



# 40th Annual Plant Construction Survey

## Food safety and consumer demands drive expansions

Processors are updating and expanding existing facilities to meet food safety regulations and changing customer needs.

► **Wayne Labs**, *Senior Technical Editor*

**T**his year's FE Plant Construction Survey produced what seem to be surprising results, but on second thought, may reveal a trend perhaps not all that surprising.

For the last four surveys, the ratio of expansion and renovation projects to new projects has steadily been increasing, showing almost a 2.5 to one ratio for the year 2016—for which we're reporting. (See graph, "Renovations and expansions compared to new projects.")

In the last 11 years, the ratio was at its lowest in 2007 (1.42), then increasing to a high of 2.2 in 2010, then decreasing again in 2012, only to rise to its highest in 2016. This begs the question: Why for every five of expansion/renovation projects would there be only two new projects? The diagram "2014, 2015 and 2016 Proj-

ects" shows that for the last three years, new projects were getting a smaller piece of the total projects pie than expansions and/or renovations.

A key reason for the increased number of renovations and expansions compared to new projects might be that processors are trying to make their facilities compatible with FSMA (if they're not under USDA regulations) before inspectors arrive on premises to find fault with indoor air quality, roof leaks, cleanliness, allergen contamination, and the list goes on.

As one A&E principal explained, processors know they have to comply with FSMA, so they'll try to renovate and repair to bring their building up to snuff. Expansions make sense if they can add on without disrupting current processing/packaging operations. When all these pos-

sibilities are not amenable, then it's time to find a new greenfield site or tear down the old facility and build a new facility on the property.

FSMA, however, is not always the key reason for expansions and renovations.

"There has been an increase over the past few months regarding expansions and renovations," reports A M King's Stuart Jernigan, preconstruction executive. "Most are geared towards increasing throughput either by increased efficiency, additional lines or both."

### What's important this year?

A&E/C (architectural and engineering/construction) firms were asked about the biggest trends they saw in 2016, which are listed in the box, "Top 10 trends."

Compared to last year's survey (2015), processors are faced with two big issues that can force their hands with facilities: prepare their facility for FSMA or GFSI accreditation—and at the same time, increase production to meet customer demand.

A&E/C firms and their clients both agree that flexibility is the key word for any design—make the design flexible, so processors can have flexible equipment and lines to meet new and changing products, especially important to Millennials as they look for clean label products.

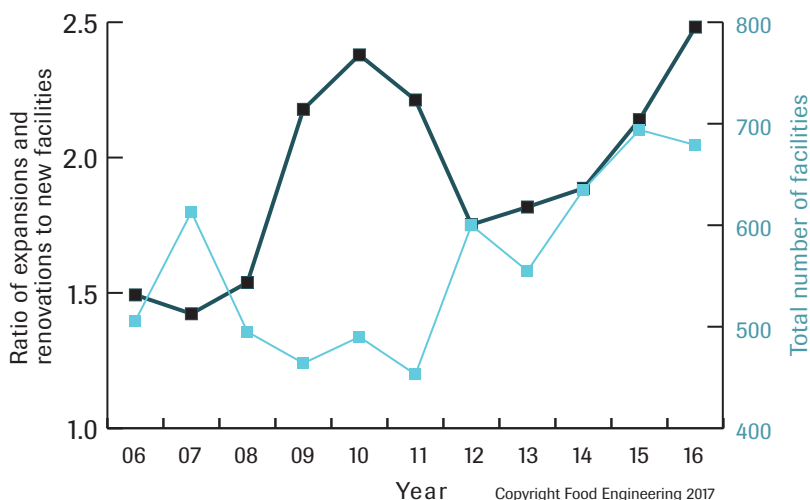
Demand has changed the rules for some processors.

"We're seeing an impressive uptick in expanded production for specialty and premium products," says Mark Di Gino, E.A. Bonelli + Associates marketing manager. "This clearly seems driven by consumer trends; people are buying more artisanal, organic and specialty food products, and because they're willing to spend more money on them, larger stores are starting to carry these items. Many of our clients over the last year approached us because of the same reason: Consumer demand swelled so much, they couldn't afford to grow steadily and needed to consider new construction to meet the immediate demands of wholesalers."

Why new? Harlan VandeZandschulp, Gleeson Constructors & Engineers president, explains that some of his clients prefer new over renovating because they want to build what they want and not impact current production. Also, he says more companies are paying more attention to sustainable production practices, such as increasing water and energy savings. Overcoming these types of issues can be difficult.

To meet the second trend of increasing production, A&E/C firms report that clients expect fast project deployment, but more than that, it has to be right at startup.

### Renovations and expansions compared to new projects



"Technology is playing the biggest role in how we deliver solutions—and it's changing rapidly," says Stellar's Todd Allsup, vice president of sales. "3D design lets you tour a plant before it's built, drones are used to verify accuracy on project sites, and cutting-edge lasers can measure within millimeters of accuracy."

With this 3D equipment and software come virtual reality (VR) and augmented reality (AR) viewing systems, so processors can "walk the plant" before it's built. No surprise head-knockers, no collisions of piping—just an optimized plant where workers will be safe, and equipment will be staged to make it efficient and versatile.

"Thanks to recent technology breakthroughs, the use of VR is simultaneously expediting and improving the design-build world," says Jeffrey Beran, Epstein project engineer. "Who doesn't want to execute projects more quickly while delivering a better-quality product to their clients?"

With copious amounts of data being created, understanding how to properly use it can help complete projects on time, under budget and without surprises. Project planning has become more robust, adds Allsup, and budgets are more closely monitored. Manufacturers want assurance that what they ask for is actually what they need. Processors are more willing to invest in pre-engineering, so they have higher confidence in investment costs before starting a project.

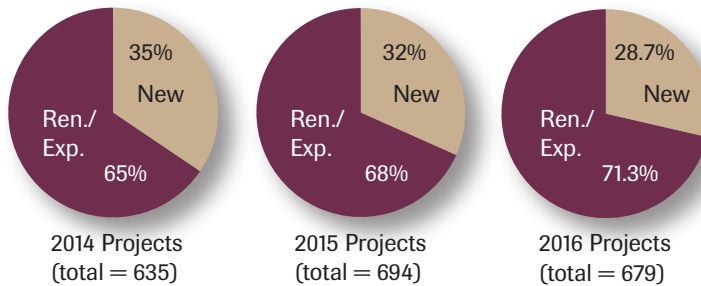
While automation ranked the highest in importance in last year's (2015) study, it only ranks sixth this year—perhaps because automation is just assumed. Environmental air handling ranks higher than automation this year, which could be explained by FSMA's more stringent demands on air quality.

In terms of sustainability, A&E/C firms indicated that because energy has become less expensive—partly

► In this graph, the black trace represents the ratio of renovations and expansions compared to new projects. For the last five years, the ratio has increased, indicating in 2016 that about two out of five projects reported were new. The blue trace shows the total number of projects for the same year.

Source: FE.

## 2014, 2015 and 2016 projects (percent of total)



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▶ **Since 2014, the number of new projects has become a smaller piece of the total number of projects while processors concentrate more on renovations (Ren.) and expansions (Exp.) to meet regulatory and production demands.** Source: FE.

due to increasing volumes of natural gas—processors are not quite so worried about energy costs, unless they are in an area where electrical energy is expensive. More important, however, is the availability of potable water as a process input and, especially, how to deal with wastewater being sent to the POTW. A&E/C firms reported an increase in the construction and enhancement of on-site wastewater treatment systems—to the point where the construction of an on-site treatment plant is as vital as the process or packaging line.

### What the numbers say

The total number of food and beverage projects in 2016, which is 679, represents a 2.2 percent decrease in the number of projects reported in 2015, the highest recorded in the last 11 years at 694. (See “Plant construction projects [2006-2016].”)

However, 2016’s total number of projects surpassed 2014 (635 projects) by 6.9 percent and was 20.8

percent higher than the 11-year simple average of 562 projects. The number of new projects in 2016 totaled 195, down 11.8 percent from the 2015 number of 221, but still half a percent higher than the 11-year simple average of 194. On the other hand, 2016’s number of expansion/renovation projects was 484 (actually 2.3 percent higher than 2015’s number of 473).

Reportable food and beverage projects are those valued at over \$1 million. They have been made public by the processor, a government entity (including local or state economic development groups) or the A&E/C firms responsible for them.

The survey (though the table lists “Completion Date” at the header) includes projects begun, announced by any entity or completed in 2016. If dates listed are beyond 2016, they reflect the projected completion date for a project either announced in 2016 or currently underway. Keep in mind, some projects can be announced, then dropped at the last minute for any number of reasons, e.g., legal problems, lack of expected funding, site issues, changing needs, politics, etc.

This year’s report found distribution centers (DCs)/warehouse sites, whether new or renovations/expansions, increased significantly over the preceding year, in fact 66 percent higher. DCs/warehouses this year totaled 78 compared to 2015’s number of 47 sites. In fact, it was the second-highest number in the last 11 years, surpassed only by 2007’s number of 94 sites.

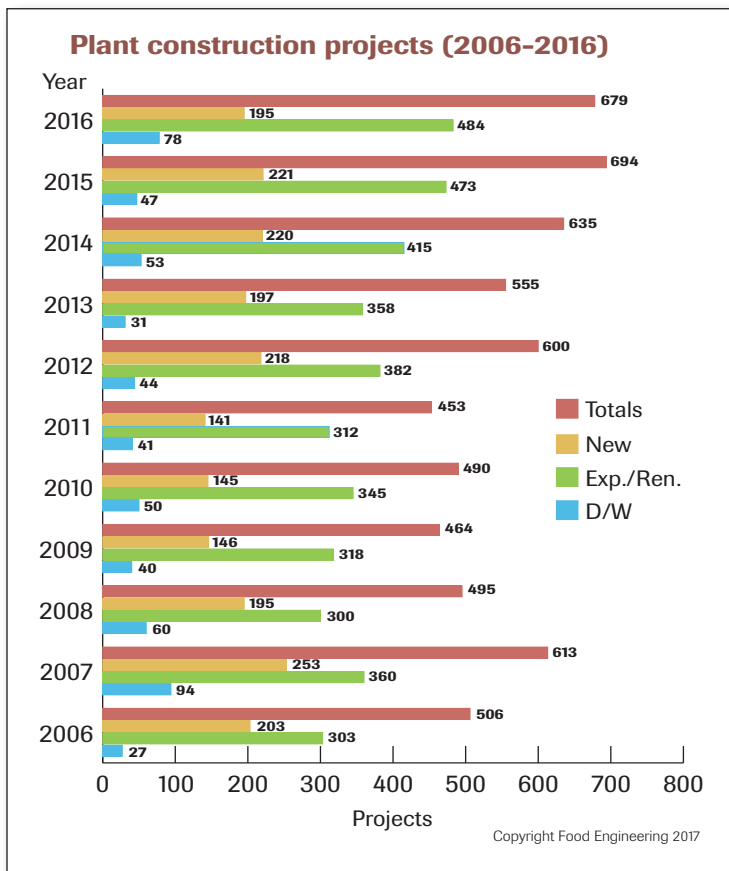
These DCs include separate, standalone warehouses either owned by a food and beverage processor or by a freezer/cold storage warehouse provider like US Cold Storage—or they can be on premises with processing and packaging equipment, often separated by a wall or located conveniently in another building where conveyance may be built to connect storage and processing/packaging. Finally, DCs in 2016 numbered 52 percent above the 11-year simple average of 51.4 percent.

We’ve been tallying alcoholic beverage projects (whether new or expansions/renovations and/or DCs) since 2012, as we began to get several announcements of new craft beer companies and craft distillers—though beer makes up the lion’s share of projects. (See “Alcoholic beverage projects 2012-2016.”) The number of alcoholic beverage projects totaled 70 in 2016, down by 22 percent (20 projects) recorded in 2015 (90). The tally in 2016 marks a 10.3 percent increase over the five-year simple average of 65 projects. Bottle or barrel-making projects are not included in the tally.

## Top 10 trends for 2016-2017\*

1. Preparing for FSMA regulations/GFSI certification
2. Increasing production to meet demand (tied with 3)
3. Flexibility in plant design and manufacturing
4. Fast project deployment
5. Environmental/air handling
6. Automation
7. Virtual reality/augmented reality/3-D design tools (tied with 8, 9 & 10)
8. Sustainability (water and energy)
9. Upgrades to existing plants/equipment
10. Employee welfare, break rooms, etc.

\*Based on the open-ended question in FE’s 2016 Plant Construction Survey, “What trends do you see emerging in plant construction projects? To what do you attribute these trends?”



► **New facilities, expansions/renovations and distribution centers/warehouses are shown for the years 2006-2016. Total projects = New + Exp./Ren. The DC/Wkse. category includes both new facilities and expansions, but only projects dedicated to distribution and warehousing (no processing).**

Source: FE.

## Hot buttons

What are the hot trends?

“Increased focus and spending on plant upgrades both to increase production, as well as comply with FSMA and SQF certification,” says Mark Galbraith, co-owner of Galbraith Pre-Design.

Processors are getting ready for FSMA, and they’re planning to get more out of their existing facilities. However, some might be concerned about acquiring too much automation too fast due to lack of skilled labor that can operate advanced equipment, reports Mark Redmond, president at Food Plant Engineering.

“Manufacturers want to produce more with the same number of people,” Redmond says. “I see a lot of what I call ‘spot automation’—automating certain parts of the process. This saves money and improves food safety.”

“We are seeing two key trends happening today,” says Chris Jarc, vice president and project manager at Hixson Architecture and Engineering. “First, FSMA has definitely impacted building and utility design. We’ve always designed our facilities in such a way that they meet 99 percent of FSMA requirements, e.g., making sure water drains [no puddles], designing HVAC with proper air change rates, proper lighting and other back-of-house functions to handle loads. However, one of the biggest changes is the fact that allergen separation has gone from

‘should’ to ‘shall.’ To help with this, plant design needs to provide more access controls, additional staging areas for verification and improved line separations, either by physical distance or other means.”

An excellent example of this can be seen in FE’s 2017 Food Plant of the Year, Abbott’s Tipp City, Ohio plant, for which Hixson provided architectural and engineering support for a new second line and associated modifications. After entering the facility, raw materials are segregated into refrigerated storage and ambient storage, and any ingredients containing potential allergens and non-GMO ingredients are segregated to prevent unwanted crossover. Blending of powders and liquids is also separated, rather than taking place all in one room as is done in many facilities, to further facilitate dust control and prevent allergen migration.

Another important trend Jarc sees is the use of building management systems (BMSs) that provide data off the floor for downtime reporting, mean time to failure analyses and other reports.

“Plus, BMSs are now capturing utility data from boilers, electrical systems and other ‘back-of-the-house’ systems to allow maintenance personnel to schedule maintenance programs and minimize costly downtime,” adds Jarc.

## Flexible design translates into flexible operation

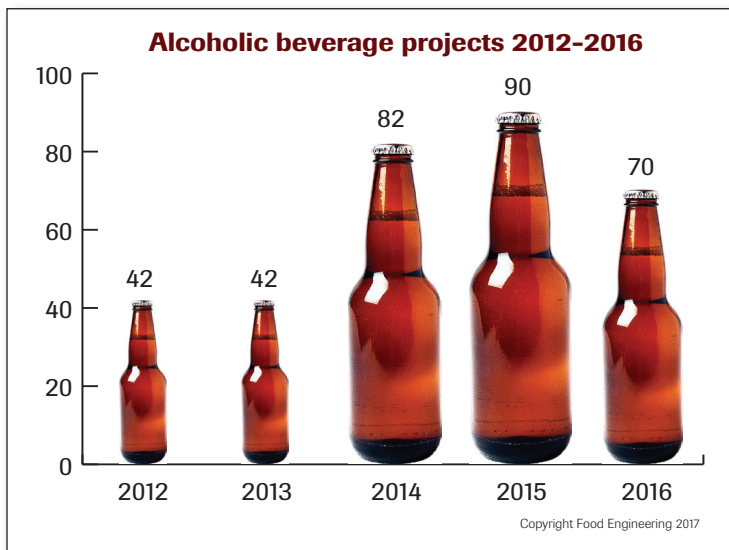
Flexibility was the third-most often cited key trend affecting processors today. To allow processors to respond more quickly to changing consumer demand and have a greater speed to market, an increased focus is now placed on flexible manufacturing and designing plants to enable it.

“Design considerations focus on identifying key process modules that could be easily exchanged or modified, as well as to allow for future flexible space in production,” says Donald Oberlies, vice president/market leader at Alberici Contractors.

Flexibility can also be incorporated into the plant design elements through a greater emphasis on sanitary and cleaning needs.

“Processors are pressured to make many products in their plants, which must be economical and, thus, require quick turnovers and easy cleaning for a profitable operation,” says Pablo Coronel, CRB director of food processing and food safety. “Flexibility is built into the design by minimizing pipe runs and eliminating hard-to-clean areas. Also critical to success, systems should be easily modified to match the different processes.”

“Layout is the key,” says Jeff Stewart, Amec Foster Wheeler project director. “Making sure that you design a production line with a space that allows for flexible insertion or removal of equipment to meet differing demands



► For the past five years, FE has been tracking alcoholic beverage producing and warehousing facilities. Though fewer projects were listed in 2016 than 2015, craft beer projects account for the largest number.

Source: FE.

makes all the difference. It's never about electrical power, PLC controls or upstream processing. It is almost always about space."

Additionally, reflecting on the entire lifespan of a plant can help inform flexible design, including possible future uses and expansions.

"Flexibility can be accommodated to an extent by thinking through all future alternatives and working into the initial layout, allowing space for anticipated equipment alternatives and linear flows, which allows for easier expansion," says Ed Wright, senior director of project planning at The Austin Company.

For instance, size utility rooms and piping for some future expansion, but don't install the additional compressor or boiler right away, recommends Keith Perkey, Haskell vice president, food and beverage.

"We might also design expansion panels into the facility to allow for cost-effective expansion in the future," he says. "Another strategy is to allow for manufacturing suites that can be changed with minimal capital from one product to the next as consumer trends change."

How does design translate into real-world flexibility?

"A flexible manufacturing operation generally falls into two main categories," says Austin's Ronaldo Gilberti, senior director of project planning.

The first, machine flexibility, refers to the changeability of the system to produce new products and the ability to change the order of operations in product lines. The second, routing flexibility, allows usage of multiple machines to perform the same operations on a product, as well as the system's ability to absorb large-scale changes, such as in volume, capacity or capability.

### Fast, innovative project deployment

Getting plants up and running is more important than ever today.

"Plants are being built quicker and quicker; speed to market in getting new products to the consumers [is key]," says Jeff Jendryk, Ambitech Engineering senior manager business development.

Modular construction is one way to speed the deployment process.

"One major trend I see is process modularization," says Lloyd Snyder, Woodard & Curran senior vice president. "This is being widely used in construction due to many benefits to developing a process skid."

The skid allows for assembly away from the construction site, which means lower cost, improved quality and safer process development. Skids also minimize startup schedules by allowing more testing and commissioning by having FATs already finished before arriving at the site, says Snyder.

Today, project development has to be more than just fast. It also has to be innovative.

"What we are seeing is two pronged," says Sam Thurber, SSOE Group senior project manager. "The first is the need to show innovation—quickly and often. Projects which are innovative, or can be marketed as such, are getting green lighted."

The second prong is that all projects are coming under greater scrutiny for regulatory, quality and safety compliance, adds Thurber. A project must be designed to create safe food and protect employees from hazards.

To ensure faster project delivery and deployment, certain steps must not be overlooked, according to Thurber. For example, delivery requirements include:

1. Greater focus on not harming existing processing during construction
2. Greater protection of employees and product during construction
3. Greater regulatory compliance during the construction effort.

"We are seeing a few trends: more activity and faster timelines, which both drive the need for single-source accountability," says Haskell's Perkey. "The single-source accountability is often referred to as an EPC [Engineering, Procurement and Construction] project delivery model, where one entity takes full responsibility for the design, construction, installation, commissioning, startup and performance of food and beverage manufacturing facilities and equipment lines."

This allows processors to shift the risk of project implementation from themselves to contract service providers.

### Sustainability issues

Energy, water supply and wastewater treatment continue to be important factors in the decision process

of any design project, says Thomas Wiersma, C2AE director of marketing and business development.

As with all considerations, each option must be estimated for initial cost versus long-term maintenance.

“Energy is always a topic of design, but is not driving new projects itself, as energy is currently cheap,” says Matt Williamson, ADF Engineering process department manager. “However, wastewater and water treatment are hot topics, and we are working on a number of wastewater projects. I would say that wastewater systems are the norm for larger facilities.”

Why the urgency for on-site wastewater treatment systems?

“Municipal wastewater treatment system infrastructures are typically of the same antiquated vintage as our bridges and tunnels,” says Mike Golden, Food Tech VP. “You don’t want to get that unexpected and large surcharge bill in the mail one day. [Therefore], proper analysis of wastewater chemistry and volume is a critical element of the design process.”

“More municipalities are requiring production facilities to install pretreatment wastewater plants to mitigate the impact on their public WWTP facilities,” says Jack Michler, ESI Group USA regional manager.

Industrial pretreatment requirements are constantly changing, depending on the policies and practices of the local municipality and utilities owners. The designer and project owner need to make reasonable predictions regarding the discharge limits to assess the surcharges on untreated outflow in comparison to the initial cost and on-going maintenance of a pretreatment system.

“Wastewater treatment systems are becoming the norm, to the level of reusing by-product streams for gray water applications,” says Steve Tippmann, executive vice president of the Tippmann Group. “When looking at water as an ingredient, any reduction of potable water usage is always the key.”

## Curbing energy usage

Even though natural gas prices have come down, the cost of energy is still a design concern.

“Energy can contribute significantly to the total operational cost of a wastewater treatment system,” says Dan McCreary, Dennis Group principal.

“Energy efficiencies in all utilities are reviewed concurrent with facility design, and in general, efficiencies gained within a specific customer-related ROI are typically implemented within the capital budget,” adds Tippmann.

Meeting FSMA regulations imposes in some cases new energy demands. This includes HVAC and refrigeration systems, which can be large energy users, says Food Tech’s Golden.

“This increased refrigeration demand and load forces operators to take a hard look at energy costs, which in turn forces an evaluation of the central refrigeration system and potential energy-efficiency upgrade opportunities.”

The shift in cost and availability of fuel sources away from oil and coal to natural gas and other renewable resources have had a significant effect on the design of facilities, says Haskell’s Perkey.

## The following companies and individuals participated in the Food Engineering survey:

### A M King

Stuart Jernigan  
704-365-3160

### ADF Engineering, Inc.

Matt Williamson  
937-847-2700

### Alberici Constructors

Donald C. Oberlies, PE  
314-733-2341

### Ambitech Engineering Corp.

Jeff Jendryk  
630-270-7809

### Amec Foster Wheeler

Dean Weber  
612-252-3651

### C2AE

Thomas Wiersma  
616-454-9414

### CMC Design-Build, Inc.

Nathan Larose  
617-328-7899

### CRB

Pablo Coronel, PhD  
919-334-7067

### Dennis Group

Dan McCreary  
413-787-1785

### E.A. Bonelli + Associates, Inc.

Mark Di Gino  
510-740-0155

### Epstein

Jeffrey W. Beran, PE  
312-429-8049

### ESI Group USA

Jack Michler  
262-369-3526

### Faithful+Gould

Jonathan Marshall  
612-656-6104

### Food Plant Engineering, LLC

Mark E. Redmond, PE  
513-488-8888

### Food Tech

Mike Golden  
781-929-7369

### Galbraith Pre-Design, Inc.

Mark Galbraith  
717-226-5203

### Gleeson Constructors & Engineers LLC

Harlan VandeZandschulp  
712-258-9300

### Gray Construction

Leslie Barrett  
859-281-9351

### Haskell

Keith Perkey  
678-328-2908

### Hixson Architecture & Engineering

Chris Jarc,  
PE PMP, LEED AP  
513-241-1230

### SSOE Group

Sam Thurber  
419-255-3830

### Stellar

Todd Allsup  
904-260-2900

### The Austin Company

Susan Riffle  
440-544-2268

### Tippmann Group

Steve Tippmann  
260-490-3000

### Woodard & Curran

Lloyd Snyder, PE  
207-415-7512

# PLANT CONSTRUCTION SURVEY

“Facilities are trending toward using more cost-effective fuel sources like natural gas to fuel packaged electrical generators and harvest the heat from those generators to produce hot water and steam for cleaning and other manufacturing processes.”

## The human element not forgotten

Even though employee welfare registered 10th on our hot trends list, the subject hasn't fallen on deaf ears.

“We have seen a move to health and wellness for plant employees and a move to more collaborative work environments that you may typically see in other work environments like commercial offices,” says Jonathan Marshall, Faithful+Gould senior vice president, manufacturing sector lead.

The creation of huddle spaces, “downtime” areas when on breaks, and generally more “daylighting” allow plant employees to be connected to what is going on outside the four walls of the plant.

“In numerous instances, we are now including workout gyms in plants and [the] creation of collaborative workplace solutions on the front of plant areas, as well as for self-directed teams to better plan and manage their work,” Marshall says.

Beyond the manufacturing walls, reductions regarding noise and

light pollution have also become big drivers in certain geographic areas, adds Jernigan.

“Plant safety must focus on the safety of people and food,” says Greg Carr, The Austin Company senior director of project planning. “No longer are maintenance staff [members] ready to climb ladders to access equipment, for example, tops of tanks or rooftop equipment.”

Also, many plants are providing easier ways to view the process without actually entering the plant. This can have a few advantages, including using the plant floor as part of the sales process.

“Plant owners want to create an environment where they can show a prospective client the product—and the process to manufacture it—in a way that’s persuasive,” says Stellar’s Allsup. “For example, viewing corridors and observation decks act as a convenient and elegant display tool that doesn’t involve gearing up in gowns and hair nets.”

Additionally, the current trends of transparency and consumers demanding more information about the foods they eat might also be raising the importance of these viewing areas.

“In today’s world, consumers and partners place a higher value on visibility, assurance of product quality, food safety and the origin of products,” adds Allsup. ❖

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
16 Bears and a Goat	Fredericksburg	VA	Microbrewery	New		3		1/16
<b>A</b>								
AAK USA K1 LLC	Louisville	KY	Edible oils, shortening	Exp.		33		12/16
Abbot Laboratories	Altavista	VA	Nutritional products	Exp.		34		6/16
Abbott Nutrition	Casa Grande	AZ	Nutritional	Exp.			Hixson	17
Abbott Nutrition	Tipp City	OH	Nutritional	Exp.			Hixson	16
Abbyland Foods	Abbotsford	WI	Sausage	New		20		1/16
Abdallah Candies	Apple Valley	MN	Candy	Exp.	70	12		1/16
Abelei Flavors	Aurora	IL	Flavors	Exp.				7/16
Acadian Wild Blueberry Company (Oxford)	Isadore	NB	Blueberries	New	175	38		7/16
ADM (Archer Daniels Midland)	Decatur	IL	Dairy	Exp.			Hixson	16
ADM (Archer Daniels Midland)	Effingham	IL	Petfood premix	Ren.	284			6/16
ADM/Wild Flavors	Erlanger	KY	Flavors	Ren.			Hixson	17
AgriMark	Chateaugay	NY	Cheese	Exp.		30		5/16
Agrimark	West Springfield	MA	Dairy	Exp.	19	19	Dennis Group	5/18
Agropur Inc.	Weyauwega	WI	Feta cheese	Exp.		55		16
AGT Food and Ingredients	Minot	ND	Pulse products	Exp.	33			9/16
Ahold	Freetown	MA	Food waste anaerobic digester	New	12		Dennis Group	2/16
Ainsworth Pet Nutrition	Meadville	PA	Pet food	Exp.				11/16
Ajinomoto Windsor	Oakland	MS	Frozen foods/rice	Exp.		20		3/16
AlaTrade Foods	Phoenix City	AL	Chicken processing	Exp.		2		1/16
ALDI	Dinwiddie	VA	DC	New	500	57		10/16
Allen Harim	Harbeson	DE	Poultry	Ren.		30		8/16
Allied Specialty Foods/AdvancePierre Foods	Vineland	NJ	Prepared foods	New	75	14		12/16
Alltech Lexington Brewing & Distilling Co.	Lexington	KY	Beer, whiskey	Exp.		20		12/16
Alpina Foods	Batavia	NY	Yogurt products	Exp.	3	1		5/16

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ MIL.)	A&E/C	Completion Date
<b>A</b>								
American Crystal & United Sugars	Montgomery	IL	Sugar storage and transfer	New		40		4/16
American Packaging	Chili	NY	Contract food packager	New	350	170		11/16
American Packaging	Story City	IA	Contract food packager	Exp.		44		12/16
Amy's Kitchen	Goshen	NY	Organic foods	New	500	100		16
Anheuser-Busch Co.	Jacksonville	FL	Beer bottling	Ren.	180	39	Haskell	4/17
Apio	Hanover	PA	Gourmet produce	Ren./Exp.	64	20		6/16
Appalachian Mountain Spirits	Marion	VA	Whiskey	Exp.		2		8/16
Arizona Beverages (aka Maplewood Beverage Packers)	Woodbridge	NJ	Iced teas, juices	New	560	40		1/16
Arla Foods	Linwood	NY	Cheese	New	30	58		3/16
Armada Nutrition	Spring Hill	TN	Nutritional products	Ren./Exp.	300	2		12/16
Armano Foods	Hayward	CA	Specialty foods (BRC compl.)	Ren.	16		E.A. Bonelli + Associates, Inc.	16
Aromatech Flavorings, Inc.	Orlando	FL	Food flavors, scents	Exp.		3		11/16
Associated Milk Producers Inc.	Sanborn	IA	Cheese, whey	Exp.		16		6/16
<b>B</b>								
Bachoco	Oklahoma City	OK	Mexican foods	Ren.		11		2/16
Back Bay Brewing	Virginia Beach	VA	Brewery	Exp.		1		6/16
Bake 'n Joy	Andover	MA	Dough	Exp	20	5	CMC Design-Build, Inc.	9/16
Baker Cheese Factory	St. Cloud	WI	Cheese	Exp.		7		10/16
Balchem	Ogden	UT	Ingredients	Exp.	10	8	Dennis Group	12/17
Baldwin-Richardson	Rochester	NY	Packaging	Ren./Exp.			Epstein	16
Ballad Brewing	Danville	VA	Craft brewery	New		2		9/16
Ballast Point Brewing	Daleville	VA	Beer	New	259	48		5/16
Bama Foods	Tulsa	OK	Hotcakes	Exp.		33		6/16
Barilla Group	Ames	IA	Gluten-free pasta	Ren./Exp.		27		12/16
Barry Callebaut Group	American Canyon	CA	Candies (Second phase)	Exp.		20		6/17
Barry Callebaut Group	American Canyon	CA	Candies (First phase)	Exp.				3/16
Bartlett Dairy	Queens	NY	Dairy	New	56			11/16
BC Fisheries	Brookings	OR	Shrimp, crab processing	New	18	10		6/16
Beak Skiff Holding Company	Lafayette	NY	Cider	Exp.				6/16
Beam Suntory	Frankfort	KY	Distilled spirits	Exp.		10		12/16
Beam Suntory	Frankfort	KY	Distilled spirits	New	50	14		6/16
Bel Brands	Leitchfield	KY	Cheese	Ren.	20	2	Dennis Group	2/17
Bellswood Brewery	Toronto	ON	Brewery	New	29	7		16
Beneficial Blends	Tampa	FL	Coconut oil products	Exp.	24			4/16
Bently Heritage	Minden	NV	Distillery	New		22	Haskell	12/17
Berner Food and Beverage	Dakota	IL	Snacks, sauces	Exp.	180	70		6/17
Bi Nutraceuticals	Reno	NV	Botanical ingredients + D/W	New	140	3		19
Bianco & Sons	Medford	MA	Meats, sausage	Exp.	29	9		12/16
Big Apple Foods	Rochester	NY	Cold storage	Exp.	30	4	Food Tech	6/17
Billsburg Brewery	Williamsburg	VA	Craft brewery	New		2		7/16
Blake Hill Preserves	Windsor	VT	Jams, preserves	New	5	1		10/16
Blount Fine Foods	Fall River	MA	Soup & spreads	Exp	60	7	CMC Design-Build, Inc.	1/16
Blount Fine Foods	McKinney	TX	Soups, sauces, entrées	Exp.	70	20		10/16
Blue Apron	Dallas	TX	Meals	New	75		Food Plant Engineering	6/17
Blue Apron	Jersey City	NJ	Food distribution	Ren.	100	4		5/16
Blue Apron	Arlington	TX	Meal kits	Ren.	40	7		11/16
Blue Bee Cider	Richmond	VA	Cider	Exp.		1		2/16
Blue Buffalo	Joplin	MO	Pet food products	Ren.			Hixson	17



# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ MIL.)	A&E/C	Completion Date
<b>B</b>								
Blue Buffalo	Richmond	IN	Pet food products	New		100		8/16
Bluegrass Dairy and Food	Glasgow	KY	Dehydrated dairy & non-dairy	Exp.		2		12/16
Boar's Head Provisions	New Castle	IN	Deli products	New	150			1/16
BoDeans Cone Company	Le Mars	IA	Ice cream cones	Exp.		5		12/16
Bon Secour Valley Ingredients	Foley	AL	Dehydrated vegetables	New		8		5/16
Boston Beer	Breinigsville	PA	Beer	Ren.	40			9/16
Boulevard Brewing Company	Kansas City	KS	Canning line	Exp.				8/16
Boulevard Brewing Company	Kansas City	KS	Cellar Five	Exp.	4	12		2/16
Braunger Foods	Sioux City	IA	Prepared foods	Ren.		4		12/16
Brew Hub	Chesterfield	MO	Brewery	New		17		10/16
BrewDog	Canal Winchester	OH	Brewery	New				2/16
Brodrene Hartmann	Rolla	MO	Food packaging	New	334	30		1/16
Brookshire Brothers	Lufkin	TX	Groceries distribution	Exp.	40	20		12/17
Buddy's Kitchen	Lakeville	MN	Frozen foods	Ren.		3		10/16
Buffalo Rock Company	Birmingham	AL	Beverage/food distribution	Exp.		5		1/16
Buffalo Trace Distillery	Frankfort	KY	Bourbon, whiskey	Exp.		7		12/16
Butterball	Raeform	NC	Poultry	Ren.	80		Gleeson Constructors & Eng.	2/16
Butterball	Raeform	NC	Poultry	Ren.	2		Gleeson Constructors & Eng.	4/17
Butts Foods Inc.	Franklin	KY	Food DC	Exp.		4		16
<b>C</b>								
Caito Foods	Indianapolis	IN	Prepared foods	New	149	25	ESI Design Services	10/16
CalCheese	Tulare	CA	Cheese, whey	New		250		1/17
California Dairies	Visalia	CA	Milk powders	Exp.				12/16
Canada Royal Milk	Kingston	ON	Infant Formula	New	350		E.A. Bonelli + Associates, Inc.	19
Cargill	Fresno	CA	Meats	Exp.	125	50		16
Cargill	Lake Odessa	MI	Egg processing	Exp.	28	27		6/16
Cargill	Wichita	KS	Soy processing	Exp.		50		17
Cargill	Columbus	NE	Cooked meats facility	Ren./Exp.	100		Gleeson Constructors & Eng.	3/17
Cargill	Columbus	NE	Cooked meats (wastewater project)	Exp.	6		Gleeson Constructors & Eng.	2/17
Carolina Cannery	Cheraw	SC	Iced teas	Exp.		45		11/16
Castellini Group (Atlantic Healthy Foods)	Conley	GA	Produce processing/warehouse	New	180	52	Tippmann Group	4/16
Cavalier Produce of Virginia	Charlottesville	VA	Cold storage	New	35		Tippmann Innovation	10/16
Cavendish Farms	Lethbridge	AB	Potato processing	New		350		12/16
CC Kitchens	Atlanta	GA	Produce	Exp.	110	19	Tippmann Group	8/17
Cend LLC	Shepherdsville	KY	Sports nutrition products	New	210	17		2/16
Central Maine Meats	Gardiner	ME	Meats	Exp.				4/16
Cereal Ingredients	Leavenworth	KS	Ingredients	Ren.	9	9	CRB	9/16
Champion Petfoods LP	Auburn	KY	Pet foods	New	371	85	Gray Construction	8/17
Charles Seligman Distribution Co.	Walton	KY	Beer, spirits DC	Exp.		6		16
Cheribundi, Inc.	Geneva	NY	Cherry juice	Exp.		4		10/16
Chobani	Twin Falls	ID	Yogurt (dips, drinks)	Exp.		100		5/16
Chobani	Twin Falls	ID	Yogurt	Exp.	45	22	Tippmann Group	16
Chobani	Twin Falls	ID	Yogurt	Exp.	32	7	Tippmann Group	16
City Lights Brewing Company	Milwaukee	WI	Beer	New				1/17
Clemens Food Group	Coldwater	MI	Pork Processing	New	343	250	Gray Construction	9/17
Clif Bar and Company	Twin Falls	ID	Nutritional/sports bars	New	300	90		10/16
Cloverleaf Cold Storage	Sioux City	IA	Warehouse/DC	Exp.		18		9/16
Coca-Cola Bottling	Montgomery	AL	DC	New		35		6/16

# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>C</b>								
Coca-Cola Company	Abilene	TX	Coke bottling (incl. extrusion line)	Exp.		32		12/16
Coca-Cola Company	Auburndale	FL	Beverages	Exp.			Hixson	16
Coca-Cola Company	Buckner	TX	Beverages	Ren.			Hixson	17
Coca-Cola Company	Ft. Worth	TX	Beverages	Ren.			Hixson	17
Coca-Cola Company	Grand Prairie	TX	Beverages	Exp.			Hixson	17
Coca-Cola Company	Milesburg	PA	Beverages	Ren.			Hixson	16
Coca-Cola Company	Northampton	MA	Beverages	Ren.			Hixson	17
Coca-Cola Company	Waco	TX	Beverages	Ren.			Hixson	17
Coca-Cola Consolidated	Anderson	SC	DC	New	150	14		8/16
Colavita Foods	Dixon	CA	Food processing (Italian)	Ren.	100	3		6/16
ColdPoint Logistics	Kansas City	KS	Cold storage	New	163			9/16
Common Roots Brewing Company	South Glens Falls	NY	Beer	Exp.				11/16
ConAgra Foods	Archbold	OH	Packaged foods	Exp.				5/16
ConAgra Foods	Boardman	OR	Potato products	Exp.		30		5/16
ConAgra Foods	Buckner	KY	Prepared foods	Exp.			Hixson	16
ConAgra Foods	Cedar Rapids	IA	RTE foods, cereals, bars	Exp.		10		12/16
ConAgra Foods	Dothan	AL	Flour	Exp.		15		1/16
ConAgra Foods	Hanover	PA	Snack foods	Ren.	5	2		7/16
ConAgra Foods	Indianapolis	IN	Prepared foods	Ren.			Hixson	16
ConAgra Foods	Lancaster	PA	Snack foods	Ren.	5	2		8/16
ConAgra Foods	Louisville	KY	Frozen foods	Ren.			Hixson	16
ConAgra Foods	South Beloit	IL	Cookies	Exp.		15		16
ConAgra Foods	St. Louis	MO	Dairy	Ren.			Hixson	16
ConAgra Foods	Troy	OH	Meats	Ren.			Hixson	16
ConAgra Foods	Waterloo	IA	Snack seeds	Exp.	99	50		12/16
ConAgra Foods	Womelsdorf	PA	Candy	Ren.	3	3		6/16
ConAgra Foods (Lamb Weston)	Richland	WA	Frozen French fries	Exp.		200		8/16
Consolidated Grain and Barge Company	Mount Vernon	IN	Soybean processing, milling	Exp.		31		11/16
Constellation Brands	Acampo	CA	Wine Bottling	Ren.		1	Haskell	12/16
Constellation Brands	Madera	CA	Wine Bottling	Ren.		2	Haskell	3/16
Constellation Brands	Mexicali	MX	Brewery	New	1500			1/16
Constellation Brands	Nava, Coahuila	MX	Beer	Exp.			Alberici , Gilbane, Vestal, Leidos, Ziemann	12/17
Cooper Farms	St. Henry	OH	Poultry	Exp.	92	18	Tippmann Group	2/17
Cooper Farms	Van Wert	OH	Poultry processing	Exp.	20	5		1/17
Corbion	Dolton	IL	Emulsifiers	Exp.				6/16
Core-Mark International	Leitchfield	KY	DC for fresh, frozen food	Exp.		3		16
Country Boy Brewery	Georgetown	KY	Brewery	New	20	4		16
Country Oven Bakery	Bowling Green	KY	Bread, rolls, Danish, etc.	Exp.		4		12/16
Cowgirl Creamery	Petaluma	CA	Cheese	New	20		E.A. Bonelli + Associates, Inc.	16
CP Kelco	Okmulgee	OK	Gellan gums	Exp.				3/17
Curly's Foods (sub. of Smithfield Foods)	Sioux City	IA	Processed meats	Exp.		9		12/16
Custom Food Products	Owingsville	KY	Meat processing/packing	Exp.		10		12/16
<b>D</b>								
D&W Fine Pack	Fountain Inn	SC	Contract packager	Exp.		20		2/16
Daily's Premium Meats	St. Joseph	MO	Pork	New	140	42	Epstein	8/16
Dairy Farmers of America	Cabool	MO	Dairy	Exp.	50	30		11/16
Dairy Farmers of America	Cass City	MI	Milk products (Ph. 2)	Exp.				6/16
Daisy Brand	Paris	TX	Dairy	New	10			6/16

# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>D</b>								
Daisy Brand	Wooster	OH	Sour cream	New	200	125	Dennis Group	9/16
Daisy Brand	Wooster	OH	Cottage cheese	New	100	53	Dennis Group	8/18
Dakota Provisions	Huron	SD	Turkey	Exp.	30		Gleeson Constructors & Eng.	16
Dakota Specialty Milling	Fargo	ND	Flours	Exp.				2/17
Dannon	West Jordan	UT	Yogurt	Ren.	2	1	Dennis Group	8/16
Dannon	West Jordan	UT	Yogurt	Ren.	1	1	Dennis Group	6/17
Darigold	Sunnyside	WA	Milk powder	Exp.	30			1/16
Dean Foods	Hammond	LA	Dairy	Ren.	20			8/16
Deli Brands of America	Baltimore	MD	Meat	Exp.			Food Plant Engineering	4/16
DeMet's Candy	Big Flats	NY	Candy	Exp.	20			6/16
Denali Ingredients	New Berlin	WI	Ice cream/food ingredients (Ph. 1)	Exp.		6		8/16
Denali Ingredients	New Berlin	WI	Ice cream/food ingredients (Ph. 2)	Exp.		6		18
Dennis Food Service	Bangor	ME	Cold storage	Exp.	30	5		12/16
Des Moines Cold Storage	Des Moines	IA	Cold storage	Exp.	111	17		8/16
Deschutes Brewery	Roanoke	VA	Beer	New		85		3/16
Develey Mustard & Condiments	Dyersburg	TN	Condiments	New	100	20		5/16
Diageo	Shelby	KY	Bourbon	New		115		7/16
DiCarlo Distributors	Holtsville	NY	Cold storage	Exp.	10	2	Food Tech	11/17
Direct Pack	Rockingham	NC	Contract packager fruits, salads	New		13		8/16
Dizzy Pig BBQ Company	Manassas	VA	Spice grinding/processing	Exp.		3		6/16
Dominion Packaging	Sandston	VA	Contract packager (Anheuser-Busch)	Exp.		25		12/16
Dot Foods	Bullhead City	AZ	DC (frozen and dry)	New	163			6/16
Dot Foods	Williamsport	MD	Prepared foods (Phase 2)	Exp.	100	35		3/18
Dovetail Brewery	Chicago	IL	Beer	New		22		8/16
Driscoll Foods	Wayne	NJ	DC	Ren./Exp.	507		Hollister Construction Services	5/16
Dustbowl Brewery	Turlock	CA	Beer	Exp.	30			1/16
<b>E</b>								
E. & J. Gallo Winery	Livingston	CA	Wine Bottling	Exp.		31	Haskell	9/17
E.G. Emil's & Son	Philadelphia	PA	Poultry	Exp.			Food Plant Engineering	4/16
Earthrise Nutritionals (DIC Corp.)	Irvine	CA	Blue food coloring (algae)	Exp.		13		11/16
Earth's Creation	Travelers Rest	SC	Nutritional supplements	New	99	3		1/16
East West Tea Company	West Eugene	OR	Yogi teas	New	175	20		6/16
Eby-Brown	Shepherdsville	KY	Cold storage	Ren.	40	5	Food Tech	1/17
Econo-Pak	Milford	PA	Contract food packager	Ren./Exp.	200			11/16
Ehrmann Commonwealth Dairy	Brattleboro	MA	Dairy products	Exp.		20		12/16
Ellicottville Brewing Company	Ellicottville	NY	Brewery	Ren.				6/16
Ellicottville Brewing Company	Little Valley	NY	Brewery	Exp.	75	6		12/16
Eimer Chocolate	Ponchatoula	LA	Chocolates, candies	Exp.	70	40		8/16
Enjoy Life Foods	Jeffersonville	IN	Chocolate	New	200	39	Berry-Prindle Architects	6/16
Escambia Peanut Company	Flomaton	AL	Peanut processing	Exp.		7		1/16
Essentia Protein Solutions	Harlan	IA	Protein ingredients (wastewater)	New	5		Gleeson Constructors & Eng.	3/16
<b>F</b>								
F&S Produce	Rosenhayn	NJ	Produce	New			Hixson	16
Fairbault Foods	Fairbault	MN	Bean processing	New	635	100	Stellar	2/16
Farmer Brothers	Dallas	TX	Coffee roasting	Ren.	135	22	Haskell	3/17
Farmer Brothers	Dallas	TX	Coffee	New		2		1/16

# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>F</b>								
Farmer Brothers	Dallas	TX	Coffee roasting	New.	500		Faithful+Gould/Haskell	12/16
Ferrero Canada	Brantford	ON	Nutella	Exp.		36		8/16
Fieldbrook Foods	Dunkirk	NY	Ice cream	Exp.		4		12/16
Finlays	N. Kingstown	RI	Tea extraction	New	30	9	CMC Design-Build, Inc.	12/16
First Choice Ingredients	Menomonee Falls	WI	Dairy flavors	Exp.	83			9/16
Fitlife Foods	Plant City	FL	Prepared meals	New	15			1/16
Foster Farms	Demopolis	AL	Corn dogs	Exp.		2		1/16
Fresco Foods	Tampa	FL	Prepared meals	New	12	52		11/16
Freshly	Laurel	MD	Fresh meals	Ren.	170	9	Food Tech	10/17
Freshpet	Bethlehem	PA	Dog and cat food	Exp.	32	25		16
Fricks Quality Meats	Washington	MO	Meat processing	Exp.	18	5	ESI Design Services	06/18
Frito Lay	Aberdeen	MD	Snacks (wastewater treatment)	Exp.				16
Frito Lay	Aberdeen	MD	Snack food lines	Exp.				16
Frito Lay	Aberdeen	MD	Distribution	Exp.	43	14	Haskell	12/16
Frito Lay	Dallas	TX	Snacks	Exp.	257	1	Haskell	9/17
Frito Lay	Frankfort	ID	Snacks/packaging	Ren.		1		8/16
Frito Lay	Jonesboro	AR	Snacks	Exp.	100	150		9/16
Frito Lay	Jonesboro	AR	Snack foods	Exp.	80	46		18
Frito Lay	Jonesboro	AK	Distribution	Exp.	84	20	Haskell	1/16
Frito Lay	Jonesboro	AK	Distribution	Ren.	42	13	Haskell	12/16
Frito Lay	Rancho Cucamonga	CA	Distribution	Ren.	131	22	Haskell	3/17
Fromm Family Foods	Mequon	WI	Beer	New		50		12/16
Fromm Family Foods	Mequon	WI	Pet foods logistics	Exp.		55		12/16
Frontier Co-op	Belle Plaine	IA	Herbs, spices, teas	Exp.		3		12/16
Frontier Co-op	Norway	IA	Flavorings	Ren.		8		12/16
Frontier Co-op	Urbana	IA	Essential oils	Exp.		4		12/16
<b>G</b>								
Galaxy Desserts	Richmond	CA	Bakery	New	60		E.A. Bonelli + Associates, Inc.	16
Gay Lea Foods	Teeswater	ON	Creamery	Exp.		60		11/16
Gelita USA	Sioux City	IA	Gelatine products	Exp.		22		11/16
General Mills	Albuquerque	NM	Cereal	Ren.				12/16
General Mills	Belvidere	IL	Snack foods	Exp.	45			5/16
General Mills	Buffalo	NY	Cereal	Ren.				05/16
General Mills	Carson	CA	Yogurt	Ren.				4/16
General Mills	Carson	CA	Yogurt	Ren.				5/16
General Mills	Carson	CA	Yogurt	Ren.				2/16
General Mills	Carson	CA	Dairy	Exp.				12/16
General Mills	Chanhassen	MN	Bakery	Ren.				7/16
General Mills	Covington	GA	Cereal	Ren.				12/16
General Mills	Fridley	MN	Cereal	Ren.				9/16
General Mills	Hannibal	MO	Soup	Ren.				9/16
General Mills	Joplin	MO	Freezer	Ren.				6/16
General Mills	Montréal	QC	Dairy	Ren.				12/16
General Mills	Murfreesboro	TN	Yogurt	Ren.				5/16
General Mills	Murfreesboro	TN	Yogurt	Ren.				8/16
General Mills	Murfreesboro	TN	Baked snacks	Ren.				12/16
General Mills	Reed City	MI	Yogurt	Ren.				5/16
General Mills	Reed City	MI	Yogurt	Ren.				10/16

# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>G</b>								
General Mills	Reed City	MI	Yogurt	Ren.				8/16
General Mills	Reed City	MI	Yogurt	Ren.				5/16
General Mills	Reed City	MI	Dairy	Exp.				03/16
General Mills	Wellston	OH	Snacks	Ren.				6/16
General Mills	Wellston	OH	Snacks	Ren.				10/16
General Mills	Wellston	OH	Snacks	Ren.				8/16
General Mills	Wellston	OH	Frozen foods	Ren.				12/16
Georgetown Trading Co.	Lexington	KY	Whiskey	Ren.				8/16
Gifford's Famous Ice Cream	Skowhegan	ME	Ice cream	Exp.	4	2	E. W. Littlefield and Sons	4/16
Ginsberg's Foods	Ghent	NY	Cold storage warehouse	Exp.	65		CMC Design Build	1/16
Glanbia	Clovis	NM	Cheese, whey	Exp.		140		17
Glory Bee	West Eugene	OR	Honey, sweeteners	Exp.	70			6/16
Golden Boy Foods	Troy	AL	Peanut butter products	Exp.	45			2/16
Golden States Food Corp.	Opelika	AL	Meat processing	New	165	63		4/16
Good City Brewing	Milwaukee	WI	Craft beer	New	7			6/16
Gordon Food Service	Kannapolis	NC	DC	New	300	58		2/16
Gordon Food Service	Plant City	FL	DC	Exp.				2/16
Gotham Greens	Queens	NY	Produce	New	60			3/16
Gourmet Foods International	Kenosha	WI	DC	New	35			3/16
Goya Foods	Secaucus	NJ	Rice-mixture products	New	240	250		12/16
Grand River Foods	Cambridge	ON	Chicken wings, etc.	Exp.		13		1/16
Grand River Foods	Cambridge	ON	Hamburgers	Exp.	16			6/16
Grande Cheese	Lomira	WI	Cheese	New	150	17	Tippmann Group	5/16
Granny's Poultry	Blumenport	MB	Poultry processing	Exp.		37		3/16
Green Flash Brewing Company	Virginia Beach	VA	Beer	New	58	20		11/16
Greenco	Greenville	SC	Beverage DC	Ren.	130			2/16
Greencore USA	Des Moines	WA	RTE meals	New	85	13	CMC Design-Build, Inc.	6/16
Greenyard Foods	Swedesboro	NJ	Produce/fruits packing	New				7/16
Gulf Coast Produce Distributors	Foley	AL	Food distribution	Exp.		2		1/16
<b>H</b>								
H.T. Hackney	Milton	WV	Wholesale grocery DC	New	246			16
Hadley Farms	Waynesboro	PA	Freezer for baked goods	New	105			10/16
Harmony House Foods	Franklin	TN	Freeze-dried, camping foods	Exp.	32			7/16
Harris Ranch	Selma	CA	Meats	New	281	10		16
Harry's Fresh Foods	Nashville	TN	Frozen soups, entrées, desserts	New	200	34		12/16
Hearthside Food Solutions	Boise	ID	Nutritional bars	Ren.	185			9/16
Heaven Hill Distilleries	Bardstown	KY	Alcoholic beverages	Exp.		29		12/16
Heaven Hill Distilleries	West Louisville	KY	Alcoholic beverages	Exp.	5	16		2/16
H-E-B	Corpus Christi	TX	Bakery	Ren.	65	4	Dennis Group	5/17
H-E-B	Houston	TX	Bakery	Ren.	15	2	Dennis Group	4/17
H-E-B	Houston	TX	Bakery	Ren.	25	2	Dennis Group	9/17
H-E-B	San Antonio	TX	Chicken	New		3		2/16
H-E-B	San Antonio	TX	Beef, pork	Ren.		3		2/16
HEC Properties (HEC Global)	Cleveland	OH	Food DC	Ren.		6		1/16
Heidelberg Foods	St. Joseph	ON	Sausage, meats	Exp.	12			1/16
Heinen's Fine Foods	Warrensville Heights	OH	Rte meals	New	65	15	CMC Design-Build, Inc.	7/16
Henningsen Cold Storage	Salem	OR	Warehouse/DC	New	166	27		4/17
Herbalife	Winston-Salem	NC	Nutrition products	Exp.				7/16
Hershey Chocolate of Virginia	Stuarts Draft	VA	Chocolate	Exp.		17		8/16

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>H</b>								
High Country Beverage	Johnstown	CO	Refrigerated beer warehouse	Exp.			Wiegmann Associates	12/16
Hillshire Brands (sub. of Tyson Foods)	Alexandria	KY	Hot dogs, lunch meat	Exp.		35		12/16
Hillshire Brands (sub. of Tyson Foods)	Tarboro	NC	Bakery	Exp.		28		3/16
Hoff's Bakery	Malden	MA	Cakes	New	75	8	CMC Design-Build, Inc.	4/16
Hollandia Dairy	San Marcos	CA	Dairy	Exp.			E.A. Bonelli + Associates, Inc.	16
Holly Poultry	Baltimore	MD	Poultry processing	New	38		Merritt Construction Services	10/16
Home Chef	DeKalb	GA	Meal kits	New	140	3		10/16
Honeyville Inc.	Honeyville	UT	Co-packer	Exp.		23		4/16
Hormel Foods	Dubuque	IA	Bacon toppings/meats	Exp.		36		6/16
Hormel Foods	Osceola	IA	Bacon	Ren./Exp.	14	7.5	Gleeson Constructors & Eng.	16
Horn Beverage Company	Troy	AL	Beer distribution	Exp.		1		1/16
House of Raeford Farms	Greenville	SC	Poultry processing	Ren.		46		9/16
HP Hood	Oneida	NY	Dairy	Exp	50	5	CMC Design-Build, Inc.	3/16
HP Hood	Vernon	NY	Dairy	Ren	5	1	CMC Design-Build, Inc.	12/16
HS Baking	Joplin	MO	Snacks, crackers	Ren.		8		9/16
HS Baking	Joplin	MO	Bakery	New		8		7/16
<b>I</b>								
Ice Cube LLC (Raw Seafoods)	Fall River	MA	Seafood cold storage DC	New		15		12/16
Imperial Sugar	Port Wentworth	GA	Refined sugar	Ren.	8	15		9/17
Imperial Sugar	Port Wentworth	GA	Refined sugar	Ren.	3	10		9/17
Imperial Sugar	Port Wentworth	GA	Refined sugar	Ren.		4		9/17
Impossible Foods	Oakland	CA	Burger patties	Exp.	65	19	Haskell	6/17
Improved Nature LLC	Garner	NC	Vege.-based meat substitutes	New		3		9/16
Indiana Packers	Delphi	IN	Meat	Exp.	99	22	Tippmann Group	16
Indiana Packers Corporation	Delphi	IN	Pork	Exp.	19	41	Epstein	1/16
Industria Vidriera de Coahuila	Nava, Coahuila	MEX	Glass bottles for beer	Exp.			Alberici, Gilbane, Leidos	12/17
In-N-Out Burgers	Lancaster	TX	Burger patties	New	166	54	Haskell	5/16
International Delights	Clifton	NJ	Bakery	Exp.			Food Plant Engineering	7/17
Inventure Foods	Lynden	WA	Berry processing	New	35			4/16
Iowa Cold Storage	Altoona	IA	Freezer	Exp.	117		Gleeson Constructors & Eng.	16
Ippolito Fruit and Produce Ltd.	Burlington	ON	Spinach	Exp.				12/16
iSpice	Jackson	AL	Spices grinding, blending	New		9		5/16
I-Supply	Dayton	OH	Cold storage	Exp.	30	5	Food Tech	10/17
Italgrani USA	St. Louis	MO	Flour	Exp			Alberici	2/18
<b>J</b>								
J & B Foods	St. Michael	MN	Beef	Exp.	100	15	Food Tech	8/17
J.M. Smucker Company	Chico	CA	Natural grains, pasta	Exp.				4/16
J.M. Smucker Company	Lexington	KY	Peanut butter	Exp.		30	Dennis Group	16
J.M. Smucker Company	Lexington	KY	Peanut butter	Exp.		1	Dennis Group	16
J.M. Smucker Company	Longmont	CO	Frozen sandwiches	New	375	200	Dennis Group	6/19
J.M. Smucker Company	Memphis	TN	Snacks	Ren.		8	Dennis Group	16
J.M. Smucker Company	Orrville	OH	Jams, jelly, preserves and ICT	Ren.	2	2		4/16
J.M. Smucker Company	Scottsville	KY	Frozen sandwiches	Exp.		28	Dennis Group	11/16
J.M. Smucker Company	Scottsville	KY	Bakery	Exp.		1	Dennis Group	11/16
Jack Daniels	Lynchburg	VA	Distillery	Exp.		140		4/16
Jack's Run Brewery	Purcellville	VA	Brewery	New		1		2/16
James E Pepper Distilling Company	Lexington	KY	Whiskey	Exp.		1		12/16

# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>J</b>								
JBS USA LLC	Hyrum	UT	Beef	Exp.	218		Gleeson Constructors & Eng.	5/16
JBS USA LLC	Marshalltown	IA	Carcass cooler	Exp.	15	5	Gleeson Constructors & Eng.	16
JD Food	Fresno	CA	Meat/dairy processing/DC	Exp.	65	11		2/16
Jif Plant	Lexington	KY	Peanut butter	Exp.		11		12/16
Jim Beam Brands	Shepherdsville	KY	Warehouse/DC	Exp.		28		16
JimmyAsh	Kern County	CA	Sandwiches	Ren.	35			10/16
Jones Dairy Farm	Fort Atkinson	WI	Breakfast meats	Exp./Ren.		155		5/16
JTM Food Group	Harrison	OH	Meat	Exp.	76	30	Tippmann Group	7/17
JW Nutritional	Plano	TX	Dietary supplements/ functional foods	New				9/16
<b>K</b>								
Kanan Enterprises (King Nut Co.)	Solon	OH	Nuts	Exp.		3		1/16
Kansas City Sausage Company	Godwin	NC	Meat	Ren.		30		9/17
KC Sausage	Kansas City	MO	Beef/pork	Exp.				4/16
KeHE Distributors	Aurora	CO	DC for organic products	New	270			10/16
Kellogg's	Cary	NC	Cheez-It	Exp.	24	6	Haskell	10/16
Kellogg's	Jackson	TN	Snacks	Ren.	45	65	Dennis Group	6/17
Kellogg's	Jackson	TN	Chips	Ren.	17	20		11/16
Kellogg's	Muncy	PA	Multigrain bar	Ren.		4		5/16
Kellogg's	Muncy	PA	Pop-Tart	Ren.		5		3/17
Kellogg's	Zanesville	OH	Frozen food	Ren.	1	2		12/16
Kellogg's	Jackson	TN	Snack foods	Ren.				12/16
Kendall Packaging	Pittsburgh	KS	Privatel label packaging	Exp.		17		9/16
Ken's Foods	Lebanon	IN	Sauces, dressings	New		90		11/16
Kent Quality Foods	Jamestown Charter Twp.	MI	Franks, specialty meats	New		35		5/16
Kentucky Fresh Harvest	Lincoln Cty	KY	Cherry tomatoes	New		11		11/16
Kerry	Greenville	MO	Liquid smoke, flavors	Exp.		14		12/16
Kerry	Rochester	MN	Flavors	Exp.	5	29		12/16
Keurig Green Mountain	Knoxville	TN	Beverages	Ren.			Hixson	16
King's Command Foods	Versailles	OH	Frozen foods	Exp.	8			3/16
Koch Foods	Fairfield	OH	Poultry processing	Exp.				6/16
Kohl Wholesale	Quincy	IL	Cold storage	New	150	15	Food Tech	8/17
Kona Brewing	Kailua-Kona	HI	Brewery	New		20		3/16
Kraft Foods	Coshocton	OH	Prepared foods	Exp./Ren.	87		Gleeson Constructors & Eng.	5/16
Kraft Foods	Coshocton	OH	Prepared foods (engine room)	Exp.	4		Gleeson Constructors & Eng.	2/16
Kraft Foods	Coshocton	OH	Prepared foods	Exp.	2.5		Gleeson Constructors & Eng.	16
Kraft Heinz	Columbia	MO	Meat	Exp.	50		Dennis Group	10/17
Kraft Heinz	Davenport	IA	Meats	New		200		1/16
Kraft Heinz	Garland	TX	RTE meals	Ren.	200	25	Dennis Group	5/17
Kraft Heinz	Holland	MI	Mustard	Exp.		17		8/16
Kraft Heinz	Kirksville	MO	Cold cuts, oil, dry spices	Exp.				9/16
Kraft Heinz	New Ulm	MN	Velveeta production	Ren./Exp.	60	100	Dean Snyder Construction	2/16
Kraft Heinz	Newberry	SC	Meats	Ren.			Hixson	17
Kraft Heinz	Tulare	CA	Dairy	Ren.			Hixson	16
Krinos Foods	Bronx	NY	Greek, Mediterranean foods	New	100	25		9/16
Kroger	Compton	CA	Ice cream	Ren.	10	5	Dennis Group	11/17
Kroger	Greensburg	IN	Prepared foods	Ren.			Hixson	17
Kroger	Indianapolis	IN	Dairy	Exp.			Hixson	16

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>K</b>								
Kuna Food Service	Dupo	IL	Cold storage	Exp.	20	3	Food Tech	6/17
<b>L</b>								
La Colombe Torrefaction	Norton Shores	MI	Coffees	New		11		9/16
Labatt Food Service	San Antonio	TX	Cooked meat products	New	65	28		10/16
Lakeside Produce	Leamington	ON	Peppers, tomatoes, cucumbers	Exp.		1		3/16
Land O'Lakes	Hillsboro	WI	Butter	Exp.	20	15		18
Land O'Lakes	Keil	WI	Dairy	Exp.				12/16
Land O'Lakes	Tulare	CA	Dairy	Exp.				12/16
Land O'Lakes	Turlock	CA	Dairy products (welfare)	Exp.			E.A. Bonelli + Associates, Inc.	16
Lawlers Barbecue	Ardmore	AL	Sauces and related products	New		3		1/16
Lebanon Valley Cold Storage & DC	Lebanon	PA	Bakery (phase 2)	New	180	19		17
Lebanon Valley Cold Storage & DC	Lebanon	PA	Frozen warehouse (phase 1)	New	120	19		17
Leclerc Foods	Kingsport	TN	Granola bars	Exp.		49		12/16
Leprino Foods	Allendale	MI	Cold Storage	Exp.			E.A. Bonelli + Associates, Inc.	16
Leprino Foods	Denver	CO	Cheese	Exp.			E.A. Bonelli + Associates, Inc.	16
Leprino Foods	Greeley	CO	Whey	Exp.			E.A. Bonelli + Associates, Inc.	16
Leprino Foods	Tracy	CA	Cheese	Exp.			E.A. Bonelli + Associates, Inc.	16
Lesaffre Yeast Corp (et.al) JV	Cedar Rapids	IA	Yeast, yeast extracts	Exp.		51		12/16
Limehouse Produce Company	Charleston	SC	Produce processing	Ren.	128	4		3/16
Limehouse Produce Company	Charleston	SC	Produce warehouse/DC	New	43	4		3/16
Lipari Foods	Warren	MI	Meat	New	260	30	Tippmann Group	16
Litehouse Foods	Sandpoint	ID	Salad dressings (cooler)	Exp.	26	6		11/16
Lollicup USA	Rockwall	TX	Warehouse replaces Wilmer	New	450			3/18
Lollicup USA	Wilmer	TX	Teas, snacks, supplies warehouse	New	150			5/16
Lone Star Cold Storage	Richardson	TX	Refrigerated warehouse	Exp.				6/16
Lotus Bakeries	Mebane	NC	Baked goods	New	150		Dennis Group	12/18
Luxco	Bardstown	KY	Distillery	New		35		5/16
<b>M</b>								
MacBeer Group	Ogden	UT	Brewery	New	10	1		10/16
Magnolia Vegetable Processors	Brundidge	AL	Pickled and salsa products	New				2/16
Maker's Mark	Loretto	KY	Bourbon	Exp.		67		1/16
Mane Flavors	Lebanon	OH	Ingredients	Exp.			Hixson	16
Mane Flavors	Lebanon	OH	Ingredients	Exp.			Hixson	17
Maple Leaf Foods	Winnipeg	MB	Bacon	Ren.-Exp.		35		7/16
Marquez Brothers	Hanford	CA	Cheese	Exp.	50		E.A. Bonelli + Associates, Inc.	16
Mars Chocolate NA	Newmarket	ON	Malterers Candy	Exp.	57	52	A. Fazel Architect Inc.	8/16
Mars Chocolate NA	Topeka	KS	Candy manufacturing	Exp.	91	41		10/16
Mars Petcare	Ft. Smith	AR	Pet foods	Exp.		72		12/16
Martin Brothers	Cedar Falls	IA	Food DC	Exp.	77	16		12/16
Martingnetti Companies	Taunton	MA	Wine, spirits DC	New	680	100		16
Marx Brothers	Birmingham	AL	Coconut processing	Exp.	40	5		1/16
Mary's Gone Crackers	Reno	NV	Organic, gluten-free snacks	New				8/16
Mast Chocolate	Brooklyn	NY	Chocolate	Exp.		68		6/16
Masters Gallery Foods	Oostburg	WI	Cheese	New	150	30		12/16
Mayer Brothers	Somerset	NY	Cider, juice bottling	Exp.	40			9/16
McCain Foods	Florenceville-Bristol	NB	Frozen French fries	Exp.	32	65		8/17
McCall Farms	Florence	SC	Glory Foods Brand et al	Exp.		23		8/16



# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>M</b>								
McKee Foods	Collegedale	TN	Snack foods	Exp.		100		1/16
McLane	Findlay	OH	Grocery DC	New		119		2/16
McLane Dothan	Cottonwood	AL	Grocery DC	Exp.	80	17		11/16
Meijer	Newport	MI	Freezer	Exp.	165	16	Dennis Group	5/17
Michaels Foods	Lenox	IA	Prepared foods, ingredients	Ren.	7		Gleeson Constructors & Eng.	16
Michters Distillery	Louisville	KY	Distillery	Exp.		1		16
Middle West Spirits	Columbus	OH	Distillery	Exp.		3		11/16
Midwest Fresh Logistics	Dell Rapids	SD	Produce DC	New	20			3/16
MillerCoors	Shenandoah	VA	Brewery	Exp.		60		8/16
Mission Foods	Grand Prairie	TX	Tortillas + DC	Exp.	766	200		2/16
Miyoko's Kitchen	Petaluma	CA	Vegan cheese	New	27		E.A. Bonelli + Associates, Inc.	16
Mondelez	Chicago	IL	Baked goods	Ren.			CRB	17
Mondelez	Fair Lawn	NJ	Snack foods	Ren.	5	8	Dennis Group	8/16
Mondelez	Toronto	ON	Bakery	Exp.				12/16
Monogram Foods	Bristol	IN	Meats	Exp.				9/16
Moon Ridge Foods	Pleasant Hope	IN	Pork processing	New	100	54		9/16
More Than a Bakery, LLC	Versailles	KY	Bakery, snack food	New	202	57	Gray Construction	9/17
Morinaga Company	Mebane	NC	Blending syrup, sugar, flavors	New	120	48		8/16
Mount Franklin Foods	Live Oak	SC	Candy	Exp.		10		12/16
Mountaire Farms	Siler City	NC	Poultry processing	Ren.				6/16
<b>N</b>								
N. K. Hurst	Zionsville	IN	Beans, soups	Exp.				3/16
Naturally Recycled Proteins	Montpelier	IN	Pet food ingredients	Exp.		10		7/16
Nellson LLC	Ontario	CA	Nutrition bars, powders	New	300	45		11/16
Nestlé	Bakersfield	OH	Ice cream	Exp.				16
Nestlé	Dublin	OH	Various foods	Exp.				16
Nestlé	Franklin Park	IL	Confections	Ren.				16
Nestlé	Ft. Wayne	IN	Frozen foods	Ren.			Hixson	17
Nestlé	Gaffney	SC	Frozen foods	Ren.			Hixson	17
Nestlé	Gaffney	SC	Frozen foods	Ren.			Hixson	16
Nestlé	Laurel	MD	Ice cream	Ren.			Hixson	16
Nestlé	Laurel	MD	Ice cream	Ren.			Hixson	16
Nestlé	Little Chute	WI	Frozen foods	Ren.			Hixson	16
Nestlé	London	ON	Ice cream	Ren.			Hixson	17
Nestlé	London	ON	Ice cream	Exp.			Hixson	17
Nestlé	Medford	WI	Frozen foods	Ren.			Hixson	16
Nestlé	Modesto	CA	Dairy	Exp.			Hixson	16
Nestlé	Modesto	CA	Dairy	Ren.			Hixson	17
Nestlé	Modesto	CA	Dairy	Ren.			Hixson	17
Nestlé	Solon	OH	Prepared foods	Ren.				16
Nestlé Purina	Allentown	PA	Pet food	Exp.	6	13	Haskell	3/16
Nestlé Purina	South Whitehall	PA	Pet food warehouse	Exp.	53			8/16
Nestlé Waters North America	Allentown	PA	Water bottling	Exp.	100	4	Haskell	4/17
Nestlé Waters North America	Hawkins	TX	Water bottling	Ren.	680	39	Haskell	4/17
Nestlé Waters North America	Poland Spring	ME	Bottling	Ren.			Epstein	16
New Glarus Brewing Company	New Glarus	WI	Distillery	Exp.				4/16
New Riff Distilling	Bellevue	KY	Craft distillery	Exp.		12		12/16
Niagara Bottling	Bloomfield	CT	Bottled water	New				3/16

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>N</b>								
Niagara Bottling	Las Lunas	NM	Water bottling	Ren.	158	5	Haskell	3/17
Niagara Bottling	Meadowville	VA	Water (Phase 2)	Exp.		50		10/16
Niagara Bottling	Meadowville	VA	Water (Phase 1)	New	450	95		10/16
Norac SA	Forks	PA	French-style baked goods	New	79			3/16
Nor-Am Cold Storage	Le Mars	IA	Cold storage	Exp.	120		Gleeson Constructors & Eng.	12/16
Nordic Logistics and Warehousing	Savannah	GA	Cold storage, blast freezing	Exp.	200			4/16
North Country Smokehouse	Claremont	NH	Smoked meats	New	85	19	CMC Design-Build, Inc.	7/16
Nueske's Applewood Smoked Meats	Wittenberg	WI	Smoked meats	Exp.	153	34		3/16
NuTek Food Service	Fargo	ND	Potassium-based salt	New	100			3/16
Nutramax	Lancaster	SC	Nutritional supplements	Exp.		15		3/16
NutriFresh Services	Edison	NJ	Juices, drinks	New				2/16
Nutriom	Panora	IA	Egg products	Ren.		3		1/16
<b>O</b>								
Octopi Brewing	Milwaukee	WI	Beer	New	18			5/16
Odom Corp.	Anchorage	AK	Beverage DC	New	240			8/16
OFD Foods	Henrietta	NY	Freeze-dried foods	New	50	25		5/16
OK Foods	Oklahoma City	OK	Fully cooked chicken	Exp.				2/16
Olam	Firebaugh	CA	Dried spices	Exp.	8	5		4/16
Olymel	Vallée-Jonction	QC	Ham deboning	Exp.		3		12/16
Olymel/Groupe Robitaille	Yamachiche	QC	Pork slaughtering/processing	Exp.		80		10/16
Orca Bay Seafoods	Federal Way	WA	Seafood	New	75			10/16
Oregon Ice Cream	Eugene	OR	Ice cream	Exp.		10		6/16
OSI Group	Chicago	IL	Protein products	Ren.	200			8/16
<b>P</b>								
Pactiv (Prairie Brookwood)	Huntersville	NC	Warehouse/DC	Exp.	325	14		12/16
Palace Foods	Plum Branch	SC	Specialty foods	New	20	5		11/16
Paradise Locker	Trimble	MO	Meat processing	Exp.	10			2/16
Paramount Farms	Madera	CA	Pistachios	Exp.				1/16
Parker Products	Fort Worth	TX	Inclusions, ingredients	New	90			1/18
Pata Negra	Gloversville	NY	Cured meats	Exp.		5		8/16
Patrick Cudahy	Cudahy	WI	Pork	Exp.	12	12	Epstein	3/16
Patriot Beverage LLC	Littleton	MA	Pepsi bottler	Exp.		9		12/16
Patriot Brands	Pleasureville	KY	Distillery	New		5		8/17
Peco Foods	Pocahontas	AR	Poultry	New	200			5/16
Peet's Coffee and Tea	Suffolk	VA	Coffee, tea	New		59		12/16
Pegasus Foods	Rockwall	TX	Contract manufacturer	New	80			5/16
Pegasus Foods	Rockwall	TX	Frozen foods	Exp.		10		3/16
Pepsi Bottling Ventures	Harrisburg	NC	DC	New	200			6/16
Pepsi Bottling Ventures	St. Pauls	NC	DC	New		17		12/16
Pepsico	Leflore Cty.	MS	DC	New				12/16
Perdue Foods	Rockingham	NC	Poultry	Exp.		11		2/16
Performance Food Group	Temple	TX	Fresh cut produce	Exp.	76	10		4/16
Pharmavite	Opelika	AL	Supplements	Exp.		7		1/16
Pilgrim's Pride	Hickory	KY	Poultry processing	Exp.		39		12/16
Pilgrim's Pride	Mayfield	KY	Poultry processing	Exp.		24		8/16
Pine Ridge Farms (Kansas City Sausage)	Des Moines	IA	Pork	Exp.			Epstein	16
Piney River Brewing	Bucyrus	MO	Beer	Exp.		1		10/16

# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>P</b>								
Pinnacle Foods	Fayetteville	AR	Frozen foods (EVOL brand)	Exp.				10/16
Pinnacle Foods	Hagerstown	MD	Prepared foods	Exp.			Hixson	17
Pinnacle Foods	Hagerstown	MD	Prepared foods	Ren.			Hixson	16
Pinnacle Foods	Hagerstown	MD	Prepared foods	Exp.			Hixson	18
Pond River Enterprises	Graham School	KY	Distillery	New		1		1/16
Port City Brewing	Alexandria	VA	Craft brewery	Exp.		3		8/16
Preferred Freezer Services	Federal Way	WA	Warehouse/DC	New	314			10/16
Preferred Freezer Services	Pasadena	TX	Refrigerated warehouse/DC	New				3/17
Premium Brands Holdings Corp.	Phoenix	AZ	Sandwiches	New	212	29		6/17
Premium Waters	Hinds County	MS	Bottled water	New		25		10/16
Prestage Farms	Eagle Grove	IA	Pork	New	675	280	Epstein	6/18
Pretzels, Inc.	Plymouth	IN	Baking	New	45		Austin	4/17
Prime Pork	Windom	MN	Pork processing	New		20		2/16
Pt. Reyes Farmstead Cheese	Petaluma	CA	Cheese	New	15		E.A. Bonelli + Associates, Inc.	16
Pure Foods	Kingsport	TN	Healthy snacks	New	88			1/16
Purnell Sausage	Louisville	KY	Meat	Ren.			Food Plant Engineering	1/16
<b>Q</b>								
Quality Cheese	Orangeville	ON	Cheese	Exp.		2		6/16
Quality Custom Packaging	New Bedford	MA	Private label scallops	Exp.		1		12/16
Quality Food Processors	Denison	IA	Bacon, cooked meats	Exp.		1		12/16

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<b>R</b>								
Ragasa Industrias, SA de CV	Monterrey	MX	Fats and oils processing	New		160		17
RDP Foods	Columbus	OH	Cold storage	Ren.	20	2	Food Tech	9/17
Ready Roast	Madera	CA	Almonds	New	144			1/16
Reser's Fine Foods	Topeka	KS	Prepared foods - salads (ph. 1)	New	300	67		10/16
Reser's Fine Foods	Topeka	KS	Prepared foods - salads (ph. 2)	Exp.		20		10/16
Revelator Coffee Company	Birmingham	AL	Coffee	New		1		1/16
Richelieu Foods	Wheeling	IL	Deki pizza, salad dressings/sauces	Exp.	115			7/16
River Edge Cattle Company	Grayson	VA	Beef, jerky	New		2		10/16
River Ridge Land and Cattle Company, LLC	Independence	VA	Beef and pork processing	Exp.		2		10/16
RMC Distributing Company	Colorado Springs	CO	Refrigerated beer warehouse	Exp.			Wiegmann Associates.	8/16
Roasting Solutions/Verena Street Ciffee	Dubuque	IA	Coffee	New		7		6/16
Rochelle Foods	Rochelle	IL	Bacon	Exp./Ren.	30		Gleeson Constructors & Eng.	9/16
Rodel International	Laredo	TX	Fruit	New	30	4	Food Tech	6/17
Rose Packing Company	Chicago	IL	Beef	Ren.			Epstein	16
Royal Candy Company	Mount Laurel	NJ	Candy	Exp.				2/16
Royal Canin/subsidiary Mars Petcare	North Sioux City	SD	Pet food	New		100		7/16
Ruiz Foods	Florence	SC	Freezer DC	Exp	50			3/16
<b>S</b>								
Sabra Dipping Co.	South Chesterfield	VA	Cold storage	Exp.	40	11		5/17
Sabra Dipping Co.	South Chesterfield	VA	Dips	Ren.	100	22	Dennis Group	10/17
Sanderson Farms	St. Pauls	NC	Poultry deboning	New	180	155		1/16
Saputo Fairy Foods	Murray	KY	Flavored milk, non-dairy creamers	Exp.		7		12/16
Sargento Foods	Elkhart Lake	WI	Cheese	Exp.				1/16
Sargento Foods	Hilbert	WI	Cheese	Exp.	60			10/16
Sargento Foods	Kiel	WI	Cheese	Exp.				1/16
Sazerac Distilleries	Bardstown	KY	Dried grain, whiskey	Exp.		15		12/16
Seaboard Foods - Triumph Foods	Sioux City	IA	Pork	New	860	294	Epstein	7/17
Select Services, LLC	Coopersville	MI	Butter	Exp.	40		E.A. Bonelli + Associates, Inc.	16
Select Services, LLC	Littlefield	TX	Butter and Whey	New	400		E.A. Bonelli + Associates, Inc.	18
Sensient Flavors	Amboy	IL	Ingredients	Exp.	36		ESI Design Services	6/16
Service Cold Storage	Stevens Point	WI	Cold storage	Exp.	97	10	Tippmann Group	10/16
Seyern Peanut Company	Lubbock	TX	Peanut processing	New		9		7/16
Shawnee Canning Company	Frederick	VA	Fruits	Exp.		1		3/16
Simmons Feed Ingredients	Siloam Springs	AR	Pet food ingredients - wet	New	72	35	CRB	7/17
Simmons Feed Ingredients	Southwest City	MO	Pet food ingredients - dry	Ren./Exp.	22	17	CRB	8/18
Simplot	Grand Forks	ND	Potato processing (freezer)	Exp.	110	30		7/16
Simply Essentials	Charles City	IA	Chicken processing	Ren.		30		8/16
Simply Incredible Foods	Menasha	WI	Cranberry snacks	Exp.		5		16
SK Food Group	Columbus	OH	Prepared foods	Exp.		13		11/16
Skally's Old World Bakery	West Harrison	IN	Bagels, pita bread	New	350	40		17
Skidmore Sales & Distributing	Cincinnati	OH	Ingredients	Ren.			Hixson	16
Smithfield Foods	Cudahy	WI	Dry sausages	Exp.	13			3/16
Smithfield Foods	Tar Heel	NC	Meat	Exp.	24	12	Tippmann Group	16
Smithfield Foods	Wilson	NC	Pork	New	200		Epstein	16
SnoTemp Cold Storage	Albany	OR	Cold storage/DC	Exp.				5/16
Snyder's Lance	Franklin	WI	Snacks	Ren.	3	2	Dennis Group	12/17
Snyders-Lance	Charlotte	NC	Snacks	Exp.		38		11/16
Southeast Frozen Foods	Gaston	SC	DC/cold storage	Exp.		6		8/16

# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>S</b>								
Southern Classic Food Group/ Magnolia Veg.	Brundidge	AL	Pickled okra, pickles, relish	New		6		5/16
Southwest Cheese	Clovis	NM	Cheese and whey	Exp.	150		E.A. Bonelli + Associates, Inc.	17
Specialty Beverage of VA (L Knife & Son)	Rockville	VA	Specialty beverage warehouse	New		6		5/16
Spindrift	Tempe	AZ	Beverage	Exp.	5	1	Dennis Group	11/17
Star Kay White	Congers	NY	Flavorings	Exp.	120	20	Dennis Group	10/18
Starbucks	York	PA	DC	Exp.	1200	490		8/16
Stevison Ham	Nashville	TN	Meat	Exp.	30		Food Plant Engineering	7/16
Stone Brewing	Richmond	VA	Beer	New	200	74		1/16
Straight to Ale Brewery	Madison	AL	Brewery	Exp.		3		1/16
Strangeways Brewing Company	Fredericksburg	VA	Beer	New	10	3		12/16
Straus Dairy	Santa Rose	CA	Cheese	New	60		E.A. Bonelli + Associates, Inc.	16
Summit Meat Processing	Science Hill	KY	Meat processing	New		1		12/16
Sun-Tek Pet LLC	Dublin	GA	Dog and cat food	Exp.	40	2		9/16
Surlean Foods	Dallas	TX	Prepared foods	Exp.		8		3/16
Sweet Candy Company	Salt Lake City	UT	Confectionary	Exp.	43			6/16
Swiss Valley Farms	Luana	IA	Cheese	Exp.	49	20		12/16
Synear Foods	Chatsworth	CA	Quick-freeze foods	Ren.	25	5	Austin	5/17
<b>T</b>								
T&E Meats	Harrisonburg	VA	Meats	Exp.		1		11/16
Table Talk Pie (Pieco Holding)	Worcester	MA	Pies	Exp.		8		12/16

## THE ULTIMATE CHOICE IN FLOORING & SEAMLESS WALL COATINGS FOR FOOD & BEVERAGE MANUFACTURING

Find out why so many facility managers choose CastorCrete® & Sani-Wall™ Seamless Wall Coatings!



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Sani-Wall Seamless Wall Coatings offer a durable, sanitary & attractive finish for industrial & institutional walls & ceilings. When combined with fiberglass reinforcement, they produce a water, impact & crack-resistant coating for drywall. Sani-Wall systems are perfect for environments that require an easy-to-clean, seamless surface with excellent impact, chemical & abrasion resistance.



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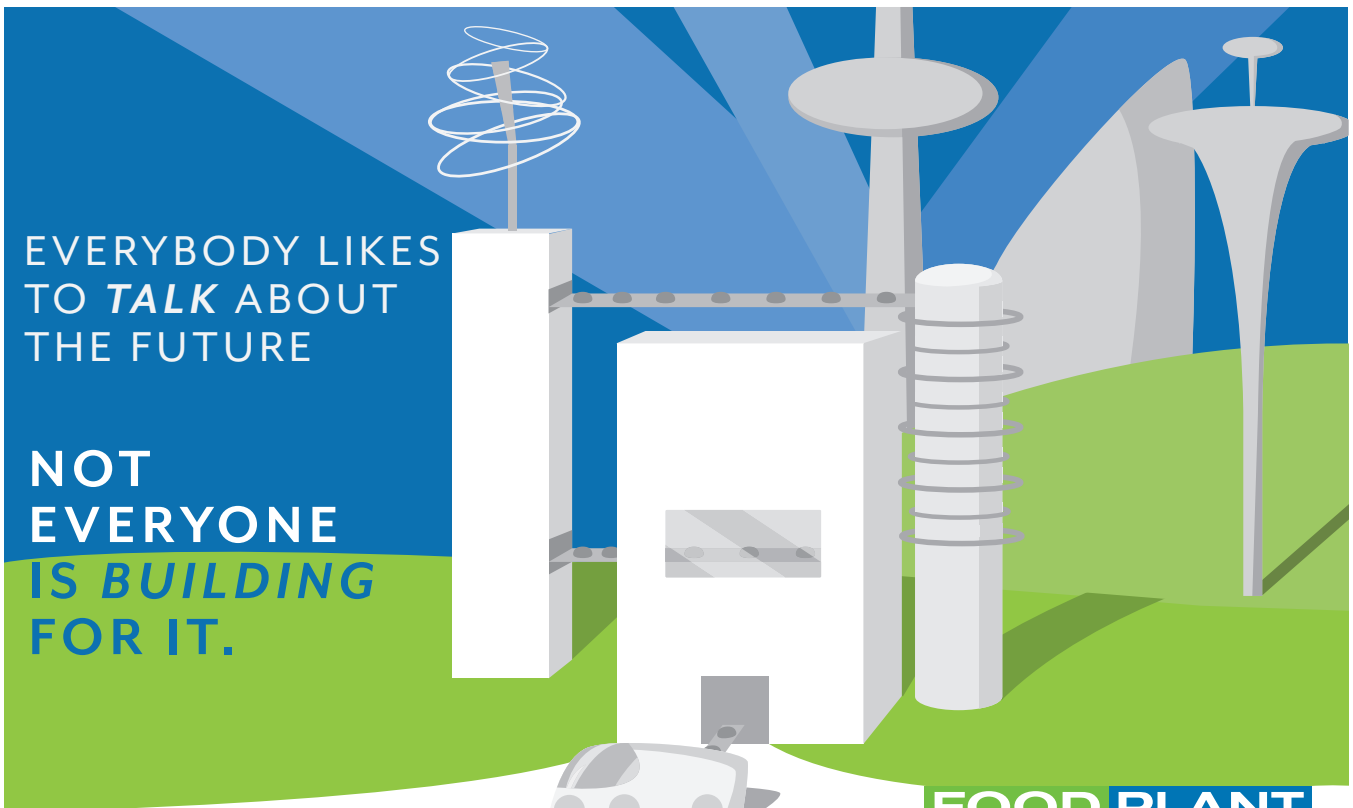


CastorCrete®



Sani-Wall™

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>T</b>								
Tabletree	Flathead Lake	MT	Cherry juice	New				4/17
Taste	Virginia Beach	VA	Warehouse	Exp.		4		7/16
Taylor Farms	Chicago	IL	Prepared meals	Exp.	1	2	Food Tech	12/17
Taylor Farms	Smyrna	TN	Fresh cut vegetables	Exp.		5	Dennis Group	6/17
Taylor Farms	Kent	WA	Fresh cut vegetables	Ren.	10	1		1/16
Tecumesh Farms	Tecumesh	NE	Poultry	Exp.	30			1/16
Templeton Rye Spirits	Templeton	IA	Whiskey distillery & whse	Exp.	99	26		10/16
The Chef's Warehouse	Las Vegas	NV	Refrigerated DC	New	80		Wiegmann Associates	2/16
The Church of Jesus Christ of Latter-day Saints	Harrisville	UT	Canned goods	New	45	8	Dennis Group	4/17
The Little Potato Company	DeForest	WI	Oven-ready potato products	New	130	20		4/16
Third Space Brewing	Milwaukee	WI	Craft beer	New	11			5/16
Thorne Research	Summerville	NC	Nutritional supplements	New		35		12/16
TLI	Westport	MA	Slaughterhouse	New	100	4	Dennis Group / TBD	11/17
To Your Health Sprouted Flour Company	Bullock Cty.	AL	Organic sprouted grains, flours	Exp.		3		5/16
Tree House Brewing	Charlton	MA	Brewery	Exp.		19		10/16
Triple Crossing Brewery	Richmond	VA	Brewery	Exp.		1		2/16
Tropicana Products Inc.	Bradenton	FL	Orange juice	Ren.		4	Haskell	6/17
Two Jays Craft Ales	Gulf Shores	AL	Beer	New		1		1/16
Two Rivers Bottling	Two Rivers	WI	Contract bottler	Ren.	316	20		1/16
Tyson Foods	GreenForest	AR	Cooked chicken	New	200	136		6/16
Tyson Foods	Kansas City	KS	Meats	Ren.			Hixson	16



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# PLANT CONSTRUCTION SURVEY

Company	City	State	Primary Product	Type	Sq. ft. (x1000)	Cost (\$ Mil.)	A&E/C	Completion Date
<b>T</b>								
Tyson Foods	Monroe	NC	Poultry	Exp.		5		2/16
Tyson Foods	N. Richland Hills	TX	Prepared foods	Ren.			Hixson	16
Tyson Foods	Robards	KY	Poultry	Exp.		14		12/16
Tyson Foods	South Hutchinson	KS	Prepared foods	Ren.			Hixson	16
Tyson Foods	Traverse City	MI	Prepared foods	Ren.			Hixson	16
Tyson Foods	Wilkesboro	NC	Chicken cooking	Exp.		14		10/16
Tyson Foods	Zeeland	MI	Prepared foods	Ren.			Hixson	17
Tyson Foods/Fresh Meats	Council Bluffs	IA	Case-ready beef, pork	Exp.	55	27		7/17
Tyson Foods/Fresh Meats	Storm Lake	IA	Pork	Exp.	40	86		9/16
<b>U</b>								
Uncle Ray's (sub. Of H.T. Hackney)	Montgomery City	MO	Potato chips	New		13		10/16
Unilever	Independence	MO	Dry-mix products	Ren.	350	99		3/16
Unilever	Independence	MO	Beverages	Ren.	14	3		9/16
Unilever	Independence	MO	Beverages	Ren.	7	2	Dennis Group	5/17
US Foods	Fife	WA	DC	Exp.	90			2/16
Usingers	Milwaukee	WI	Sausage	Exp.	20	4	ESI Design Services	8/16
<b>V</b>								
Valley Milk	Modesto	CA	Powdered milk	New	100			10/17
Valley Natural Foods	Northfield	MN	Meats	New	9	2		9/16
Velvet Ice Cream	Utica	OH	Ice cream	Exp.	23	3		12/16
Veritable Vegetable	San Francisco	CA	Produce	Ren.	15	4	ESI Design Services	5/16
Virginia Poultry Growers Cooperative	Hinton	VA	Poultry processing	Exp	92		Austin	4/17
Vital Farms	Springfield	MO	Egg processing	New	82			11/16
Vitalus Nutrition/Gay Lea Foods Co-Op JV	Winnipeg	MB	Dairy ingredients, butter	Ren.				12/16
Vitco Foods	Ontario	CA	Cold storage	New	100	12	Food Tech	12/17
<b>W</b>								
Walmart	Fort Wayne	IN	Milk processing/dairy	New	250	180		3/16
Wayne Farms	Dothan	AL	Poultry processing	Exp.	42			16
Wayne Farms	Newton	AL	Poultry processing	New		53		1/16
Wegmans	Rochester	NY	Organic bread	Ren	11	6	Dennis Group	9/16
WellPet, LLC	Minneapolis	MN	Pet food	Ren./Exp.	80	16	CRB	17
Wells Enterprises	LeMars	IA	Blue Bunny ice cream	Exp.		40		11/16
Weyauwega	Sheboygan	WI	Dairy products, ice cream	Ren.				9/16
Whitehall Specialties	Slippery Rock	PA	Cheese	Ren.	81	3		12/16
Whitewave Foods	Dallas	TX	Beverages	Ren.			Hixson	16
WhiteWave Foods	Jacksonville	FL	Plant-based/cream products	Exp,		2		1/16
Whitewave Foods	Salt Lake City	UT	Beverages	Ren.			Hixson	17
Wild Turkey Distillery	Lawrenceburg	KY	Distilled spirits	Exp.		2		12/16
Willow Rock Brewing Company	Syracuse	NY	Beer	Exp.				6/16
Wm. Wrigley Jr. Company	Yorkville	IL	Skittles Candy	Exp.	150	50	CRB Consulting Engineers, Inc.	4/16
Wolfgang Candy Company	Loganville	PA	Candy	New				8/16
Woodford Reserve Distillery	Midway	KY	Distilled spirits, bourbon	Exp.		22		12/16
<b>Z</b>								
Zentis	Plymouth	IN	Fruit and vegetable packing	Ren.	150			3/16