sets of competitors from abroad. For example, curtain wall contractors have been experiencing competition from Chinese firms for several years. Now, the landscape is changing.

"We are seeing European companies aggressively trying to increase market share for their products due to the stronger value of their currency to the weaker American dollar," according to Michael Haber, managing partner of W&W Glass. "Some of the Asian market competition has been less prevalent over the last six months due to the tariffs being put in place."

But many specialty contractors say that price is usually not the determining factor in competing for work. Jeff VanderLaan, CEO of The Kent Companies Inc. says, "Partnerships trump price in today's market. We are selective about the projects we choose, and we look for contracting partners who want to leverage our experience and national capacity." He adds that "there is no need to race to the bottom with low bids."

Being a Partner

The growth of design-build and integrated project delivery (IPD) has resulted in an increasing profile of subcontractors in the project delivery process. This evolution in process has allowed subcontractors to provide more input and have more influence in the project. The Associated General Contractors "is now calling subcontractors their 'trade partners.' That's what we want to be—partners," says Little.

The use of design-build and IPD requires early input from the major trades to be successful. This has allowed subs to avoid the traditional low-bid

Concrete

Gate Precast Breaks the Mold



The use of 3D printing is beginning to make an impact on the industry. But one of the most surprising uses is coming from Gate Precast Co. (No. 126), which has begun to use 3D printers to create intricate precast concrete formwork.

Working with the Chicagobased Precast/Prestressed Concrete Institute, Gate Precast began testing the feasibility of using 3Dprinted carbon-reinforced plastics to create molds for precast concrete at the Tennessee-based Oak Ridge National Laboratory in 2017 (above). The project allowed Gate Precast to create molds for insulated highstrength concrete casts.

The process involves feeding a BIM model of the mold into the 3D printer. Layers of carbon-reinforced beads are then fed into the machine to build up the shape of the form. It takes about nine to 11 hours.

Standard wood-and-fiberglass models tend to break down after 20 castings. But using the printed reinforced plastic molds provided Gate Precast with over 100 castings. "We started using the printed molds and found we couldn't wear them out," says Dean Gwin, Gate Precast's president and COO.

Gwin notes that the process of creating 3D-printed molds costs three to five times that of a tradition-

ally fabricated mold, but for intricate castings requiring larger volumes of casts, it makes up for higher costs.

One problem in using 3D printing for formwork is the lack of commercial firms doing the printing. "Most 3D printers are owned by large manufacturers for their own use and commercial 3D printers are trying to develop an appropriate way of pricing jobs," Gwin says.

3D printing also may help the precast concrete industry deal with workforce shortages. "We only have a handful of highly skilled form workers at each of our plants, so being able to use a 3D printed form will take the burden off these professionals," says Gwin.

Gate Precast now is using 3D printed formwork on a 42-floor residential tower on the site of the old Domino Sugar plant in Brooklyn, N.Y. The job will call for 1,600-2,000 precast components. "If we were to do these molds in the traditional way, it would take all six of our plants to complete it," Gwin says.

The 3D printed molds are not always feasible. "But for intricate, high-volume work, it is definitely a money saver," Gwin says.

Gate Precast is sharing its work on 3D printed molds with the rest of the industry through the Precast/ Prestressed Concrete Institute.

scenario. It also has given a boost to subcontractors with long experience in design work in their fields. "We are pleased to see the continued growth of the design-build delivery method, as it allows us to leverage our foundation of mechanical engineering," says Hansen of ACCO Engineered Systems.

Southland Industries has its own engineering group, which has given it a boost in working in the design-build and IPD arena. But CEO Ted Lynch says there is an added advantage. "There are many customers that want to use design-build but are unfamiliar with its benefits," he says. These clients ask Southland to bring in its engineering group to do a pre-design engineering analysis.

Many contractors say their experience and design skills are giving them an edge. "We are having the best success with general contractors that take advantage of integrated project delivery and preconstruction planning to drive field productivity and strategic procurement," says John Gunderson, vice president of preconstruction, Faith Technologies.

Relationships

But relations with GCs are not always positive. One perennial problem among subcontractors is getting paid on time and in full. "There are still some GCs playing hardball with their people. But now that the market is good, these GCs can't get the prices they need from subs," says Little.

This has resulted in subs not just being selective in projects, but also about which GCs they work with. "Not all GCs manage the same way. There are ones we love working with and others we refuse to work with. When and where we can build our relationship and secure projects directly with the owner, we will do so," says Goodrich of Gaylor Electric Inc.

While relations with general contractors have improved with the growing use of collaborative project delivery systems, there still remains some friction between GCs and subs. Risk mitigation continues to be a trend for large national GCs. "Even though times are very good, getting paid on time continues to be an issue, especially when owners tend to hold onto the 10% retainage for the duration of the project," says R. Glenn Sherrill Jr., CEO of SteelFab Inc. "We have even seen some GCs refuse to request retainage from the owner in order to have more leverage over the subcontractor."

The Tariff Question

The series of tariffs on materials such as steel, aluminum and timber have had an impact on specialty trade contractors. For some firms that work heavily in materials covered by the tariffs, the impact can be severe. SteelFab Inc. has seen extreme materials price escalation. "Raw material prices are up 30% to 50% depending on the shape. This is largely tariff driven. Our consumables are up 25%, which I believe is more market driven," says Sherrill.

But firms in a broad range of disciplines also have been affected. "The elephant in the room is obviously the tariff situation that could escalate to a serious increase in pricing of steel and steel products," says Rutland of MMR. He says tariffs could have a drastic effect on the cost of conduit and fittings that make up about 30% to 40% of an electrical project.

Other companies see a more moderate impact. "Prices always fluctuate, which can be attributed to changes in taxes and tariffs, supply and demand and other factors, but there are no major pricing changes to materials, equipment, or labor currently," says David Fischer, CFO of L. Keeley Construction.

But Rutland warns that trade negotiations in Washington, D.C., could have an impact on the projects themselves, beyond costs. He says many new projects "are foreign-owned and are subject to



"We are now seeing a sizable repatriation of cash that previously had been held overseas to avoid the high domestic corporate tax rates."

Anthony Guzzi, CEO, EMCOR Group Inc. be canceled or delayed if those negotiations go badly. Our business has not been affected as of now, but we will have to see how trade policies and tariffs change foreign investing," he says.

Tax Breaks

One significant development this past year was the enactment of federal tax cuts at the end of 2017. Many in the industry believe the cuts would free up cash for corporate capital investments. While no one can point to specific projects that are going forward as the result of the tax cuts, many firms believe they will stimulate hiring and expansion among clients.

Many contractors believe that one of the aims of the tax law, to encourage corporations to invest in the U.S. and to bring back cash from foreign tax havens, is working. "We are now seeing a sizable repatriation of cash that previously had been held overseas to avoid the high domestic corporate tax rates," says Guzzi of EMCOR. He believes that many corporations now feel more comfortable in relocating production facilities back to the U.S. in the wake of the tax legislation.



THE TOP 20 FIRMS IN GLAZING AND CURTAIN WALL

RANK 2018 2017		FIRM	(\$ MIL.) 2017 REV.	% CHANGE '16-'17
1	1	ENCLOS CORP.	402.0	-11
2	3	BENSON INDUSTRIES	278.0	+7
3	4	W&W GLASS LLC	160.0	-11
4	6	CROWN CORR INC.	151.8	+24
5	5	ARCHITECTURAL GLASS & ALUMINUM	110.5	-11
6	7	KARAS & KARAS GLASS CO. INC.	77.1	-18
7	9	PIONEER CLADDING & GLAZING SYSTEMS LLC	73.7	+31
8	8	ALLIANCE GLAZING TECHNOLOGIES	72.0	-6
9	**	INTEGRO BUILDING SYSTEMS	67.0	NA
10	13	FLYNN GROUP OF COS.	63.6	+90
11	11	GIROUX GLASS INC.	56.0	+28
12	**	TSI CORP.	49.1	NA
13	10	HALEY-GREER INC.	48.0	+0
14	14	CRAWFORD TRACEY CORP.	40.2	+27
15	18	EGAN CO.	38.4	+55
16	19	KOVACH BUILDING ENCLOSURES	37.8	+54
17	15	ARCHITECTURAL WALL SYSTEMS LLC	32.9	+14
18	12	AJAY GLASS CO.	32.5	-23
19	17	NATIONAL ENCLOSURE CO.	29.4	+18
20	20	H.J. MARTIN AND SON	21.5	-11
NA=NOT A	VAILABLE.	** =NOT PREVIOUSLY RANKED.		

The Top 600 List

MARKETS (% OF 2017 REVENUE)

						GEWERAL, D.	MANUFACTUS	SMIMG	/ 2	SEWER / WASTE	INDUS./PETPO.	TRANSPORTA	HAZARDOUS	WASTE
				2017 REVEN	NUE (\$ MIL)	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	FACT	? / _Æ	A SUP	A MA	. / PE.	SPORY	;. / Mogs	, Mo
RAN 2018		FIRM	FIRM TYPE	TOTAL REVENUE	NEW CONTRACTS	GENE	MAW	POWER	WATER SUPPLY	SEWE	/ MON/	1RAN.	HAZAI	TELECOM
351	**	INTEGRO BUILDING SYSTEMS, Opa-Locka, Fla.	G	67.0	51.4	100	0	0	0	0	0	0	0	0
352	391	BONLAND INDUSTRIES INC., Wayne, N.J.	SH	66.8	42.9	71	10	0	0	0	0	1	0	0
353	387	DANT CLAYTON, Louisville, Ky. 353	0/C	66.6	64.4	75	0	0	10	10	0	5	0	0
354	446	DANNY'S CONSTRUCTION CO. LLC, Shakopee, Minn.	ST	65.5	86.1	58	0	0	1	0	1	40	0	0
355	327	FERGUSON, Plainville, Conn. 355	M/E/SH	65.5	71.2	90	0	0	0	0	5	0	0	5
356	287	E.S. WAGNER CO., Oregon, Ohio	Х	65.4	124.4	5	1	0	5	17	6	64	0	0
357	266	QUALITY PLUS SERVICES INC., Petersburg, Va.	E/M/ST	65.0	108.0	5	45	0	0	0	48	0	0	2
358	352	TAYLOR ELECTRIC INC., Salt Lake City, Utah	Е	64.8	54.8	91	0	0	0	0	0	8	0	2
359	**	CJ DRILLING INC., Dundee, III.	Х	64.6	105.2	5	0	80	0	0	0	15	0	0
360	325	MENARD GROUP USA, Carnegie, Pa.	Х	64.3	56.1	25	6	3	1	1	19	44	1	0
361	328	SUPERIOR GUNITE, Lakeview Terrace, Calif.	С	64.0	42.9	35	0	9	13	1	0	39	0	0
362	315	TJ WIES CONTRACTING INC., Lake St. Louis, Mo.	W	63.0	68.0	100	0	0	0	0	0	0	0	0
363	396	SOWLES CO., Shakopee, Minn.	ST	62.9	30.0	40	20	0	0	0	40	0	0	0
364	372	AVALOTIS CORP., Verona, Pa.	Р	62.8	60.6	0	0	35	0	0	20	45	0	0
365	362	KPOST CO., Dallas, Texas ³⁶⁵	R	62.5	55.2	84	16	0	0	0	0	0	0	0
366	357	R.W. WARNER INC., Frederick, Md.	M	62.5	41.4	100	0	0	0	0	0	0	0	0
367	427	APEX IMAGING SERVICES, Pomona, Calif.	W/P/C	62.0	69.9	100	0	0	0	0	0	0	0	0
368	334	WHITE ELECTRICAL CONSTRUCTION CO., Atlanta, Ga.	Е	61.9	63.4	0	20	40	0	0	30	0	0	10
369	403	BARNUM & CELILLO ELECTRIC INC., Sacramento, Calif.	Е	61.5	83.8	70	20	0	0	0	10	0	0	0
370	317	SURE STEEL INC., South Weber, Utah	ST	61.2	91.3	100	0	0	0	0	0	0	0	0
371	**	RUSTON PAVING, Durham, N.C. ³⁷¹	0/X	60.9	61.5	75	25	0	0	0	0	0	0	0
372	388	SWANSON & YOUNGDALE INC., Minneapolis, Minn.	P/W	60.8	55.7	82	1	1	0	0	14	2	0	0
373	**	CASTLE CONTRACTING LLC, St. Louis, Mo. 373	0	59.5	52.0	70	0	0	0	1	25	4	0	0
374	345	JDC DEMOLITION CO. INC., Boston, Mass.	D	58.8	42.7	80	0	0	0	0	20	0	0	0
375	397	THE BULLDOG GROUP INC., Winston-Salem, N.C.	R	58.5	62.6	60	35	0	0	0	5	0	0	0
376	421	CLEVELAND CEMENT CONTRACTORS INC., Cleveland, Ohio	С	58.3	52.5	75	20	0	0	5	0	0	0	0
377	423	PERLECTRIC INC., Fairfax, Va.	Е	58.3	72.7	100	0	0	0	0	0	0	0	0
378	**	SUN VALLEY MASONRY INC., Phoenix, Ariz.	MA	58.1	58.1	100	0	0	0	0	0	0	0	0
379	370	WYATT INC., Pittsburgh, Pa. ³⁷⁹	W/O/F	58.0	37.9	100	0	0	0	0	0	0	0	0
380	**	ALFRED MILLER CONTRACTING, Lake Charles, La. 380	F/C/O	57.7	35.7	0	0	0	0	0	100	0	0	0
381	356	UNISTRUT CONSTRUCTION, Addison, III.	W	57.6	45.4	100	0	0	0	0	0	0	0	0
382	383	PETTICOAT-SCHMITT CIVIL CONTRACTORS INC., Jacksonville, Fla.	U/X/C	57.4	60.8	0	0	0	20	25	0	55	0	0
383	416	J&E COS., Grand Prairie, Texas	MA/W	57.2	87.6	100	0	0	0	0	0	0	0	0
384	349	LATITE ROOFING LLC, Pompano Beach, Fla.	R	57.0	58.0	100	0	0	0	0	0	0	0	0
385	353	PREMIER ELECTRICAL CORP., Brooklyn Park, Minn.	E	56.9	56.0	30	5	5	0	15	5	30	0	10
386	371	INDUSTRIAL POWER SYSTEMS, Rossford, Ohio	M/E/C	56.9	60.0	15	50	0	0	0	35	0	0	0
387	439	GIROUX GLASS INC., Los Angeles, Calif.	G	56.0	55.6	52	0	0	0	0	0	4	0	0
388	443	GREINER ELECTRIC LLC, Littleton, Colo.	E	55.7	38.9	99	0	0	0	0	1	0	0	0
389	389	MILLER INSULATION CO. INC., Bismarck, N.D. ³⁸⁹	0	55.4	29.7	36	0	0	0	0	64	0	0	0
390	395	NASDI LLC, Woburn, Mass.	D	54.8	54.8	50	0	0	0	0	0	10	40	0
391	408	CONCRETE PROTECTION & RESTORATION INC., Baltimore, Md.	C/D	54.7	65.2	95	0	0	0	0	0	5	0	0
392	374	HODESS CLEANROOM CONSTRUCTION, North Attleboro, Mass. 392	0	54.4	76.2	5	95	0	0	0	0	0	0	0
393	435	THE ROOF DEPOT INC., Roswell, Ga.	R	54.3	37.5	100	0	0	0	0	0	0	0	0
394	431	AREA ERECTORS INC., Rockford, III.	ST	53.9	56.5	80	10	0	0	5	5	0	0	0
395	465	JOHNSON AND JORDAN INC., Scarborough, Maine	M/E	53.8	35.0	96	2	0	1	1	0	0	0	0
396	366	BENCOR GLOBAL, A KELLER CO., Frisco, Texas	X	53.7	25.7	14	0	4	71	10	0	1	0	0
397	363	GSL ELECTRIC, Sandy, Utah	E	53.5	40.3	60	10	0	0	0	20	0	0	10
398	411	MID-CITY ELECTRIC/TECHNOLOGIES, Westerville, Ohio ³⁹⁸	E/0	53.4	58.9	0	0	0	0	0	0	0	0	0
399	454	TRUESDELL CORP., Tempe, Ariz. 399	0	52.7	49.6	20	0	0	0	0	0	80	0	0
400	406	WESTERN ALLIED CORP., Santa Fe Springs, Calif.	M	52.3	55.0	95	3	0	0	0	0	2	0	0