TOP OWNERS

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Firms Rethink Future Strategy

Owners cautiously transition from finishing backlogs to building new long-term business. By Emell Adolphus and Jonathan Keller



TOP OWNERS

ith another year of the coronavirus pandemic nearing its end, owners have mostly moved past reactionary plans for completing stalled projects and are now actively planning new ones. Looking ahead, how will fundamental changes to market sectors lead owners to potentially reconfigure business models?

An uncertain market outlook is giving many owners a case of "analysis paralysis" when it comes to planning for the future, explains Stephen Mulva, director of the Construction Industry Institute. Reported labor shortages and supply-chain disruptions caused by COVID-19 are still top-

of-mind concerns in the decision-making process, he says, including "quality problems" with the raw materials that are actually available.

The Construction Owners Association of America (COAA) reports that some of their members are pre-purchasing materi-

als and storing them in bonded warehouses to directly ameliorate supply chain issues. "This works especially for owners who are allowed to select the builder long before construction," says executive director Howie S. Ferguson. "The cost of that storage is thought to offset the potential

TOP FIRMS WITH CONSTRUCTION IN PROGRESS

TRANSPORTATION EQUIPMENT

| RANK | FIRM | (\$ MIL) |
|------|----------------------------------|----------|
| 1 | GENERAL MOTORS CO. | 3,581.0 |
| 2 | LOCKHEED MARTIN CORP. | 1,921.0 |
| 3 | TESLA INC. | 1,649.0 |
| 4 | THE BOEING CO. | 1,340.0 |
| 5 | PACCAR INC. | 1,081.8 |
| 6 | GENERAL DYNAMICS CORP. | 802.0 |
| 7 | LUCID GROUP INC. | 636.9 |
| 8 | BORGWARNER INC. | 432.0 |
| 9 | FARADAY FUTURE INTELLIGENT | 251.6 |
| 10 | SPIRIT AEROSYSTEMS HOLDINGS INC. | 220.0 |

BUSINESS SERVICES

| RANK | FIRM | (\$ MIL) |
|------|--------------------------------------|----------|
| 1 | ALPHABET INC. | 23,111.0 |
| 2 | FACEBOOK INC. | 11,288.0 |
| 3 | FORTRESS TRANS. AND INFRA. INVESTORS | 425.3 |
| 4 | TWITTER INC. | 349.9 |
| 5 | BOOKING HOLDINGS INC. | 257.0 |
| 6 | GLOBAL PAYMENTS INC. | 237.7 |
| 7 | ORACLE CORP. | 233.0 |
| 8 | ADOBE INC. | 199.0 |
| 9 | SWITCH INC. | 198.4 |
| 10 | EBAY INC. | 154.0 |

CHEMICALS AND ALLIED PRODUCTS

| RANK | FIRM | (\$ MIL) |
|------|---------------------------------|----------|
| 1 | MERCK & CO. INC. | 7,324.0 |
| 2 | JOHNSON & JOHNSON | 4,316.0 |
| 3 | PFIZER INC. | 3,552.0 |
| 4 | LYONDELLBASELL INDUSTRIES N.V. | 3,103.0 |
| 5 | THE PROCTER & GAMBLE CO. | 2,358.0 |
| 6 | ELI LILLY AND CO. | 2,138.8 |
| 7 | BIOGEN INC. | 1,950.8 |
| 8 | AIR PRODUCTS AND CHEMICALS INC. | 1,784.2 |
| 9 | DOW INC. | 1,604.0 |
| 10 | DUPONT DE NEMOURS INC. | 1,546.0 |

COMMUNICATIONS

| RANK | FIRM | (\$ MIL) |
|------|---------------------------------|----------|
| 1 | VERIZON COMMUNICATIONS INC. | 8,576.0 |
| 2 | COMCAST CORP. | 7,095.0 |
| 3 | T-MOBILE US INC. | 4,595.0 |
| 4 | THE WALT DISNEY CO. | 4,449.0 |
| 5 | AT&T INC. | 4,099.0 |
| 6 | LUMEN TECHNOLOGIES INC. | 1,611.0 |
| 7 | FRONTIER COMMUNICATIONS INC. | 558.0 |
| 8 | TELEPHONE AND DATA SYSTEMS INC. | 528.0 |
| 9 | SIRIUS XM HOLDINGS INC. | 510.0 |
| 10 | UNITED STATES CELLULAR CORP. | 317.0 |

ELECTRIC, GAS AND SANITARY SERVICES

| RANK | FIRM | (\$ MIL) |
|------|----------------------------------|----------|
| 1 | NEXTERA ENERGY INC. | 10,639.0 |
| 2 | THE SOUTHERN CO. | 8,697.0 |
| 3 | DUKE ENERGY CORP. | 6,645.0 |
| 4 | EDISON INTERNATIONAL | 5,033.0 |
| 5 | SEMPRA | 4,388.0 |
| 6 | THE AES CORP. | 4,174.0 |
| 7 | AMERICAN ELECTRIC POWER CO. INC. | 4,025.7 |
| 8 | EXELON CORP. | 3,576.0 |
| 9 | DOMINION ENERGY INC. | 3,350.0 |
| 10 | CONSOLIDATED EDISON INC. | 3,112.0 |

ELECTRONICS AND ELECTRIC PRODUCTS

| RANK | FIRM | (\$MIL) |
|------|-------------------------|----------|
| 1 | INTEL CORP. | 17,309.0 |
| 2 | CORNING INC. | 1,918.0 |
| 3 | MICRON TECHNOLOGY INC. | 1,600.0 |
| 4 | VIASAT INC. | 1,557.9 |
| 5 | CREE INC. | 767.8 |
| 6 | MAXAR TECHNOLOGIES INC. | 572.0 |
| 7 | NVIDIA CORP. | 558.0 |
| 8 | ECHOSTAR CORP. | 508.7 |
| 9 | FIRST SOLAR INC. | 419.8 |
| 10 | SUNRUN INC. | 394.1 |

TOP FIRMS WITH CONSTRUCTION IN PROGRESS

FOOD AND ALLIED PRODUCTS

| RANK | FIRM | (\$ MIL) |
|------|-----------------------------|----------|
| 1 | PEPSICO INC. | 3,679.0 |
| 2 | CONSTELLATION BRANDS INC. | 2,084.2 |
| 3 | ARCHER-DANIELS-MIDLAND CO. | 1,118.0 |
| 4 | TYSON FOODS INC. | 991.0 |
| 5 | THE KRAFT HEINZ CO. | 792.0 |
| 6 | KELLOGG CO. | 641.0 |
| 7 | MONDELEZ INTERNATIONAL INC. | 628.0 |
| 8 | MOLSON COORS BEVERAGE CO. | 532.1 |
| 9 | GENERAL MILLS INC. | 395.7 |
| 10 | KEURIG DR PEPPER INC. | 393.0 |

PHOTOGRAPHIC, MEDICAL AND OPTICAL GOODS

| RANK | FIRM | (\$ MIL) |
|------|----------------------------|----------|
| 1 | ABBOTT LABORATORIES | 1,357.0 |
| 2 | EMERSON ELECTRIC CO. | 463.0 |
| 3 | BOSTON SCIENTIFIC CORP. | 446.0 |
| 4 | THE COOPER COS. INC. | 333.9 |
| 5 | EDWARDS LIFESCIENCES CORP. | 313.3 |
| 6 | DEXCOM INC. | 219.0 |
| 7 | KLA CORP. | 182.3 |
| 8 | ALIGN TECHNOLOGY INC. | 163.5 |
| 9 | II-VI INC. | 136.5 |
| 10 | WATERS CORP. | 125.9 |
| | | |

RETAIL STORES

| RANK | FIRM | (\$ MIL) |
|------|------------------------|----------|
| 1 | WALMART INC. | 4,741.0 |
| 2 | COSTCO WHOLESALE CORP. | 1,276.0 |
| 3 | THE HOME DEPOT INC. | 1,068.0 |
| 4 | LOWE'S COMPANIES INC. | 831.0 |
| 5 | TARGET CORP. | 780.0 |
| 6 | ROSS STORES INC. | 376.1 |
| 7 | KOHL'S CORP. | 313.0 |
| 8 | DOLLAR TREE INC. | 257.5 |
| 9 | NORDSTROM INC. | 231.0 |
| 10 | URBAN OUTFITTERS INC. | 195.7 |

PRIMARY AND FABRICATED METAL

| RANK | FIRM | (\$ MIL) |
|------|----------------------------|----------|
| 1 | NUCOR CORP. | 1,603.4 |
| 2 | CLEVELAND-CLIFFS INC. | 1,364.0 |
| 3 | STEEL DYNAMICS INC. | 1,302.7 |
| 4 | BALL CORP. | 883.0 |
| 5 | UNITED STATES STEEL CORP. | 613.0 |
| 6 | CROWN HOLDINGS INC. | 514.0 |
| 7 | ALCOA CORP. | 335.0 |
| 8 | SILGAN HOLDINGS INC. | 199.6 |
| 9 | PARKER-HANNIFIN CORP. | 195.6 |
| 10 | CARPENTER TECHNOLOGY CORP. | 120.0 |

INDUSTRIAL MACHINERY & EQUIPMENT

| RANK | FIRM | (\$ MIL) |
|------|--------------------------|----------|
| 1 | CUMMINS INC. | 547.0 |
| 2 | WESTERN DIGITAL CORP. | 476.0 |
| 3 | DEERE & CO. | 440.0 |
| 4 | BWX TECHNOLOGIES INC. | 420.4 |
| 5 | APPLIED MATERIALS INC. | 237.0 |
| 6 | FORTINET INC. | 166.4 |
| 7 | ILLINOIS TOOL WORKS INC. | 133.0 |
| 8 | OTIS WORLDWIDE CORP. | 132.0 |
| 9 | XYLEM INC. | 110.0 |
| 10 | ENTEGRIS INC. | 109.3 |

HEALTH SERVICES

| FIRM | (\$ MIL) |
|--------------------------------|--|
| HCA HEALTHCARE INC. | 1,495.0 |
| DAVITA INC. | 616.7 |
| UNIVERSAL HEALTH SERVICES INC. | 507.4 |
| LABORATORY CORP. OF AMERICA | 231.6 |
| ACADIA HEALTHCARE CO. INC. | 217.5 |
| ENCOMPASS HEALTH CORP. | 202.5 |
| QUEST DIAGNOSTICS INC. | 202.0 |
| SELECT MEDICAL HOLDINGS CORP. | 62.7 |
| BROOKDALE SENIOR LIVING INC. | 61.5 |
| RADNET INC. | 57.5 |
| | HCA HEALTHCARE INC. DAVITA INC. UNIVERSAL HEALTH SERVICES INC. LABORATORY CORP. OF AMERICA ACADIA HEALTHCARE CO. INC. ENCOMPASS HEALTH CORP. QUEST DIAGNOSTICS INC. SELECT MEDICAL HOLDINGS CORP. BROOKDALE SENIOR LIVING INC. |

price increase of those materials in six to 12 or more months. But in many cases the advantage has even more to do with ensuring the materials will be on hand when they're needed."

But owners in some sectors are increasingly hesitant to move on current business opportunities because, while they may offer short-term returns, the prospects might be obsolete in the long term. One such example is how the upcoming energy transition will transform the oil and gas sector, says Mulva.

"Companies like Shell and ExxonMobil see business opportunities for plastics, chemicals, different kinds of fuels," he says, "yet maybe they shouldn't hit the go button on that because of the upcoming energy transition. Maybe they should be thinking more green: hydrogen and carbon-capture projects."

Headquartered at the University of Texas at Austin, the CII is a consortium of more than 140 leading owner, engineering-

contractor and supplier firms from both the public and private sectors. The institute serves as a research and development center to enhance the business effectiveness and sustainability of capital projects.

Mulva sees many owners mulling larger societal issues that are causing them to rethink projects. "[Owners] are doing a lot of studies and they are not really pulling the trigger yet on the projects," he adds.

Construction contractors are often at a standstill until owners have the information they need to move forward. But such conversations seemingly haven't stalled construction-in-progress (CIP) spending among owners—at least not yet.

Construction Spending on the Rise

Despite disruptions from the ongoing COVID-19 pandemic, CIP spending among ENR's Top 425 Owners rose 7.5%, to \$356.09 billion in 2020 from \$331.4 billion in 2019. This marks the fifth consecutive year of CIP growth since

a slight 0.8% dip between 2015 and 2016.

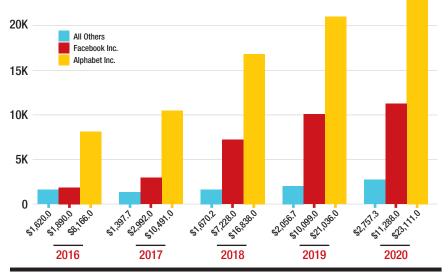
Overall, CIP is up 28.8% since 2016. Major tech firms, particularly Google, Amazon and Facebook, are driving a significant portion of that growth. That trio has increased their CIP spending by over \$37 billion since 2016.

Amazon alone increased its CIP over \$9 billion between 2019 and 2020. For Facebook, (recently renamed Meta Platforms Inc.), CIP increased nearly 500% since 2016, moving from \$1.89 billion to \$11.29 billion in 2020.

The business services sector, which includes Google and Facebook, has risen 218% overall since 2016. In addition, the tech industry has had healthy growth outside of the big two with CIP up 70.2% between 2019 and 2020 for the remaining firms in the sector.

Only Google ranked in the top 10 on the 2017 Top Capital Expenditures list. This year Amazon, Google and Facebook are ranking first, second and





SOURCE: DATA PROVIDED BY S&P GLOBAL MARKET INTELLIGENCE, A UNIT OF S&P GLOBAL. VISUALIZATION BY ENR.

eighth respectively, with over \$77 billion in reported capital expenditures.

The primary and fabricated metals sector has also seen a sharp rise in recent years. The sector vaulted 70.4% between 2019 and 2020. A large portion of that increase is attributable to Cleveland-Cliffs reclassification in the sector after a switch in operations from a pure mining company to an integrated mining and steel producer. But even if the Cleveland-Cliffs' CIP was excluded from this year's total, the sector would have risen 43% last year and over 176% since 2016.

Joe Dardis, senior structural steel specialist at the American Institute of Steel Construction expects that trend to continue. "Most steel producers are looking to invest right now as they have had record quarterly earnings in 2021," he says, citing Nucor's recently announced plans to build a \$2.7-billion sheet mill as an example.

Although the oil and gas extraction sector is up 32.3% from last year, the sector as a whole has still fallen 57.1% in the last five years. However, the transportation sector had the largest drop in CIP, 42.2% between 2019 and 2020.

Companies ranked on ENR's Top 425 Owners list must be publicly traded on a U.S. exchange and headquartered in the U.S. The list excludes limited partnerships, public limited companies and companies classified as real estate investment trusts (the latter of which are ranked separately).

Changing Ownership

With the stock market reaching all-time highs and businesses creating value and a need to expand, now is the time for owners to begin

capital projects, says Mulva. But when shovels can hit the ground generally lags behind market demand. Mulva points to the global microchip shortage impacting everything from consumer electron-

ics to car manufacturers as an example of supply lagging behind a surge in demand.

Intel CEO Pat Gelsinger recently made a plea for Congress to help shore up chip manufacturing in the U.S. by subsidizing the semiconductor industry to reduce reliance on foreign chip making factories. If passed in both the Senate and the House, the CHIPS Act would invest \$52 billion in the effort—yet still fall short of the estimated billions of dollars needed to close the gap on the shortage.

Chipmakers such as Intel have responded to the shortages with plans for more factories; the company recently broke ground on two making foundries in Arizona. However, Intel estimates the foundries won't be completed until 2024. Mulva notes a shift in the owner needs and overall role, and contractors report seeing companies move away from the traditional owner-operator model and decentralize their capital workforce.

Rather than being blue chip companies like Ford and Procter & Gamble, owners are becoming more akin to investors, he says. "They're more like 20 people in an office building who have some venture capital ... and their approach to projects is vastly different." One reason for this change is a general reduction in capacity among owner-operators. In some cases, CII reports major layoffs among capital project staff.

No matter the ownership structure, relationships are at the heart of successful projects, says Ferguson of COAA. "All owners would do well to remember that people are ultimately what makes a project succeed or fail—not tools, tech-

nology, contracts and processes," he says. "With that

being the case, those people who come together once to execute a project must have a solid relationship."

Tech Focus

GM (ranked no. 23) has been dramatically impacted by the global microchip shortage. The company

has had to sporadically suspend production at car plants due to chip shortages, leading to a decrease of supplies and record-high prices for new cars. However, the company is still pushing forward with its plans to become less of a car company and more of a tech company that happens

to make cars. With a planned pivot to electric vehicles, the company recently started construction on the Wallace Battery Cell Innovation Center—which will significantly expand GM's battery technology operations and "accelerate development and commercialization of longer range, more affordable electric vehicle batteries," according to the company.

Leaning into becoming a tech company over a car company has changed construction needs as an owner, the company said in a statement provided to ENR. "Many traditional processes were linear in nature with construction data going from the AE to the constructor and finally to the owner," the company explains. "With the advent of cloud-based construction solutions, it is now possible to automate many of these processes and to perform many others in a much more condensed timeline."

The company says it has taken a highlevel look at both the data it creates and the data it requests and how that can be leveraged for future projects. Nearly all of GM's facility construction projects have been either design-build or integrated project delivery (IPD), according to the company.

"Data ownership and the contents of shared data are both issues that when coordinated between partners can benefit both equally and in unexpected ways," says GM. "Having multiple partners utilizing either a common platform or agreeing on data exchanges also enables greater use of emerging technologies."

Before the pandemic began, GM had

CONSTRUCTION IN PROGRESS 2020 BY SIC CODE

| IN \$ MIL | SIC | NO. 0F TOP 425 | CONST. IN PROGRESS |
|--|--------------------------|-------------------|--------------------|
| DESCRIPTION | CODE | FIRMS | 2020 |
| ELECTRIC, GAS AND SANITARY SERVICES | 4900 | 64 | 86,900.7 |
| CHEMICALS AND ALLIED PRODUCTS | 2800 | 63 | 46,195.7 |
| BUSINESS SERVICES | 7300 | 18 | 37,156.3 |
| COMMUNICATIONS | 4800 | 18 | 33,499.3 |
| ELECTRONICS AND ELECTRIC PRODUCTS | 3600 | 28 | 27,230.5 |
| MISCELLANEOUS RETAIL | 5900 | 3 | 15,398.0 |
| FOOD AND ALLIED PRODUCTS | 2000 | 24 | 13,759.7 |
| TRANSPORTATION EQUIPMENT | 3700 | 17 | 12,624.1 |
| RETAIL STORES | 5200/5300/5600 | 15 | 10,736.4 |
| PRIMARY AND FABRICATED METAL | 3300/3400 | 16 | 7,660.9 |
| METAL MINING | 1000 | 6 | 6,555.9 |
| OIL AND GAS EXTRACTION | 1300 | 4 | 6,155.1 |
| PETROLEUM AND COAL PRODUCTS | 2900 | 8 | 5,483.3 |
| NON-CLASSIFIABLE ESTABLISHMENTS | 9900 | 3 | 5,438.0 |
| PHOTOGRAPHIC, MEDICAL AND OPTICAL GOODS | 3800 | 20 | 4,706.4 |
| AMUSEMENT AND RECREATION SERVICES | 7900 | 9 | 4,121.4 |
| FOOD STORES | 5400 | 3 | 3,929.5 |
| PAPER AND ALLIED PRODUCTS | 2600 | 10 | 3,922.3 |
| TRANSPORTATION | 4000/4100/4400/4500/4700 | 8 | 3,705.4 |
| HEALTH SERVICES | 8000 | 10 | 3,654.4 |
| SOURCE: S&P GLOBAL MARKET INTELLIGENCE, A UNIT OF S&P GLOBAL | | | |

already started the transition of more than 20,000 employees to "unassigned agile space" to give them the flexibility to focus on virtual work. "This gave us a head start as our transformed workplaces include a variety of spaces for collaboration and group work—something our previous spaces lacked," the company says.

Greg Sizemore, executive vice president of the Construction Users Roundtable, says that construction contractors are only just beginning to scratch the surface when it comes to tech and how technological solutions can remedy workforce shortages and reduce waste. But

forward-thinking owners like GM can lead the way in bringing more of the construction industry's players on board.

"It's also a time of opportunity, and I think it's ripe for technology improvement" says Sizemore. "How do we bring technology to the foremen, the supervisors? How do we use it to assess optimal workforce crews? Communication is more robust than ever. So there are opportunities here to address these challenges, and these challenges are going to drive, in my opinion, technological improvement in the way we do business" for owners and construction contractors.

How To Read the Tables

STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES: 1000=Metal
mining; 1300=Oil and gas extraction;
1400=Non-metallic minerals; 1500=Building construction - contractors; 2000=Food
and kindred products; 2100=Tobacco
products; 2200=Textile mill products;
2300=Apparel and other textile products;
2400=Lumber and wood; 2500=Furniture
and fixtures; 2600=Paper and allied
products; 2700=Printing, publishing, and
allied industries; 2800=Chemicals and
allied products: 2900=Petroleum and coal

KEY TO COMPANY TYPE USING THE

U.S. DEPT. OF COMMERCE'S

products; 3000=Rubber and miscellaneous plastics products; 3200=Stone, clay and glass products; 3300=Primary metal industries; 3400=Fabricated metal products; 3500=Industrial machinery and equipment; 3600=Electronic and other electric equipment; 3700=Transportation equipment; 3800=Photographic, medical and optical goods; 3900=Miscellaneous manufacturing; 4000=Railroad transportation; 4100=Local, suburban, interurban passenger transit; 4200=Trucking and warehousing; 4400=Water transportation; 4500=Transportation by air; 4700=Transportation services; 4800=Communica-

tions; 4900=Electric, gas and sanitary services; 5000=Wholesale trade, durable goods; 5100=Wholesale trade, non-durable goods; **5200=**Building materials and garden supplies; 5300=General merchandise stores; 5400=Food stores; 5500= Automotive dealers and service; 5600= Apparel and accessory stores; 5800=Eating and drinking places; 5900=Miscellaneous; 6000=Depository institutions; 6100=Non-depository institutions; 6200=Security and commodity brokers; 6300=Insurance carriers: 6400=Insurance agents, brokers: 6500=Real estate: 7000=Hotel and other lodging places: 7200=Personal services: 7300=Business services: 7500=Automotive repair. services, and parking; 7800=Motion

pictures; **7900=**Amusement and recreation services; **8000=**Health services; **8200=**Educational services; **8700=**Engi-

neering and management services;

9900=Non-classifiable establishments.

BUILDING VALUE ADDED expenditures for building construction and acquisitions minus retirements.

BUILDING INVENTORY fiscal year-end balance of the cost of buildings owned by the firm on owned or leased land.

NM means "not meaningful."

NA means "not available."

SOURCE S&P Global Market Intelligence, a unit of S&P Global.

HOTOS COURTESY HUDSON PACIFIC (TOP); FEDERAL REALTY INVESTMENT TRUST (BOTTOM)

New LA Film Studio

The Hudson Pacific facility will be the first in two decades

udson Pacific Properties and Black-stone unveiled plans to develop the first large-scale purpose-built studio development in Los Angeles in more than two decades. Dubbed Sunset Glenoaks Studios, the 240,000-sq-ft, 10-acre project will house seven stages, ranging from 15,000 to 21,000 sq ft with 35-ft or 40-ft clear heights. The facility will also include nearly 120,000 sq ft of stage-adjacent support space, as well as offices, a large mill and parking. Construction is targeting LEED certification. Operations will be

100% carbon neutral with advanced waste, water and energy-use reduction programs. Construction is expected to complete in the third quarter of 2023 with a total investment of between \$170 million and \$190 million. The project was announced after Gov. Gavin Newsom approved including \$150 million in incentives for newly constructed or renovated film facilities. The studio will be the fourth owned by Hudson Pacific and Blackstone funds under the Sunset Studios brand.

By Bruce Buckley



NEW ERA Movie studio construction was sparked by state incentives for California's film and TV industry.

The NAIOP CRE Sentiment Index for September 2021. The sentiment is based on a 100-point scale. Its current position above 50 indicates that respondents expect favorable conditions for commercial real estate over the next 12 months. The Index is higher than at any point since the COVID-19 pandemic began and has returned to the level observed in March 2019.



FEDERAL REALTY INVESTMENT TRUST 915 MEETING STREET

Federal Realty Investment Trust expects to break ground by the end of the year on its 915 Meeting Street project in North Bethesda, Md. Choice Hotels International has signed a long-term lease to occupy 105,000 sq ft of the new 276,000-sq-ft office building. The project is part of Federal Realty's Pike and Rose development. Scheduled for completion in late 2023, the 16-story building will feature 9,600 sq ft of ground-floor retail. Designed by Gensler, the project is targeting LEED Gold certification.

Alexandria Real Estate Equities Moderna Headquarters

Alexandria Real Estate Equities announced it will develop, construct and operate a new corporate headguarters and core research and development facility for Moderna at its Alexandria Center at One Kendall Square development in Cambridge, Mass. The 462,000-sq-ft facility will be "the most sustainable laboratory building in Cambridge," according to Alexandria Real Estate Equities, and is designed to operate as a net-zero-energy commercial laboratory facility. The building, which is targeting LEED Platinum Core & Shell, LEED Zero Energy and Fitwel certifications, will rely on ultra-efficient mechanical and envelope systems, geothermal energy as its primary heating source, and onand off-site renewable energy. In addition to including space for research and development, the planned site will integrate scientific and non-scientific spaces to drive collaboration and innovation as well.

Corporate Office Properties Northrop Grumman Campus

Corporate Office Properties Trust announced it will construct a twobuilding campus for Northrop Grumman Corp. at its Redstone Gateway development in Huntsville, Ala. The \$103-million project will create a total of 263,000 sq ft of space. Both buildings are expected to deliver in the second half of 2022. Upon completion, Redstone Gateway will consist of 2.2 million sq ft of space near the U.S. Army's Redstone Arsenal outpost.

Minneapolis North Loop Green **Mixed-Use Development**

Hines, AFL-CIO Building Investment Trust and Marquee Development broke ground on North Loop Green, a mixed-use development in Minneapolis, Minn. The project will feature 350,000 sq ft of office space, 350 residential units, 100 hospitality units and 17,000 sq ft of retail space. The project will also feature a one-acre public green space for cultural and community-based events. It is expected to open in spring 2024.

South Carolina

Carolina Crossroads Phase 2

The South Carolina Dept. of Transportation has awarded the first two construction contracts in a five-phase, \$1.7-billion program to modernize the outdated I-26/I-20 /I-126 interchange complex in Columbia. Totaling \$337 million and set to begin major construction next year, the first two phases begin a seven-year effort to widen 14 miles of interstate, upgrade seven interchanges with modern ramp configurations and other measures to improve safety and traffic flow.

Illinois

I-57/I-74 Interchange

Officially underway in August, the fouryear, \$216.8-million Illinois Dept. of Transportation project will bring the nearly 60-year-old conventional cloverleaf interchange in Champaign up to date to better support modern traffic volumes. Designed to eliminate existing hazards with merging, weaving and slow speeds, the project includes 11 new structures, including two flyover ramps. A third auxiliary lane in both directions will be added to a portion of I-74.

Maine

Hampden Bridge Bundle

The Maine Dept. of Transportation is more than halfway through its nearly three-year, \$44.8-million program to replace eight 60-year-old bridges along a four-mile stretch of I-19 in Hampden. With northbound structures substantially complete in September, construction is underway at all four southbound bridges, all of which feature non-corrosive materials to reduce future maintenance requirements. The Souadabscook Stream crossing is using single-span structures to eliminate locating piers in the waterway.

Texas

Nueces River Bridge

Construction is underway on an \$85.7-million upgrade to a 3-mile section of I-37 outside Corpus Christi. The 66-month project includes building wider, higher bridges across the Nueces River to make the crossing more resilient to storm surge and flooding. Along with widening the highway to eight lanes, the Texas Dept. of Transportation will upgrade the nearby U.S. Route 77 interchange by rebuilding several structures.

Crossing the Missouri

New bridge to support transcontinental traffic



LYNCHPIN New paired three-lane bridges will replace a structurally deficient truss bridge across the Missouri River.

onstruction is underway on a \$240-million Missouri River crossing for I-70 near Rocheport, Mo. The paired 3,000-ft-long, three-lane structures will replace a 60-year-old, structurally deficient continuous truss bridge that the Missouri Dept. of Transportation calls the "lynchpin of America" because the highway connects the state's largest cities, St. Louis and Kansas City, and key portions of the U.S. system. The structure currently carries more than 12.5 million vehicles per year, including 3.6 million trucks. To minimize traffic impacts, plans call for the existing bridge to remain in service until the first river span is completed, a milestone the agency expects to achieve by late 2023. The second bridge is scheduled to be ready the following year. Lunda Construction Co. is leading the design-build project, which is being funded in part by an \$81.2-million Infrastructure for Rebuilding America (INFRA) grant from the U.S. Dept. of Transportation. Parsons Transportation Group Inc., Dan Brown & Associates Inc. and Hugh Zeng United are providing design services. Safety enhancements planned for the new structures include high-friction surface treatment, pavement sensors, wet reflective striping and a linear delineation system. The project team will also reconstruct the nearby County Route BB interchange.

By 7im Parsons

\$70.5

Value of cross-border truck freight in August 2021, a 6.8% increase over August 2019.

Source: U.S. Bureau of Transportation Statistics



FLORIDA

A LIFT FOR JUPITER

The Florida Dept. of Transportation has begun a five-year, \$122-million project to replace the U.S. Route 1 bridge across the Loxahatchee River in Jupiter. To be built by Johnson Brothers Construction Inc., the twin double-leaf drawbridge will provide up to 42 ft of vertical clearance—nearly double that of the structurally deficient 1958 bridge it replaces—and a 125-ft-wide navigation channel. Other features include a concrete bridge deck to reduce traffic noise, a new tender house, pedestrian overlooks and a stormwater management system to safeguard the river's marine life.



DOMINION ENERGY

In the latest move to develop Virginia into an offshore wind hub, Dominion Energy and turbine maker Siemens Gamesa say they will build the first U.S. facility to produce blades for offshore wind turbines. The \$200-million factory in Portsmouth, Va., will support Dominion's 2.6-GW Coastal Virginia Offshore Wind Commercial Project, which the firm anticipates will be the largest offshore wind farm in the U.S. To enable shipping for turbine components, Dominion is also building in Texas the first offshore wind installation ship that complies with the federal Jones Act.

Delays for Nuclear Units

Georgia Power pushes timeline back



SLOWING DOWN An additional three months of construction has been added to the timeline of Voqtle 3 and 4.

iting continued construction challenges and the need for additional testing time, Georgia Power has pushed back by three months its timeline for the Vogtle units 3 and 4 nuclear powerplant expansion, the first new plant construction in years. The company projects Unit 3 will come on line in the third quarter of 2022, followed by Unit 4 in the second quarter of 2023. "As we've said from the beginning of this project, we are going to build these units the right way, without compromising safety and quality to achieve a schedule deadline," Georgia Power Chairman, President and CEO Chris Womack said in a statement. In October, Unit 3 direct construction was 99% complete, bringing the units 3 and 4 expansion to 95% completion. Vogtle 3 and 4 is one of the largest job-producing construction projects in Georgia, with more than 7,000 workers on site and 800-plus permanent jobs after the units begin operating.

By Autumn Cafiero Giusti

Southern California Edison

Battery Energy Storage

Southern California Edison has contracted with renewable energy engineer Ameresco to install 535 MW of battery energy storage at three of the utility's substations to increase grid reliability by summer 2022. The systems should help meet electricity demand more effectively in the San Joaquin Valley, Rancho Cucamonga and the Long Beach area. The additional storage will complement long-term capacity contracts SCE completed last year and will bring the utility's total installed and procured storage capacity to about 2,810 MW. The new systems are expected to be online in August 2022.

NextEra Energy Wolf Creek-Blackberry **Transmission Line**

NextEra Energy Transmission won a contract from the Southwest Power Pool to construct a new 94-mile, 345kV transmission line between Kansas and Missouri. The transmission line will run from the Wolf Creek substation in Kansas to the Blackberry substation in Missouri. SPP approved a recommendation by an industry expert panel to award the project to NextEra Energy Transmission, a subsidiary of Florida electric services company NextEra Energy. The panel evaluated the project through its competitive transmission owner selection process, a federally required process for certain transmission projects. Pending regulatory approvals in Kansas and Missouri, the project should come online in January 2025.

Proportion of power generation natural gas accounted for in 2020, nearly equal to shares of coal and nuclear combined.

> -U.S. Energy Information Administration



MAKEOVER The two new concourses at Salt Lake International Airport will be linked by an underground tunnel.

Salt Lake City's Second Act

Massive hub airport rebuild continues in Phase 2

62.5 MILLION

Number of originating U.S. airline passengers in Q2 2021, nearly double the previous quarter's total, and up from 11.5 million passengers a year earlier.

Source: U.S. Bureau of Transportation Statistics ne year into phase 2 of its \$4.1-billion, multifaceted makeover, Salt Lake City International Airport recently marked the topping out of Concourse A-East. The 337,700-sq-ft, 22-gate expansion will provide an aboveground connection between Concourse A-West and Concourse B, both of which opened in October 2020 as part of the construction program's first phase and have received LEED Gold certification. The two concourses also will be linked underground via another Phase 2 project—a 990-ft-long, 106,140-sq-ft Central Tunnel. Along with an art installation called "The River Tunnel," work includes a new entry point to Concourse B that will provide a mini-plaza complete with large-scale art installations. The Central Tunnel also will provide space for a tram connection to access a future additional concourse. The joint venture of Holder Construction and Big-D Construction is leading Phase 2, which is scheduled to wrap up in 2024.

By Jim Parsons

CHARLOTTE'S DISTINCTIVE OUTDOOR CANOPY IS A SHOWPIECE

The \$600-million terminal lobby expansion at Charlotte Douglas International Airport includes 366,000 sq ft of new and renovated interior to provide additional circulation space, automated security screening lanes and new customer amenities. Outside, a distinctive 146,000-sq-ft exterior canopy will shelter the existing elevated terminal access roadway and curb front, while overhead and underground walkways will offer safer connections with parking facilities. The program is scheduled for completion in 2025.



Pittsburgh International

New Terminal Takes Off

The post-pandemic world's first ground-up airport terminal project formally got underway in mid-October with groundbreaking ceremonies for Pittsburgh International Airport's \$1.4-billion Terminal Modernization Program. Delayed by a year due to sharp drop-offs in passenger traffic, the three-year program includes a centerpiece 700,000-sq-ft terminal that consolidates ticketing, security checkpoints and baggage claim, as well as a 3,300-space parking garage, rental car facilities and entrance roadways.

SW Fla. International Airport Terminal Project Features Streamlined Security

Construction is underway on the \$331-million expansion of Southwest Florida International Airport's main terminal. Totaling 281,000 sq ft of remodeled space and new construction, the three-year project calls for consolidating existing TSA checkpoints into a more streamlined 16-lane configuration and providing new walkways, concession options, additional seating and a business lounge.

BWI International

A Maintenance Milestone

Maryland officials have approved construction and operations contracts for a new \$135-million Southwest Airlines maintenance facility at Baltimore/ Washington International Thurgood Marshall Airport. To be funded jointly by the airline and the state, the 27-acre project will incorporate a hangar with room to service up to three Boeing 737 planes, as well as apron space for another eight jets. The facility also will have office and workshop space and tool storage areas.

Montrose, Colo. Keeping Pace With Growth

With passenger counts regularly setting new records over the past decade, Montrose County Airport in southwest Colorado has launched a \$33-million expansion that will double the size of its existing terminal, to 70,000 sq ft. The two-year project includes 30,000 sq ft of new indoor and outdoor construction, 8,000 sq ft of existing facility renovation and additional space for ground-service equipment.

Enbridge Inc.

Line 3 Replacement Project

The Enbridge Inc. Line 3 Replacement Project became fully operational on Oct. 1. The project included full replacement of a 1,097-milelong oil pipeline from Edmonton, Alberta, to Superior, Wis. The line's new 337-mile Minnesota segment, which follows others already placed into service in Canada, North Dakota and Wisconsin, restores the full pipeline capacity of 760,000 barrels per day.

Gulf Coast Growth Ventures Monoethylene Glycol & Polyethylene Units

ExxonMobil and SABIC announced in July that their joint venture, Gulf Coast Growth Ventures located near Corpus Christi, Texas, reached mechanical completion of a monoethylene glycol production unit and two polyethylene production units. Project startup is expected to begin ahead of schedule, likely in the fourth quarter, the companies said. The project, which includes a 1.8-million-metric-ton ethane steam cracker, will produce 1,100 kilotons of monoethylene glycol used to manufacture high performance plastics, and 1,300 kilotons per year of polyethylene, a component of food and medicine packaging.

Meridian Energy Group Davis Refinery

In September, Meridian Energy Group entered into a long-term offtake agreement with Musket Corp. for the transportation of fuels from Meridian's 49,500-barrel-per-day Davis refinery being built in Belfield, N.D. Under the pact, Musket will purchase, market, distribute and resell the Davis refinery output of diesel, estimated at 360 million gallons annually, and of gasoline, about 280 million gallons per year. The facility is the first greenfield refinery to be built in the U.S. in nearly 50 years, according to Meridian. Construction began in 2018, but was delayed by litigation with environmental groups. It is expected to resume in 2022 and completion is expected by 2023. McDermott International was awarded front-end engineering design and EPC contracts on the project.



LIFECYCLE Owner Nacero calls the plant the first of its kind to have carbon capture, sequestration and renewable power.

Renewable Gasoline

Energy firm builds natural gas to gasoline plant in Texas.

acero Inc. has awarded to contractor Bechtel a front-end engineering and design (FEED) contract for a natural gas-to-gasoline manufacturing facility in Penwell, Texas. The energy company claims that the 115,000 barrel-per-day plant will be the first gasoline manufacturing facility in the world to incorporate carbon capture, carbon sequestration and 100% renewable power. Both renewable natural gas and mitigated flare gas will make it possible to reduce its lifecycle footprint of sulfur gasoline to zero over time, according to Nacero. After FEED completion, Bechtel will propose a lump sum, turnkey EPC price. During the first phase of construction, which will take four years, up to 3,500 skilled construction workers will be employed. The project's second phase will take an additional two years. When fully operational, the plant will employ 350 full-time operators and maintenance personnel. The University of Texas has estimated that the Penwell facility will add more than \$25 billion to the economy of the Odessa region in Texas during its anticipated operating lifespan of more than 50 years.

By Louise Poirier

33.5
TRILLION
CUBIC
FT (TCF)

Dry
domestic gas
production in
2020, which
dropped for
the first time
since 2016,
and is 1.5%
lower than
production
in 2019.

-U.S. Energy Information Administration

BP CHERRY POINT UPGRADES

In October, BP announced plans to invest \$269 million in three projects at its Cherry Point refinery in Washington state, including a \$169-million hydrocracker improvement project that will boost efficiency and reduce periods of planned maintenance; a \$55-million cooling water infrastructure



project to enhance existing cooling water infrastructure; and a \$45-million renewable diesel optimization project that will more than double the facility's renewable diesel production capability to an estimated 2.6 million barrels per year by 2022.



ELECTRIFIED Ford and SK Innovation plan to spend \$5.8 billion building two EV battery plants in Glendale, Ky.

Charging Into the Future

Automakers building electric vehicle battery plants

he International Energy Agency projects that electric vehicles will account for more than 15% of U.S. car sales by 2030, and the number of publicly-available EV chargers will rise that year to more than 800,000, from 98,981 in 2020. More automakers are preparing for the projected increase in popularity of electric vehicles by planning to manufacture their own EV batteries. Ford said in September that it and SK Innovation will invest a combined \$11.4 billion for a new EV and battery plant in Tennessee and two EV battery plants in Kentucky. The 3,600-acre Stanton, Tenn., campus will also include an on-site wastewater treatment plant and recycling facilities. On Oct. 18, Toyota announced plans to invest \$3.4 billion in EV battery development and production in the U.S. through 2030, including the construction of a plant at an unspecified location, and on the same day Stellantis and LG Energy Solution also announced they had formed a joint venture for battery manufacturing. Stellantis and LG are reviewing locations for a North American plant that will break ground in the second quarter of 2022.

By James Leggate

Manufacturing jobs recovered since March and

April 2020.

-Bureau of Labor Statistics

Manufacturing employment growth in October.

-Bureau of Labor Statistics

construction starts in manufacturing year-todate in September.

-Dodge Data & Analytics

Intel Corp.

Arizona Fab Expansion

Intel broke ground on its two new semiconductor plants, known as "fabs," on Oct. 1 at its 700-acre Chandler, Ariz., campus. The \$20-billion project will use 400,000 cu vd of concrete and 40.000 tons of steel. Jacobs Engineering is the designer and Hoffman Construction is the general contractor. Intel says the project will support about 3,000 construction jobs.

The Boeing Company MQ-25 Stingray Facility

Boeing announced plans in September to build a \$200-million plant where it will manufacture MQ-25 Stingray drones for the U.S. Navy. The 300,000-sq-ft facility will be located at MidAmerica St. Louis Airport in Illinois. Boeing has already been conducting test flights out of the airport for the MQ-25, which is the Navy's first autonomous carrier-based aircraft. The Stingray is used for refueling other aircraft, and has surveillance and reconnaissance capabilities. Construction is expected to finish in 2024.

Ball Corp.

Beverage Can Plant

Aluminum packaging manufacturer Ball Corporation is building a \$290-million multi-line beverage packaging plant in North Las Vegas, Nev., the company announced in September. Ball says it chose the location for its proximity to customers, increasing regional demand, local infrastructure and labor base. plus the cooperation of state and local officials. The plant will supply a range of can sizes for beverage customers. Production is scheduled to start in late 2022.

Great Lakes Cheese Co. N.Y. Cheese Plant

Great Lakes Cheese announced in September that it will build a \$500-million cheese manufacturing and packaging plant in Franklinville, N.Y., to replace a smaller plant nearby in Cuba, N.Y. Construction of the 500,000 sq-ft facility is scheduled to start in the spring of 2022 and expected to complete in early 2025. Discussions are underway to find new uses for the smaller plant.

The Top 200 List

Companies are ranked here by capital expenditures, funds used for additions to a company's property, plant or equipment. These expenditures include capital leases, increases in construction funds and reclassification of inventory to property, plant and equipment. They do not include capital expenditures of discontinued operations, changes resulting from foreign currency fluctuations, decreases in funds for construction presented as a use of funds or property, plant and equipment of acquired firms.

| RANK 2021* | FIRM | FIRM TYPE** | CAPITAL EXPENDITURES 2020-2021† (\$ MIL) | RANK 2021* | FIRM | FIRM TYPE** | CAPITAL EXPENDITURES 2020-2021† (\$ MIL) |
|---------------|---|----------------|---|---------------|---|----------------|---|
| 1 | AMAZON.COM INC., Seattle, Wash. | 5900 | 40,140.0 | 51 | UNION PACIFIC CORP., Omaha, Neb. | 4000 | 2,927.0 |
| 2 | ALPHABET INC., Mountain View, Calif. | 7300 | 22,281.0 | 52 | PUBLIC SERVICE ENTERPRISE GROUP INC., Newark, N.J. | 4900 | 2,923.0 |
| 3 | MICROSOFT CORP., Redmond, Wash. | 7300 | 20,622.0 | 53 | PHILLIPS 66, Houston, Texas | 2900 | 2,920.0 |
| 4 | GENERAL MOTORS CO., Detroit, Mich. | 3700 | 20,533.0 | 54 | THE KROGER CO., Cincinnati, Ohio | 5400 | 2,865.0 |
| 5 | VERIZON COMMUNICATIONS INC., New York, N.Y. | 4800 | 18,192.0 | 55 | HCA HEALTHCARE INC., Nashville, Tenn. | 8000 | 2,835.0 |
| 6 | EXXON MOBIL CORP., Irving, Texas | 2900 | 17,282.0 | 56 | COSTCO WHOLESALE CORP., Issaquah, Wash. | 5300 | 2,810.0 |
| 7 | AT&T INC., Dallas, Texas | 4800 | 15,675.0 | 57 | THE PROCTER & GAMBLE CO., Cincinnati, Ohio | 2800 | 2,787.0 |
| 8 | FACEBOOK INC., Menlo Park, Calif. | 7300 | 15,115.0 | 58 | MARATHON PETROLEUM CORP., Findlay, Ohio | 2900 | 2,787.0 |
| 9 | NEXTERA ENERGY INC., Juno Beach, Fla. | 4900 | 14,610.0 | 59 | AVANGRID INC., Orange, Conn. | 4900 | 2,781.0 |
| 10 | INTEL CORP., Santa Clara, Calif. | 3600 | 14,453.0 | 60 | FIRSTENERGY CORP., Akron, Ohio | 4900 | 2,657.0 |
| 11 | BERKSHIRE HATHAWAY INC., Omaha, Neb. | 9900 | 13,012.0 | 61 | DEERE & CO., Moline, III. | 3500 | 2,656.0 |
| 12 | T-MOBILE US INC., Bellevue, Wash. | 4800 | 11,034.0 | 62 | TARGET CORP., Minneapolis, Minn. | 5300 | 2,649.0 |
| 13 | COMCAST CORP., Philadelphia, Pa. | 4800 | 10,677.0 | 63 | INTERNATIONAL BUSINESS MACHINES CORP., Armonk, N.Y. | 7300 | 2,618.0 |
| 14 | WALMART INC., Bentonville, Ark. | 5300 | 10,264.0 | 64 | CENTERPOINT ENERGY INC., Houston, Texas | 4900 | 2,596.0 |
| | | _ | | | | | |
| 15 | DUKE ENERGY CORP., Charlotte, N.C. | 4900 | 9,907.0 | 65 | OCCIDENTAL PETROLEUM CORP., Houston, Texas | 1300 | 2,535.0 |
| 16 | CHEVRON CORP., San Ramon, Calif. | 2900 | 8,922.0 | 66 | AIR LEASE CORP., Los Angeles, Calif. | 7300 | 2,527.1 |
| 17 | MICRON TECHNOLOGY INC., Boise, Idaho | 3600 | 8,223.0 | 67 | AIR PRODUCTS AND CHEMICALS INC., Allentown, Pa. | 2800 | 2,509.0 |
| 18 | EXELON CORP., Chicago, III. | 4900 | 8,048.0 | 68 | THE HOME DEPOT INC., Atlanta, Ga. | 5200 | 2,463.0 |
| 19 | PG&E CORP., San Francisco, Calif. | 4900 | 7,690.0 | 69 | CVS HEALTH CORP., Woonsocket, R.I. | 5900 | 2,437.0 |
| 20 | THE SOUTHERN CO., Atlanta, Ga. | 4900 | 7,441.0 | 70 | HEWLETT PACKARD ENTERPRISE CO., Houston, Texas | 3500 | 2,383.0 |
| 21 | CHARTER COMMUNICATIONS INC., Stamford, Conn. | 4800 | 7,415.0 | 71 | CMS ENERGY CORP., Jackson, Mich. | 4900 | 2,317.0 |
| 22 | APPLE INC., Cupertino, Calif. | 3600 | 7,309.0 | 72 | PFIZER INC., New York, N.Y. | 2800 | 2,252.0 |
| 23 | SANTANDER CONSUMER USA HOLDINGS INC., Dallas, Texas | 6100 | 6,884.1 | 73 | WEC ENERGY GROUP INC., Milwaukee, Wis. | 4900 | 2,238.8 |
| 24 | DOMINION ENERGY INC., Richmond, Va. | 4900 | 6,331.0 | 74 | HESS CORP., New York, N.Y. | 1300 | 2,197.0 |
| 25 | AMERICAN ELECTRIC POWER CO. INC., Columbus, Ohio | 4900 | 6,316.0 | 75 | oneok inc., Tulsa, Okla. | 4900 | 2,195.4 |
| 26 | THE GOLDMAN SACHS GROUP INC., New York, N.Y. | 6200 | 6,309.0 | 76 | ABBOTT LABORATORIES, North Chicago, III. | 3800 | 2,177.0 |
| 27 | FEDEX CORP., Memphis, Tenn. | 4500 | 5,884.0 | 77 | ORACLE CORP., Austin, Texas | 7300 | 2,135.0 |
| 28 | FORD MOTOR CO., Dearborn, Mich. | 3700 | 5,742.0 | 78 | CATERPILLAR INC., Deerfield, III. | 3500 | 2,115.0 |
| 29 | EDISON INTERNATIONAL, Rosemead, Calif. | 4900 | 5,484.0 | 79 | DELL TECHNOLOGIES INC., Round Rock, Texas | 3500 | 2,082.0 |
| 30 | UNITED PARCEL SERVICE INC., Atlanta, Ga. | 4200 | 5,412.0 | 80 | UNITEDHEALTH GROUP INC., Minnetonka, Minn. | 6300 | 2,051.0 |
| 31 | XCEL ENERGY INC., Minneapolis, Minn. | 4900 | 5,369.0 | 81 | DIAMONDBACK ENERGY INC., Midland, Texas | 1300 | 2,044.0 |
| 32 | ENTERGY CORP., New Orleans, La. | 4900 | 5,037.4 | 82 | ROYAL CARIBBEAN GROUP, Miami, Fla. | 4400 | 1,965.1 |
| 33 | CONOCOPHILLIPS, Houston, Texas | 1300 | 4,715.0 | 83 | FREEPORT-MCMORAN INC., Phoenix, Ariz. | 1000 | 1,961.0 |
| 34 | MERCK & CO. INC., Kenilworth, N.J. | 2800 | 4,684.0 | 84 | AMERICAN AIRLINES GROUP INC., Fort Worth, Texas | 4500 | 1,958.0 |
| 35 | SEMPRA, San Diego, Calif. | 4900 | 4,676.0 | 85 | LYONDELLBASELL INDUSTRIES N.V., Houston, Texas | 2800 | 1,947.0 |
| 36 | ALLY FINANCIAL INC., Detroit, Mich. | 6100 | 4,320.0 | 86 | ATMOS ENERGY CORP., Dallas, Texas | 4900 | 1,935.7 |
| 37 | PEPSICO INC., Purchase, N.Y. | 2000 | 4,240.0 | 87 | THE AES CORP., Arlington, Va. | 4900 | 1,900.0 |
| 38 | EVERSOURCE ENERGY, Springfield, Mass. | 4900 | 4,056.2 | 88 | DELTA AIR LINES INC., Atlanta, Ga. | 4500 | 1,899.0 |
| 39 | THE WALT DISNEY CO., Burbank, Calif. | 4800 | 4,022.0 | 89 | CHENIERE ENERGY INC., Houston, Texas | 1300 | 1,839.0 |
| 40 | CONSOLIDATED EDISON INC., New York, N.Y. | 4900 | 3,936.0 | 90 | AMERICAN WATER WORKS CO. INC., Camden, N.J. | 4900 | 1,822.0 |
| 41 | DTE ENERGY CO., Detroit, Mich. | 4900 | 3,857.0 | 91 | RAYTHEON TECHNOLOGIES CORP., Waltham, Mass. | 3700 | 1,795.0 |
| 42 | LUMEN TECHNOLOGIES INC., Monroe, La. | 4800 | 3,729.0 | 92 | | | 1,791.0 |
| | | _ | | | LOWE'S COS. INC., Mooresville, N.C. | 5200 | |
| 43 | CARNIVAL CORP. & PLC, Miami, Fla. | 4400 | 3,620.0 | 93 | VALERO ENERGY CORP., San Antonio, Texas | 2900 | 1,788.0 |
| 44 | EOG RESOURCES INC., Houston, Texas | 1300 | 3,464.7 | 94 | LOCKHEED MARTIN CORP., Bethesda, Md. | 3700 | 1,766.0 |
| 45 | CITIGROUP INC., New York, N.Y. | 6100 | 3,446.0 | 95 | NISOURCE INC., Merrillville, Ind. | 4900 | 1,758.1 |
| 46 | JOHNSON & JOHNSON, New Brunswick, N.J. | 2800 | 3,347.0 | 96 | UNITED AIRLINES HOLDINGS INC., Chicago, III. | 4500 | 1,727.0 |
| 47 | AMEREN CORP., St. Louis, Mo. | 4900 | 3,299.0 | 97 | KINDER MORGAN INC., Houston, Texas | 4900 | 1,723.0 |
| 48 | GENERAL ELECTRIC CO., Boston, Mass. | 9900 | 3,252.0 | 98 | MCDONALD'S CORP., Chicago, III. | 5800 | 1,640.8 |
| 49 | PPL CORP., Allentown, Pa. | 4900 | 3,249.0 | 99 | PACCAR INC, Bellevue, Wash. | 3700 | 1,638.4 |
| 50 | TESLA INC., Palo Alto, Calif. | 3700 | 3,232.0 | 100 | WASTE MANAGEMENT INC., Houston, Texas | 4900 | 1,632.0 |

| RANK 2021* | FIRM | FIRM TYPE** | CAPITAL EXPENDITURES 2020-2021† (\$ MIL) | RANK 2021* | FIRM | FIRM TYPE** | CAPITAL EXPENDITURES 2020-2021† (\$ MIL) |
|---------------|--|----------------|---|---------------|--|----------------|---|
| 101 | ALBERTSONS COS. INC., Boise, Idaho | 5400 | 1,630.2 | 151 | ANTHEM INC., Indianapolis, Ind. | 6300 | 1,021.0 |
| 102 | CSX CORP., Jacksonville, Fla. | 4000 | 1,626.0 | 152 | CIT GROUP INC., New York, N.Y. | 6000 | 1,018.6 |
| 103 | CROWN CASTLE INTERNATIONAL CORP. (REIT), Houston, Texas | 6700 | 1,624.0 | 153 | UNITED STATES CELLULAR CORP., Chicago, III. | 4800 | 989.0 |
| 104 | PIONEER NATURAL RESOURCES CO., Irving, Texas | 1300 | 1,602.0 | 154 | JABIL INC., St. Petersburg, Fla. | 3600 | 983.0 |
| 105 | EVERGY INC., Kansas City, Mo. | 4900 | 1,560.3 | 155 | WESTROCK CO., Atlanta, Ga. | 2600 | 978.1 |
| 106 | NUCOR CORP., Charlotte, N.C. | 3300 | 1,543.2 | 156 | BAKER HUGHES CO., Houston, Texas | 1300 | 974.0 |
| 107 | CONTINENTAL RESOURCES INC., Oklahoma City, Okla. | 1300 | 1,514.1 | 157 | SUNRUN INC., San Francisco, Calif. | 3600 | 969.7 |
| 108 | 3M CO., St. Paul, Minn. | 2600 | 1,501.0 | 158 | GENERAL DYNAMICS CORP., Reston, Va. | 3700 | 967.0 |
| 109 | NORFOLK SOUTHERN CORP., Norfolk, Va. | 4000 | 1,494.0 | 159 | HUMANA INC., Louisville, Ky. | 6300 | 964.0 |
| 110 | STARBUCKS CORP., Seattle, Wash. | 5800 | 1,483.6 | 160 | TARGA RESOURCES CORP., Houston, Texas | 4900 | 951.6 |
| 111 | AMERICAN EXPRESS CO., New York, N.Y. | 6100 | 1,479.0 | 161 | NORWEGIAN CRUISE LINE HOLDINGS LTD., Miami, Fla. | 4400 | 946.5 |
| 112 | THERMO FISHER SCIENTIFIC INC., Waltham, Mass. | 3800 | 1,474.0 | 162 | HONEYWELL INTERNATIONAL INC., Charlotte, N.C. | 9900 | 906.0 |
| 113 | MORGAN STANLEY, New York, N.Y. | 6200 | 1,444.0 | 163 | FISERV INC., Brookfield, Wis. | 7300 | 900.0 |
| 114 | AMERCO, Reno, Nev. | 7500 | 1,441.5 | 164 | DOLLAR TREE INC., Chesapeake, Va. | 5300 | 898.8 |
| 115 | NORTHROP GRUMMAN CORP., Falls Church, Va. | 3800 | 1,420.0 | 165 | SOUTHWESTERN ENERGY CO., Spring, Texas | 4900 | 896.0 |
| 116 | SCHLUMBERGER LTD., Houston, Texas | 1300 | 1,419.0 | 166 | ANTERO RESOURCES CORP., Denver, Colo. | 1300 | 874.4 |
| 117 | QUALCOMM INC., San Diego, Calif. | 3600 | 1,407.0 | 167 | TWITTER INC., San Francisco, Calif. | 7300 | 873.4 |
| 118 | DOW INC., Midland, Mich. | 2800 | 1,392.0 | 168 | MURPHY OIL CORP., Houston, Texas | 1300 | 872.8 |
| 119 | ELI LILLY AND CO., Indianapolis, Ind. | 2800 | 1,387.9 | 169 | CENTENE CORP., St. Louis, Mo. | 6300 | 869.0 |
| 120 | CORNING INC., Corning, N.Y. | 3600 | 1,377.0 | 170 | PAYPAL HOLDINGS INC., San Jose, Calif. | 7300 | 866.0 |
| 121 | WALGREENS BOOTS ALLIANCE INC., Deerfield, III. | 5900 | 1,374.0 | 171 | CONSTELLATION BRANDS INC., Victor, N.Y. | 2000 | 864.6 |
| 122 | | 4900 | 1,366.0 | 172 | MONDELEZ INTERNATIONAL INC., Chicago, III. | 2000 | 863.0 |
| 123 | ALLIANT ENERGY CORP., Madison, Wis. PINNACLE WEST CAPITAL CORP., Phoenix, Ariz. | 4900 | 1,345.1 | 173 | - | 4700 | 860.8 |
| 124 | - | 1300 | | 174 | GATX CORP., Chicago, III. | 2800 | 850.5 |
| 125 | MARATHON OIL CORP., Houston, Texas | 4800 | 1,343.0 | 175 | ALBEMARLE CORP., Charlotte, N.C. | 4900 | 835.6 |
| 126 | TELEPHONE AND DATA SYSTEMS INC., Chicago, III. | 7900 | 1,330.0 | 176 | ESSENTIAL UTILITIES INC., Bryn Mawr, Pa. | 3600 | 827.2 |
| 127 | LAS VEGAS SANDS CORP., Las Vegas, Nev. | 3700 | | 177 | VIASAT INC., Carlsbad, Calif. | 4900 | 825.1 |
| | THE BOEING CO., Chicago, III. | | 1,303.0 | | SOUTHWEST GAS HOLDINGS INC., Las Vegas, Nev. | 2000 | 823.0 |
| 128 | APA CORP., Houston, Texas | 1300 | 1,302.0 | 178 | ARCHER-DANIELS-MIDLAND CO., Chicago, III. | | |
| 129 | NEWMONT CORP., Denver, Colo. | 1000 | 1,302.0 | 179 | TRUIST FINANCIAL CORP., Charlotte, N.C. | 6000 | 815.0 |
| 130 | THE WILLIAMS COS. INC., Tulsa, Okla. | 4900 | 1,275.0 | 180 | BECTON DICKINSON AND CO., Franklin Lakes, N.J. | 3800 | 810.0 |
| 131 | DUPONT DE NEMOURS INC., Wilmington, Del. | 2800 | 1,264.0 | 181 | ABBVIE INC., North Chicago, III. | 2800 | 798.0 |
| 132 | VISTRA CORP., Irving, Texas | 4900 | 1,259.0 | 182 | EXPEDIA GROUP INC., Seattle, Wash. | 4700 | 797.0 |
| 133 | NATIONAL FUEL GAS CO., Williamsville, N.Y. | 4900 | 1,222.4 | 183 | JETBLUE AIRWAYS CORP., Long Island City, N.Y. | 4500 | 791.0 |
| 134 | THE BANK OF NEW YORK MELLON CORP., New York, N.Y. | 6000 | 1,222.0 | 184 | DANAHER CORP., Washington, D.C. | 3800 | 791.0 |
| 135 | KIMBERLY-CLARK CORP., Dallas, Texas | 2600 | 1,217.0 | 185 | PORTLAND GENERAL ELECTRIC CO., Portland, Ore. | 4900 | 784.0 |
| 136 | TYSON FOODS INC., Springdale, Ark. | 2000 | 1,199.0 | 186 | MATADOR RESOURCES CO., Dallas, Texas | 1300 | 780.5 |
| 137 | STEEL DYNAMICS INC., Fort Wayne, Ind. | 3300 | 1,198.1 | 187 | BLACK HILLS CORP., Rapid City, S.D. | 4900 | 767.4 |
| 138 | REPUBLIC SERVICES INC., Phoenix, Ariz. | 4900 | 1,194.6 | 188 | BRISTOL-MYERS SQUIBB CO., New York, N.Y. | 2800 | 753.0 |
| 139 | FRONTIER COMMUNICATIONS INC., Norwalk, Conn. | 4800 | 1,181.0 | 189 | INTERNATIONAL PAPER CO., Memphis, Tenn. | 2600 | 751.0 |
| 140 | THE COCA-COLA CO., Atlanta, Ga. | 2000 | 1,177.0 | 190 | J.B. HUNT TRANSPORT SERVICES INC., Lowell, Ark. | 4200 | 738.5 |
| 141 | THE MOSAIC CO., Tampa, Fla. | 2800 | 1,170.6 | 191 | VISA INC., San Francisco, Calif. | 6000 | 736.0 |
| 142 | DEVON ENERGY CORP., Oklahoma City, Okla. | 1300 | 1,161.0 | 192 | UNIVERSAL HEALTH SERVICES INC., King of Prussia, Pa. | 8000 | 731.3 |
| 143 | WESTERN DIGITAL CORP., San Jose, Calif. | 3500 | 1,146.0 | 193 | HALLIBURTON CO., Houston, Texas | 1300 | 728.0 |
| 144 | CHESAPEAKE ENERGY CORP., Oklahoma City, Okla. | 1300 | 1,142.0 | 194 | UNITED STATES STEEL CORP., Pittsburgh, Pa. | 3300 | 725.0 |
| 145 | NVIDIA CORP., Santa Clara, Calif. | 3600 | 1,128.0 | 195 | ALLETE INC., Duluth, Minn. | 4900 | 717.8 |
| 146 | BALL CORP., Westminster, Colo. | 3400 | 1,113.0 | 196 | BEST BUY CO. INC., Richfield, Minn. | 5700 | 713.0 |
| 147 | CIGNA CORP., Bloomfield, Conn. | 6300 | 1,094.0 | 197 | SALESFORCE.COM INC., San Francisco, Calif. | 7300 | 710.0 |
| 148 | ALTICE USA INC., Long Island City, N.Y. | 4800 | 1,074.0 | 198 | LOEWS CORP., New York, N.Y. | 6300 | 710.0 |
| 149 | EQT CORP., Pittsburgh, Pa. | 4900 | 1,042.2 | 199 | CAPITAL ONE FINANCIAL CORP., McLean, Va. | 6100 | 710.0 |
| 150 | DOLLAR GENERAL CORP., Goodlettsville, Tenn. | 5300 | 1,028.0 | 200 | BAXTER INTERNATIONAL INC., Deerfield, III. | 2800 | 709.0 |



The Top 50 List

The top 50 publicly held real estate investment trusts are ranked based on the 2020 construction-in-progress figures the trusts supplied to the U.S. Securities & Exchange Commission. The ENR Top 425 Owners list followed the same process (see p. 65). All the firms list their SIC code as 6700—that is, Holding and Other Investment Offices. The data were compiled by S&P Global Market Intelligence, a unit of S&P Global.

| RANK 2021 | | FIRM TYPE | | N IN PROGRESS % CHG. VS. 2019 | | ALUE ADDED % CHG. VS. 2019 | TOTAL BUILD 2020 (\$ MIL) | NG INVENTORY % CHG. VS. 2019 |
|--------------|---|--------------|---------|------------------------------------|--------|---------------------------------|------------------------------|-----------------------------------|
| 1 | ALEXANDRIA REAL ESTATE EQUITIES INC., Pasadena, Calif. | 6700 | 3,075.5 | 50 | 1,589 | -11 | 13,365 | 13 |
| 2 | DIGITAL REALTY TRUST INC., Austin, Texas | 6700 | 2,531.8 | 70 | 5,827 | 3,354 | 21,141 | 38 |
| 3 | PROLOGIS INC., San Francisco, Calif. | 6700 | 1,882.6 | 1 | 8,422 | 1,653 | 31,490 | 37 |
| 4 | VORNADO REALTY TRUST, New York, N.Y. | 6700 | 1,604.6 | 8 | -20 | NM | 7,933 | 0 |
| 5 | EQUINIX INC. (REIT), Redwood City, Calif. | 6700 | 1,363.9 | 36 | 1,159 | 101 | 6,557 | 21 |
| 6 | CROWN CASTLE INTERNATIONAL CORP. (REIT), Houston, Texas | 6700 | 1,063.0 | -2 | 0 | -100 | 147 | 0 |
| 7 | AVALONBAY COMMUNITIES INC., Arlington, Va. | 6700 | 989.8 | -24 | 563 | -45 | 17,231 | 3 |
| 8 | CYRUSONE INC., Dallas, Texas | 6700 | 982.2 | 4 | 274 | 226 | 2,035 | 16 |
| 9 | BOSTON PROPERTIES INC., Boston, Mass. | 6700 | 868.8 | 10 | 132 | -54 | 13,778 | 1 |
| 10 | FEDERAL REALTY INVESTMENT TRUST, North Bethesda, Md. | 6700 | 810.9 | 7 | NA | NA | NA | NA |
| 11 | DUKE REALTY CORP., Indianapolis, Ind. | 6700 | 695.2 | 26 | 517 | 64 | 5,812 | 10 |
| 12 | IRON MOUNTAIN INC., Boston, Mass. | 6700 | 499.5 | 11 | 11 | -71 | 3,040 | 0 |
| 13 | WELLTOWER INC., Toledo, Ohio | 6700 | 487.7 | -4 | -1,138 | -200 | 28,025 | -4 |
| 14 | CORPORATE OFFICE PROPERTIES TRUST, Columbia, Md. | 6700 | 447.3 | -21 | 404 | 523 | 3,711 | 12 |
| 15 | CAMDEN PROPERTY TRUST, Houston, Texas | 6700 | 444.6 | 8 | 360 | -23 | 7,764 | 5 |
| 16 | AMERICAN TOWER CORP. (REIT), Boston, Mass. | 6700 | 431.5 | 16 | -6 | NM | 466 | -1 |
| 17 | EQUITY RESIDENTIAL, Chicago, III. | 6700 | 411.1 | 126 | -440 | -166 | 18,464 | -2 |
| 18 | ESSEX PROPERTY TRUST INC., San Mateo, Calif. | 6700 | 386.0 | -29 | 868 | 45 | 12,133 | 8 |
| 19 | AMERICAN CAMPUS COMMUNITIES INC., Austin, Texas | 6700 | 361.9 | 6 | 201 | -52 | 7,107 | 3 |
| 20 | EASTGROUP PROPERTIES INC., Ridgeland, Miss. | 6700 | 359.6 | -14 | 213 | 21 | 2,121 | 11 |
| 21 | SERITAGE GROWTH PROPERTIES, New York, N.Y. | 6700 | 352.8 | 4 | -5 | -102 | 1,108 | 0 |
| 22 | CORESITE REALTY CORP., Denver, Colo. | 6700 | 319.4 | -19 | 284 | 9 | 2,274 | 14 |
| 23 | AMERICOLD REALTY TRUST, Atlanta, Ga. | 6700 | 303.5 | 179 | 1,308 | 54 | 4,005 | 49 |
| 24 | MID-AMERICA APARTMENT COMMUNITIES INC., Germantown, Tenn. | 6700 | 283.5 | 143 | 223 | 30 | 12,065 | 2 |
| 25 | HUDSON PACIFIC PROPERTIES INC., Los Angeles, Calif. | 6700 | 281.9 | 127 | 651 | 230 | 5,841 | 13 |
| 26 | JBG SMITH PROPERTIES, Bethesda, Md. | 6700 | 268.1 | -59 | 460 | 191 | 4,341 | 12 |
| 27 | VENTAS INC., Chicago, III. | 6700 | 265.7 | -42 | -57 | -103 | 24,323 | 0 |
| 28 | HIGHWOODS PROPERTIES INC., Raleigh, N.C. | 6700 | 259.7 | 50 | -147 | -132 | 4,982 | -3 |
| 29 | DOUGLAS EMMETT INC., Santa Monica, Calif. | 6700 | 254.3 | 128 | 36 | -97 | 9,345 | 0 |
| 30 | AMERICAN HOMES 4 RENT, Calabasas, Calif. | 6700 | 239.6 | 82 | 471 | 126 | 8,163 | 6 |
| 31 | BRANDYWINE REALTY TRUST, Philadelphia, Pa. | 6700 | 210.3 | 16 | -384 | -2,024 | 2,665 | -13 |
| 32 | RETAIL PROPERTIES OF AMERICA INC., Oak Brook, III. | 6700 | 188.6 | 66 | 46 | NM | 3,590 | 1 |
| 33 | PUBLIC STORAGE, Glendale, Calif. | 6700 | 188.1 | 33 | 895 | 5 | 12,997 | 7 |
| 34 | UDR INC., Highlands Ranch, Colo. | 6700 | 174.2 | 330 | 190 | -90 | 10,293 | 2 |
| 35 | RYMAN HOSPITALITY PROPERTIES INC., Nashville, Tenn. | 6700 | 166.1 | 100 | 30 | -43 | 3,462 | 1 |
| 36 | HOST HOTELS & RESORTS INC., Bethesda, Md. | 6700 | 166.0 | -37 | 301 | NM | 13,609 | 2 |
| 37 | REGENCY CENTERS CORP., Jacksonville, Fla. | 6700 | 159.2 | 5 | 34 | -40 | 6,081 | 1 |
| 38 | THE MACERICH CO., Santa Monica, Calif. | 6700 | 153.3 | 21 | 231 | 129 | 6,621 | 4 |
| 39 | W. P. CAREY INC., New York, N.Y. | 6700 | 119.4 | 72 | 0 | NM | 73 | 1 |
| 40 | CUBESMART, Malvern, Pa. | 6700 | 108.3 | 16 | 503 | 82 | 4,123 | 14 |
| 41 | DIGITALBRIDGE GROUP INC., Boca Raton, Fla. | 6700 | 84.4 | -67 | -4,116 | NM | 4,907 | -46 |
| 42 | COLUMBIA PROPERTY TRUST INC., New York, N.Y. | 6700 | 83.9 | 57 | -159 | NM | 1,841 | -8 |
| 43 | HEALTHCARE TRUST OF AMERICA INC., Scottsdale, Ariz. | 6700 | 80.2 | 185 | 255 | -45 | 6,508 | 4 |
| 44 | LEXINGTON REALTY TRUST, New York, N.Y. | 6700 | 79.0 | 420 | 181 | -16 | 3,144 | 6 |
| 45 | FIRST INDUSTRIAL REALTY TRUST INC., Chicago, III. | 6700 | 77.6 | -14 | 140 | 80 | 2,922 | 5 |
| 46 | STARWOOD PROPERTY TRUST INC., Greenwich, Conn. | 6700 | 75.2 | NA | 3 | NM | 1,889 | 0 |
| 47 | WEYERHAEUSER CO., Seattle, Wash. | 2400 | 73.0 | -44 | 50 | -12 | 1,049 | 5 |
| 48 | SAUL CENTERS INC., Bethesda, Md. | 6700 | 69.5 | -79 | 251 | 1,198 | 1,544 | 19 |
| 48 | | 6700 | 67.4 | 64 | 309 | 1,190 | | 4 |
| 49 50 | EXTRA SPACE STORAGE INC., Salt Lake City, Utah ARMADA HOFFLER PROPERTIES INC., Virginia Beach, Va. | 6700 | 63.4 | -55 | 219 | -37 | 7,357 1,358 | 19 |

| ANK 021* | FIRM TYPE** | | N IN PROGRESS % CHG. VS. 2019 | BUILDING VA 2020 (\$ MIL) | ALUE ADDED % CHG. VS. 2019 | TOTAL BUILDIN 2020 (\$ MIL) | IG INVENTORY % CHG. VS. 2019 |
|---|----------------|----------|------------------------------------|------------------------------|---------------------------------|--------------------------------|---------------------------------|
| 1 ALPHABET INC., Mountain View, Calif. | 7300 | 23,111.0 | 10 | NA NA | NA | NA | NA |
| 2 INTEL CORP., Santa Clara, Calif. | 3600 | 17,309.0 | 8 | NA | NA | NA | NA |
| 3 AMAZON.COM INC., Seattle, Wash. | 5900 | 15,228.0 | 152 | NA | NA | NA | NA |
| 4 FACEBOOK INC., Menlo Park, Calif. | 7300 | 11,288.0 | 12 | 6,134 | 60 | 17,360 | 55 |
| 5 NEXTERA ENERGY INC., Juno Beach, Fla. | 4900 | 10,639.0 | 14 | NA | NA | NA | NA |
| 6 THE SOUTHERN CO., Atlanta, Ga. | 4900 | 8,697.0 | 10 | NA | NA | NA | NA |
| 7 VERIZON COMMUNICATIONS INC., New York, N.Y. | 4800 | 8,576.0 | -7 | 1,717 | 130 | 32,933 | 6 |
| 8 MERCK & CO. INC., Kenilworth, N.J. | 2800 | 7,324.0 | 46 | 656 | 30 | 12,645 | 5 |
| 9 COMCAST CORP., Philadelphia, Pa. | 4800 | 7,095.0 | 35 | 781 | -15 | 15,885 | 5 |
| 10 DUKE ENERGY CORP., Charlotte, N.C. | 4900 | 6,645.0 | 9 | 259 | NM | 2,557 | 11 |
| 11 CHENIERE ENERGY INC., Houston, Texas | 1300 | 5,378.0 | 38 | NA | NA | NA | N/ |
| 12 EDISON INTERNATIONAL, Rosemead, Calif. | 4900 | 5,033.0 | 22 | NA | NA | NA | N/ |
| 13 WALMART INC., Bentonville, Ark. | 5300 | 4,741.0 | 26 | -8,092 | -273 | 97,582 | -{ |
| 14 T-MOBILE US INC., Bellevue, Wash. | 4800 | 4,595.0 | 55 | 1,419 | 765 | 4,006 | 55 |
| 15 THE WALT DISNEY CO., Burbank, Calif. | 4800 | 4,449.0 | 4 | NA | NA | NA | N/ |
| 16 SEMPRA, San Diego, Calif. | 4900 | 4,388.0 | 31 | NA | NA | NA | N/ |
| 17 JOHNSON & JOHNSON, New Brunswick, N.J. | 2800 | 4,316.0 | 19 | 625 | -11 | 12,502 | į |
| 18 BERKSHIRE HATHAWAY INC., Omaha, Neb. | 9900 | 4,224.0 | -6 | NA | NA | NA | N/ |
| 19 THE AES CORP., Arlington, Va. | 4900 | 4,174.0 | -20 | -105 | NM | 1,507 | -7 |
| 20 AT&T INC., Dallas, Texas | 4800 | 4,099.0 | -2 | 494 | -46 | 39,418 | 1 |
| 21 AMERICAN ELECTRIC POWER CO. INC., Columbus, Ohio | 4900 | 4,025.7 | -7 | NA | NA | NA | N/ |
| 22 PEPSICO INC., Purchase, N.Y. | 2000 | 3,679.0 | 16 | 900 | 141 | 10,214 | 10 |
| 23 GENERAL MOTORS CO., Detroit, Mich. | 3700 | 3,581.0 | 18 | -34 | -106 | 9,671 | (|
| 24 EXELON CORP., Chicago, III. | 4900 | 3,576.0 | 17 | NA | NA | NA | N/ |
| 25 PFIZER INC., New York, N.Y. | 2800 | 3,552.0 | 20 | -1,046 | -807 | 9,022 | -10 |
| 26 DOMINION ENERGY INC., Richmond, Va. | 4900 | 3,350.0 | 13 | NA | NA | NA | N/ |
| 27 CONSOLIDATED EDISON INC., New York, N.Y. | 4900 | 3,112.0 | 39 | NA | NA | NA | N/ |
| 28 LYONDELLBASELL INDUSTRIES N.V., Houston, Texas | 2800 | 3,103.0 | -6 | 151 | -9 | 1,241 | 14 |
| 29 THE KROGER CO., Cincinnati, Ohio | 5400 | 2,892.0 | -9 | 596 | 94 | 13,149 | į |
| 30 PG&E CORP., San Francisco, Calif. | 4900 | 2,757.0 | 3 | NA | NA | NA | N/ |
| 31 NEWMONT CORP., Denver, Colo. | 1000 | 2,474.0 | 18 | NA | NA | NA | N. |
| 32 AVANGRID INC., Orange, Conn. | 4900 | 2,408.0 | 11 | NA | NA | NA | N. |
| 33 VALERO ENERGY CORP., San Antonio, Texas | 2900 | 2,399.0 | 39 | 23 | -63 | 1,038 | : |
| 34 THE PROCTER & GAMBLE CO., Cincinnati, Ohio | 2800 | 2,358.0 | 16 | 465 | NM | 8,165 | (|
| 35 ELI LILLY AND CO., Indianapolis, Ind. | 2800 | 2,138.8 | 14 | 259 | NM | 7,326 | |
| 36 CONSTELLATION BRANDS INC., Victor, N.Y. | 2000 | 2,084.2 | 46 | 8 | NM | 983 | |
| 37 LAS VEGAS SANDS CORP., Las Vegas, Nev. | 7900 | 2,074.0 | 38 | 352 | NM | 18,014 | |
| 38 UNITED PARCEL SERVICE INC., Atlanta, Ga. | 4200 | 2,048.0 | 3 | 674 | -16 | 10,346 | |
| 39 PUBLIC SERVICE ENTERPRISE GROUP INC., Newark, N.J. | 4900 | 2,031.0 | 8 | NA | NA | NA | N. |
| 40 ENTERGY CORP., New Orleans, La. | 4900 | 2,012.0 | -29 | NA | NA | NA | N. |
| 41 BIOGEN INC., Cambridge, Mass. | 2800 | 1,950.8 | -6 | 190 | NM | 1,025 | 2 |
| 42 LOCKHEED MARTIN CORP., Bethesda, Md. | 3700 | 1,921.0 | 13 | 412 | -10 | 7,425 | (|
| 43 CORNING INC., Corning, N.Y. | 3600 | 1,918.0 | -30 | 430 | 334 | 6,453 | |
| 44 XCEL ENERGY INC., Minneapolis, Minn. | 4900 | 1,877.0 | -19 | NA | NA | NA | N/ |
| 45 EVERSOURCE ENERGY, Springfield, Mass. | 4900 | 1,854.4 | 7 | NA | NA | NA | N/ |
| 46 MARATHON PETROLEUM CORP., Findlay, Ohio | 2900 | 1,830.0 | -47 | NA | NA | NA | N. |
| 47 AIR PRODUCTS AND CHEMICALS INC., Allentown, Pa. | 2800 | 1,784.2 | 76 | 51 | NM | 998 | |
| 48 TESLA INC., Palo Alto, Calif. | 3700 | 1,649.0 | 111 | NA | NA | NA | N |
| 49 LUMEN TECHNOLOGIES INC., Monroe, La. | 4800 | 1,611.0 | -30 | NA | NA | NA | N. |
| 50 DOW INC., Midland, Mich. | 2800 | 1,604.0 | -19 | 234 | NM | 4,976 | |
| 51 NUCOR CORP., Charlotte, N.C. | 3300 | 1,603.4 | 45 | 92 | -29 | 1,506 | 7 |

| ANK 121* | FIRM TYPE** | CONSTRUCTION 2020 (\$ MIL) | N IN PROGRESS % CHG. VS. 2019 | BUILDING VA 2020 (\$ MIL) | ALUE ADDED % CHG. VS. 2019 | | NG INVENTORY % CHG. VS. 2019 |
|--|----------------|-------------------------------|------------------------------------|------------------------------|---------------------------------|--------|-----------------------------------|
| 52 MICRON TECHNOLOGY INC., Boise, Idaho | 3600 | 1,600.0 | -6 | 3,578 | 62 | 13,981 | 34 |
| 53 FIRSTENERGY CORP., Akron, Ohio | 4900 | 1,578.0 | 20 | NA | NA | NA | NA |
| 54 VIASAT INC., Carlsbad, Calif. | 3600 | 1,557.9 | 38 | 0.0 | NM | 9 | 0 |
| 55 DUPONT DE NEMOURS INC., Wilmington, Del. | 2800 | 1,546.0 | -6 | 253 | NM | 3,028 | 9 |
| 56 ONEOK INC., Tulsa, Okla. | 4900 | 1,513.0 | -56 | NA | NA | NA | NA |
| 57 PPL CORP., Allentown, Pa. | 4900 | 1,503.0 | -5 | NA | NA | NA | NA |
| 58 HCA HEALTHCARE INC., Nashville, Tenn. | 8000 | 1,495.0 | -8 | 802 | -60 | 18,471 | 5 |
| 59 ALBEMARLE CORP., Charlotte, N.C. | 2800 | 1,491.3 | 29 | 17 | -80 | 355 | 5 |
| 60 SOUTHERN COPPER CORP., Phoenix, Ariz. | 1000 | 1,481.6 | 14 | 546 | -24 | 15,562 | 4 |
| 61 FREEPORT-MCMORAN INC., Phoenix, Ariz. | 1000 | 1,454.0 | -66 | 779 | 103 | 9,214 | 9 |
| THE MOSAIC CO., Tampa, Fla. | 2800 | 1,447.1 | 15 | 198 | -43 | 3,306 | 6 |
| 3M CO., St. Paul, Minn. | 2600 | 1,425.0 | 9 | 144 | -60 | 8,021 | 2 |
| 64 CLEVELAND-CLIFFS INC., Cleveland, Ohio | 3300 | 1,364.0 | 87 | 473 | 553 | 703 | 206 |
| 65 ABBOTT LABORATORIES, North Chicago, III. | 3800 | 1,357.0 | 22 | 312 | 112 | 4,014 | 8 |
| 66 THE BOEING CO., Chicago, III. | 3700 | 1,340.0 | 3 | 127 | -29 | 14,415 | 1 |
| 67 STEEL DYNAMICS INC., Fort Wayne, Ind. | 3300 | 1,302.7 | 233 | 55 | 107 | 861 | 7 |
| 68 COSTCO WHOLESALE CORP., Issaquah, Wash. | 5300 | 1,276.0 | 0 | 846 | -18 | 17,982 | 5 |
| 69 EVERGY INC., Kansas City, Mo. | 4900 | 1,153.5 | 37 | NA | NA | NA | N/A |
| 70 THE HOWARD HUGHES CORP., Dallas, Texas | 6500 | 1,152.7 | -20 | 302 | -66 | 4,115 | 3 |
| 71 MADISON SQUARE GARDEN ENTERTAINMENT CORP., New York, N.Y. | 7900 | 1,144.9 | 67 | 3 | NM | 996 | (|
| 72 ARCHER-DANIELS-MIDLAND CO., Chicago, III. | 2000 | 1,118.0 | 10 | 141 | -33 | 5,522 | 3 |
| 73 CMS ENERGY CORP., Jackson, Mich. | 4900 | 1,085.0 | 21 | NA | NA | NA | N/ |
| 74 PACCAR INC., Bellevue, Wash. | 3700 | 1,081.8 | 46 | 93 | 74 | 1,475 | - |
| 75 ROYAL CARIBBEAN GROUP, Miami, Fla. | 4400 | 1,078.2 | -3 | NA | NA | NA | N/ |
| 76 THE HOME DEPOT INC., Atlanta, Ga. | 5200 | 1,068.0 | 6 | 406 | 74 | 18,838 | 2 |
| 77 ABBVIE INC., North Chicago, III. | 2800 | 1,040.0 | 112 | 942 | 9,320 | 2,555 | 58 |
| 78 WEC ENERGY GROUP INC., Milwaukee, Wis. | 4900 | 1,019.0 | 21 | NA | NA | NA | NA |
| 79 TYSON FOODS INC., Springdale, Ark. | 2000 | 991.0 | 39 | 214 | -66 | 4,961 | 5 |
| 80 ALBERTSONS COS. INC., Boise, Idaho | 5400 | 938.9 | 40 | 161 | NM | 4,881 | 3 |
| PINNACLE WEST CAPITAL CORP., Phoenix, Ariz. | 4900 | 937.4 | 16 | NA | NA | NA | N/ |
| AMGEN INC., Thousand Oaks, Calif. | 2800 | 915.0 | 1 | 100 | -29 | 3,857 | ; |
| BALL CORP., Westminster, Colo. | 3400 | 883.0 | 103 | 220 | 197 | 1,653 | 15 |
| AMEREN CORP., St. Louis, Mo. | 4900 | 861.0 | 18 | NA | NA | NA | N/ |
| 85 GILEAD SCIENCES INC., Foster City, Calif. | 2800 | 856.0 | 18 | 320 | -68 | 3,678 | 1(|
| 86 KIMBERLY-CLARK CORP., Dallas, Texas | 2600 | 845.0 | -1 | 55 | -39 | 2,932 | 2 |
| 87 LOWE'S COS. INC., Mooresville, N.C. | 5200 | 831.0 | 64 | 228 | NM | 18,090 | |
| 88 HONEYWELL INTERNATIONAL INC., Charlotte, N.C. | 9900 | 825.0 | 14 | 93 | 244 | 3,245 | ; |
| 89 GENERAL DYNAMICS CORP., Reston, Va. | 3700 | 802.0 | 17 | 326 | 48 | 3,558 | 1(|
| THE KRAFT HEINZ CO., Pittsburgh, Pa. | 2000 | 792.0 | -23 | 67 | -7 | 2,514 | |
| 91 TARGET CORP., Minneapolis, Minn. | 5300 | 780.0 | 46 | 630 | -56 | 30,053 | |
| 92 CAPITAL ONE FINANCIAL CORP., McLean, Va. | 6100 | 768.0 | 11 | -161 | NM | 3,742 | - |
| 93 CREE INC., Durham, N.C. | 3600 | 767.8 | 107 | NA | NA | NA | N/ |
| 94 UNION PACIFIC CORP., Omaha, Neb. | 4000 | 748.0 | -40 | NA | NA | NA | N/ |
| 95 THE GOODYEAR TIRE & RUBBER CO., Akron, Ohio | 3000 | 737.0 | 8 | 36 | NM | 2,467 | |
| 96 REGENERON PHARMACEUTICALS INC., Tarrytown, N.Y. | 2800 | 724.5 | 12 | 208 | 18 | 1,891 | 12 |
| 97 CORTEVA INC., Wilmington, Del. | 1000 | 721.0 | 24 | 17 | NA | 1,525 | |
| 98 VISTRA CORP., Irving, Texas | 4900 | 712.0 | 224 | NA | NA | NA | N/ |
| 99 BAXTER INTERNATIONAL INC., Deerfield, III. | 2800 | 701.0 | 19 | 88 | 40 | 1,849 | |
| OO ZOETIS INC., Parsippany, N.J. | 2800 | 673.0 | 22 | 36 | -33 | 1,019 | |
| THE WILLIAMS COS. INC., Tulsa, Okla. | 4900 | 671.0 | -29 | NA | NA | NA | N/ |
| 02 KELLOGG CO., Battle Creek, Mich. | 2000 | 641.0 | 13 | 114 | NM | 2,135 | 6 |

| 104 M 105 M 106 C 107 U 108 H 109 K 110 M 111 M 112 F 113 M | LUCID GROUP INC., Newark, Calif. IORFOLK SOUTHERN CORP., Norfolk, Va. MONDELEZ INTERNATIONAL INC., Chicago, III. DAVITA INC., Denver, Colo. INITED STATES STEEL CORP., Pittsburgh, Pa. DACORP INC., Boise, Idaho KINDER MORGAN INC., Houston, Texas IISOURCE INC., Merrillville, Ind. | 3700 4000 2000 8000 3300 4900 | 636.9 630.0 628.0 616.7 | % CHG. VS. 2019 432 -3 -8 | NA NA | % CHG. VS. 2019 NA NA | 2020 (\$ MIL) NA NA | % CHG. VS. 2019 NA NA |
|--|--|--|----------------------------------|------------------------------------|----------|-----------------------------|---------------------------|-----------------------------|
| 104 M 105 M 106 C 107 U 108 H 109 K 110 M 111 M 112 F 113 M | IORFOLK SOUTHERN CORP., Norfolk, Va. MONDELEZ INTERNATIONAL INC., Chicago, III. DAVITA INC., Denver, Colo. INITED STATES STEEL CORP., Pittsburgh, Pa. DACORP INC., Boise, Idaho KINDER MORGAN INC., Houston, Texas | 4000 2000 8000 3300 | 630.0 628.0 | -3 | NA | | | |
| 105 M 106 C 107 U 108 II 109 K 110 M 111 M 112 F 113 M | MONDELEZ INTERNATIONAL INC., Chicago, III. DAVITA INC., Denver, Colo. INITED STATES STEEL CORP., Pittsburgh, Pa. DACORP INC., Boise, Idaho KINDER MORGAN INC., Houston, Texas | 2000 8000 3300 | 628.0 | | | | | |
| 106 C 107 U 108 II 109 K 110 N 111 A 112 F 113 N | DAVITA INC., Denver, Colo. INITED STATES STEEL CORP., Pittsburgh, Pa. DACORP INC., Boise, Idaho KINDER MORGAN INC., Houston, Texas | 8000 3300 | | " | 112 | -28 | 3,252 | 4 |
| 107 U 108 II 109 K 110 N 111 N 112 F 113 N | DACORP INC., Boise, Idaho KINDER MORGAN INC., Houston, Texas | 3300 | 010.7 | 5 | 8 | NM | 401 | 2 |
| 108 II 109 K 110 N 111 N 112 F 113 N | DACORP INC., Boise, Idaho KINDER MORGAN INC., Houston, Texas | | 613.0 | -26 | 49 | 600 | 1,154 | 4 |
| 109 K 110 N 111 N 112 F 113 N | KINDER MORGAN INC., Houston, Texas | 1000 | 597.2 | 8 | NA NA | NA NA | NA NA | NA |
| 110 M 111 M 112 F 113 M | · | 4900 | 582.0 | -42 | NA NA | NA NA | NA | NA |
| 111 N 112 F 113 N | | 4900 | 572.6 | 25 | NA NA | NA NA | NA | NA |
| 112 F | MAXAR TECHNOLOGIES INC., Westminster, Colo. | 3600 | 572.0 | 47 | NA NA | NA NA | NA. | NA |
| 113 N | RONTIER COMMUNICATIONS INC., Norwalk, Conn. | 4800 | 558.0 | 48 | -32 | NM | 2,139 | -1 |
| | IVIDIA CORP., Santa Clara, Calif. | 3600 | 558.0 | 7 | 1 | 0 | 341 | 0 |
| | IEW JERSEY RESOURCES CORP., Wall Township, N.J. | 4900 | 556.4 | 89 | NA | NA NA | NA. | NA NA |
| 115 C | CUMMINS INC., Columbus, Ind. | 3500 | 547.0 | -8 | NA NA | NA NA | NA NA | NA NA |
| | CATALENT INC., Somerset, N.J. | 2800 | 543.0 | 23 | NA NA | NA NA | NA NA | NA NA |
| | ADLSON COORS BEVERAGE CO., Golden, Colo. | 2000 | 532.1 | 20 | 49 | -32 | 1,075 | 5 |
| | ELEPHONE AND DATA SYSTEMS INC., Chicago, III. | 4800 | 528.0 | -11 | 6 | 50 | 533 | 1 |
| | VESTLAKE CHEMICAL CORP., Houston, Texas | 2800 | 527.0 | -4 | 44 | -31 | 652 | 7 |
| | PDC ENERGY INC., Denver, Colo. | 1300 | 523.6 | 28 | NA NA | NA NA | NA | NA |
| | ROWN HOLDINGS INC., Yardley, Pa. | 3400 | 514.0 | 86 | 17 | -66 | 1,419 | 1 |
| | SIRIUS XM HOLDINGS INC., New York, N.Y. | 4800 | 510.0 | 1 | 0 | -100 | 63 | 0 |
| | CHOSTAR CORP., Englewood, Colo. | 3600 | 508.7 | 22 | 1 | NM | 115 | 1 |
| | INIVERSAL HEALTH SERVICES INC., King of Prussia, Pa. | 8000 | 507.4 | 35 | 384 | 48 | 6,030 | 7 |
| | CELANESE CORP., Irving, Texas | 2800 | 492.0 | 8 | 50 | 213 | 812 | 7 |
| | BRISTOL-MYERS SQUIBB CO., New York, N.Y. | 2800 | 487.0 | -8 | -604 | -155 | 5,732 | -10 |
| | DRMAT TECHNOLOGIES INC., Reno, Nev. | 4900 | 479.3 | 27 | NA | NA | NA. | NA |
| | RAPHIC PACKAGING HOLDING CO., Atlanta, Ga. | 2600 | 478.3 | 136 | 16 | -57 | 566 | 3 |
| | VESTERN DIGITAL CORP., San Jose, Calif. | 3500 | 476.0 | 60 | 17 | -82 | 1,854 | 1 |
| | MERSON ELECTRIC CO., St. Louis, Mo. | 3800 | 463.0 | -2 | 116 | 57 | 2,335 | 5 |
| | CHILIP MORRIS INTERNATIONAL INC., New York, N.Y. | 2100 | 449.0 | 14 | 278 | 77 | 4,410 | 7 |
| | COSTON SCIENTIFIC CORP., Mariborough, Mass. | 3800 | 446.0 | 1 | 94 | -4 | 1,292 | 8 |
| _ | DEERE & CO., Moline, III. | 3500 | 440.0 | -40 | 138 | 8 | 4,114 | 3 |
| | BORGWARNER INC., Auburn Hills, Mich. | 3700 | 432.0 | 20 | NA | NM | NA | NA |
| | ORTLAND GENERAL ELECTRIC CO., Portland, Ore. | 4900 | 429.0 | 31 | NA | NA | NA | NA |
| | DELEK US HOLDINGS INC., Brentwood, Tenn. | 2900 | 428.5 | 16 | 6 | NM | 114 | 5 |
| | ORTRESS TRANS. AND INFRA. INVESTORS LLC, New York, N.Y. | 7300 | 425.3 | 101 | 1 | NM | 4 | 19 |
| _ | HE CHEMOURS CO., Wilmington, Del. | 2800 | 421.0 | -15 | 24 | -91 | 1,198 | 2 |
| | WX TECHNOLOGIES INC., Lynchburg, Va. | 3500 | 420.4 | 58 | 46 | 191 | 268 | 21 |
| | FIRST SOLAR INC., Tempe, Ariz. | 3600 | 419.8 | 73 | 29 | -69 | 694 | 4 |
| | TMOS ENERGY CORP., Dallas, Texas | 4900 | 418.1 | -1 | NA | NA | NA | NA |
| | REPUBLIC SERVICES INC., Phoenix, Ariz. | 4900 | 411.2 | -10 | 60 | -5 | 1,403 | 4 |
| | ALLIANT ENERGY CORP., Madison, Wis. | 4900 | 405.0 | -78 | NA | NA | NA | NA |
| | GENERAL MILLS INC., Minneapolis, Minn. | 2000 | 395.7 | 6 | 130 | NM | 2,543 | 5 |
| | SUNRUN INC., San Francisco, Calif. | 3600 | 394.1 | 94 | NA | NA | NA | NA |
| | KEURIG DR PEPPER INC., Burlington, Mass. | 2000 | 393.0 | 43 | 47 | NM | 520 | 10 |
| | SEABOARD CORP., Merriam, Kan. | 9900 | 389.0 | 36 | 66 | 20 | 712 | 10 |
| | ACKESSON CORP., Irving, Texas | 5100 | 382.0 | NA | -2,298 | NM | 1,745 | -57 |
| | STARBUCKS CORP., Seattle, Wash. | 5800 | 377.3 | 5 | -105 | -178 | 587 | -15 |
| | /IATRIS INC., Canonsburg, Pa. | 2800 | 376.3 | 36 | 758 | 4,950 | 1,955 | 63 |
| | ROSS STORES INC., Dublin, Calif. | 5600 | 376.1 | 98 | NA | NA NA | NA | NA |
| | IORWEGIAN CRUISE LINE HOLDINGS LTD., Miami, Fla. | 4400 | 376.1 | -3 | NA | NA | NA | NA |
| | SX CORP., Jacksonville, Fla. | 4000 | 371.0 | -14 | 31 | 82 | 1,366 | 2 |

| RANK 2021* | | FIRM TYPE** | | N IN PROGRESS % CHG. VS. 2019 | | ALUE ADDED % CHG. VS. 2019 | TOTAL BUILDIN 2020 (\$ MIL) | IG INVENTORY % CHG. VS. 2019 |
|---------------|---|----------------|-------|------------------------------------|--------|---------------------------------|--------------------------------|---------------------------------|
| 205 | PNM RESOURCES INC., Albuquerque, N.M. | 4900 | 218.7 | 36 | NA | NA NA | NA | NA NA |
| 206 | ACADIA HEALTHCARE CO. INC., Franklin, Tenn. | 8000 | 217.5 | -14 | -1,256 | -489 | 1,490 | -46 |
| 207 | HAWAIIAN ELECTRIC INDUSTRIES INC., Honolulu, Hawaii | 4900 | 214.3 | -7 | NA | NA | NA | NA |
| 208 | TRINITY PLACE HOLDINGS INC., New York, N.Y. | 6500 | 213.2 | -6 | 0 | NM | 41 | 0 |
| 209 | OTTER TAIL CORP., Fergus Falls, Minn. | 4900 | 212.4 | 15 | 2 | 406 | 55 | 4 |
| 210 | SOUTHWEST GAS HOLDINGS INC., Las Vegas, Nev. | 4900 | 211.4 | 14 | NA | NA | NA | NA |
| 211 | O-I GLASS INC., Perrysburg, Ohio | 3200 | 211.0 | -41 | -70 | -156 | 1,197 | -6 |
| 212 | MARTIN MARIETTA MATERIALS INC., Raleigh, N.C. | 1400 | 209.4 | -19 | 1 | -39 | 164 | 0 |
| 213 | HILTON GRAND VACATIONS INC., Orlando, Fla. | 6500 | 208.0 | -46 | -36 | NM | 250 | -13 |
| 214 | HOWMET AEROSPACE INC., Pittsburgh, Pa. | 3700 | 208.0 | -72 | -1,352 | -6,538 | 1,033 | -57 |
| 215 | REGIONS FINANCIAL CORP., Birmingham, Ala. | 6000 | 208.0 | 5 | -105 | NM | 1,678 | -6 |
| 216 | ENCOMPASS HEALTH CORP., Birmingham, Ala. | 8000 | 202.5 | 8 | 272 | -50 | 2,357 | 13 |
| 217 | QUEST DIAGNOSTICS INC., Secaucus, N.J. | 8000 | 202.0 | -39 | 185 | NM | 526 | 54 |
| 218 | SILGAN HOLDINGS INC., Stamford, Conn. | 3400 | 199.6 | 19 | 67 | 157 | 560 | 14 |
| 219 | PBF ENERGY INC., Parsippany, N.J. | 2900 | 199.2 | -36 | 62 | 877 | 127 | 97 |
| 220 | PILGRIM'S PRIDE CORP., Greeley, Colo. | 2000 | 199.2 | -13 | 230 | 306 | 1,984 | 13 |
| 221 | ADOBE INC., San Jose, Calif. | 7300 | 199.0 | 77 | 111 | 465 | 901 | 14 |
| 222 | SWITCH INC., Las Vegas, Nev. | 7300 | 198.4 | -22 | 98 | 323 | 533 | 22 |
| 223 | STERICYCLE INC., Bannockburn, III. | 4900 | 196.1 | 13 | -38 | -293 | 225 | -15 |
| 224 | URBAN OUTFITTERS INC., Philadelphia, Pa. | 5600 | 195.7 | 152 | 2 | -97 | 413 | 0 |
| 225 | PARKER-HANNIFIN CORP., Cleveland, Ohio | 3400 | 195.6 | 11 | 75 | -64 | 1,848 | 4 |
| 226 | ASHLAND GLOBAL HOLDINGS INC., Wilmington, Del. | 2800 | 193.0 | -1 | 28 | NM | 489 | 6 |
| 227 | WEST PHARMACEUTICAL SERVICES INC., Exton, Pa. | 3000 | 192.1 | 49 | 45 | 1,089 | 618 | 8 |
| 228 | ELANCO ANIMAL HEALTH INC., Greenfield, Ind. | 2800 | 191.0 | 37 | 148 | 257 | 756 | 24 |
| 229 | PACTIV EVERGREEN INC., Lake Forest, III. | 2600 | 191.0 | -58 | -361 | NM | 532 | -40 |
| 230 | CABOT CORP., Boston, Mass. | 2800 | 190.0 | -27 | 28 | 180 | 552 | 5 |
| 231 | DOLLAR GENERAL CORP., Goodlettsville, Tenn. | 5300 | 183.6 | 195 | 39 | -45 | 1,329 | 3 |
| 232 | EMERGENT BIOSOLUTIONS INC., Gaithersburg, Md. | 2800 | 183.4 | 125 | 12 | -38 | 246 | 5 |
| 233 | KLA CORP., Milpitas, Calif. | 3800 | 182.3 | 95 | 53 | 1,985 | 459 | 13 |
| 234 | DARLING INGREDIENTS INC., Irving, Texas | 2000 | 179.1 | -2 | 65 | -8 | 684 | 11 |
| 235 | NEWS CORP., New York, N.Y. | 2700 | 179.0 | 56 | 219 | NM | 1,692 | 15 |
| 236 | TRUIST FINANCIAL CORP., Charlotte, N.C. | 6000 | 179.0 | -9 | 471 | 5 | 2,724 | 21 |
| 237 | BLACK HILLS CORP., Rapid City, S.D. | 4900 | 177.9 | -7 | NA | NA | NA | NA |
| 238 | VULCAN MATERIALS CO., Birmingham, Ala. | 1400 | 176.9 | 14 | 4 | 81 | 145 | 2 |
| 239 | AVISTA CORP., Spokane, Wash. | 4900 | 175.8 | 7 | NA | NA | NA | NA |
| 240 | W. R. GRACE & CO., Columbia, Md. | 2800 | 175.7 | -39 | 38 | 171 | 477 | 9 |
| 241 | | 6200 | 175.0 | 19 | 24 | NM | 108 | 29 |
| 242 | | 4800 | 174.6 | -9 | 25 | -46 | 482 | 5 |
| 243 | NORTHWESTERN CORP., Sioux Falls, S.D. | 4900 | 173.5 | 80 | 25 | 79 | 303 | 9 |
| 244 | | 4900 | 171.4 | -30 | 24 | 80 | 306 | 9 |
| 245 | | 7900 | 171.0 | -19 | -3,238 | NM | 12,053 | -21 |
| 246 | | 5600 | 170.1 | 189 | 3 | -76 | 445 | 1 |
| 247 | | 4100 | 170.0 | -80 | 671 | NM | 711 | 1,678 |
| 248 | | 3500 | 166.4 | 172 | 3 | 0 | 151 | 2 |
| 249 | AUTOZONE INC., Memphis, Tenn. | 5500 | 166.0 | 31 | 125 | -37 | 4,020 | 3 |
| 250 | AVERY DENNISON CORP., Glendale, Calif. | 2600 | 165.2 | 16 | 59 | 33 | 746 | 9 |
| 251 | THE GAP INC., San Francisco, Calif. | 5600 | 165.0 | -18 | NA | NA | NA | NA |
| 252 | ALIGN TECHNOLOGY INC., Tempe, Ariz. | 3800 | 163.5 | 40 | 35 | -51 | 244 | 16 |
| 253 | | 6000 | 163.0 | -9 | 42 | -37 | 1,007 | 4 |
| | SUNNOVA ENERGY INTERNATIONAL INC., Houston, Texas | 4900 | 160.6 | 12 | NA | NA | | NA |

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|---------------|--|----------------|-------|---------------|------|---------------------------------|-------|-----------------------------------|
| 305 | SJW GROUP, San Jose, Calif. | 4900 | 110.0 | -2 | 670 | 383 | 974 | 221 |
| 306 | ENTEGRIS INC., Billerica, Mass. | 3500 | 109.3 | 73 | 18 | -49 | 239 | 8 |
| 307 | BIOMARIN PHARMACEUTICAL INC., San Rafael, Calif. | 2800 | 109.1 | -2 | 36 | 13 | 762 | 5 |
| 308 | QORVO INC., Greensboro, N.C. | 3600 | 108.6 | 9 | 7 | NM | 411 | 2 |
| 309 | CARVANA CO., Tempe, Ariz. | 5900 | 108.4 | 22 | 247 | 133 | 476 | 107 |
| 310 | FIFTH THIRD BANCORP, Cincinnati, Ohio | 6000 | 108.0 | 27 | 37 | 32 | 1,612 | 2 |
| 311 | US FOODS HOLDING CORP., Rosemont, III. | 5100 | 108.0 | 9 | 60 | -64 | 1,441 | 4 |
| 312 | VALMONT INDUSTRIES INC., Omaha, Neb. | 3400 | 106.4 | 39 | 9 | -43 | 373 | 2 |
| 313 | AEROJET ROCKETDYNE HOLDINGS INC., El Segundo, Calif. | 3700 | 105.5 | 50 | -2 | -106 | 433 | 0 |
| 314 | COMMERCIAL METALS CO., Irving, Texas | 3300 | 103.8 | 51 | 36 | -69 | 787 | 5 |
| 315 | MICROCHIP TECHNOLOGY INC., Chandler, Ariz. | 3600 | 102.7 | 3 | 0 | -98 | 660 | 0 |
| 316 | ARCONIC CORP., Pittsburgh, Pa. | 3300 | 102.0 | -68 | 173 | NM | 1,493 | 13 |
| 317 | VALVOLINE INC., Lexington, Ky. | 2900 | 101.0 | 40 | 125 | 635 | 412 | 44 |
| 318 | NEXSTAR MEDIA GROUP INC., Irving, Texas | 4800 | 100.6 | -46 | 7 | -94 | 361 | 2 |
| 319 | CVR ENERGY INC., Sugar Land, Texas | 2900 | 100.0 | 5 | 1 | -80 | 88 | 1 |
| 320 | NOBLE CORP., Sugar Land, Texas | 1300 | 99.8 | 12 | NA | NA NA | NA NA | NA NA |
| 321 | FASTENAL CO., Winona, Minn. | 5000 | 99.0 | -25 | 27 | -73 | 450 | 6 |
| 322 | ILLUMINA INC., San Diego, Calif. | 3800 | 99.0 | 36 | 0 | NM | 44 | 0 |
| 323 | CASEY'S GENERAL STORES INC., Ankeny, Iowa | 5400 | 98.6 | -22 | 193 | -3 | 2,162 | 10 |
| 324 | NRG ENERGY INC., Houston, Texas | 4900 | 97.0 | -5 | NA | NA | NA | NA |
| 325 | COOPER-STANDARD HOLDINGS INC., Northville, Mich. | 3700 | 96.7 | -40 | -12 | NM | 298 | -4 |
| 326 | BLUEBIRD BIO INC., Cambridge, Mass. | 2800 | 92.5 | 19 | 0 | NM | 16 | 1 |
| 327 | CHARLES RIVER LABORATORIES INTERNATIONAL INC., Wilmington, Mass. | 8700 | 92.3 | 36 | 53 | -22 | 1,060 | 5 |
| 328 | ENCORE WIRE CORP., McKinney, Texas | 3300 | 91.7 | 84 | 1 | -28 | 153 | 0 |
| 329 | COVANTA HOLDING CORP., Morristown, N.J. | 4900 | 90.0 | 55 | NA | NA | NA | NA |
| 330 | PENN NATIONAL GAMING INC., Wyomissing, Pa. | 7900 | 89.8 | 51 | -215 | -378 | 205 | -51 |
| 331 | CABLE ONE INC., Phoenix, Ariz. | 4800 | 89.5 | -4 | 4 | -68 | 117 | 4 |
| 332 | SUPER MICRO COMPUTER INC., San Jose, Calif. | 3500 | 87.4 | 89 | 2 | -29 | 114 | 2 |
| 333 | DOMTAR CORP., Fort Mill, S.C. | 2600 | 87.0 | -51 | -98 | -676 | 962 | -9 |
| 334 | CHURCH & DWIGHT CO. INC., Ewing, N.J. | 2800 | 86.8 | 19 | 10 | NM | 265 | 4 |
| 335 | VISHAY INTERTECHNOLOGY INC., Malvern, Pa. | 3600 | 86.5 | -22 | 56 | NM | 641 | 10 |
| 336 | TILRAY INC., New York, N.Y. | 2800 | 85.3 | 4 | NA | NA | NA | NA |
| 337 | ENVISTA HOLDINGS CORP., Brea, Calif. | 3800 | 84.8 | NA. | 16 | 8 | 183 | 9 |
| 338 | INSPERITY INC., Kingwood, Texas | 7300 | 84.7 | 305 | 6 | -17 | 126 | 5 |
| 339 | THE BOSTON BEER CO. INC., Boston, Mass. | 2000 | 84.6 | 43 | 44 | 332 | 174 | 34 |
| 340 | TELEFLEX INC., Wayne, Pa. | 3800 | 84.3 | 32 | NA | NA | NA | NA |
| 341 | INVESCO LTD., Atlanta, Ga. | 6200 | 83.1 | 12 | NA | NA | NA | NA |
| 342 | PAYPAL HOLDINGS INC., San Jose, Calif. | 7300 | 83.0 | 4 | NA | NA | NA | NA |
| 343 | WARRIOR MET COAL INC., Brookwood, Ala. | 1200 | 82.4 | 96 | 3 | 16 | 78 | 4 |
| 344 | VMWARE INC., Palo Alto, Calif. | 7300 | 82.0 | -23 | 49 | -64 | 1,137 | 5 |
| 345 | VAIL RESORTS INC., Broomfield, Colo. | 7900 | 82.0 | 3 | 191 | 109 | 1,434 | 15 |
| 346 | BROWN & BROWN INC., Daytona Beach, Fla. | 6400 | 81.7 | 115 | NA | NA | NA | NA |
| 347 | MIDDLESEX WATER CO., Iselin, N.J. | 4900 | 80.1 | 6 | NA | NA | NA | NA |
| 348 | ROCKET COS. INC., Detroit, Mich. | 6100 | 79.4 | 99 | NA | NA | NA | NA |
| 349 | UNITED NATURAL FOODS INC., Providence, R.I. | 5100 | 79.1 | -54 | 58 | -88 | 971 | 6 |
| 350 | ECOVYST INC., Malvern, Pa. | 2800 | 78.6 | -5 | -53 | -681 | 168 | -24 |
| 351 | ENLINK MIDSTREAM LLC, Dallas, Texas | 4900 | 78.6 | -64 | NA | NA | NA | NA |
| 352 | SOTERA HEALTH CO., Broadview Heights, Ohio | 8700 | 78.5 | 86 | NA | NA | NA | NA |
| 353 | APPHARVEST INC., Morehead, Ky. | 1000 | 78.2 | NA. | NA | NA | 1 | NA |
| 354 | AMERICAN REALTY INVESTORS INC., Dallas, Texas | 6500 | 77.9 | 248 | 141 | 373 | 298 | 91 |

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|---------------|--|----------------|------|---------------|-----|---------------------------------|--------------------------------|-----------------------------------|
| 355 | TRANSCONTINENTAL REALTY INVESTORS INC., Dallas, Texas | 6500 | 77.9 | 248 | 141 | 373 | 298 | 91 |
| 356 | ONE GAS INC., Tulsa, Okla. | 4900 | 77.7 | -49 | NA | NA | NA | NA |
| 357 | LKQ CORP., Chicago, III. | 5000 | 76.9 | 44 | 31 | 381 | 416 | 8 |
| 358 | FERRO CORP., Mayfield Heights, Ohio | 2800 | 76.8 | -17 | 27 | NM | 176 | 18 |
| 359 | JABIL INC., Saint Petersburg, Fla. | 3600 | 76.3 | -8 | 190 | 68 | 1,152 | 20 |
| 360 | CHIPOTLE MEXICAN GRILL INC., Newport Beach, Calif. | 5800 | 76.3 | 68 | NA | NA | NA | NA |
| 361 | ROGERS CORP., Chandler, Ariz. | 3600 | 76.2 | 20 | -10 | NM | 156 | -6 |
| 362 | FIVE BELOW INC., Philadelphia, Pa. | 5300 | 74.4 | -5 | NA | NA | NA | NA |
| 363 | TRACTOR SUPPLY CO., Brentwood, Tenn. | 5200 | 74.0 | 89 | 77 | -52 | 1,320 | 6 |
| 364 | INTEGRA LIFESCIENCES HOLDINGS CORP., Princeton, N.J. | 3800 | 73.9 | -47 | 1 | NM | 17 | 7 |
| 365 | FMC CORP., Philadelphia, Pa. | 2800 | 73.6 | 13 | 146 | NM | 514 | 40 |
| 366 | SOUTH JERSEY INDUSTRIES INC., Folsom, N.J. | 4900 | 73.6 | -63 | NA | NA | NA | NA |
| 367 | CLEAN ENERGY FUELS CORP., Newport Beach, Calif. | 5500 | 73.3 | -3 | NA | NA | NA | NA |
| 368 | NEWMARKET CORP., Richmond, Va. | 2800 | 73.2 | 151 | 9 | 7 | 183 | 5 |
| 369 | COMMSCOPE HOLDING CO. INC., Hickory, N.C. | 3600 | 73.2 | 98 | 7 | -95 | 340 | 2 |
| 370 | CAL-MAINE FOODS INC., Ridgeland, Miss. | 2000 | 72.9 | -42 | 61 | 169 | 454 | 16 |
| 371 | LEIDOS HOLDINGS INC., Reston, Va. | 7300 | 72.0 | -31 | 119 | NM | 142 | 517 |
| 372 | TEMPUR SEALY INTERNATIONAL INC., Lexington, Ky. | 2500 | 72.0 | 11 | NA | NA | NA | NA |
| 373 | RH, Corte Madera, Calif. | 5700 | 71.9 | 349 | -30 | -691 | 3 | -91 |
| 374 | ADVANCED DRAINAGE SYSTEMS INC., Hilliard, Ohio | 3000 | 71.9 | 261 | NA | NA | NA | NA |
| 375 | JELD-WEN HOLDING INC., Charlotte, N.C. | 2400 | 71.8 | -7 | 34 | 5,092 | 536 | 7 |
| 376 | SAREPTA THERAPEUTICS INC., Cambridge, Mass. | 2800 | 71.5 | 175 | 16 | 11,877 | 39 | 70 |
| 377 | AMNEAL PHARMACEUTICALS INC., Bridgewater, N.J. | 2800 | 71.5 | 11 | 7 | NM | 210 | 3 |
| 378 | NOVAVAX INC., Gaithersburg, Md. | 2800 | 71.2 | 15,800 | NA | NA | NA | NA |
| 379 | ORTHO CLINICAL DIAGNOSTICS HOLDINGS PLC, Raritan, N.J. | 3800 | 71.1 | -29 | 10 | 179 | 247 | 4 |
| 380 | PACIRA BIOSCIENCES INC., Parsippany, N.J. | 2800 | 71.1 | 83 | NA | NA | NA | NA |
| 381 | PHOTRONICS INC., Brookfield, Conn. | 3600 | 70.9 | 152 | 7 | -86 | 179 | 4 |
| 382 | H.B. FULLER CO., St. Paul, Minn. | 2800 | 70.7 | 30 | 31 | NM | 393 | 9 |
| 383 | MKS INSTRUMENTS INC., Andover, Mass. | 3800 | 70.6 | 50 | 7 | -26 | 120 | 6 |
| 384 | IPG PHOTONICS CORP., Oxford, Mass. | 3600 | 70.3 | 59 | 12 | -82 | 413 | 3 |
| 385 | LENNOX INTERNATIONAL INC., Richardson, Texas | 3500 | 69.7 | -4 | 23 | -27 | 266 | 10 |
| 386 | KRATON CORP., Houston, Texas | 2800 | 69.3 | -5 | 17 | 264 | 200 | 9 |
| 387 | MATERION CORP., Mayfield Heights, Ohio | 3300 | 69.3 | 315 | 15 | 2,283 | 165 | 10 |
| 388 | ALLOGENE THERAPEUTICS INC., South San Francisco, Calif. | 2800 | 68.9 | 456 | NA | NA | NA | NA |
| 389 | NORTHWEST NATURAL HOLDING CO., Portland, Ore. | 4900 | 68.9 | -24 | NA | NA | NA | NA |
| 390 | CYXTERA TECHNOLOGIES INC., Coral Gables, Fla. | 7300 | 68.9 | -25 | 48 | NA | 986 | 5 |
| 391 | ASANA INC., San Francisco, Calif. | 7300 | 68.4 | 1,667 | NA | NA | NA | NA |
| 392 | RAYONIER ADVANCED MATERIALS INC., Jacksonville, Fla. | 2800 | 68.0 | 47 | 7 | NM | 255 | 3 |
| 393 | MARRIOTT VACATIONS WORLDWIDE CORP., Orlando, Fla. | 7000 | 68.0 | -17 | 93 | NM | 482 | 24 |
| 394 | UNIVAR SOLUTIONS INC., Downers Grove, III. | 5100 | 65.4 | 40 | NA | NA | NA | NA |
| 395 | VALHI INC., Dallas, Texas | 2800 | 64.5 | 3 | 21 | NM | 269 | 8 |
| 396 | CONSOLIDATED COMMUNICATIONS HOLDINGS INC., Mattoon, III. | 4800 | 64.1 | 7 | NA | NA | NA | NA |
| 397 | WARNER MUSIC GROUP CORP., New York, N.Y. | 3600 | 64.0 | 220 | -7 | -109 | 179 | -4 |
| 398 | BELDEN INC., St. Louis, Mo. | 3600 | 63.6 | -10 | 10 | NM | 136 | 8 |
| 399 | COTY INC., New York, N.Y. | 2800 | 63.0 | -42 | NA | NA | NA | NA |
| 400 | LOUISIANA-PACIFIC CORP., Nashville, Tenn. | 2400 | 63.0 | 37 | 6 | -70 | 356 | 2 |
| 401 | MERITOR INC., Troy, Mich. | 3700 | 63.0 | -15 | 4 | NA | 228 | 2 |
| 402 | SELECT MEDICAL HOLDINGS CORP., Mechanicsburg, Pa. | 8000 | 62.7 | 20 | -1 | -101 | 553 | 0 |
| | | | | | | | | |
| 403 | CLEARWAY ENERGY INC., Princeton, N.J. | 4900 | 62.0 | -34 | NA | NA | NA | NA |

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|---------------|--|----------------|------|------------------------------------|-----|---------------------------------|--------------------------------|-----------------------------------|
| 405 | PERFORMANCE FOOD GROUP CO., Richmond, Va. | 5100 | 61.5 | -43 | 41 | -84 | 842 | 5 |
| 406 | BROOKDALE SENIOR LIVING INC., Brentwood, Tenn. | 8000 | 61.5 | -24 | 425 | NM | 5,215 | 9 |
| 407 | BANCFIRST CORP., Oklahoma City, Okla. | 6000 | 61.3 | 380 | 11 | 27 | 202 | 6 |
| 408 | CHESAPEAKE UTILITIES CORP., Dover, Del. | 4900 | 60.9 | 13 | NA | NA | NA | NA |
| 409 | LIBERTY BROADBAND CORP., Englewood, Colo. | 4800 | 60.7 | NA | NA | NA | 94 | NA |
| 410 | ENERSYS, Reading, Pa. | 3600 | 60.0 | -36 | NA | NA | NA | NA |
| 411 | AVIS BUDGET GROUP INC., Parsippany, N.J. | 7500 | 60.0 | -67 | 27 | NM | 592 | 5 |
| 412 | CARLISLE COS. INC., Scottsdale, Ariz. | 2900 | 59.6 | 9 | 19 | -49 | 499 | 4 |
| 413 | FLOWERS FOODS INC., Thomasville, Ga. | 2000 | 59.1 | 38 | -4 | -180 | 485 | -1 |
| 414 | COMPASS MINERALS INTERNATIONAL INC., Overland Park, Kan. | 1400 | 58.7 | -58 | NA | NA | NA | NA |
| 415 | HOLLY ENERGY PARTNERS L.P., Dallas, Texas | 4600 | 58.5 | 435 | NA | NA | NA | NA |
| 416 | RADNET INC., Los Angeles, Calif. | 8000 | 57.5 | 36 | NA | NA | NA | NA |
| 417 | HUBBELL INC., Shelton, Conn. | 3600 | 57.4 | 63 | -3 | -133 | 283 | -1 |
| 418 | MUELLER WATER PRODUCTS INC., Atlanta, Ga. | 3400 | 57.4 | 20 | 12 | -12 | 80 | 17 |
| 419 | MICROVAST HOLDINGS INC., Stafford, Texas | 3600 | 57.4 | -38 | 3 | NA | 40 | 7 |
| 420 | PPD INC., Wilmington, N.C. | 8700 | 57.1 | -26 | 59 | 48 | 444 | 15 |
| 421 | TRANSDIGM GROUP INC., Cleveland, Ohio | 3700 | 57.0 | 9 | -57 | -124 | 350 | -14 |
| 422 | TREEHOUSE FOODS INC., Oak Brook, III. | 2000 | 57.0 | -23 | 41 | NM | 443 | 10 |
| 423 | IOVANCE BIOTHERAPEUTICS INC., San Carlos, Calif. | 2800 | 56.8 | 948 | NA | NA | NA | NA |
| 424 | GROUP 1 AUTOMOTIVE INC., Houston, Texas | 5500 | 56.6 | 55 | 257 | 111 | 1,107 | 30 |
| 425 | LORDSTOWN MOTORS CORP., Lordstown, Ohio | 3700 | 56.5 | 179 | NA | NA | 6 | NA |

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