Breaking Ground

THE MAGAZINE OF THE MASTER BUILDERS' ASSOCIATION OF WESTERN PENNSYLVANIA

SEPTEMBER/OCTOBER 2021

WHAT COVID CHANGED (So Far)

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On the cover: Perkins Eastman Pittsburgh studio. Photo by Andrew Rugge, courtesy Perkins Eastman.

MBA

PUBLISHER'S NOTE

When you publish a magazine that is supposed to be giving readers a glimpse into what trends are shaping up that might affect their lives (or at least their work), you have to go out on a limb every once in a while and predict what you don't know for sure. That has served *BreakingGround* pretty well since 2006. We have been out ahead of green building, BIM, and the mortgage crisis, to name a few. (We also have been dead wrong on a few, which I will not name.) For that reason, I decided we would include a look at the things that COVID-19 changed this year, even though I felt it was something of a fool's errand. I hope when you read the feature article you don't agree with that assessment.

You need only glance at the headline to understand the foolishness of the errand. It's past tense. When I proposed the topic, my assumption was that we would have vaccines by this time and the pandemic would have passed. I was correct about the former assumption but not about the latter. Thus, when it came time to write the article, I added the (So Far) to the title.

That addition was in part to cover my backside. By the time we are actually looking back at COVID-19, I expect there will be a number of things that have changed that we aren't anticipating now. When you read the article, you may be surprised to see that there are only a few changes covered. That's partly a result of my reluctance to predict the outcome of something with which we are still wrestling. Many of the things that were predicted to be doomed by COVID-19 have avoided that fate. Retail stores, restaurants, colleges, are among the institutions that have adjusted and are still a part of our lives. Mostly I avoided the idea of writing about what changed because so much has changed, even if the changes are short-lived. Focusing on a few durable changes feels like I'm omitting too much. Space is limited, however, so what you read about are the things I believe have been changed more than temporarily.

I focused on how the pandemic has impacted the consumer because the economic upheaval that accompanied the pandemic has not done what previous downturns have done. It may be that once the bans imposed upon evictions and foreclosures are fully lifted (as they were beginning to be as we went to press), the pain will begin to spread, and the economy will feel it. But assuming that does not happen, the American consumer has surprised most economists with their resilience. And the American consumer has a big impact on the economy.

The other two main areas I focused on – Pittsburgh's Downtown and the workplace – are works in progress that are still changing rapidly. Whether or not either returns to pre-pandemic normal again, the disruptions to both during this period have been enormous.

COVID-19 seems to have been the catalyst that pushed workers to say "enough." Maybe there is enough fear of the public health crisis to keep a big slice of workers from their jobs, but the evidence suggests that the pandemic prompted people to quit jobs they didn't want to do. That's been less of a problem for construction, but it is causing some big headaches for employers from hospitality to hospitals. For once, it feels like the "great resignation" will be one of those trends that is as momentous as it is hyped up to be.

Looking at Downtown means trying to understand the office market. It is too soon to draw conclusions other than that office occupancy will suffer for a while. I agree with those that think things will normalize, and sooner than expected, but it is hard to argue that the steep decline in occupancy Downtown has not been consequential. Downtown was already struggling with growing office vacancy and wrestling with how to attract some of the emerging technology companies that were filling up buildings in the Strip District and Oakland. Pittsburgh's Downtown needs to find a new mix of occupants. I think Jeremy Waldrup and the Pittsburgh Downtown Partnership have done a great job over the past decade. I wouldn't wish this challenge on them, but here we are.

I suspect Downtown will be alright in a few years. The Golden Triangle is likely going to become a lower rent office market than its neighbors, but its proximity to lifestyle amenities will keep it vibrant. The Cultural District is still there. The sports venues are still close by. It may take a few years but the vibrance of the night life will return. If you want to help, get yourself Downtown for an event. If things still don't feel safe to you, get some takeout from one of the restaurants.

It has been a relief to have lived in Allegheny County while all this was going on. Rich Fitzgerald, Bill Peduto, and others did a good job of letting the experts lead the way and keeping the politics on low. Even with the Delta variant running loose, our higher vaccination levels have allowed us to behave closer to normal and remain safe. COVID-19 has changed our lives, and some of those changes will endure. I'm glad it didn't change the way we Pittsburghers go about tackling big problems.

Jeff Burd

REGIONAL MARKET UPDATE

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The combination of rising costs and rising COVID-19 infections dampened the contracting activity as the summer of 2021 wound down. Owners looking forward to growing demand in 2022 (or feeling higher current demand) were forced to re-think plans for construction in light of the unusual level of inflation. The uncertainty about when costs would normalize was matched by renewed uncertainty about the arc of the pandemic. The rapidly-spreading Delta variant gave consumers reason to pause plans for travel and entertainment, and business owners reason to re-evaluate the return to the workplace.

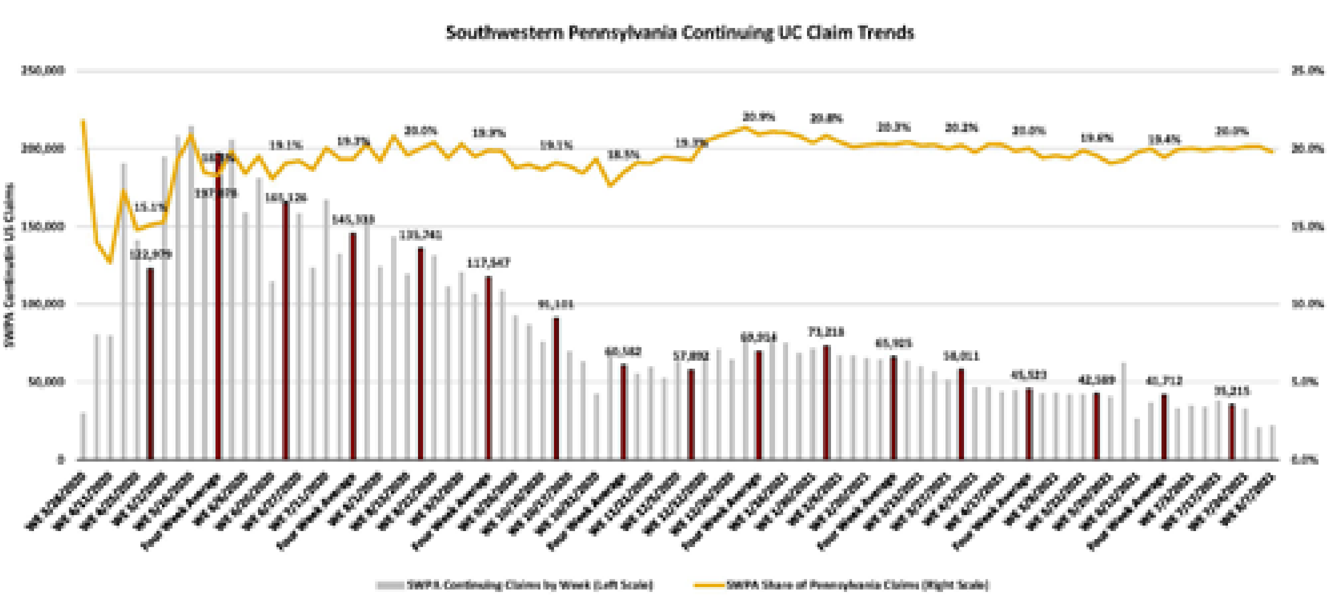
Uncertainty is not the fuel for decision making. The third quarter saw as many deferrals as notices to proceed. Bidding slowed, although late summer is typically a slower time for bidding.

In the face of the slower pace of planning and bidding, construction starts continued to outperform expectations, both in residential and nonresidential/commercial projects. The indecision about new projects seems to have obscured the amount of activity that was already approved and has gone into construction thus far. Residential demand for new construction is well-documented, but the pace of nonresidential work is surprising.

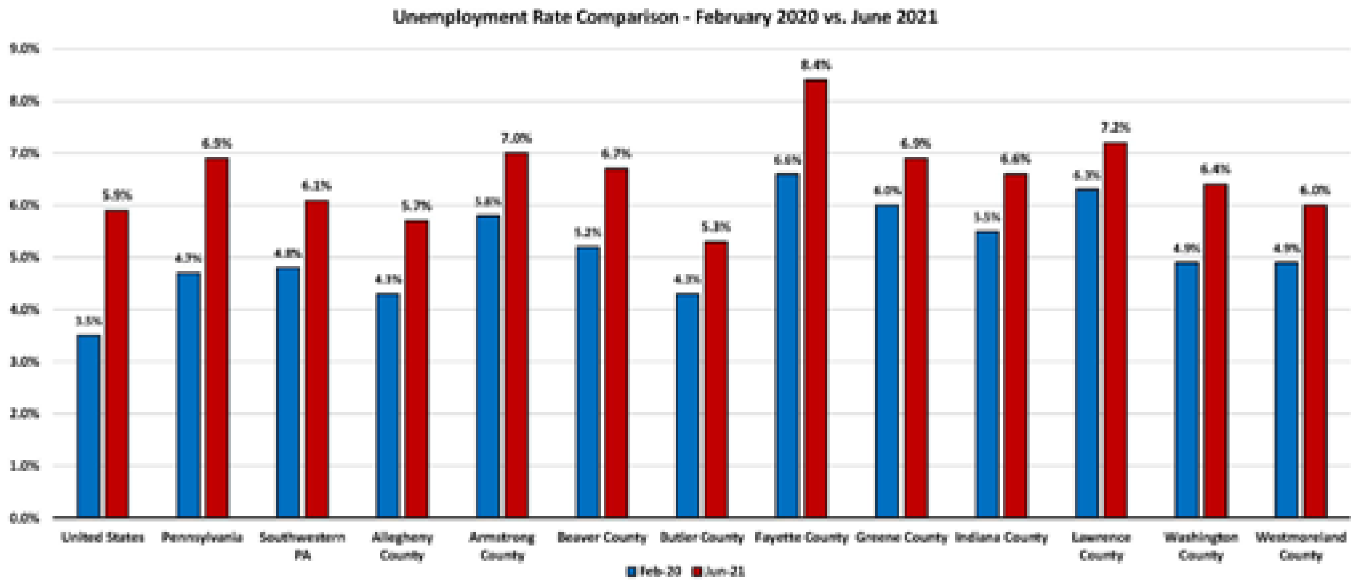
Through August 31, data compiled by the Tall Timber Group from construction reports and building permit research showed $3.96 billion in construction starts (including the construction put in place at the Shell Franklin plant). That is a pace that is well ahead of 2020's activity and is tracking to reach $4.5 billion or higher by year's end. During the first eight months of 2020, nonresidential/commercial activity totaled $2.53 billion, including the construction put in place at the Shell plant. While virus mitigation played a role in stopping construction activity for a few weeks in the early spring of 2020, by summer most construction was in catch-up mode. The bigger drag during the first two-thirds of 2020 was the slowdown in economic activity that would have been driving construction.

One year later, it is the diversity of the construction activity that stands out. While there are mega projects moving through the pipeline in Western PA, little of that activity is reflected in the data. Aside from the Shell project, only the first $200 million in contracts at the airport have gone to start stage. The lion's share of the projects under construction are between $2 million and $25 million, and the projects are spread across the spectrum of end uses. That's the mark of a healthy construction market, something of a surprise in market conditions in which inflation is greater than normal. That suggests that small businesses and institutional owners fared better than expected in 2020 and that they are optimistic about 2022 and beyond.

Residential construction is likewise dramatically ahead of the 2020 pace. Total housing starts through July 31 were 32.9 percent ahead of the number of units started during the same months in 2020. The distribution of the activity is fairly even, with the increase in multi-family units slightly ahead



Source: PA Department of Labor and Industry, Pennsylvania Economy League



Source: Bureau of Labor Statistics Local Area Unemployment Statistics, PA Department of Labor and Industry, Pennsylvania Economy League.

of the pace of increase in single-family starts. Spending on new residential construction is up 47.3 percent, a reflection of both the appreciation due to higher new construction demand and the material inflation, particularly in lumber.

Comparing year-over-year activity in a mid-size market like Pittsburgh requires a deeper examination, as one or two major projects can create volatility in a single category. While that may be the case in the office market, where the volume is being driven by speculative projects rather than overall expansion of demand, in most categories the significant increases year-over-year reflect much stronger fundamental demand. That is a surprise, given the nature of the global market conditions, which are marked by high inflation and supply disruption.

The unexpected level of increased investment in construction is also surprising because the anecdotal evidence suggests that construction inflation has indeed had an impact on the decision to proceed on numerous projects, including most of the projects over $100 million.

Within the major property categories, construction is up to the largest degree on industrial (up 22.6 percent, with Shell Franklin excluded), multi-family (25.9 percent), office (69 percent), and healthcare (159 percent). The latter is the only one that owes the variance to the impact of the pandemic in 2020. Hospitals saw major revenue declines into the third quarter of 2020, causing them to freeze spending on most capital projects until the full impact of COVID-19 was understood. One year later, healthcare spending has resumed and is the property type with the largest pipeline for the coming three-to-five years.

Only two major categories declined compared to the same period in 2020. Retail construction fell by $15.2 million year-over-year and K-12 spending was off $2.9 million. Neither decline has even a minor impact on the market.

Signals on the Pittsburgh economy were also more upbeat in mid-summer, although not as surprisingly robust as construction.

Employment data from the PA Department of Labor and Industry suggested that Pittsburgh's labor market improved significantly in July, the latest month for which local data exists. Unemployment decreased by 10 basis points after four months of decline; and, the region's unemployment rate remained 70 basis points lower than that of the Commonwealth. At 6.2 percent, the unemployment rate in Southwestern PA was slightly above the U.S. rate of 5.4 percent in June.

Continuing claims for unemployment compensation also declined in mid-August. Claims for the week that ended August 7, 2021 totaled 22,111. That was below the four-week average of 35,215 for July and lower than the number of continuing claims filed the week of March 28, 2020. The trend suggests that layoffs have declined to pre-pandemic levels.

2020 Census: Pittsburgh MSA Population Change by County

	2001	2020	Change	% Change
Allegheny	1,223,348	1,250,578	27,230	2.2%
Armstrong	68,941	65,558	(3,383)	-4.9%
Beaver	170,539	168,215	(2,324)	-1.4%
Butler	183,862	193,763	9,901	5.4%
Fayette	136,606	128,804	(7,802)	-5.7%
Washington	207,820	209,349	1,529	0.7%
Westmoreland	365,169	354,663	(10,506)	-2.9%
Total Pittsburgh MSA	**2,356,285**	**2,370,930**	**14,645**	**0.6%**

Pittsburgh Market (Thru Aug. 31)	2020	2021	Variance
Total Nonresidential/commercial $	$2.53B	$3.96B	56.5%
Total Residential $	$628.3M	$925.8M	47.3%
Total Housing Starts (thru July 31)	2,328	3,095	32.9%
Healthcare	$85.4M	$221.6M	159.0%
Higher Ed	$186.7M	$220.9M	18.3%
Industrial	$305.4M	$374.4M	22.6%
K-12	$137.3M	$134.4M	-2.1%
Multi-family	$262.9M	$331M	25.9%
Office	$339.1M	$573M	69.0%
Retail	$103.8M	$88.5M	-14.7%

The most important improvement in the labor market was the increase in labor force in Southwestern PA. Compared to February 2020, the number of unemployed persons in Pittsburgh was 1,000 lower in June 2021, at 72,600; however, the workforce was smaller by 65,200.

Looking forward, the increase in workforce – assuming it is a sustainable trend – could play a significant role in the regional economic fortunes. One trend predicted as a byproduct of the pandemic is the increased attraction of smaller non-coastal markets with strong technology sectors. Should that trend prove durable, it would elevate Pittsburgh's profile for tech talent; however, the stagnant or declining workforce numbers would be a deterrent to businesses considering a location in Western PA.

To the extent that the improving workforce participation is connected to population growth, Pittsburgh got unexpected, good news from the 2020 census. The census data, released on August 12, showed that there were 27,223 more people living in Allegheny County in 2020 than in 2010. The 2.2 percent increase was the first for Allegheny County since the 1960 census. Butler County (9,901 increase) and Washington County (1,529 increase) also showed growth, which helped boost the population of the Pittsburgh Metropolitan Statistical Area by 14,645, or 0.6 percent.

The increase in population was a surprise to the Census Bureau, which had estimated that Allegheny County's population would decline by roughly one percent.

The surprisingly strong levels of construction activity may be an indication of the strength of the Pittsburgh market, but the volatile and unusual economic conditions may be supporting a surge in 2021 that will recede in 2022. The slowdown in contracting during July and August will likely lead to smaller backlogs as 2021 winds down. The pipeline for 2022 and 2023 remains fuller than what was on the boards coming into 2021. If this take on the market is correct, the outlook for the last four months of 2021 should be for increased bidding (and re-bidding of project's deferred earlier in the year). That scenario may mean more headaches for surety agents and estimating departments, but it would set the table for a booming 2022. BG

NATIONAL MARKET UPDATE

Experts warned earlier this year that the economic recovery from the COVID-19 pandemic would largely follow the course of the public health recovery. During the dog days of summer, a surge of infections due to the more transmittable Delta variant of the coronavirus showed those warnings were well-founded.

America's economy slowed in 2020 because of the severe mitigation measures taken to avert the widest spread and direst outcome from the pandemic in the spring. The short-lived recession was not due to imbalances in the economy and so the "V-shaped" recovery that followed reflected the demand that was pent up during lockdowns. For the economy to recover fully, especially for full employment to return, consumers and businesses need to be confident that COVID-19 will be reduced to periodic regional endemics, if it cannot be eradicated. Even without the kinds of government actions that closed businesses a year ago, consumers reacted to the spiking number of infections and hospitalizations by dialing back on activities that are perceived to be riskier, like air travel and dining out, even for those who are vaccinated.

The caution of the consumer is reflected in both sentiment and spending. The former began cooling when reports of the Delta variant's spread emerged in June. The headline University of Michigan Consumer Confidence Survey leveled off in May and June, although the levels are significantly higher than one year past. Likewise, consumer spending cooled off following its upward rise in the late spring, falling 1.1 percent in July. After jumping by nearly 30 percent from April 2020 to April 2021, personal consumption has remained at roughly $15.5 trillion annualized level since. There are many economic metrics suggesting that consumers are willing and able to resume higher spending once the level of new infections falls. The trajectory of the Delta variant in countries such as India and Great Britain offers the hope that cases will begin falling significantly in September.

Once consumers perceive that there is lower risk of community spread again, they will have fewer constraints on spending than after the last several economic slowdowns. Consumer credit is at an all-time high, but delinquency is near all-time lows. Less than two percent of the outstanding debt is more than 90 days late.

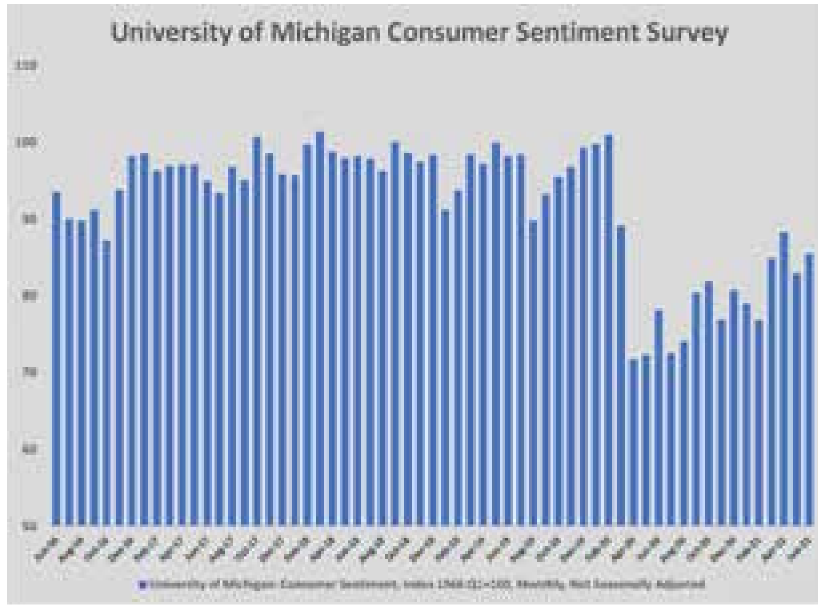
Fundamentals in the housing market moved slightly in July and August. According to the National Association of Realtors, pending home sales fell 7.4 percent in July, while the number of new listings increased by 2.8 percent. The shift likely represented a slowdown in buying as prices peaked, which also motivated more sellers to take advantage of the market. The net jump in housing inventory is a reversal of a multi-year trend that has shrunk supply. Total listings were still down 24 percent year-over-year.

New home construction jumped 6.3 percent higher in June. The 1.643 million units was the third-highest level of new construction in the past year, but new construction has only been higher in two months going back to August 2006. Perhaps a better comparison of the current level of activity is to compare it to the 1,397-unit monthly average in 2020 and the 1,292-unit average in 2019. Increased home prices, while making first-time buying more difficult, have created a better financial justification for increased residential development.

Housing starts rebounded in June, continuing the upward trend that began in late 2019. Source: U.S. Census Bureau.

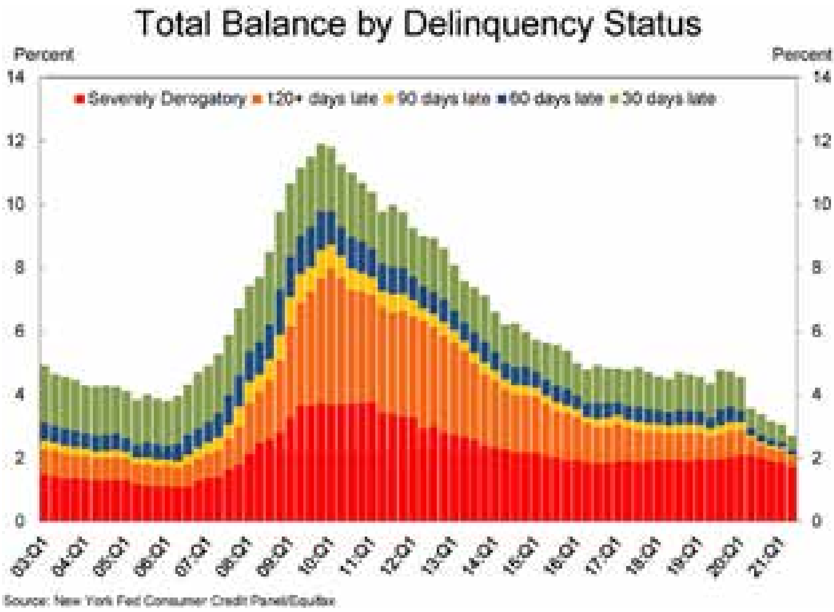
Nonresidential construction received a potential boost when the U.S. Senate passed the INVEST in America Act on August 10 by a 69-30 vote. The $1.2 trillion infrastructure bill adds $550 billion in new spending to improve on the nation's energy grid, Internet access, and physical infrastructure. The Senate's version of the bill still needs to clear a reconciliation with the House of Representatives, which could be slowed by political considerations by the majority Democratic leadership intent upon passing a reconciled 2021-2022 budget at the same time.

Assuming the INVEST in America Act passes, the provisions for infrastructure construction are smaller than the $1.2 trillion price tag may suggest. Within the bill, $110 billion is earmarked for physical infrastructure spending on roads and bridges. That is a fraction of the $786 billion backlog of investment that the American Society of Professional Engineers recommends, but it nearly doubles the federal contribution made under the various surface transportation acts. The Senate also included the Surface Transportation Reauthorization Act, which will provide $311 billion for the states to invest in roads and bridges for the next five years. That is an increase of $85 billion over the previous FAST Act. The Associated General Contractors of America analyzed the bill and identified the key provisions that will result in construction:



- $66B for freight and passenger rail
- $65B to states for broadband deployment and broadband affordability
- $55B for water infrastructure (including $15 billion for lead pipe replacement)
- $47B for roads and bridges beyond Surface Transportation Reauthorization Act
- $73B for modernizing electric grid and clean energy transmission
- $39B for transit
- $25B for airport projects
- $17B for ports

Because the legislation includes both direct federal spending and state funding, the employment impact of the INVEST Act should



be felt within the current construction year, particularly in states with little weather-related winter downtime. The job creation could potentially exacerbate the skilled worker shortage, but the increase in demand may also be an incentive for what appears to be a trend in workers changing career paths in large numbers.

The August 6 Employment Situation Summary – the July jobs report – provided a measure of relief to economists wary of an uneven labor recovery. Employers added 943,000 workers in July, bringing the unemployment rate down to 5.4 percent. The total number of those unemployed or employed part-time instead of full-time remained 4.39 million higher than in February 2020, more than double the pre-pandemic number. That number is falling more rapidly than expected, however, and is now well below the number of job openings that exist. Most encouraging was that the number of employed part-time for economic reasons fell to 4.5 million, just 100,000 above the February 2020 level. The number of long-term unemployed fell by 560,000 – the largest monthly decline ever.

Job creation was strongest in the hospitality fields, with the normalized travel season creating demand for 380,000 workers. Local government education sector gained 221,000 jobs. That bodes well for a fall reopening of schools, which in turn will have a beneficial impact on the available workforce that left jobs to supervise school from home.

July's jobs report culminated a week of strong employment news. On August 3, payroll processor ADP reported that private payrolls had increased by 362,000 in July. While that number was less than anticipated, the gains were in line with the responses of business owners regarding the difficulty in finding workers. Employers overwhelmingly told ADP that they had openings going unfilled. Unemployment claims also fell throughout August, reaching new post-pandemic lows below 340,000 first-time claims.

That survey response matched up well to the same month's Job Openings and Labor Turnover Survey (JOLTS), which showed 10.1 million openings in June. The number of vacancies exceeded hires by 3.4 million in June, a slightly narrower gap from the record seen a month earlier. The number of people who voluntarily left their jobs increased to 3.9 million in the month, and the quits rate rose to 2.7 percent.

What has not been factored into all this good news is the impact of the renewed surge in COVID-19 infections attributable to the Delta variant that began in July. Early indications in August were that heightened caution was slowing traffic at restaurants and travel, but not dramatically. More than 40 percent of July's job gains were in hospitality, however, so further slowdowns in travel and entertainment by consumers could hamper the jobs recovery in August and September. At least one major financial observer, J.P. Morgan Chase, scaled back its forecast for the August jobs report in one of its models to 53,000.

While it appears that the uneven response to the public health crisis will perpetuate an uneven recovery for the economy throughout the remainder of 2021, many metrics of behavior indicate that Americans were returning to normal ahead of the Delta variant's spread mid-summer.

Placer Labs, a California-based artificial intelligence firm that tracks individual's movements, issued a report in mid-August that showed retail traffic had returned to 2019 levels by July. According to Placer's data, outdoor shopping centers saw 2.1 percent more shoppers in July 2021 than in July 2019. Indoor malls fared nearly as well, narrowing the gap between July 2021 and 2019 to 0.1 percent. Visit patterns were markedly higher in high-profile malls in Texas and Arizona, suggesting that the more cautious behavior that was following the surge in infections may not dampen traffic dramatically before fall.

Owners of multi-family properties saw similar improvements to market conditions. Rising home prices and limited inventory for sale increased demand for apartments, as a share of the renter population is unable to buy as planned. Rents have been increasing at higher-than-normal rates in most major markets. Apartment Guide's mid-year report showed that rents increased in two-thirds of U.S. cities and declined in one-third. Average rents for a one-bedroom jumped 5.2 percent and rose 4.8 percent for a two-bedroom. Apartment List reported that the median rent in the U.S. increased 9.2 percent during the first six months of 2021, nearly four times the average increase. According to the same report, median rent in the U.S. is now more than two percent higher than if the pandemic had not occurred.

Rental data is often skewed towards the larger, professionally managed properties, since these types of owners more reliably report data and make up the biggest share of the number of units. In markets where more of the units are locally owned and operated, however, rents are not rising as quickly or significantly, and the pain of the eviction ban is having a bigger impact.

Industrial properties continue to be the strongest commercial real estate category. The combination of online shopping and increased food distribution and cold storage are driving demand faster than the pace of development. According to JLL, industrial rents increased by 5.1 percent year-over-year through July, with net absorption of 107 million square feet. CBRE's data showed even higher net absorption – 153.8 square feet – and an average taking rent that exceeded the asking rent. Newmark reported that a dip in construction completions during the second quarter pushed triple-net rents higher by three percent to a new high of $8.32 per square foot.

Uncertainty about the future of office occupancy continues to weaken that segment of the market. The economic fundamentals of the sector are strengthening. Office employment gained strongly during the first half of 2021, leaving office-occupying jobs just 838,000 below the February 2020 peak. Rents have increased by roughly three percent. But absorption of space remained negative for the fifth consecutive quarter, even as construction completions declined. The share of the office workforce that will choose to work from home is unknowable at this point, and the recent surge in COVID-19 infections has spurred many employers to delay a return to the office until later in 2021 or beyond.

During the next several years, as leases expire, it will be the impact of work from home that will determine how much of the pre-pandemic office demand will make up the requirements of the next lease cycle. That, in turn, will drive or chill demand for construction.

Aside from the infrastructure sector, public construction remains weakened by lower tax revenues and the overhang of 2020's fiscal strains. Demand for government office space has been weakened by work from home. Public agencies that rely on property taxes for revenues will see improvements in 2022 and beyond because of the significant increase in home values. Those agencies that issue bonds to finance capital improvements will also find the conditions very favorable until at least the middle of the decade. Public construction generally has fewer defenses against material inflation, however, assuming that the current spike in prices does prove temporary, the environment for public construction – especially K-12 education – should be greatly improved.

If the story of 2020 was the pandemic and the jolt to the economy that came from the mitigation of COVID-19's spread, the story of 2021 is likely to be the consumer's response to managing the ongoing pandemic of the unvaccinated. It was the consumer's renewed enthusiasm that drove the unparalleled GDP growth during the first half of 2021. Data on travel, entertainment, and personal spending shows that the consumer will respond by pulling back when new surges in infections and hospitalizations occur, sparked largely by community spread among the unvaccinated population. Cash reserves remain high. Interest rates remain low. Pent up demand for goods and services has not dissipated. Consumers and businesses should return to deploying those cash reserves once concerns about public health have abated. BG

WHAT'S IT **COST?**

As expected, the August 12 report on producer price index (PPI) changes showed large year-over-year increases. Whether July will mark the high-water mark in price inflation remains to be seen, but the comparison of high demand in July 2021 to the bottom of the 2020 recession made for a perfect storm for year-to-year inflation.

The value of construction put in place remained at an all-time high in June, at $1.552 trillion. Only April 2021, with a revised $1.553 trillion put in place, has had higher construction volume. June's total was 13.6 percent higher than February 2020. Such an elevated level of increased demand, particularly from residential construction, added extraordinary stress to a supply chain that was already strained. As a result, suppliers can price materials and building products at top-of-market conditions. This dynamic was visible even for materials like lumber and steel, both of which are seeing futures prices falling well below the current market positions.

Lumber has received significant coverage since May regarding the precipitous decline in its future pricing. While future contracts for lumber have fallen 70 percent or more since winter highs, the current price is only 16.2 percent lower than in May and is still 56.8 percent higher than June 2020, which was near a historic high at that time. Inventories of higher-priced lumber are still working through the distribution channel and demand still exceeds supply in most markets.

Overall, producer prices are outpacing the rate of consumer inflation by a rate of 7.8 percent to 5.4 percent for the consumer price index. PPI for inputs to construction are higher by much more, with year-over-year jumps of 25 percent for most types of construction or major categories of inputs. Inputs to construction, without the cost of energy, were up 19.5 percent. That was the only one of the 21 categories measured by the Bureau of Labor Statistics that was below 20 percent. The PPI for new nonresidential construction was 4.4 percent higher than one year earlier. That marked the highest increase in that category since the summer of 2018. Of greater concern for the remainder of 2021 is the fact that the pace of inflation for this metric has increased during the past 90 days.

With year-over-year increases in bid pricing that remain below five percent, construction activity will be hampered by inflation – however transitory it proves to be – for the foreseeable future. Such an enormous gulf between input prices and bid prices will be difficult to reconcile until at least the fourth quarter of 2021. That gap translates into uncertainty that will require unusual flexibility and cooperation between designers, contractors, and owners. In an industry that delivers projects by design-bid-build for the most part, there will be structural barriers to such flexibility.

Inflation, as compared to any period in 2020 after the pandemic began, will remain high in 2021. A disrupted supply chain continues to be the dominant reason for the extraordinary construction inflation. Manufacturers and suppliers typically exploit higher prices to increase capacity and maximize profits. Eventually that re-balances supply and demand at lower prices. Until suppliers have that opportunity, the imbalances will keep inflation above normal.

PERCENTAGE CHANGES IN COSTS	July 2021 compared to		
Consumer, Producer & Construction Prices	1 mo.	3 mo.	1 yr.
Consumer price index (CPI-U)	0.5	2.2	5.4
Producer price index (PPI) for final demand	1.0	3.0	7.8
PPI for final demand construction	1.5	2.8	4.5
PPI for new nonresidential buildings	1.7	2.8	4.4
Costs by Construction Types/Subcontractors			
New warehouse construction	2.8	4.2	6.5
New school construction	2.4	2.5	3.3
New office construction	1.3	2.8	5.9
New industrial building construction	2.8	3.0	3.9
New health care building construction	(0.2)	1.4	3.2
Concrete contractors, nonresidential	0.8	2.8	5.4
Roofing contractors, nonresidential	1.3	2.9	6.2
Electrical contractors, nonresidential	0.7	3.2	3.5
Plumbing contractors, nonresidential	(0.7)	2.4	3.5
Construction wages and benefits	N/A	1.4	3.0
Architectural services	0.3	0.5	1.1
Costs for Specific Construction Inputs			
#2 diesel fuel	4.0	16.3	81.9
Asphalt paving mixtures and blocks	0.3	3.9	5.9
Cement	(1.0)	1.7	3.3
Concrete products	0.3	1.9	4.5
Brick and structural clay tile	0.4	2.1	4.3
Plastic construction products	4.5	10.8	26.7
Flat glass	0.6	3.3	7.3
Gypsum products	2.8	8.2	21.6
Lumber and plywood	(16.2)	(1.3)	56.8
Architectural coatings	4.5	5.7	9.9
Steel mill products	10.8	20.5	108.6
Copper and brass mill shapes	(1.4)	11.1	49.0
Aluminum mill shapes	1.5	6.9	33.2
Fabricated structural metal	0.8	21.6	32.5
Iron and steel scrap	0.8	16.3	103.8

Source Bureau of Labor Statistics, Updated August 12, 2021
Compiled by Ken Simonson, AGC Chief Economist

What COVID Changed (So Far)

Whatever else the novel coronavirus COVID-19 was, the virus proved to be an extraordinary disruption.

For all that is not known, there are aspects of living and working that we know have been changed by the pandemic. Some of these are likely to be temporary, or as the Federal Reserve Bank likes to say, "transitory." Inflation is among these transitory conditions, although rising costs may not meet your definition of temporary. The principal cause of inflation remains the imbalance between rising demand and a fractured supply chain. That supply chain will remain unsettled until the outbreaks of COVID-19 cease globally, and manufacturers can comfortably predict a stable workforce. Declining demand for office space is also likely to be a temporary byproduct of the pandemic, although the definition of temporary will vary depending upon how much office space you own.

The change in workforce is destined to be a more permanent result of the pandemic. As has been noted by many experts, COVID-19 accelerated a number of trends that were already emerging. While lots of smart people will magnify trends like work from home, or shifting office designs and amenity demands, the more impactful trends were demographic in nature. In the U.S., we were heading towards an imbalance between the number of people retiring and the new workers coming into the workplace to replace them. In Western PA, that imbalance was more exaggerated than in most of the country. The unexpected financial gains that occurred during 2020-2021 have allowed even more Baby Boomers to retire than predicted. Social and behavioral changes resulting from the pandemic added to the demographic pressures, spurring millions who were in the prime of their careers to reassess their choices and change jobs.

COVID-19 will probably be like many other American disruptions. It will change the way we do things forever, for a few years. The American capacity for collective amnesia has proven to be endless. The lessons of the Spanish Flu were long gone by the time we needed them 100 years later. Changes to the way we travel that followed 9/11 have slowly faded. Pandemic mitigation measures will probably do the same. Many of them, like wearing masks and avoiding crowds, will be happily left behind. Others, like frequently washing hands and getting regular vaccinations, will persist. In time, even those minimal precautions may well recede with the memory of 2020.

What will persist are the changes that were already in the works. Shopping online was just one of many conveniences that technology was bringing to us. The pandemic gave sellers a motive to accelerate the delivery of those conveniences. The competition for jobs was declining with the accelerating retirement of Baby Boomers. COVID may have shortened the cycle on that trend by three-to-five years and employers best be prepared for the consequences. How we use real estate has been disrupted and is not going to revert to the role real estate played in 2015. These changes, and others, will have ripples that change construction for the foreseeable future.

COVID and the Consumer

The important takeaways from the Quarterly Report on Household Debt and Credit, published by the Federal Reserve Bank of New York on August 2, were the robust finances of the U.S. consumer and the benefits of the CARES Act. The former reflects how well the majority of U.S. households fared during an extraordinary economic upheaval. The latter remains a work in progress, as much of the feared deterioration of loan portfolios is being avoided by the continued forbearance provisions in the CARES Act. Loans in forbearance, especially those which were a result of forbearance offered by private lenders, have been declining; however, avoiding future increases in delinquency and bankruptcy will depend upon good fortune in timing the recovery ahead of the end of forbearance periods.

Within the second quarter Household Debt and Credit report were several other indications that the foundation of economic health was strong for U.S. households and lenders. Mortgage debt was mainly being extended to borrowers with higher-than-average credit scores. Following the financial crisis, 75 percent of mortgage originations were with borrowers whose FICO credit score exceeded 720. That trend persisted until 2014-2015 and returned again in 2016. More than half the mortgages originated in the second half of 2019 were with borrowers having FICO scores above 760. That trend accelerated ahead of the pandemic, as lenders became more wary about the chances of recession in 2021. In the second quarter of 2021, three in four mortgages went to borrowers with FICO scores over 760; 88 percent went to borrowers with scores of 720 or higher.

The high credit quality can be explained in part by the high cost of housing, which precludes buyers with lesser credit worthiness. Lenders also became more conservative during the pandemic. Regardless of the reason, it is good for the economy at large to not have credit extended to those who will struggle to repay.

Declining credit card debt, which made up five percent of household debt in the second quarter, means less income spent on higher interest rates. That also tends to signal less austerity will be needed in coming quarters to pay down credit card debt. The decline in revolving debt likewise means less deleveraging to slow down the economy. Delinquency on all debt was strikingly lower than during the recovery 10 years earlier. More than 97 percent of mortgage borrowers were current on payments at the end of the second quarter of 2021. That's seven percentage points higher than at the same point in 2011.

You only need to look back to economic data from 2011 to judge the economic damage that deleveraging causes. Paying for purchases already made, especially when the bulk of the purchases are not assets, inhibits purchasing and investment in economic recovery. Deleveraging reduces the income available for mortgage and rent, making it difficult to grow the housing market. Assuming that consumer finances remain as solid for the rest of 2021, that strength should prevent what economic pain exists from bleeding into evictions and foreclosures.

Perhaps because the pandemic came on suddenly and quite publicly, households seemed to react just as quickly. Shutdowns and travel restrictions kept discretionary spending on hospitality much lower than normal, perhaps enough to bolster savings that were used to pay other obligations. Paycheck Protection Program kept millions employed that might have otherwise not been. And direct payments from the CARES Act and American Recovery Plan added to household balance sheets.

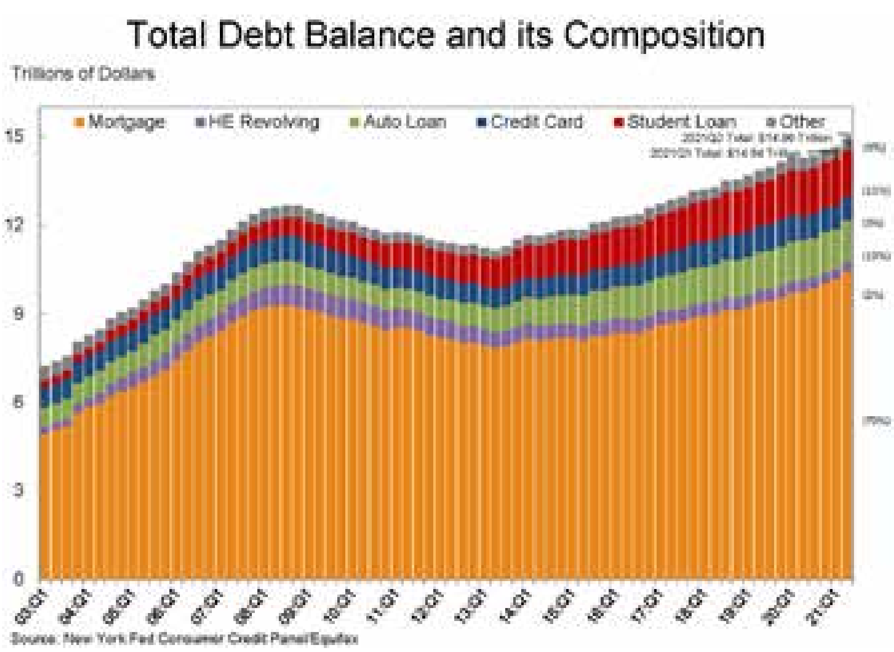
The upshot is that, in addition to keeping mortgage delinquency lower than expected, there is ample evidence that apartment evictions will not reach the levels feared by proponents of the eviction moratorium. Once the moratorium is lifted, eviction notices will be filed on hundreds of thousands of units; however, data from the National Multifamily Housing Council (NMHC) on actual payments showed that 96 percent of renters paid rent in June. NMHC data is collected on 11.5 million or one-fourth of all rentals nationwide. Similarly, the National Association of Realtors reported that payments on single-family rentals were at 95 percent through the end of 2020. That is 0.4 percentage points lower than at the end of 2019. Until the economy recovers to the point of full employment, there will be pain among renters who are under- or unemployed. It is unlikely that evictions will be widespread enough to upend the prevailing trends in multi-family development.

More surprising perhaps than the resilience of the apartment market was the strength of retail. Here too, the robust consumer balance sheet and direct payments from government provided support for retailers and restaurant owners. COVID-19 certainly accelerated existing trends, like online shopping and more fine dining, but it was not the destructive force that the industry feared.

"During the first month or so I was afraid every restaurant and store was going to go out of business. Instead, what happened was landlords were human beings," says Jason Cannon, first vice president at CBRE. "Because of the kind of loans they had, some landlords couldn't realistically give tenants a break. Most of them were great human beings through the early part of this pandemic. It is a cliche but early on the attitude that 'we're in this together' was real."

Cannon notes that the pandemic exposed owners that had weak balance sheets and insufficient reserves to weather the first few difficult months. But he also explains that work-from-home provided an unexpected boost to the community shop or restaurant as 2020 unfolded.

"Without people at the office, the daytime population was more present in their communities. That meant that if you live in Wexford but were normally Downtown during the day, your lunch break might be at the Giant Eagle or the Walnut Grill. Suburban shopping centers saw a benefit from people working from home."



The Changed Office and Central Business District

Offices did not see that same benefit. During the darkest months of the pandemic in 2020, nearly two-thirds of U.S. employees worked from their homes. Fewer than 10 percent did so in February 2020. Of the office-occupying workforce, the share of work-from-home topped 80 percent, even after the lockdowns of spring 2020 ended. That change persisted until effective vaccines rolled out in 2021, with more than 50 percent of workers staying home into the summer of 2021. It is assumed that some significant share of the workforce will adopt the work-from-home model permanently. The open questions are what size that share will be and for how long. The correct answer is still, "too early to tell." But it's a trend that has legs.

As the expectations about office occupancy become clearer in late summer 2021, the elephant in the room is the post-COVID occupancy rate. To be clear, almost all observations about the future of office occupancy are speculative. The rapid spread of the Delta variant put most corporations' return to work on ice, for at least a few months. According to CoStar, more than three percent of office space demand – over 170 million square feet – was lost since the pandemic began. That is 50 percent more than during the Great Recession. There are thousands of (unsupported) opinions about how much of that space will return, or if more space will be vacated, when "normal" returns. Delta variant notwithstanding, however, there are some metrics that help see when normal might reappear.

Cushman and Wakefield's August Research Spotlight looked at several "green shoots" of recovery for the office market. The report noted that more than 75 percent of office occupying jobs had been recovered through July. That same level of recovery took almost six years following the financial crisis. Cushman and Wakefield also reported that 75 percent of leases signed in 2021 were for four years or more; 25 percent were for 10 years or longer. That is an indication of growing confidence in the office market. The most encouraging indicator was the jump in office search activity. Following a decline of 65 percent in searches from February to December 2020, office searches are at roughly 90 percent of the pre-pandemic levels in late August.

The positive indicators are not necessarily making it easier to predict the changes that will endure in the office sector. In part, that is because the key driver of the demand for future office space, office employment, is currently disconnected from occupancy. Office absorption has had an 82 percent correlation with office employment historically. Because so much of the office occupancy is currently working at home, there has been a negative 81 percent correlation between office employment and absorption since the second quarter of 2020.

COVID-19 has certainly not helped what was a troubled office market in Pittsburgh's central business district (CBD).

During the 2010s, as vacancy rates plunged in the CBD, PNC added more than one million square feet of office space to the inventory, all of which was occupied by its growing business units. That, coupled with the absorption of roughly 1.5 million square feet by UPMC, gave the appearance of a healthy market in the CBD. As early as 2015, however, real estate professionals were sounding warnings of coming vacancy. They also pointed out that the conversion of numerous Class B and C offices into apartments, along with Point Park University's acquisition of several buildings, had reduced the inventory, even as PNC added to the skyline.

A closer examination of the data reveals that occupancy peaked Downtown in 2010 at 18.265 million square feet. The total CBD office inventory peaked the previous year at 21.8 million square feet and then declined by 1.5 million square feet through 2020. According to Newmark, property owners converted 3.5 million square feet of office space to other use during the decade.

During that decade of repurposing of office space, a wave of corporate relocations put nearly two million square feet of space into the sublease market. Data on vacancy in Pittsburgh, primarily in Downtown, did not reflect the actual levels of occupancy from 2017 on. COVID has made an uncertain situation less tenable.

At the outset of the pandemic, in March 2020, the initial response was devastating to Downtown Pittsburgh. Office workers immediately shifted to working from home. That was impactful throughout the region but, for a sub-market that essentially exists as an office destination, virtually all activity stopped. Even though the Downtown residential community is more robust than ever before, there were not enough residents to support the number of restaurants in the CBD, including after the lockdowns eased in early summer.

Prospects for a return to pre-COVID occupancy levels soon are not good but one Pittsburgh real estate veteran sees an unlikely reversal of fortune for co-working space as a result of the pandemic. Kim Ford, CEO of Rise Pittsburgh, believes the damage done to the category by high-flying WeWork in 2019 may be repaired by the conditions in the office market of 2021.

"There is a lot of uncertainty. Do we go back to work do we not go back to work? The benefit to co-working is that it allows people more flexibility," Ford says.

Co-working offers emerging growth companies, like tech startups, to afford office space without taking on an overhead burden that could choke them. Ford notes that the previous co-working model of renting large blocks of space and subleasing it to many tenants is being replaced by a more stable, if more capital-intensive model.

"Take a look at Novel Coworking [now Expansive], for example. They have been taking control and buying their assets," Ford explains. "They have three towers in downtown Chicago. They put the same finishes throughout but build the suites out differently from floor to floor. The building has the same carpet squares, kitchens, conference rooms, and even private offices, but the sizes of the suites are different. Novel can get a tenant to lock in on a longer-term lease but gives the tenant the agility to move around in the building. If the tenant wins a contract and is now at 10,000 square feet, they could move to a different floor. They lose a contract and go down to 2,000 square feet, they can move down to another floor. I think landlords are going to start seeing that work and adjust to that model."

Office emptied after Gov. Wolf closed businesses on March 19, 2020. Photo by Elliot Cramer Photography. Use courtesy NEXT Architecture.

That kind of flexibility is attractive to startup companies and their investors, which want to see their capital put to use on products instead of real estate. The future of Pittsburgh's CBD is probably not a conversion to co-working; however, with the absorption of office space being driven primarily by emerging technology companies in Pittsburgh, Downtown landlords might gain a competitive edge by considering how to adapt the office stock to a more flexible product.

"COVID magnified the importance of people to Downtown. When you have a CBD that's reliant upon commercial office, and the occupants leave, you're not left with much. There is a lot of conversation swirling around how the CBD can become more resilient," says Jeremy Waldrup, CEO of Pittsburgh Downtown Partnership. "A big part of that is diversifying uses Downtown and creating more residential population. We think there are real opportunities in the Class B and C market to convert to residential. These are beautiful historic buildings, and we want them to be around for another 100 years, but office may not be their best use going forward."

Waldrup points to the recent activity in several buildings as evidence that a new round of conversions may be underway. Lubert-Adler Partners took over the troubled Kaufmann's Grand conversion and cut the ribbon on a $40 million investment that brought 311 apartments to the market. PMC Property Group has returned to the CBD after several years hiatus to convert the Allegheny Building into 177 apartments. Lubert-Adler also purchased The Pittsburgher across Forbes Avenue to convert it to 130 apartments and has talked openly about working with Stark Enterprises to breathe life into the renovation of the former Frank and Seder Building at 441 Smithfield Street.

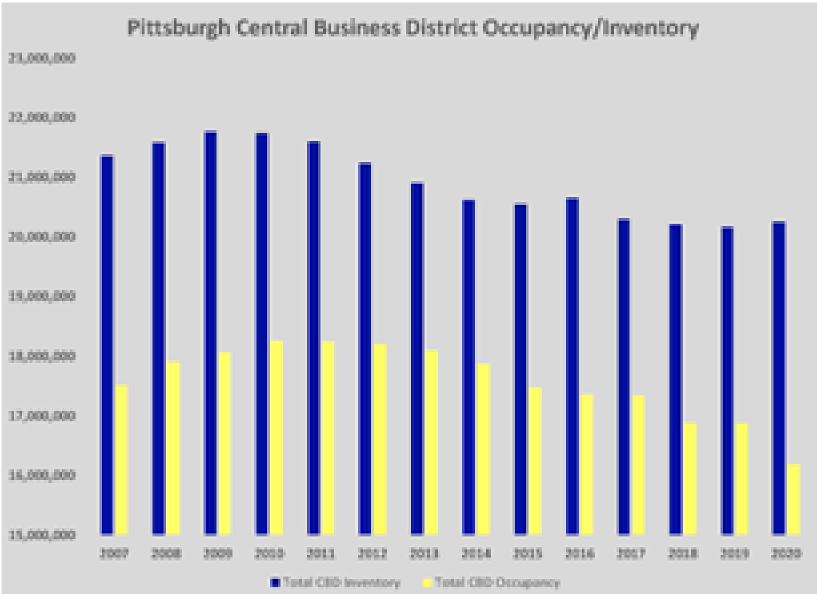
"That's a one block area where there are four projects, if you include the Kaufmann's building," Waldrup notes." Our organization is really focusing on animating street life, realizing that it will be critical to whoever is there whether it's residents, workers, or folks staying in hotels."

The conversion of a portion of Fort Duquesne Boulevard into the Allegheny Overlook pop-up park this summer is an example of activating street life. The concerts, food, and drinks brought visitors back into the CBD and brought cultural events back to the heart of the city. Daily events also reminded residents and what office occupants were in the buildings Downtown of the vibrancy of the CBD. Efforts like Allegheny Overlook will meet with mixed results while the COVID-19 virus presents a public health risk, but they have the potential to position the CBD to benefit from a return to normal, whenever that occurs.

The Changing Workforce and the Construction Workplace

COVID pulled back the curtain on an undercurrent of dissatisfaction with the workplace that was swelling. Younger workers wanted something different from working and from the office. For retail and hospitality workers, COVID seems to have marked a sea change.

"Restaurants are starting to close their dining rooms again. I



Vacancy rates declined in Downtown Pittsburgh during the 2010s as office inventory was converted to apartments and higher education use. Source: Newmark.

think the public's viewpoint of that will be that it is COVID-related but it's not. It is an employee problem," says Cannon. "Restaurants can't staff the dining rooms, so they have to fall back to drive-through. It's an employment problem, not people's fear of going out."

Cannon says that the change in expectations from hospitality or retail workers is something that his clients are learning to adapt to meet. The alternative is to change professions.

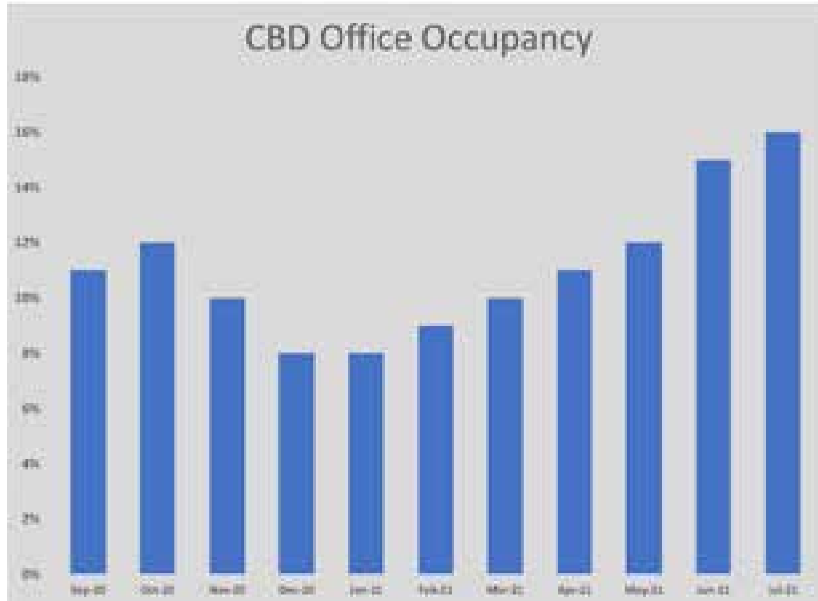
"One of my clients owns a restaurant and just paid a new manager $80,000 for a position that used to pay $55,000," he says. "I was surprised he paid that much but he asked, 'What is the value of my restaurant if I close two-thirds of it because I can't staff it'? That is the COVID effect."

Most older employers and landlords chalked these shifting expectations up to generational immaturity that would fade. Savvier companies saw something different.

Developers, property owners, and employers began changing their approach to real estate before the mid-2010s as a response to the growing problem of attracting and retaining the best talent. The results of that change manifested sporadically, and then more regularly, in decisions that have now become trends.

Tech giants like Google and Apple offered amenities that were appealing to a young workforce, many of which seemed trivial. Foosball tables, free lunch, and refrigerators stocked with craft beers were part of the high-tech workplace that bled into the mainstream by the end of the decade (albeit in more mainstream amenities like exercise rooms, upgraded lunchrooms, and nursing suites).

As Main Street embraced amenity-rich environments, the cutting-edge employers were moving towards more impactful lifestyle amenities, including allowing talent to develop in place, rather than forcing relocation. That was a significant change in recognition that it was the talent that was in the driver's seat. The pandemic was lighter fluid for that flame.



Actual office occupancy remains below 20 percent in the CBD. Source: Pittsburgh Downtown Partnership.

During the pandemic the effect of allowing talent to develop in place meant allowing work-from-home and allowing that home to be a city other than the office location. This shift in employer thinking showed up in outmigration from the major gateway cities like New York and San Francisco. COVID brought heightened fears about the safety of the denser urban areas, but the real driver of outmigration was the extraordinarily high cost of living in the coastal cities. In a vaccinated world, allowing talent to develop in place (or at least in a different place) will mean establishing offices in more desirable cities. This trend was already in place because of high real estate costs (think Amazon HQ2 and the relocation of Oracle to Austin, TX), and the need to offer flexibility to talent. For smaller cities, like Pittsburgh, an expansion of this trend could drive growth in employment and population, and eventually drive development.

Emerging technology companies need talent faster than they can attract it. That leads to slower growth, an anathema in a sector that feeds on growth ahead of profits, and to working harder to retain talent. Tight labor means higher wages for good talent, which elevates the need to retain workforce. Developers are finding higher demand for space, even office space in a pandemic, that offers occupants a workplace that meets the demands of a 24/7 live/work/play lifestyle. Even as there is growing evidence that the pandemic is changing the perception of work/life balance, the demand that the office provide comfort, safety, recreation, and an environment that fosters creativity has grown.

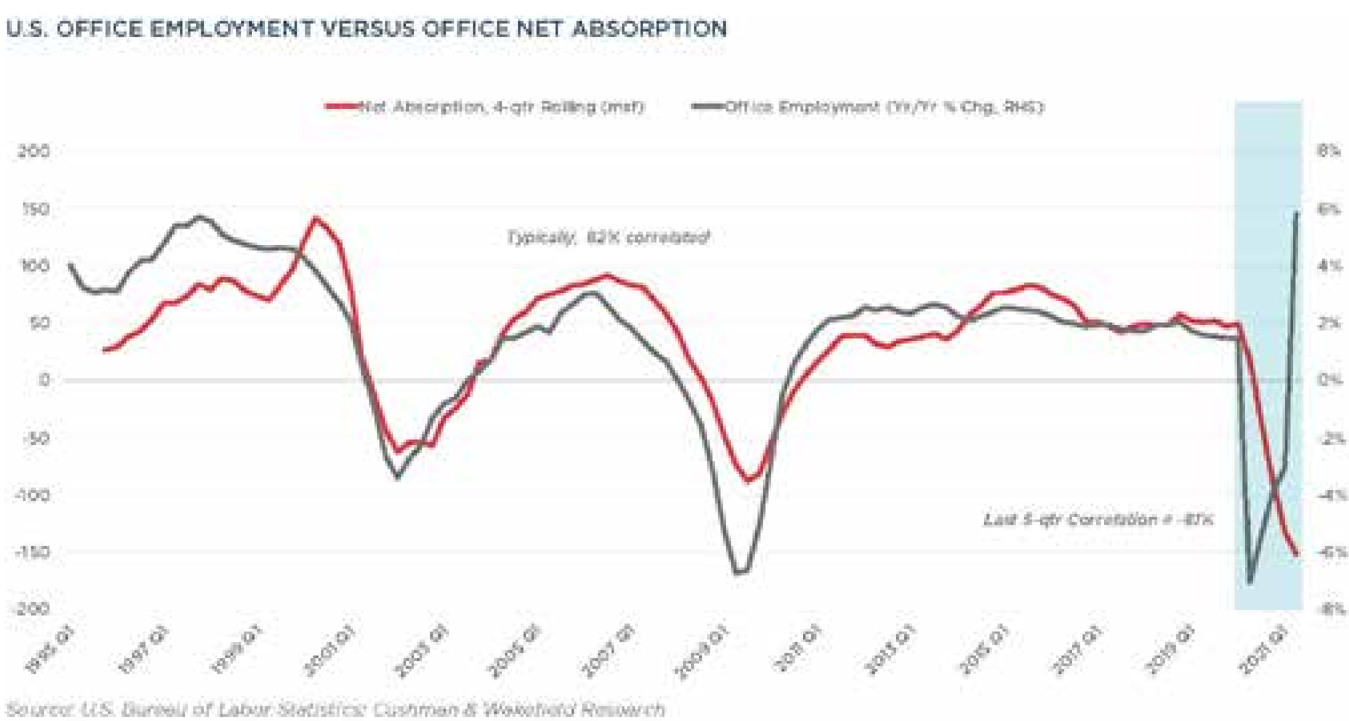
While landlords and business owners struggle to figure out how to meet the demands of workers, there is a new challenge that COVID made more urgent: higher turnover.

Dubbed the "great resignation," the growing trend of workers quitting their jobs has shown little sign of letting up. (See page 49 for a deeper dive into this trend.) The national quits rate has been double that of the pre-pandemic workforce (and roughly three times that of a period with high unemployment). The effects of this high turnover rate have not been felt as strongly in the construction field workforce, but three of four construction company owners say they are experiencing higher-than-normal levels of turnover in their office staff.

"We have been OK retaining talent because we're in a growth mode, but I will tell you that our people get calls every day from recruiters. It has not been too bad locally but there is a lot of recruiting activity out there," says Todd Mikec, CEO of Lighthouse Electric. "The unusual thing is that I get a call or an email a week from people that are looking for mergers and acquisition. We have seen them more this year than ever. It used to be that you would get one or two a year."

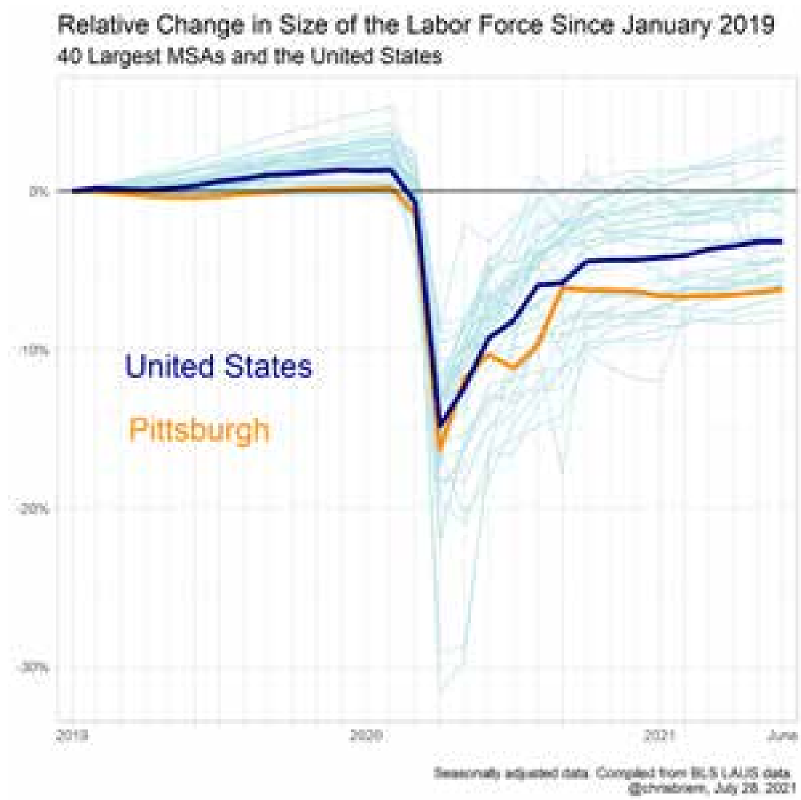
Recruitment from outside the market poses a challenge for the Pittsburgh region across all industries. One significant change that COVID appears to have wrought in Western PA is a reduction of the workforce and levels of employment. Chris Briehm, regional economist at Pitt's Urban and Regional Analysis Program, believes that the jobs lost as a direct result of COVID-19 have been mostly replaced. He points to the essentially flat line of total employment that has existed since September 2020 as evidence that future job gains will have to be from organic growth rather than a further snap back of pre-pandemic employment. With nearly every other region facing labor shortages and experiencing higher job growth, Briehm worries that the competition for workers will be fierce.

"There are two things happening in the labor force. There is a big chunk of students that are not here. And I think we lost a lot of older workers. That's a national phenomenon and we have more older workers here. I think the students will have an impact as they come back, both from a labor supply and demand side," Briehm predicts. "What I've noticed is the seasonally adjusted employment levels here have been flat for eight or nine months. The labor force has not shown



The correlation between office employment and absorption has been rendered ineffective by work-from-home.

any rebound from the COVID lows, but if you benchmark against most other markets, everybody else has been inching back. Something else is going on here. I don't have all the answers, but I think a lot of it comes down to those two cohorts. The situation is that all regions are growing so we're not going to get workers coming from other regions. We have unique levels of competition for workers between regions."



The construction workplace, the job site, saw numerous interventions when the virus outbreak began. Personal protective equipment, sanitizing, distancing, testing, and masking all became part of the daily routine of the construction job site. Initially, the measures added sufficient time to the routine that productivity suffered. By the time that vaccines came along at the beginning of 2021, job sites had adjusted to what worked and what was superfluous, to the point that work flowed more like normal. Depending on the kind of project and the nature of the trades involved, that adjustment was easier for some workers than others.

"Our members are separated from everyone else because they are in a machine. For the most part it has not affected our members that much unless a job had to shut down," says Tom Melisko, business manager for the Operating Engineers Local 66. "The contractors seemed to figure out how to plug through it. It hasn't affected the way we approach the day. Our members are trying to use their heads like everyone else. With this spike right now, for example, we're seeing masking up again and separating from people, but again we're mostly outside and inside a machine."

Restrictions came off for skilled workers outside as the case numbers spiked. Vaccinations eased restrictions further for tradespersons working inside. Over the past 18 months, data showed that many of the mitigation practices were unnecessary. Construction job sites, which are among the riskiest workplaces in normal times, proved to be among the safest for preventing community spread of COVID-19. Safety professionals can feel vindicated by the preventative measures taken, some of which seem destined to last beyond the pandemic.

"I'd like to think that the hand-washing stations will remain permanent. I think back to after H1N1, being stuck with hand sanitizer on the job sites, and we started putting sanitizer in the Porta Johns. I'd like to think that the hygiene habits will stick," says Crystal Schafer, safety director at Massaro Corporation. "I don't think I would go so far as to say that the wiping down of doorknobs and surfaces will stick."

When asked about wearing face masks in the future, especially during the winter flu season, Schafer did not see that practice returning.

"The workers couldn't wait to get them off, especially when the job site was outside. However, hospitals are still asking workers to wear masks in their facilities," says Schafer. "Our radar is definitely tuned to going into emergency rooms or any rooms where a COVID patient had been recently. The workers are now asking that question."

Bob McCall, director of safety for the Master Builders' Association of Western PA, was part of a small group that mobilized immediately after construction sites were shut down by Gov. Wolf to craft emergency safety measures to allow for returning to work. McCall believes two trends that emerged during COVID-19 will endure.

"There are better hygiene practices on site. Workers like that the Porta Johns are being kept clean and the sites are being cleaned. I think there will be more hygienic, healthier work environments on job sites," he says. "I think you'll see practices like those used for ICRA in hospitals being applied on other job sites also so that germs or bacteria encountered on a job site aren't brought home.

"The other aspect is mental health. People got an awareness during this pandemic of the challenges people face in their work life and outside of work. I think mental health awareness is something that is going to stick around. Employers are caring more for the total health of the individual as opposed to just what the worker does from 7:00 until 3:30."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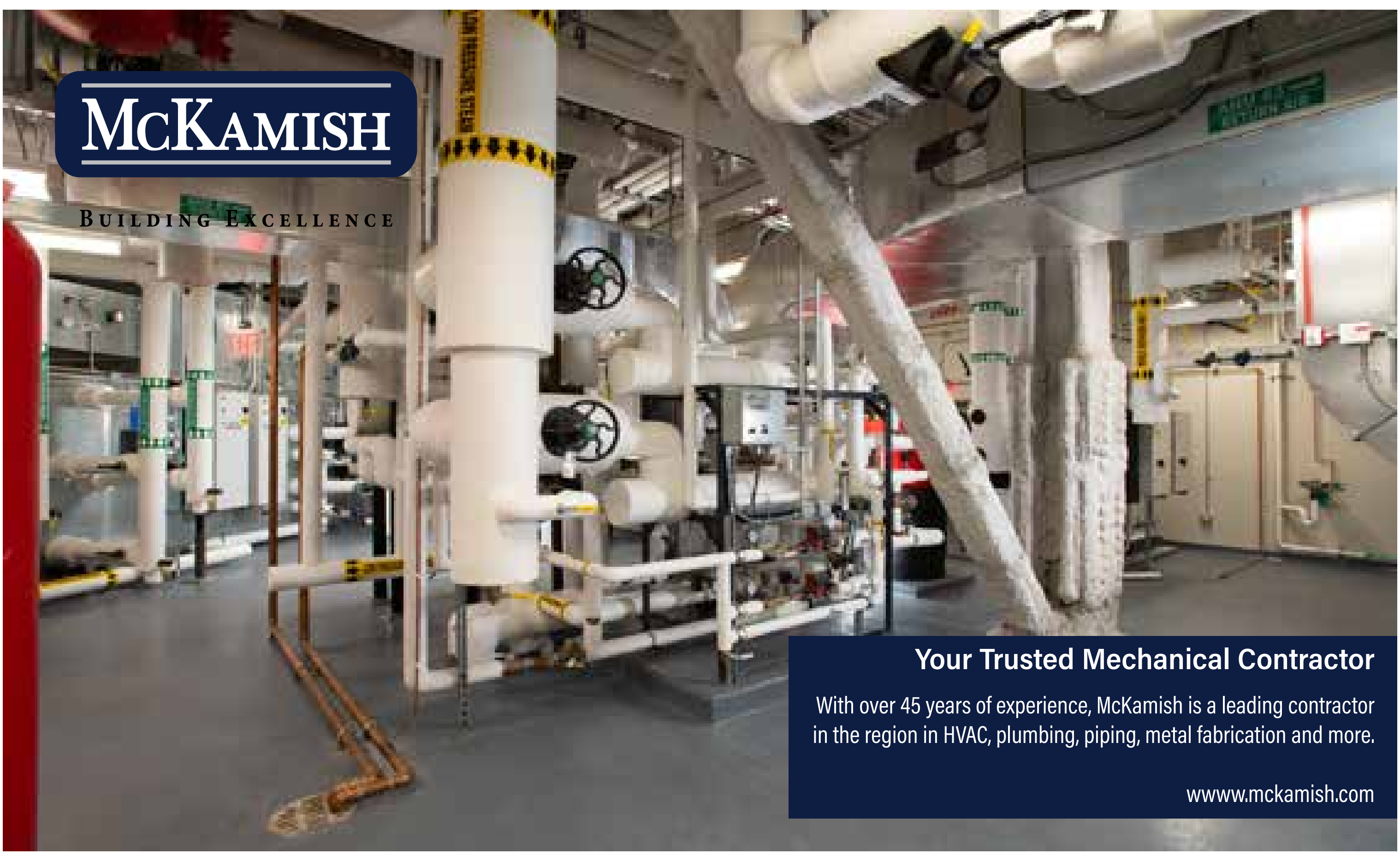
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PROJECT PROFILE

THE BRIDGE SPORTS COMPLEX

In May 2021, the City of Bridgeport, WV opened the $37 million The Bridge Sports Complex at the massive Charles Pointe development along I-79. The project encountered a handful of significant challenges during construction – not least of which was a global pandemic – but delivered a large, multi-sport facility that is a point of civic pride for the community. Built by Albert M. Higley Company's Pittsburgh office, The Bridge was that rarest of construction projects: a publicly-bid project that proceeded like a private project.

A. M. Higley performs most of its work as a construction manager at-risk, and the Bridgeport project was one of the few public bids the Pittsburgh office pursued. When Higley was the successful bidder on The Bridge in April 2019, the project management team made the decision to approach the project as it would any other.

"It was a hard bid job. We didn't have a relationship with the City of Bridgeport. Our approach from the beginning was to treat this as a relationship builder, to treat them like somebody that we had worked with 100 times. Of course, everybody says that but it's hard to do," says Jason Scheible, project manager for Higley. "Early on it took some time to get over the expected approach, which was a hard-bid contractor hammering change orders. Once we got past that, everybody loosened up a bit. And the subcontracting team did a great job of staying a step ahead of the issues and having solutions before they came up."

The relationship testing began early on. Delays in funding pushed the start of construction from May to December. Once the preliminary work was started, the site became a major issue. Bridgeport's engineering staff, and their consultants, were well aware that the soil underneath the site was unsuitable for construction. Test borings had shown unsuitable soils but the extent of the soils problems were greater than even what the tests had shown.

"There was pyrite in the soil where the swimming pool was to be located. We were aware of the pyrite from the borings, but there wasn't a good plan for how to handle it until after we were awarded the contract," says Scheible. "There was an allowance for undercutting carbonaceous materials or pyrite, but we were going to exceed that to make sure that it was done right."

The discovery was less of a surprise for Beth Fox, P.E., director of engineering and public utilities for City of Bridgeport.

"I think it helps that I have 24 years in construction. Having built

Photo by Joe McNemar Photographer

bridges and roads, I know that in the field there are so many unforeseen conditions. Any time you bid a job you have to look at the scope that the contractors bid and the information they were relying on for their bid. You also have to look at the information available to the architect to design the work," Fox says. "When you're in a situation of finding unexpected rock or pyrite material you need to have understanding from all sides that it was not anticipated, and it was above and beyond the scope."

The project team, which also included structural engineer Barber Hoffman and aquatics consultant Counsilman Hunsaker, evaluated the solutions and the city ultimately directed Higley to remove significantly more material than expected. Rather than risk future damage to the aquatics center, which makes up one-third of the facility, it was decided to get below the problem area before doing foundations.

"The city made the call to go down an extra 15 feet to excavate all of the pyrite down to good material, and fill it with stone and lean concrete," says Scheible. "That pool probably has the best foundation of any in the world."

That swimming pool is one of several large athletic facilities that provide competition-class venues for sports teams throughout the region. The Bridge is 156,000 square feet and includes six full-size basketball courts, an indoor soccer field, a quarter-mile running/walking track, fitness rooms, locker rooms, and administrative space. Fox says that the need for The Bridge came from the way Bridgeport residents live and play.

"It's a great recreational facility for our community and the whole region. This has been an idea that was planned in conjunction with Genesis Partners, the developer of the master plan, for more than a decade," Fox says. "Bridgeport is a very sports-oriented city. Whether it's youth sports or high school sports, the participation is astronomical. Once there were kids from Bridgeport on traveling teams, it seemed our local teams always had to travel quite a distance to find tournaments. The community was 100 percent on board with the council from the beginning."

Bridgeport resident Richard Forren, principal at Omni Associates, led a design team that included Barker Rinker Seacat Architecture (BRS), a Denver-based community center design expert. Forren recalls that one of the architectural challenges was keeping the scope within the budget.

"We had been working on the project for four years. The programming was challenging because the city did a lot of work up front with interested groups to come up with a comprehensive program. Then they established a budget," Forren says. "We went back-and-forth quite a bit trying to prioritize the program elements versus the money they had available."

"The challenge was making sure that a facility was being built that was for the community and represented the majority of the needs of the community," says Fox. "We tried to satisfy everybody because it's their tax dollars at work. They came up with a 156,000 square foot facility that meets the needs of the vast majority of our taxpayers."

Working with BRS, Omni toured numerous facilities throughout the country. What they saw informed the design of The Bridge and led to one of its most notable architectural characteristics: its open layout.

"We looked a lot of different facilities and BRS took us to a lot of facilities in their area. One of the things that was desirable about the facilities they showed us was how open the facilities felt," Forren says. "Even if it was just looking through glass, it was important to the city that people be able to walk around and see what is going on both from the inside and the outside."

To achieve that open, daylit atmosphere, the building required an unusual structural approach. Each of the three major athletic facilities with The Bridge have a different structure.

"There were four different structural systems. There is a cast-in-place structure, precast concrete, a pre-engineered metal building, and a fabricated structural steel frame," explains Scheible. "We used building information modeling (BIM) to integrate all those systems. That worked because we started with a great model from the architect and had subcontractors who knew how to use BIM."

Forren explains that the natatorium dictated the use of precast concrete panels, which were also the exterior architectural finish. The sloping elevation allowed for access and egress on two levels from the large parking area. The gymnasium was best-suited for cast-in-place concrete and the spans of the turf fields worked well for a pre-engineered structure. The three systems were tied together with a conventional steel entrance atrium.

"The other reason we were creative with structural systems was that we wanted to keep the entire facility as open as we could," says Forren. "You can walk the quarter mile track and see every activity within the facility."

The construction challenges started with the structure and were made worse by a winter that was wet and warmer than usual, which made the concrete placement problematic. Compaction was not possible many days and the mud made working with heavy equipment difficult. That added to the problems of erecting the natatorium structure.

"A big challenge right off the bat was the precast. Sidley prepared 60,000-pound double-wythe architectural panels, 20 feet wide by 30 feet tall. Even though it was a big site, allowing for the swing radiuses of the big cranes took up a lot of space," Scheible says. "It was hard to determine how to build the pool. We had to choose between digging the pool and erecting around it or erecting the exterior and digging the pool afterwards. Our original plan was to erect the structure and then excavate the hole, but we ended up going the other way. Had we stuck with original plan I don't think we would have had the space to do it. If you look at the floor plan there is maybe 20 feet between the two pools and maybe 15 feet between the exterior wall and the perimeter of the pool."

It was also a challenge to maintain the indoor environment in the natatorium. Scheible says that BSR developed a tight spec

Photo by Joe McNemar Photographer

for how watertight the pool envelope needed to be, with rigorous testing for moisture inside and outside the natatorium. Meeting the spec required the coordination of many of the subcontractors.

"The architect designed a polished concrete floor in the main areas but wanted the control joints cut in a fashion that aligned with the casework, corners, and different changes in color on the walls. That was a big challenge," Scheible says. "There were a lot of discussions about the proper curing of treatments of top coats for the slabs. There was a lot of coordination with the owner's self-performed items, like the gym floor and recreation equipment subcontractors that the owner hired directly."

Whatever technical difficulties the project threw at Higley and its team, none was as tricky as the public health challenge that arose four months into the project. COVID-19 became a problem that would project throughout the job. West Virginia declared construction to be an essential industry, which meant the work could continue. Not all workers were anxious to remain on a crowded jobsite, however, especially if there was a friend or family

Photo by Joe McNemar Photographer

member who came in contact with the virus. Scheible recalls that scenario occurred often but that few workers tested positive. No community spread occurred on the site.

How the city and the construction team managed the COVID-19 challenge was another example of the level of teamwork that developed on The Bridge project. The project schedule had already been extended by the unforeseen site conditions, but the city worked with Higley's team to extend the time expected to hit mileposts because of the pandemic. Moreover, Bridgeport agreed to pay Higley in advance to order materials and equipment early to stay ahead of the supply chain disruptions that would have plagued the second half of the project.

"We really didn't have any of those issues on this project because of that," concludes Scheible.

Scheible credits the owner and design team for approaching the challenges that the pandemic caused in the same manner as they had all challenges throughout the project. He also called out the quality of the documents, not something general contractors often do.

"This is probably the best example in my career of the owner getting what they paid for, because of a solid design. Reuben Losh was the project architect and was hands down one of the most detail-oriented persons I've ever worked with," says Scheible.

"The typical public entity owner takes the attitude that the contractor 'owns it' after bid day. The City of Bridgeport's attitude is a big part of the story of how we were able to be successful there and have a positive relationship at the end," agrees Skylar van Soest, vice president for Higley. "It was a public lump sum project, and we ran it like a CM-at-risk. We never had any major unexpected, out-of-the blue

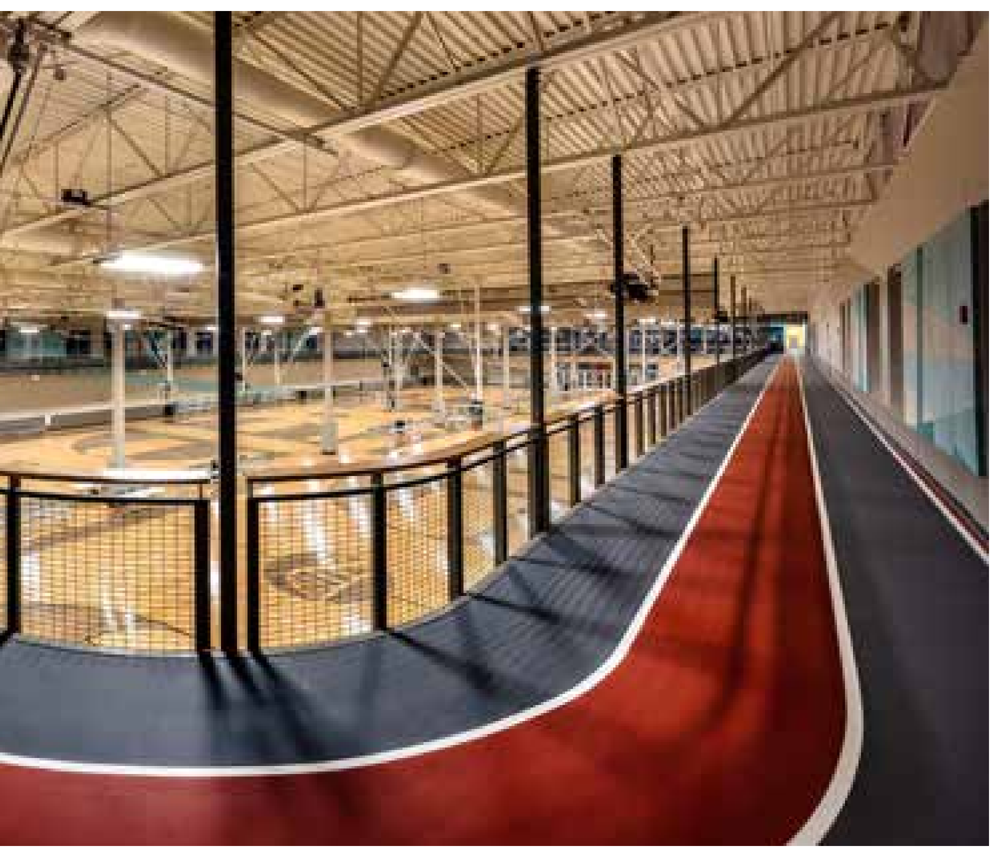

Photo by Joe McNemar Photographer

change orders. A lot of that had to do with the quality of the design that Omni did. They were solid documents from the beginning."

"You never know what you're going to get in a competitive bid situation. I think we were lucky to get A. M. Higley, who has a very ethical approach when it comes to their management style. We are also as a firm very careful about the documents in a competitive bid situation," notes Forren. "From the owner's perspective and the design team's perspective, it was great that we all came together as a team. Nobody pointed fingers when a situation occurred. It was a matter of figuring out a solution and getting it done." BG

PROJECT TEAM

The Albert M. Higley Co.	General Contractor
City of Bridgeport	Owner
Omni Associates – Architects, Inc.	Architect
Barker Rinker Seacat Architecture	Consulting Architect
Civil & Environmental Consultants	Civil Engineer
H. F. Lenz Co.	Mechanical Engineer
Cousilman Hunsaker	Aquatic Design Consultant
Barber & Hoffman	Structural Engineer
McKamish Inc.	HVAC Contractor
Finnie Plumbing Inc.	Plumbing Contractor
Tri-County Electric	Electrical Contractor
Nitro Construction Services	Fire Protection Contractor
Mardo Masonry	Masonry Contractor
Mohawk Construction & Supply Inc.	Exterior Panels
Easley & Rivers Inc.	Drywall and Framing Contractor
Dan Taylor Interiors Inc.	Interior Finishes Contractor
A. J. Vater & Sons	Painting Contractor
Trinity Steel inc.	Structural Steel
Sutter Roofing Inc.	Roofing Contractor
Wolfe's Excavating LLC	Excavation Contractor
Sidley Precast Group	Structural Precast Concrete
RAM Construction Services	Waterproofing
Massaro Industries	Ceramic Tile
Nemes Glass Corp.	Glass & Glazing Contractor
Paddock Swimming Pools	Swimming Pool Contractor
Platform Contracting	Concrete Contractor


a m HIGLEY
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FIRM PROFILE

BRISTOL ENVIRONMENTAL, INC.

It's been decades since asbestos was widely used in new construction. Yet still today, the harmful substance lurks in commercial buildings, high-rises, old factories, government facilities, and other structures containing spray-on fireproofing, vinyl floor tiles, and other materials where asbestos hides.

Sometimes Ernie DeCaro wonders how much more asbestos we can find. One thing's clear—we haven't found all of it.

DeCaro is president and CEO of Bristol Environmental, Inc., a full-service environmental remediation contractor headquartered in Philadelphia. Bristol also has a branch office in Pittsburgh and three more offices in three other states. In addition to performing its share of asbestos abatement jobs, Bristol conducts lead paint abatement, mold remediation, disaster recovery and infection control work, selective demolition, and other types of jobs. "We do any kind of environmental remediation from the ground up," DeCaro says. Today, the company has become a go-to provider for many services, and it continues to grow based on its customers' needs.

DeCaro completed his first asbestos job in 1980. He had been working at an insulation company in Bucks County, PA, that also did asbestos removal. Back then, workers didn't yet have all the proper tools for asbestos removal, DeCaro says, but he learned the job well, and there was plenty of asbestos to be found.

DeCaro would go on to launch Bristol Environmental in 1994, focusing initially on asbestos abatement, his area of expertise. As Bristol's services expanded, the company began shifting its focus from public operations to private clients like drug stores, banks, and other franchises.

Even though Bristol is headquartered in Philadelphia, Pittsburgh holds a special place in DeCaro's heart. He and Bristol partner and vice president Pat DeCaro hail from Ellwood City, PA, 40 miles northwest of Pittsburgh.

"If you were to cut our arms open, they would bleed black and gold," DeCaro says. "Even though we're sitting here in Philadelphia, our roots are there." In fact, Steelers memorabilia featuring the likes of Franco Harris, Terry Bradshaw, and other players adorns Ernie DeCaro's office, and photos of Pittsburgh decorate the walls.

Naturally, then, Bristol began taking jobs in Pittsburgh. In 2001, the company hired Pittsburgh general manager Dave Brogan, who ran Bristol's Pittsburgh branch initially from a filing cabinet and computer in his basement. (Today, the company occupies a 10,000-square-foot warehouse in Pittsburgh's South Side that Brogan says is bursting at the seams.) Throughout the years, Brogan says that Pittsburgh has been a steady market to work in, free from the dramatic ups and downs that characterize some other cities.

The scope of Bristol's services extends beyond specifically environmental remediation and includes a range of selective demolition projects. The company's origins in asbestos removal meant that workers often performed selective demolition in order to knock out asbestos without harming other structures.

"While we're doing asbestos, we're already doing very precise demolition—remove the ceiling, don't hurt the walls; remove the floor, don't hurt the walls," Brogan says. "So, it was a natural segue for us to go from removing asbestos to doing precise, selective demolition."

Doing such precise demolition in commercial buildings, hospitals, and other structures without affecting other building tenants has become a staple for Bristol. Now, many of the demolition jobs that Bristol takes on do not involve asbestos removal. "For selective demolition, we believe that we've become the sort-of go-to contractor for tough jobs," DeCaro says.

Bristol's demolition work typically doesn't involve knocking down entire structures. But its team has become adept at handling the sort of jobs requiring a precise touch and a little extra creativity. For example, for decades, Pittsburgh's Civic Arena was home to the NHL's Pittsburgh Penguins and hosted concerts and shows. But when "The Igloo" came down in 2011, Bristol worked to strip the cladding off the arena, removing the stainless steel layer from the building's iconic dome to prepare the structure for demolition. Unlike working with a flat roof, the curvature of the roof made the job more challenging, Brogan recalls.

At a manufacturing plant in Mt. Pleasant, PA, Bristol workers completed a demolition of a collection of oversized HVAC systems on the roof for RIDC. After realizing that the HVAC units were actually several units put together, the team took them apart and lifted them off with a crane. "Most people would think we've got to cut this thing apart. But we just came up with a

Bristol Environmental performed the removal of the aluminum cladding from the former Civic Arena's roof.

creative way to get it done faster and more cost effectively," DeCaro says.

Another notable job involved not demolition per se but preservation. At Allegheny College in Meadville, PA, Bristol completed a lead abatement project that restored the look of one of the college's historic buildings on campus. The building's original brick had been painted over, and the college wanted to uncover its original exterior.

So, Bristol's team used a chemical stripper and a very low PSI pressure washer to remove paint from the brick. They then used an abrasive blaster that used water and fine media to remove paint from the sandstone.

"The building itself is back to its natural brick from the 1800s, and they're very pleased with the project," Brogan says.

DeCaro adds that, "With that building, we had to do a lot of detailed, experimental work with different product lines to make sure that we didn't ruin the integrity of the original part of the building," he says. "Even though it was a lead abatement job, it was a pretty sophisticated, difficult lead abatement job."

Looking forward, DeCaro says that Bristol's growth continues, but it's a controlled growth. The company prefers to seek out quality projects rather than just chasing high-dollar work, he says.

A lot of new work comes from cross-business between Bristol's five branches. And instead of relying on a huge sales force, DeCaro says that Bristol's service drives its growth. "Our growth is basically by earning it from the customer base that we have," he says. "I think that we do so much variety of work that we stand out."

Growth and expansion of services stem largely from customers' needs. Lately, for example, there's been increased focus on indoor air quality, DeCaro says; so, Bristol recently began offering duct cleaning as a new service.

Being able to perform complementary tasks for clients helps to finish the job in many cases. Even after remediation work is complete, Bristol can add the finishing touches itself if needed. If a client needs drywall put up after a job, Bristol will do that. Or, if the client needs painting completed, Bristol's team can handle that too.

Yet as with many other employers at this time, Bristol has seen personnel and hiring challenges. Some skilled workers are not looking to get into the environmental remediation business, which can involve intense labor and working in hazardous environments. Workers considering remediation work can gravitate toward skilled labor in other trades, DeCaro says.

But the demand for Bristol's type of work is there, especially in light of recent events. During the onset of the ongoing COVID-19 pandemic, Bristol found itself busy with decontamination work in the pandemic's early days. "Recently during the COVID outbreak, we were instrumental in servicing a large group of customers for disinfecting areas—banks, drug stores, medical facilities—all pretty much on an emergency response basis," DeCaro says.

Bristol's teams are used to donning Tyvek personal protective equipment, respirators, and full facemasks to carry out jobs. So, sites contaminated with a virus weren't so different from other hazardous sites. DeCaro says that Bristol has taken hundreds of calls since the start of the pandemic, dispatching teams to disinfect offices and other locations from top to bottom. Bristol still gets some calls today requesting COVID disinfections.

In fact, not a day goes by without at least a few emergency calls to Bristol's various branches. It could be that a natural disaster struck or that some facility has been flooded. It could be that a sewer backed up or that someone somewhere discovered mold or asbestos and needs it handled right away. In any event, Bristol will take the call, send out a crew, and get the job done, just as it's been doing for years. BG

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LEGAL PERSPECTIVE

THE INTERNET OF THINGS GIVES RISE TO SMART BUILDINGS BUT CREATES SIGNIFICANT NEW RISKS

BY MARC FELEZZOLA

The upsurge of the Internet of Things (IoT) has given rise to a digital revolution where almost every device that uses electricity – from light bulbs and plugs to home appliances and vehicles – now comes in a cloud-connected version. This growth in internet connectivity has facilitated a growth in the construction of "smart buildings" – i.e., buildings that integrate technology via the IoT to share information between systems in order to optimize the building's performance and automate building processes. The advent of 5G technology has further fueled this evolution, with some investors estimating that the size of the IoT market will grow from $2.6 billion in 2021 to $40.2 billion by 2026.

However, with the growth in IoT and the rise in construction of smart buildings and industrial systems has come a rise in cybersecurity risk. In the past, cybersecurity efforts have focused on IT assets like servers and workstations. However, as buildings and building systems become smarter, there are far more potential targets for hackers to attack. In fact, a recent survey of 312 individuals who were directly responsible for IoT or Internet of Industrial Things (IIoT) security at their company reported that 99 percent of them had encountered challenges in the process of securing their organization's IoT or IIoT devices and 95 percent reported concerns about the risk associated with IoT devices on their network. Perhaps even more alarming, the majority of those surveyed indicated they lacked the ability to fully monitor IIoT devices.

Despite these significant concerns, stories of hacks exploiting IoT vulnerabilities are nothing new. For example, in 2017 the Washington Post published a story about how hackers infiltrated a casino's network and stole more than 10 gigabytes of data through an internet-connected fish tank heater. Moreover, the massive cyberattack that brought down much of the internet, including popular sites like Amazon, Twitter, Netflix, Reddit, The New York Times, Fox News, and CNN in October 2016 was the result of a coordinated attack on IoT devices across the globe.

The risk of IoT hacks to the energy industry is magnified for several reasons. First, energy companies face the same basic threats that are encountered by other industries – data theft, ransomware, and billing fraud. These threats, however, are elevated because cybercriminals recognize the high economic value of many energy companies and the individuals they employ. One need look no further than the very recent ransomware attack that shutdown the Colonial Pipeline for a very prominent example.

In addition to the traditional threats posed by cybercriminals, companies in the energy industry are also targets for

cyberattacks by nation-state actors seeking to cause economic and security disturbances. For example, the FBI has warned that from December 2018 until at least May 2020, a Russian GRU Military Intelligence Agency hacker group targeted the U.S. energy sector. It is well known that another Russian GRU hacker group planted malware in energy U.S. utility networks in 2014 before carrying out the first cyber-attack-induced blackouts in the Ukraine in 2015 and 2016. Similarly, in June 2019, The New York Times reported that the US government launched cyberattacks against the Russian power grid.

Finally, energy companies are increasingly becoming the target of "hacktivist" groups like Anonymous. Thus, the number of threats to companies in the energy sector are significantly higher than in most other sectors.

Compounding with the heightened threat level, a recent report from McKinsey & Company explains how many energy companies' geographic and organizational complexity and the unique interdependencies between physical and cyber infrastructure in the energy sector further increase the risk of cyberattacks.

With a recognition of the upward trend in the utilization of the IoT, IIoT and cybersecurity risks, legislatures and courts have begun to attempt to address the critical questions raised by these new issues. Lawmakers have recognized the increased cybersecurity risk to the energy sector and have adopted regulations governing power, chemical, and nuclear facilities. However, there are few, if any, corresponding federal regulations imposing similar standards on the oil and gas industry. It is possible that these gaps in legislation will be addressed in the near future.

With respect to the design phase, prudent project owners should insist that all plans and specifications include specific cybersecurity protections. Owners must be cognizant of the fact that contractor competitive bids may often include the lowest priced IoT device meeting the mandatory contract requirements.

Moreover, the Pennsylvania Supreme Court recently recognized an employer has a duty to protect its employee data and could be held liable for data breaches that result in a compromise of that data. Thus, all employers in Pennsylvania, have a common law duty to protect employee data from cybersecurity threats, and with the growth in IoT devices and smart buildings, they must be acutely aware of the increased cybersecurity risks they create and ensure proper steps are taken to protect against that risk.

This judicial recognition of legal duties owed to third parties regarding cybersecurity breaches raises numerous other questions for the energy sector. For example, we anticipate that as companies undertake new construction projects (including renovations or additions to existing assets), it will become increasingly common that each project includes the installation of multiple, integrated IoT or IIoT systems. Given the elevated risk of cyberattacks on the energy sector, the project owner must be cognizant of cybersecurity during both the design and construction phase of the project.

With respect to the design phase, prudent project owners should insist that all plans and specifications include specific cybersecurity protections. Owners must be cognizant of the fact that contractor competitive bids may often include the lowest priced IoT device meeting the mandatory contract requirements. Thus, to avoid security vulnerabilities, it is imperative that the project design include specific and detailed requirements outlining the minimum-security requirements for all IoT or IIoT devices and systems.

The 2014 Target hack that made headlines across the nation illustrates why project owners must also remain focused on cybersecurity during construction. In that instance, hackers were able to gain access to the retail giant's system and steal approximately 40 million credit card numbers through a vulnerability in the network of Target's HVAC contractor. Thus, prudent construction project owners must be very careful about whether and to what extent they allow contractors to access their networks and should insist (by contract) that each contractor who may have any access to any owner network have cybersecurity insurance to protect against any potential damages that occur if the owner's systems are breached.

As IoT and IIoT continues to permeate every aspect of our lives, cybersecurity risks to the energy sector will continue to increase, and cybersecurity must remain a top priority for energy companies undertaking a new construction project BG

Marc Felezzola is a shareholder with Babst Calland's Construction Practice. This article is an excerpt from the 2021 Babst Calland Report, which represents the collective legal perspectives of Babst Calland's energy attorneys addressing the most current business and regulatory issues facing the oil and natural gas industry. To view the full report go to reports.babstcalland.com/the-2021-babst-calland-report-2.

FINANCIAL PERSPECTIVE

LESSONS LEARNED; HOPEFULLY, NO BRIDGES BURNED: THE COVID-19 PANDEMIC AND ITS IMPACT ON COMMERCIAL LEASING

BY MARK STADLER

BACKGROUND

Approximately 18 months have passed since the first coronavirus (COVID-19) shutdowns were imposed. Much has changed.

In the commercial lease environment, tenants confronted the prospect of paying for space that had no real value for them during the shutdown (at least in their minds). Numerous phone calls were made. "You don't expect me to continue paying for this space when I'm basically out of business, right?" "Surely you're going to provide some sort of abatement or deferral while this all plays out, are you not?"

Landlords did not respond in a uniform manner. Some were willing to compromise. (A typical deal included some temporary abatement or deferral, often coupled with an extension of the lease.) Others adopted a harder line.

When confronted with this harder line, tenants carefully scrutinized various lease provisions previously deemed "mere boilerplate." Threats were made, strident positions were taken, suits were filed, motions were made to dismiss those suits, arguments were submitted, much money and time was expended, and ultimately settlements were crafted, judges were called upon to issue decisions, or cases remained pending, awaiting resolution by trial.

The first course of action for most tenants post-shutdown was to contact their business interruption insurance carrier. Most were disappointed to discover that, after the SARS epidemic of the early 2000s, most insurance companies added endorsements to these policies specifically excluding virus events of this type from coverage.

To this mix various government agencies added loan and grant programs, most notably the PPP loan, intended to directly address the impact of the tenant's ongoing rent burden during the shutdown.

In a nation consisting of 50 states and several territories, each with their own separate body of landlord/tenant law, uniform consistent outcomes were never likely. Of course, the language of the relevant leases differed significantly. Certain parties involved in these disputes were more likable and sympathetic than others. Advocates made arguments of divergent craft and quality. The political and economic climate varied in the communities where the suits were filed, as did the particular disposition, temperament, and inclinations of the involved judges. In short, the parties to these disputes faced all of the manifold issues and uncertainties typically at play in any piece of litigation while also confronting numerous somewhat novel legal issues and theories arising as the result of a once in a century pandemic.

This article attempts to determine whether any meaningful patterns have emerged, and the extent to which it is possible to use those to inform future landlord action.

LESSONS LEARNED

Generally speaking, landlords have done reasonably well on the COVID-19 battleground. However, tenants have also tasted some victory. [For those interested in reading actual judicial opinions, compare and contrast the following favorable tenant outcomes: 267 Dev., LLC v Brooklyn Babies & Toddlers, LLC, No. 510160/2020, 2021 BL 97086 (N.Y. Sup. Ct. Mar. 15, 2021) and UMNV 205-207 Newbury, LLC v. CafféNero Americas Inc., Case No. 2084CV01493, 2021 BL 90820 (Mass. Super. Ct., Feb. 8, 2021) with the significant landlord victory achieved in The Gap Inc. v. Ponte Gadea New York LLC, No 20 CV 4541-LTS-KHP (United States District Court for the Southern District of New York March 8, 2021)].

While, of course, each case is unique and highly dependent on the particular facts and lease language at issue, some broad general lessons were learned during the last 18 months.

Landlords Were Not Held Blameworthy or Responsible for the Tenants' COVID-19 Plight

The practical overarching issue in all of the lease disputes boils down to: who should properly bear the burdens of the COVID-19 government shutdowns? In the classic scenario: landlord owns property; landlord leases some or all of that property to tenant over a stated period of time in return for negotiated payments; tenant operates its business at the property; all goes well until the government dictates that the public can no longer freely visit tenant's establishment due to the health risks inherent in a global pandemic. Whose problem is that? The landlord has done nothing to stop the tenant from enjoying the benefits of the lease. Tenant can still occupy the space, store its personal property there, and conduct certain business activities there so long as they do not involve direct in-person contact with the public. The landlord still has to pay its lenders and its employees, contractors, suppliers and providers. Under these circumstances does it make sense that the tenant should be excused from paying rent? Does it matter that there exist generous government grant and loan programs to assist tenants with their rent obligations? Viewed in this context, most have concluded that the COVID-19 burden most appropriately falls on the tenant and it should not be absolved of its obligation to pay rent.

At the Same Time, Landlords Were Wise to Not Overplay Their Cards

Even though a tenant's obligation to pay rent remains in place, should a tenant be subject to eviction and substantial penalties and fees for late payment of rent? While most courts may have been inclined to side with the landlord on the tenant's ongoing obligation to pay rent, a landlord's efforts to evict a tenant or impose significant penalties, even if supported by the lease language, were much more troublesome and likely to encounter judicial resistance. This was especially true whenever the tenant engendered sympathy and had been a longstanding and historically compliant tenant. While Oregon, for example, did impose a moratorium on commercial tenant evictions, the majority of the states did not. Nonetheless, during the actual course of the COVID-19 shutdowns, pursuing eviction of commercial tenants was problematic at best. The landlord's ongoing relationship with the tenant should be important. When tenants are suffering due to circumstances they did not create, it is wise to work with them as collegially as possible, especially if the landlord cares about keeping them as tenants. Come renewal time, tenants will remember how they were treated during the pandemic.

Temperatures Cooled Quickly Once the Shutdowns Were Lifted

It was amazing how many disputes were resolved once the shutdowns were lifted, tenants reopened their businesses, and revenue streams returned.

Efforts to Contort Lease Language to Address a Highly Unique Situation Were Generally Ineffective

Attorneys are more than capable of analyzing lease language and crafting arguments in support of their client's claim for rent relief. Here is brief summary of those arguments:

a. *Quiet Enjoyment.* The COVID-19 shutdown deprived tenant of its right to quietly enjoy the leased space. It may have prevented tenant from making as much money as expected under the lease, but generally it did not prevent tenant from having access to and occupying the space.

b. *Force Majeure.* The COVID-19 shutdown was an act of God preventing tenant from using its space, thereby entitling tenant to relief. Most force majeure clauses include language stating that a force majeure event does not excuse the obligation to pay rent. In any event, most tenants were not precluded from using their space, they suffered losses because the public could not visit that space.

c. *Eminent Domain.* The COVID-19 shutdown constituted a taking of the property by the government. While the government shutdown orders did impose some restrictions regarding use of the space, that did not rise to the level of an actual taking.

d. *Frustration, Impossibility, Failure of Consideration.* The shutdown frustrated tenant's purpose in entering into the lease, made it impossible for tenant to perform its obligations, and deprived it of the benefit of the bargain it made with the landlord. The typical response was: tenant continued to have access to and use the space it leased. While tenant was not making as much revenue as it expected, that fact did not justify relief unless tenant negotiated specific provisions to that effect in the lease.

e. *Compliance with Law and Continuous Operation Requirements.* Most leases require tenants to comply with all applicable legal requirements and to maintain continuous operations. Did this present a Catch-22 for tenants requiring that they be freed of further lease obligations? (By honoring the shutdown order, they were precluded from maintaining continuous operations.) These requirements exist in leases for the benefit of the landlord, which can choose to waive temporary non-compliance.

f. *Casualty.* Was the COVID-19 shutdown a "casualty" which rendered the leased premises unusable? Most courts (and dictionaries) thought not.

g. *Co-Tenancy.* Some mall leases contain a co-tenancy provision which provides relief to smaller tenants when one or more anchor tenants terminate their leases and/or cease operations. However, few anchor tenants actually terminated their leases, and most continued to conduct some operations at their leased space during the shutdowns. Hence, no relief.

Some or all of these arguments may have succeeded in limited circumstances, especially for highly sympathetic tenants who had advantageous lease provisions. For the most part, however, the courts viewed these theories as an attempt to fit a square peg in a round hole.

Business Interruption Insurance was Not a Source of Relief for Tenants

The first course of action for most tenants post-shutdown was to contact their business interruption insurance carrier. Most were disappointed to discover that, after the SARS epidemic of the early 2000s, most insurance companies added endorsements to these policies specifically excluding virus events of this type from coverage. Some litigation is ongoing, but the insurance companies have been winning most of these cases.

FUTURE IMPACT

For commercial landlords and tenants, what changes are expected?

Reduced Space

It is clear that tenants will want to reduce their space footprint due to fewer employees being regularly present at the office. This will also decrease demand for amenities such as parking, health facilities, and on-site retail and food service. Conversely, landlords will want to get people back into their properties. More people present means more business activity, leading to fewer defaults and vacancies. In the short-term a tenant-friendly market is likely, as landlords offer incentives to fill vacant space and to encourage tenants to return to full use of their space as soon as possible.

Virus/Shutdown Specific Lease Language

Landlords can expect demands to address these issues through either (a) specific lease language providing tenants with rent relief in the event of similar shutdowns in the future, or (b) modification of some or all the lease provisions (a through g) referenced above.

Percentage- Based Rent

It's not uncommon for leases to contain a provision where at least a portion of the tenant's rent is a function of the revenue it derives from the space. Tenants may press approaches seeking to tie a larger portion of their rent to their revenues or profitability.

Triple Net Leases

There is a perception among tenants that landlords profited from full-service leases during the shutdowns when the provision of lease-related services was limited or not existent. In short, tenants were paying for services that weren't necessary or were provided at a reduced level. Hence, it would be wise to expect an increased interest from tenants in triple-net leases.

COVID-Specific Improvements

We are now all well-versed in the methods of COVID-19 mitigation, especially social distancing. These will impact how tenant space is designed and marketed. Large open areas are likely a thing of the past. Enclosed spaces will return. Tenants will also want enhanced health-related amenities, particularly high-end air filtration systems and touchless features like automatic doors and soap dispensers.

Shared Pain

More generically, tenants are going to want assurances that the pain of future shutdowns will be shared more equally. While one can argue whether tenants are entitled to this, landlords would do well to foster this sense of sharing and a recognition that both sides will do best when their relationship is one of partners rather than adversaries.

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TREND TO WATCH

RETURNING TO WORK HAS STARTED A REALLOCATION OF THE WORKFORCE

The vaccines worked. As hoped, an accelerating pace of vaccination during the spring months allowed business to begin the return to normal. Direct payments and extended unemployment benefits put money in the pockets of consumers, which drove an unexpected hot recovery and demand for workers.

What followed still has economists and employers scratching their heads. Even as unemployment remained near six percent, hiring was being hampered by a slow return to the workforce for millions of people. By August, there were more job openings – 10.1 million – than unemployed persons. The rate of job creation was lagging the demand for workers, threatening to take some of the heat out of the recovery.

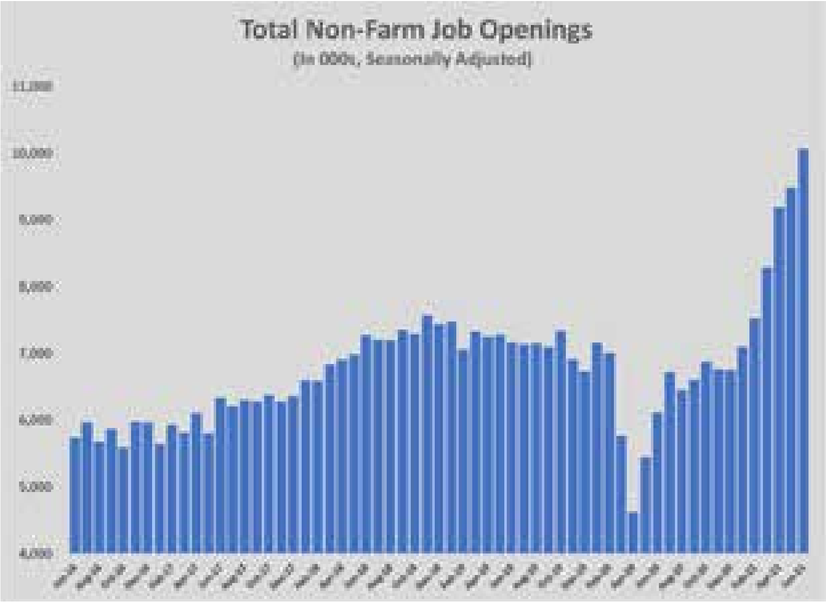
There was no shortage of possible explanations. Women left the workforce in large numbers during the pandemic, mostly to care for children who weren't in school or day care. Those schools did not reopen until September, meaning that workers awaiting childcare options to return to work had a few more months to wait. Supplemental unemployment benefits were also cited as an incentive for laid off workers to remain unemployed. A booming stock market made it easier for older workers to retire. Concerns about the virus also lingered, especially after the Delta variant caused a surge in infections, keeping some share of the workforce from seeking employment. One other explanation that is gaining credibility daily is simpler: more people were quitting their jobs.

When more than three million people quit their jobs while 20 million more are out of work, there is something changing in the psychology of the worker. It makes sense that workers would quit jobs they disliked when unemployment is below four percent. When one worker in eight has been laid off, however, economic uncertainty tends to keep employees in place. In lean times, in fact, it is not unusual for employees to be reluctant to leave an employer to take a new position, fearing that they would be among the first let go if the new employer hits rough sailing.

So why are roughly 3.5 million people leaving jobs each month in 2021?

It appears that the time away from the workplace that was afforded by COVID-19 was a contributor, in that it gave people an opportunity to reflect upon their situations that might not have come along otherwise. It turns out there are several answers to the question. The pandemic accelerated the growing number of retirees leaving the workforce. Workers are aware that there are record job openings and that a shortage of qualified workers has existed for several years. Millions of workers have seen their wages stagnate since the late 1990s. Spending more than a year at home made people realize they did not like their jobs and wanted to have a better balance to their lives. Others have decided that jobs that exposed them to the public feel unsafe.

The trend has been dubbed the "Great Resignation" for this reason. Beginning in April 2021, record numbers of workers have left their jobs without having another to replace it. Nearly four million people quit their jobs that month. In June, the number was nearly the same. The 2.7 percent quit rate was the highest recorded since December 2000, when the data was first kept. The quit rate has been above two percent for several periods since then, during the peak years of economic expansion in the mid-2000s and again in 2018-2019. Quit rate has been tracked during three economic downturns. During those periods, the quit rate was nearly half what it is today. In fact, in April and May 2020, the quit rate fell to 1.6 percent, about what would be expected in a recession. Instead of lingering until unemployment fell back to the five percent range, the quit rate jumped to 2.3 percent in July 2020 and has risen since.



Source: U.S. Census Bureau

Source: U.S. Census Bureau

The top-of-mind explanation for the reallocation is that a record number of openings allows workers making less money to find better paying jobs. The gap between productivity gains and wage growth has been widening since the late 1970s. Cumulative average wage growth outstripped productivity growth from 1964 until 1973. From 1979 until today, however, that trend diverged. In the 43 years since, wages have grown 17.2 percent while productivity expanded by 72.2 percent. After adjusting for inflation today's average hourly wage has just about the same purchasing power it did in 1978. In fact, in real terms average hourly earnings peaked more than 45 years ago. The $4.03-an-hour rate recorded in January 1973 had the same purchasing power that $24.58 would today.

Wages were not the only source of dissatisfaction, however. A survey of 4,600 workers by Flex Jobs in July and August found that 68 percent of employees were considering changing jobs. The surprise was that the number one reason (named by 56 percent of respondents) was to work for a firm or in a field with a better work/life balance. A better paycheck came in second at 50 percent. Bankrate's job search survey for August found that 55 percent of workers were looking for a new job. Monster.com reported last month that 92 percent of employees would consider working for a different company.

Work/life balance is difficult to quantify. Concerns about work/life balance are not new but, with the advent of devices that allow workers to be connected to work 24/7, there has been more thought leadership on the subject in recent years. Employers had begun acknowledging that they could not expect employees to respond to emails at 10:00 pm without allowing employees to tend to personal matters during the workday. The work-from-home shift that the pandemic precipitated seems to have shifted the balance towards the employee, who has been operating with less close supervision since mid-March 2020. If nothing else, the time saved commuting and going out to lunch has given workers a renewed sense of what an eight-hour workday feels like. That may be a genie that isn't going back in the bottle.

Of course, concerns about workers needing better balance between work and play would fall flat in a buyer's labor market. With three million more people out of work than in February 2020, the market in September 2021 should be a buyer's market. That's clearly not the case. The publicity given to the worker shortage, even in a pandemic, may be giving workers the courage to make a change, especially since 10 million jobs are open.

The construction industry seems to be impacted by the "great resignation" quite differently from the field to the office. On balance, construction pays well. Skilled workers in construction decided to work in a field that is more physically demanding than most professions. And while construction is still one of the riskier trades, job site safety has improved markedly in recent years, and creating a safety culture has become a high priority of successful construction companies. And construction is one of the few industries that has significant pension benefits. That has posed a challenge because of the demographics of construction.

"I think the people that are retiring were ready to retire. I don't think COVID had anything to do with that," says Tom Melisko, business manager for the Operating Engineers Local 66. "The pandemic hasn't impacted our apprenticeship programs. We still get hundreds of applicants for 60 or 70 apprenticeships. We also have hundreds of resumes on file from experienced operating engineers who are interested in membership."

"Recruiting is going well. We will probably have 450 applicants take our apprenticeship test, which is about what we average every year. Every now and then we'll have somebody quit that wants to do something else but that is not something that is happening more how," agrees Ken Broadbent, business manager for Steamfitters Local 449. "COVID did not hit us like it hit the service industries. We kept working. Some people were getting a good buck on unemployment and didn't want to come back to work but most people came back and are working."

Office workers, whether at contractors or design firms, are changing professions at a higher rate than before the pandemic. It may be that the after effects of COVID-19 will not be felt as strongly in construction because the associated challenges of the construction industry, like attracting young professional talent, were already there. For now, however, white collar turnover is higher.

"I think we will see higher turnover," says Todd Dominick, Rycon Construction's CEO. "Our people are getting called by headhunters more than ever. I think we will see a lot of hopscotching of people between contractors."

Eighteen months into a global pandemic, there is growing evidence that workers are reallocating themselves to new positions in the economy. Labor demand is growing faster than the labor supply. Demographic support doesn't exist for organic labor supply growth. U.S. immigration politics are ignoring the economic need for more workers. The cyclical pressures on the workforce are slowly fading as unemployment benefits expire, children return to school, and vaccination expands. The structural pressures – Baby Boomer retirements, lower immigration and birth rates – are not.

Source: Economic Policy Institute

Those 10 million open jobs are a window into how difficult the situation may be. Prior to the outbreak, when job openings also exceeded the number of unemployed by more than one million, the unemployment rate was at record low levels. There are about three million more unemployed today than in February 2020. For so many openings to remain unfilled suggests that there could be two or three times the number of unfilled positions left when the unemployment rate recovers in another year or two. Perhaps the answer will be the three million people who have left the workforce since the end of 2019. But, in the meantime, those in the current workforce will have heightened clout.

Wage growth seems destined to remain above three percent as the reallocation continues. Nimble employers in low-wage industries have already responded by hiking wages to minimum wage level and higher. The broader implications of this reallocation – if it is durable – go beyond raising wages or closing the gap on wage inequality. Employers are going to find themselves quickly in a position where compensation cannot move the needle on recruitment and retention. That will mean changing workplace culture. It will also likely mean that companies that plan to grow will need to meet the needs of their workers. Ambitious employees will have greater opportunity to stretch their skills and gain responsibilities beyond what their experience might dictate.

In some ways, the coming decade will resemble the post-World War II era. Five years of war created experience gaps that employers could not wait to have filled. Millions of workers got opportunities to take on responsibility and grow their careers as a result. The 2020s are unlikely to replicate the dizzying demand growth that fueled the U.S. economy during the late 1940s and 1950s. But an unusually tight supply of workers should create similar opportunities.

At some point in the next year or so, there should be sufficient levels of vaccination in the U.S. that COVID-19 will become endemic. During the next 90 days, with vaccines receiving full approval, schools mostly returning to in-person attendance, and enhanced unemployment benefits expiring, the major impediments for a full return to work will be removed. When the dust settles from these developments, we will have a better idea of how much of the workforce has decided to retire or remain on the sidelines permanently. Whether the labor force returns to that 160 million-plus level or not, employers will be challenged to retain those who return to a greater degree than before the COVID-19 disruption.

"In the long run, companies that don't treat their people well will struggle to keep them," says Todd Dominick. "Many people were surprised by how their employer treated them during the pandemic and, now that there are opportunities, they are taking them." BG

PERKINS EASTMAN OFFICE ANTICIPATES THE POST-COVID WORKPLACE

As the lockdown to mitigate the spread of COVID-19 extended well into spring in 2020, Perkins Eastman Architects was regularly being asked by clients how to plan for a return to work. Like all designers that have an office practice, Perkins Eastman was being queried about layouts, cleaning, spacing, measures for health and wellness. Unlike most firms, Perkins Eastman had a vested interest in the solutions. Its Pittsburgh office lease was expiring in spring 2021 and a new office plan would be built in the midst of a global pandemic. Perkins Eastman's clients' questions about the future workplace mirrored its own.

On May 1, 2021, Perkins Eastman took occupancy of its new space on the 25th floor of 525 William Penn Place. The COVID-19 pandemic had an influence that is seen throughout the office; however, there are almost no visible accommodations to the virus. No widened hallways. No disinfection stations. No plexiglass dividers. The only physical space that responds to the virus is the "mud room," which has a sink and closet that employees are expected to use before entering the office. Perkin Eastman's office was nonetheless strongly influenced by the changes that the pandemic drove in how people work.

Understanding those changes required an unusual programming journey for what were very experienced office designers.

COVID-19 threw a monkey wrench into the plans for Perkins Eastman's offices, but the timing was not all bad luck. A plan to move from The Pennsylvanian to 525 William Penn Place had been developed by the end of 2019, but the design had not been approved by Perkins Eastman corporate management, nor had it been presented to the Pittsburgh Department of Permits Licenses and Inspections. That monkey wrench proved to be valuable.

"Pre-COVID, we had a floor plan that was more conventional. It had growth built into it and had spaces that an architect's office would need, like a materials library, code counter, phone rooms, meeting rooms and a pantry," recalls Jeff Young, a managing principal of the Pittsburgh office. "We had assigned seats like we always had. We had few offices but that's as it had always been. We were ready to stamp those drawings as approved and then COVID hit."

Prior to the business shutdowns that began in mid-March 2020, Perkins Eastman had been aware of the potential impact of the coronavirus because of its office in China. Having dealt with a mandated lockdown there in January, Perkins Eastman had a leg up on the preparations needed to weather the office closing in Pittsburgh. Young was not prepared for what he and his peers would learn during those months.

"When everyone dispersed into the wind to their homes,

Photo by Andrew Rugge, courtesy Perkins Eastman.

Photo by Andrew Rugge, courtesy Perkins Eastman.

the office sat dark and empty for several months. I walked through the office during that time and saw all the things piled up that people clearly weren't needing. They were already demonstrating, in a very short period of time, that they could work differently with different tools in a different setting," he says. "They were ramping up remote communication. They were using phones to scan and create documents that would have been paper in our office. While 90 days was a very small sample size, there was a sense of how we would be able to continue to work productively but remotely."

"We had a chance to think about how we were working in real time over those 60 to 90 days. We decided that we could use that moment to think differently about what the office of the future should be," Young continues. "We could use the Pittsburgh office as a living lab for how that might work. The firm made a commitment to continue towards moving on April 30, 2021. We were ahead of schedule in March 2020, so we had the time and the flexibility to pivot without altering the schedule or seeking extensions on our previous lease."

Architects were looked to for professional guidance by property owners and managers during the first months of the pandemic. With buildings mostly empty, owners wanted to know what to change so that their occupants could safely return to work during a pandemic. Hundreds of work papers were written (including by Perkins Eastman) about deep cleaning, widening corridors, adding cubicles, arranging circulation so that no one passed closely to another, and, of course, erecting lots of acrylic shielding. When faced with envisioning how to design its own office, however, Perkins Eastman had the opportunity to approach the problem from a different perspective. It chose to imagine the office as it would be after the pandemic eased.

By designing an office for the workplace after COVID-19, Perkins Eastman was forced to ask what could change because of the way its architects changed how they worked after March 2020. Young explains that the study resulted in revelations that drove the design.

"There were three things that fundamentally changed how we thought about this space. One was that there was going to be some amount of work from home or work from anywhere when this is done," he says. "We didn't know exactly what that would look like, but we were already thinking about a sort of 60/40 split. We recognize that our business is an office culture, and we believe it's important to get together. That led to implementing a work-from-anywhere policy that expects that people will work eight days per month outside of our office. If that's possible, why would you have some of your real estate assigned that was going to be empty upwards of 40 percent of the time?"

"That led to step two, which was implementing a free address model where no seat is assigned. We think that's a much more valuable deployment of real estate," Young continues. "Then the third thing was thinking different about what constitutes a meaningful workpoint. A workpoint doesn't need to be the same six-foot long desk with double monitor for our employees. I don't think anybody in our office had a six-foot workstation set up in their home. Our people got very comfortable working in different ways in their home."

The manifestation of these revelations is evident throughout the new 11,895 square foot office, which Turner Construction built on the 25th floor of 525 William Penn Place. There are more than a dozen different styles of seating areas, scattered almost entirely along the perimeter window walls. Seating includes couches, café-style seats, worktables, counters, booths, individual work desks, cubicles, phone booths, and eight of the six-foot, dual monitor workstations. For design architects, the latter area tends to be the most popular during any given workday. The space includes four meeting rooms, a maker space, material workshop, and wellness room. File cabinets have been replaced with bins, in which single copies of a project's paperwork are stored until closed out. The one concession to COVID-19 is a mud room, an entrance to the office that Perkins Eastman's staff use when entering the office, washing their hands before storing their personal items in a locker and finding their spot for the day.

The office has only been open since May and the Delta variant surge delayed the formal implementation of the work-from-anywhere policy until October or later. Most of the firm's employees have been back to the office for a test drive. Young says he doesn't expect the adoption to be troublesome.

"The pandemic gave us the chance to talk to our folks about going to free address. The change management behind that was pretty easy. It did not take a lot of arm twisting," he says. "This was sort of a kick in the pants to be more efficient moving forward. When a project closes out the paperwork doesn't need to live under your desk for the rest of your career."

Perkins Eastman has benefitted already from the process undertaken to reimagine its offices, even before its 60 people return to the building. Most practical was the net reduction in space. By planning for an office that would be only partly occupied at any time, Perkins Eastman was able to design a space that was 17 percent smaller than its previous office. Most important, the architects got to apply an approach to planning that is replicable for its clients.

"There are a couple of lessons we learned that can be useful to our clients. One was getting to know your own company. We really got to know ourselves," Young says. "We sell these design strategy services that most of our clients overlook. They look at it like it's the underbody rustproofing that comes with the car. They want to cut to the programming and test fit. We had the luxury of having additional time to tease this stuff out and the people designing the space were us. We like to think we thought about every inch, every corner, and how we work. We'd like to be able to have that opportunity with a client up front to understand how they tick, what's important to them."

What Young describes is no different than what any architect would describe as ideal client interaction. Few firms would struggle with a design commission for a client that takes sufficient time to understand its own business and how it operates within the space it occupies. Few firms have a client that does just that. Perkins Eastman's new office acts as a test kitchen that the firm can walk clients and prospects through, using the tour as an opportunity to talk about the discovery process and how it influenced the end result. Young notes that in more than one case, the experience elevated the level of discussion. In the case of one law firm client, sharing the discovery experience led the client to shift its investment in finishes and technology from private offices to collaborative and client-facing spaces.

"We think we can take the lessons we learned and the philosophies we deployed here for the legal profession, financial services, accounting, or other professional services. There's a different cocktail mix of spaces that are more appropriate for the individual professions, but the process of self-analysis is applicable," says Young.

"We recognize that we needed to rethink how we work because of COVID. We also know the open workplace has some failing grades attached to it. We believe a lot of that stemmed from poor execution of the idea. In many cases it fundamentally missed the things needed to make it work," he concludes. "There really is a meaningful benefit to understanding how your company works. It's a relatively small investment that has a potentially profound impact on the bottom line." BG

Photo by Andrew Rugge, courtesy Perkins Eastman.

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The Inaugural Construction Inclusion Week is

October 18, 2021-October 22, 2021

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DAY 2- 10.19.21
Unconscious Bias

DAY 3- 10.20.21
Supplier Diversity

DAY 4- 10.21.21
Jobsite Culture

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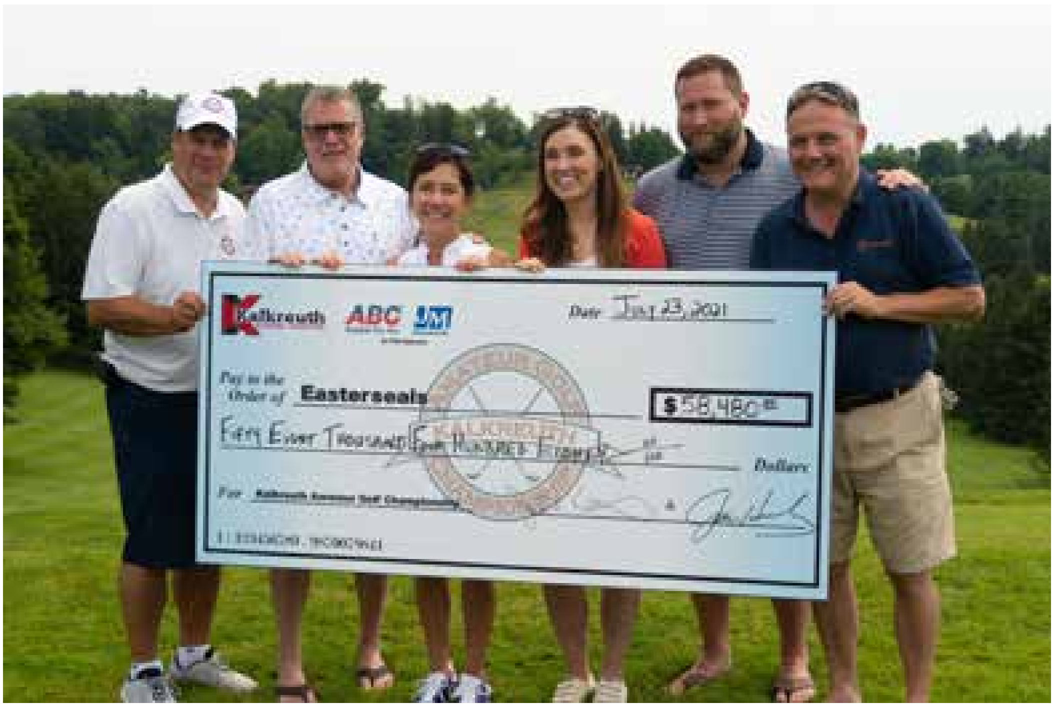

The Kalkreuth Amateur Golf Championship presented Easter Seals with a donation of $58,480 for its organization, which offers hands-on programs and support for those with disabilities. Standing with the ceremonial check are (from left) Kalkreuth Roofing and Sheet Metal (KRSM) sales manager Dan Tennant, KRSM chairman John Kalkreuth, Sherri Kalkreuth, Allison O'Konski from the Easter Seals, KRSM's Bill Lewis, and Easter Seals CEO Jay Prager.

(From left) Strada's Acadia Klain, Brian Budny and Chris Cooper from PJ Dick, with Strada's Rhonda Bolding at the NAIOP/CREW Clays Shoot.

(From left) Jendoco's Meredith Calfe, and Bob Lloyd, with CBRE's Rob Blackmore, Mike Cooney, and Jendoco CEO Domenic Dozzi at the NAIOP Summer Soire.

(From left) JLJI's Matt Ayres, Adam Ramsey, Ron Areford, and Tim Blair at the MBA Young Constructors' Clay Shoot.

(From left) Travis Raught from Burns Scalo Real Estate, McKamish's Naley McKamish and Jake Wiskeman, and Burns Scalo's Steve Whittingham.

(From left) Stantec's Jim Jasper, Seubert's Jay Black, Jeffrey Landau, and Evan Krahe from Gunning Inc.

Michael Mascaro participated in the 2021 ALS CEO Soak. This is the fifth year for the Soak and the event raised over $230,000 for the ALS Association.

(From left) CREW Pittsburgh panelists Mary Rose Hopkins from LGA Partners, Amie Piz from Workscape, Burns & Scalo's Angela Gillot, and Jamie Gildersleeve from Mascaro Construction at the CREW Pittsburgh Lunch 'n Learn on August 25.

AWARDS & CONTRACTS

Yarborough Development Inc. was awarded the general construction contract for the $4.5 million Allegheny Intermediate Unit interior alterations at the Waterfront in Homestead. The architect is HHSDR Architects + Engineers.

Ringgold School District awarded **Caliber Contracting Services** the general construction contract for the $5.3 million renovations of its High School Natatorium and Locker Rooms. The architect is HHSDR Architects + Engineers.

Landau Building Company will be the general contractor for the UPMC Passavant Hospital Operating Room #15 Equipment Replacement project. Mechanical, structural, fire protection, electrical, medical gases, and finish upgrades are within the scope of work as well. DRS Architects and Allen & Shariff are the designers.

On July 8, 2021, **Landau Building Company** broke ground at Andrew Carnegie Free Library and Music Hall for the Library Park project in Carnegie, PA. The new park is designed to connect "the Carnegie in Carnegie" to the lively main street below.

Landau Building Company will begin the Weirton Medical Center Lab Relocation project on the third floor of the medical office building located in Weirton, WV in September 2021. A 5,100 square foot shell space will be the new location of the laboratory. McLean Architects and CJL Engineering are the design firms.

Shannon Construction is the general contractor for the $2.3 million tenant improvements to Ibex at M & J Wilkow's Penn Center East. The project involves renovations to 33,000 square feet at 500 Penn Center Boulevard in Wilkins Township.

Allegheny Health Network selected **AIMS Construction** as construction manager for two projects at AHN Jefferson Hospital in Jefferson Hills. Construction is underway for the Operating Room Cart Lift. Work will start in January on the renovations to the morgue. The architect for both projects is LGA Partners.

Volpatt Construction was awarded a contract from the University of Pittsburgh for the Langley Hall Kohl Animal Lab renovation. The project was designed by Renaissance 3 Architects.

Kokosing Industrial Construction was awarded a $2.5 million contract for the general construction portion of the $12 million ALCOSAN Electrical Distribution System Upgrade. Michael Baker International is the engineer.

Rycon's Building Group was awarded a negotiated GMP contract to complete mechanical infrastructure upgrades to the Chartwell Pharmacy and Laboratory facility in Oakdale, PA. This project follows a 52,000 square foot interior renovation that Rycon completed two years prior at the same facility.

During core/shell construction of a new Class A 193,000 square foot office building located in the Strip District, **Rycon**'s Building Group was also chosen to fit-out floors four through six for GNC's global headquarters. The owner's representative is Oxford Development Company and the architect is LGA Partners.

Rycon's Building Group was awarded the construction of a new, 39,000 square foot campus engineering and IT building for the University of Pittsburgh at Bradford. The $16.6 million project features a two-story innovative center that holds numerous labs, classrooms, and faculty offices to prepare students for STEM-related careers. LGA Partners is the architect of record and HED is the design architect.

Rycon's Special Projects Group was awarded a lump sum contract to renovate several existing areas, including a pharmacy, within one of Pittsburgh's busiest hospitals. The $900,000, 4,900 square foot phased project was coordinated to allow the hospital to maintain partial occupancy during construction. DRS Architects is the architect.

In Verona, PA, **Rycon**'s Special Projects Group is performing ADA upgrades within the parking lot of a skilled nursing and rehabilitation facility. The $1.3 million project is anticipated for completion December 2021.

Rycon's Special Projects Group is finishing up renovations for repeat client, Starbucks, at two of their stores located in Canton and Mansfield, OH. To date, Rycon has completed 56 Starbucks related projects throughout eleven states and Washington, DC.

Rycon was selected to build a new, 7,000 square foot Mavis Tires in Sanford, NC for Aileron Capital. This $1.5 million project is slated to wrap up January 2022.

Work on two Burlington locations is set to begin by **Rycon** in Columbus, GA and Casselberry, FL. The two projects total $3.3 million. In the past five years, Rycon completed eight additional Burlington stores throughout six states.

Renovations are underway by **Rycon** to convert a 33,000 square foot vacant auto dealership into a new, modern prototype dealership for pre-owned cars. Located in Charleston, SC, the $1.5 million project is the eighth dealership, collision center, and/or storage lot within the past two years that **Rycon** is handling for repeat client, AutoNation.

Rycon was selected to build new storage facilities for U-Haul International in North Charleston, SC and Brandon, FL. The two projects total $23.2 million. These are the sixth and seventh U-Haul International locations that **Rycon** has constructed within the past year.

Rycon is responsible for a 3,300 square foot upgrade within an occupied post-hospital skilled nursing care center for ProMedica Heartland Health in Grosse Pointe, MI. This is the eighth project throughout five states that **Rycon** has been selected to complete for repeat client, ProMedica (formerly HRC Manor Care).

In Kent, OH, **Rycon** is set to begin work on a $8.2 million, 26,000 square foot renovation and addition to a fire department and administrative building. The project will consolidate fire, zoning, economic development, and parks departments under one roof.

Rycon will construct a new, 6,900 square foot pre-engineered metal building warehouse in Wickliffe, OH. The $1.2 million project includes the demolition of an existing warehouse for Dominion Energy.

In Cleveland Ohio, **Rycon** is renovating the fourth and fifth floor psychology department for Cleveland State University. Work will wrap up by end of August 2021.

Rycon was selected to transform a former furniture store into a new 20,000 square foot Sprouts Farmers Market in Homestead, FL. The $2.6 million project consists of demolition, interior finishes, MEP upgrades, and the installation of an entire system of coolers and refrigerators.

In Hialeah, FL, **Rycon** continues work at Countyline Corporate Park for repeat client Flagler Global Logistics. Most recently, **Rycon** was selected as construction manager to build two new $27 million warehouses: buildings #29 and #30. Since 2018, **Rycon**'s built five other core/shell warehouse buildings – with two underway – plus an interior build-out within the corporate park. In total, all projects awarded to **Rycon** equal 1.8 million square feet and $107 million.

In Philadelphia, PA, **Rycon** is the general contractor in charge of replacing the façade at Andorra Shopping Center. The $1.1 million project is anticipated for completion December 2021. The owner is Federal Realty Investment Trust and JP2 Architects is the architect.

Rycon will convert a former retail store into a new, 22,100 square foot HomeGoods location in Vineland, NJ. The $1.5 million project includes demolition, MEP upgrades, and storefront rebuild. The Owner is PREIT/Philadelphia Center Realty Associates and CREATE Architecture is the architect.

Rycon is the construction manager responsible for a 13,600 square foot phased renovation of multiple areas within Inspira Medical Center's Pediatric Emergency Department and Cath Lab located in Vineland, NJ. The $4.6 million renovations include 14 private inpatient positions, resuscitation room, multipurpose/child playroom, and support spaces.

In downtown Philadelphia, work is underway by **Rycon** on a new, 2,700 square foot rare coin gallery. The owner is Silverstein Properties, the owner's representative is Stream Realty, and the architect is Desmone & Associates.

In Paulsboro, NJ, **Rycon** continues work on the largest U.S. offshore wind manufacturing hub for a confidential client. Added scope of an operation site plan and the construction of two new buildings bring **Rycon**'s total to $35.5 million at the site.

Rycon was selected to complete a dining refresh at Conrad Dining Hall located on Delaware State University's campus in Dover, DE. The project also includes upgrades at Village Cafe, Administration Building Marketplace C-Store, MLK Student Center, and Wesley College.

In Elkridge, MD, **Rycon** is working with repeat client, Dick's Sporting Goods, on their Golf Galaxy Simulator Roll-out. The architect is Fox Design Group, LLC.

In Washington, DC, **Rycon** is working with repeat client, Aramark, on millwork, carpet, and lighting repairs at the Samsung Solutions Center. Work is anticipated for completion September 2021.

Mascaro is repairing leaks inside flumes of a filter system at West View Water Authority as part of the CPO-2 Filter Leak Repair contract.

As part of the KeyCon-Conemaugh Absorber A contract, **Mascaro** removed and replaced flooring in Absorber A at KeyCon Operating LLC in New Florence, PA.

Mascaro received a contract for the Theis AK Steel Butler Mill Equipment Removal project. This project consists of dismantling an existing rolling 43-inch Z-mill in preparation for shipment.

Mascaro's Client Services Group was awarded two projects in the Petersen Events Center at the University of Pittsburgh: seating replacement in the Platinum Club and flooring installation in the main entry. Additionally, they were awarded interior and exterior renovations at the Laborer's Union Local 1058 as well as a contract for the Reflexion Linac/PET CT at UPMC Shadyside.

PJ Dick is providing CM at risk services for the AVP Fit Out in Bakery Square. AVP is a casual Italian dining concept from Big Burrito Restaurant Group.

PJ Dick is providing general construction services for the VAMC Wilkes-Barre Parking Garage, the largest project on the existing VA Wilkes-Barre Medical Center campus in 15 years. The parking structure will accommodate approximately 435 vehicles.

PJ Dick was awarded the design-build contract for a repeat confidential client in Upstate New York. The 17,000 square foot building includes 1.5 stories for laboratory space and storage, intricate concrete, and a miscellaneous steel package.

PJ Dick is providing CM at risk services for two renovation projects for UPMC Williamsport: imaging expansion and interventional radiology.

PJ Dick is returning to the UPMC East campus to provide CM at risk services for the OR expansion and nuclear medicine relocation. The project will consist of the addition of two operating rooms and associated storage space within the future second floor shell space of a two-story building addition currently under construction. The first phase will increase the total number of operating rooms at UPMC East from seven to nine. One of the two new ORs will be dedicated to a robot.

PJ Dick is providing CM at risk services for the interior renovation of University of Pittsburgh's Big Idea Center. The project consists of renovations to 4,500 square feet of storefront and basement, including new interior partitions and finishes, bathroom expansion and relocation, new mechanical services including new rooftop equipment, and a new limited use elevator. The fit out will also include a Saxby's coffee shop.

F. J. Busse Co. was awarded a contract for tenant improvements for Carnegie Mellon University at 6 PPG Place. The architect is InterArchitecture.

Massaro Corporation was awarded a design-build contract for the new $6 million facility for Gruppo Fanti in Weirton, WV. The architect is McKinley Architecture + Engineering.

ACH Clear Pathways selected **Massaro Corp.** as construction manager for its $500,000 plaza, adjacent to the 2,500 square foot addition to the Kaufmann Center in the Hill District. The plaza design was done by Gateway Engineers.

University of Pittsburgh selected **Massaro Corp.** as contractor for a $1.2 million renovation of its softball facilities. The architect is DRS Architects. Pitt also awarded a contract to Massaro for renovations to the Owen Library at its Johnstown campus.


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FACES & NEW PLACES

A. Martini & Co. welcomed **Rachel Casper** as director of marketing. Casper graduated in 2014 with a degree in Communications from Seton Hill University. She brings more than four years of experience with a regional general contractor.

Mosites welcomed **Sydney Zalewski** in July. Zalewski graduated from Carnegie Mellon University in 2013 with a Bachelor of Architecture degree and a minor in photography. She will be working as project coordinator at the Forbes & Beeler Residence Hall.

Natalie Bradshaw joins **Rycon**'s Philadelphia office as a project manager. Natalie earned a bachelor's degree in architecture from the University at Buffalo and a master's degree in construction management from Philadelphia University.

Rycon welcomes **George Burke** as a payroll accountant/human resources administrator. George received a bachelor's degree in business administration and management with a corporate finance specialization from the Ohio State University.

In **Rycon**'s Fort Lauderdale office, **José Falcon** has been hired as an estimator.

Anamaria Hazel has been hired as a project manager in **Rycon**'s Philadelphia office. A graduate of the University of Southern Mississippi, Anamaria brings over 22 years' experience to the team.

Andrew Hein joins **Rycon**'s Special Projects Group as a project engineer. Andrew earned a bachelor's degree in civil engineering from the University of Dayton.

Rycon's Atlanta office welcomes **Regan Horn** as a junior estimator.

In **Rycon**'s accounting department, **Lindsay Jones** has been hired as an accounts payable administrator clerk.

Susan Martin joins **Rycon**'s Philadelphia office as a project coordinator.

Rycon's Philadelphia office welcomes **Al Meyer** as project manager. A graduate of the University of Delaware, Al brings over 23 years' experience to the company.

Ronak Mody has been hired as an assistant project manager in **Rycon**'s Special Projects Group. Ronak is a graduate of both Mumbai University and Carnegie Mellon University, receiving degrees in architecture and project management for construction.

In **Rycon**'s Special Projects Group, **Joe Prokopik** has been hired as a senior project manager. A graduate of the Pennsylvania State University, Joe brings over 11 years' experience to the team.

Eden Shepherd joins **Rycon**'s Building Group as an estimator. Eden is a graduate of Indiana University - Purdue University at Indianapolis and brings over four years' experience to the company.

In **Rycon**'s Building Group, recent promotions include: **Ryan Ernst** as project manager, **Kenya Finn** as assistant project manager, and **Joel Schubert** as senior project manager.

In **Rycon**'s Special Projects Group, recent promotions include: **Marshall Davis** as project manager, **Brandon DiBello** as estimator, and **Hannah Schell** as assistant project manager.

In **Rycon**'s human resources department, **Dani Harper** has been promoted to human resource generalist and **Heather Saxon** has been promoted to director of human resources.

Tim Heller has been promoted to assistant project manager in **Rycon**'s Philadelphia office.

Joseph Graziosi was assigned to **Turner** Pittsburgh from Turner's Aviation Market Sector Group to work as a project manager on the Pittsburgh International Airport Terminal Modernization Multimodal Complex.

Aaron Kelly recently transferred to **Turner** Pittsburgh from Ohio. He will be working on The Assembly project as an assistant superintendent.

David Pingree joined **Turner** Pittsburgh as an electrical estimator. Pingree brings more than 23 years in the industry.

Elizabeth Rakers joined **Turner** as an engineering assistant. Rakers is a recent graduate from the University of Pittsburgh Johnstown.

Michael Cortazzo started with **Turner** Pittsburgh as a project engineer. Cortazzo brings more than eight years in the construction industry.

Mike DePoortere recently transferred to **Turner** Pittsburgh from New Jersey. He will be working on the University of Pittsburgh Upper Campus Chiller Plant and Distribution project as a project superintendent.

Turner Pittsburgh was selected to participate in the University of Pittsburgh MBE Mentor-Protégé Program. The program focuses on training, enhancing, and growing an existing minority business in the Pittsburgh region. Turner's protégé partner will be ImbuTec, a Pittsburgh based MBE and DBE that offers full electrical and general contractor services.

Bates Szakos joined **Mascaro** as a project manager on July 12. The University of Akron alum brings over 17 years of experience managing construction projects and teams.

On July 19, **Nik Donlin** joined **Mascaro** as a project engineer. In addition to his experience as a project engineer and a laborer, Nik holds a Bachelor of Science in Commerce and Business Administration from the University of Alabama and a Construction Site Supervision Certificate from Purdue University.

Shawna Crow joined **Mascaro** as a project engineer on August 9. She has experience in estimating, planning, and execution of projects along with the creation and maintenance of project schedules.

Mark Weir joins the **PJ Dick** companies as corporate EEO officer. Mark has extensive experience in EEO, DEI, legislative tracking, compliance management, strategic planning, and community outreach. He has taught and presented locally and internationally and has received numerous honors and awards for his work in this area.

Chuck Schaum joins the **PJ Dick** companies as a staff accountant in the Pittsburgh Main Office. He previously worked as a senior accountant for Southwestern PA Human Services and most recently as a trade analyst for Blacksmith Applications. Chuck earned his BSBA in Finance and Accounting from Robert Morris University.

Brian James joins **PJ Dick**'s Exton office as a project superintendent at the Princeton Plasma Physics Lab in New Jersey. Brian received degrees in architectural engineering and construction management from Delaware Technical College.

Dave LoDato joins **PJ Dick**'s Saratoga Springs office as a project manager. Previously, Dave was a project manager for Precision Glass and Aluminum and owner of a contracting firm. Dave was a corporal in the U.S. Marine Corps Reserves.

After more than 20 years of service to **PJ Dick** – Trumbull – Lindy Group, **Jennifer Howe**, corporate EEO officer and human resources manager, will be retiring in December 2021. Jennifer will continue to serve the companies as a member of the board of directors. As part of this transition, the companies have promoted **Lisa Nakamura** to vice president of human resources, training, and leadership development, and hired corporate EEO Officer **Mark Weir**.

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Architectural Innovations, LLC (AI) is a certified Small/Disadvantaged/Woman Business Enterprise (SDB/DBE/WBE). AI offers architecture, planning, interior design, and consulting services for government, healthcare, aviation, educational, retail, commercial, single/multi-family residential clients both domestically and internationally. We are currently working on the $1.1B Airport Terminal Modernization Project with Gensler Architects. Using a proven process on all of AI's projects, our team has delivered every job, on-time/on budget. We are passionate about sustainable design on every project and Jan is a member of the CEOs for Sustainability since its inception. AI has been named one of the region's Largest Architectural Firms since 2016 and Best Places to Work since 2009. We are most proud of using 100% diverse teams, leading to an impact award from Smart 50.

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HDG is a full-service architectural firm headquartered in Pittsburgh, PA. Since 1992, we've provided architecture, planning, and interior design for offices and commercial buildings, industrial and institutional buildings, schools, churches, government buildings, and water treatment plants. We believe that design excellence is achieved through an interactive process from initial planning and programming through completion. We seek to understand the needs that each client has for a project. Our team is made up of 15 professionals including 10 architects. Our firm's size helps us to serve each client, as we have the capability to complete large projects, but we're small enough that any size project will be very important to us.

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ikm architecture

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IKM Architecture is a dynamic design firm providing architectural, planning, and interior design services to clients across the region in Healthcare, Education, Science & Technology, Workplace, and Civic/Cultural. IKM champions an immersive client engagement process proven to creatively develop the direction of a client's project. IKM incorporates animations, VR, 3-D Modeling, and laser technology from our on-site Maker Space. In continuous practice for 109 years, IKM believes in providing innovative and informed design solutions that will continue to create enduring value for their clients in a changing world. IKM is a member of the AIA and the USGBC.

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JENDOCO Construction, founded in 1957, is located in Pittsburgh's East End and provides building construction services to the Western Pennsylvania region. Jendoco believes that the built environment should have a Net-Positive impact on people, nature, and communities and that designing and constructing the places in which we live, work, worship, learn, heal and play should be collaborative, creative, and fun. Through proactive solution development, sustainable building practices, community engagement, and charitable support, Jendoco continues to demonstrate our commitment to the Greater Pittsburgh Region.

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McKamish, Inc.

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PJ Dick Inc.

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PJ Dick is a part of a Pittsburgh, PA based family of companies that provides best-in-class construction management staff to estimate, plan, and build the Mid-Atlantic region's most prominent projects. Since 1979, PJ Dick has served markets including commercial, government, hospitality, healthcare, higher education, industrial, K-12 education, multi-family and senior living, and sports and entertainment. Consistently ranked among the nation's top firms, PJ Dick offers unsurpassed general contracting, design/build, construction management, and consulting services while maintaining its values of safety, sustainable building, quality construction and innovative technology.

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Rycon Construction, Inc. is a premier preconstruction, general contracting and construction management firm with offices in Pittsburgh, Atlanta, Cleveland, Ft. Lauderdale, and Philadelphia. An ENR Top 400 Contractor and ENR Top Green Contractor, Rycon specializes in new construction, renovations and design-build projects for Owners of commercial, industrial, institutional, multi-unit residential and governmental buildings. Rycon's stellar reputation for quality service is built on a solid history of successful projects completed on time and on budget and an unwavering business philosophy that puts customer satisfaction first. The results are return customers and impressive company growth. Rycon is an employee-owned company with a $550 million revenue in 2019.

Shannon Construction Company

3257 West Liberty Ave., Pittsburgh, PA 15216
T: 412-341-1155 F: 412-341-2955
www.shannon1.com
Rich Amberson, Exec. VP
richa@shannon1.com

Shannon Construction is a commercial builder with a rich legacy handed down from generations of family. Our objective is to develop and deliver customized building programs that meet our client's goals. Shannon utilizes a creative, collaborative project approach to ensure client satisfaction and successful outcomes on every project. Clients benefit from our service philosophy rooted in personalized attention to every detail. We believe the best way to do business is to treat people fairly and do the right thing. Our services include General Contractor, Construction Management, Design & Build, Self-perform Construction, Building Construction Maintenance, and Green Building techniques.

Volpatt Construction Corporation

100 Castleview Road, Pittsburgh, PA 15234
T: 412-942-0200
www.volpatt.com
Ray Volpatt, Jr. President – rayjr@volpatt.com

From our first renovation in 1991, to over 800 industrial, commercial, and institutional projects, Volpatt Construction has successfully positioned itself as one of the most respected building contractors in the Tri-State area. With a focus on high quality, hands-on service, competitive pricing, and timely project completion, Volpatt Construction has built and maintained a long list of repeat clients, partnering with the finest businesses and institutions in the area. Today, the family-operated company continues to play an integral role in building the region into a top global destination for healthcare, education, and research.

DEVELOPER

Ambridge Regional Center and ConAm3PL

2301 Duss Avenue #1, Ambridge, PA 15003
T: 724-266-4661
www.AmbridgeRegional.com
www.ConAm3PL.com
Office@AmbridgeRegional.com

The Ambridge Regional Center offers over 1 million square feet of warehouse, distribution, manufacturing, lab and yard space for lease. Our tenants include Fortune 100 firms as well as small private companies.

ConAm3PL offers full third party logistics to international conglomerates as well as regional companies whom all utilize our distribution capabilities to maximize their operational efficiencies.

Chapman Properties

100 Leetsdale Industrial Dr., Leetsdale, PA 15056
T: 724-266-4499
www.chapmanprop.com
Steve Thomas – sthomas@chapmanprop.com

Chapman Properties is a leading provider of quality business facilities in Southwestern Pennsylvania. An award-winning commercial property development and management company based in Pittsburgh, Chapman designs, builds, and operates state-of-the-art business parks with a concentration on regional distribution and industrial projects. They are best known for their redevelopment of the two-plus million square foot Leetsdale Industrial Park, and are currently developing Chapman Westport, a 2.6 million square foot master-planned mixed use business park located 3 miles from Pittsburgh International Airport on PA Turnpike 576 with tenants including General Electric's Center for Additive Technology Advancement and a new one million square foot Amazon fulfillment center (under construction). For more information, visit www.chapmanprop.com.

DOCUMENT HANDLING

Tri-State Signs & Reprographics, Inc.

2934 Smallman Street, Pittsburgh, PA 15201
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www.tsrepro.com
DJ McClary, Vice President
DJMcClary@tsrepro.com

Tri-State provides printing and document management to Architects, Engineers and Contractors. We utilize the latest in Online Plan Room Services, Scanning and Printing in both Black & White and Color. Our color division specializes in large format color, servicing the Trade Show Exhibit, Sign, Vehicle Advertising, and Window Display Markets among others. Our unique approach combines our years of experience with new technical knowledge and capabilities to equip us to continually present new possibilities to our clients.

ECONOMIC DEVELOPMENT

Armstrong County Industrial Development Council

Northpointe Technology Center II
187 Northpointe Boulevard, Freeport, PA 16229
T: 724-548-1500
www.armstrongidc.org

The Armstrong County Industrial Development Council (ACIDC), established in 1968 is a private 501(c)(3) industrial development corporation. Identified as the lead economic development group within the County, the ACIDC, along with its sister organization the Armstrong County Industrial Development Authority, provides single-point-of-contact service for emerging or expanding business and industry. Owners and operators of four industrial parks, single use and multi-tenant facilities, the ACIDC works closely with existing or prospective businesses to identify the right location. They also provide financing assistance to companies through government loan/grant programs and private sector financial institutions.

Community Development Corporation of Butler County

120 Hollywood Drive #101, Butler PA 16001
T: 800-283-0021 | F: 724-283-3599
www.butlercountycdc.com
Joe Saeler, Executive Director
jsaeler@butlercountycdc.com

The Community Development Corporation of Butler County (CDC) is the lead economic development organization in Butler County. The CDC is your first contact for economic development in Butler County. The CDC works closely with you to identify the right location for your business. The CDC also has financing available for real estate, equipment, working capital and lines of credit.

Indiana County Center for Economic Operations

801 Water St., Indiana, PA 15701-1705
T: 724-465-2662 | F: 724-465-3150
www.indianacountyceo.com
Byron G. Stauffer, Jr., Executive Director
byronjr@ceo.co.indiana.pa.us

The Indiana County Center for Economic Operations (the "CEO") was established in 1994 as a county-wide public-private initiative. The CEO Affiliates include the Indiana County Commissioners, the Indiana County Chamber of Commerce, the Indiana County Development Corporation, the Indiana County Tourist Bureau, and Indiana University of Pennsylvania, whom jointly seek to support the continuous improvement and vitality of Indiana County through increased business, economic growth, tourism, education, and the quality of life in Indiana County. The CEO facilitates access to information, resources, and the delivery of integrated programs and services to assist businesses in their efforts to grow and expand.

Mon Valley Alliance

1428 Delberts Drive, Monongahela, PA 15063
T: 724-565-5636
www.monvalleyalliance.org
Ben Brown, CEO
bbrown@monvalleyalliance.org

The Mon Valley Alliance (MVA) is a non-profit, Certified Economic Development Organization, dedicated to industrial, business, and community development in the Mid-Mon Valley region, south of Pittsburgh, PA. MVA provides shovel-ready industrial land for sale or lease in 4 area business parks, build-to-suit projects, preferred financing through the Pennsylvania Industrial Development Authority, and access to tax abatements for companies creating and retaining family sustaining jobs. The organization serves as coordinator of the Mid-Mon Valley Regional Enterprise Zone and is a leader in community revitalization through improvement projects and blight removal in the historic downtowns.

Washington County Chamber of Commerce

375 Southpointe Blvd. #240, Canonsburg, PA 15317
T: 724-225-3010 | F: 724-228-7337
www.washcochamber.com
Will Thomeier, Director Economic & Tourism Development – will@washcochamber.com

The Washington County Chamber of Commerce is the largest business organization in Washington County and the second largest chamber of commerce in Southwestern Pennsylvania. The Chamber focuses on economic and business development initiatives to expand the economy of Washington County and was one of the first organizations to publically support the economic benefits and job creation potential of the natural gas industry. Learn more at www.washcochamber.com.

Westmoreland County Industrial Development Corporation

5th Floor, Suite 520,
40 North Pennsylvania Ave., Greensburg, PA 15601
T: 724-830-3061 | F: 724-830-3611
www.westmorelandcountyidc.org
Jason W. Rigone, Executive Director
wcidc@wpa.net

Founded in 1983 by the Westmoreland County Board of Commissioners, Westmoreland County Industrial Development Corporation promotes growth in terms of job creation, economic output and a stable tax base for Westmoreland County. By developing a robust industrial park system, deploying a comprehensive marketing strategy, administering a proactive Business Outreach Program and collaborating in public/private partnerships, WCIDC supports business growth that results in job opportunities for the citizens of Westmoreland County.

ENGINEERS

Civil & Environmental Consultants, Inc.

333 Baldwin Rd., Pittsburgh, PA 15205
T: 800-365-2324
www.cecinc.com
Christopher J. Remley, P.E. – cremley@cecinc.com

CEC provides integrated design, engineering, surveying, environmental, and construction-related services with a tailored approach to address diverse development/redevelopment requirements. We have the local and national expertise necessary to support developers and architects with cost-effective designs for projects of all sizes. We understand the desire to minimize cost and maximize your return on investment. We will provide objective opinions regarding project feasibility to enable you to make informed business decisions. The complete real estate development life cycle... WE OWN IT.™

KU Resources, Inc.

KU Resources, Inc.

22 South Linden St., Duquesne, PA 15110
T: 412-469-9331 | F: 412-469-9336
www.kuresources.com
Tysen Miller – Tmiller@KUResources.com

KU Resources, Inc. provides a full range of environmental management and site development engineering services to industrial, commercial, and community based clients. The firm specializes in brownfield redevelopment, environmental site assessment, economic revitalization assistance, regulatory permitting and compliance, remediation design and implementation, and environmental risk management strategies. The firm's engineering and environmental consulting capabilities also include the areas of civil and geotechnical engineering, site development engineering, water resources engineering, mining and quarry services, water quality monitoring, and air quality compliance and permitting.

Lennon, Smith, Souleret Engineering, Inc.

846 Fourth Ave., Coraopolis, PA 15108
T: 412-264-4400
www.lsse.com
Kevin A. Brett, P.E. – kbrett@lsse.com

Established in 1985, LSSE is a civil engineering and surveying firm with offices located in Coraopolis, Allegheny County (headquarters); Greensburg, Westmoreland County (branch), Albion, Erie County (branch), Center Township, Beaver County (branch), Pennsylvania and Dublin, Franklin County (branch), Ohio. LSSE has provided planning, surveying and design services for sites throughout Pennsylvania, Ohio, and West Virginia. LSSE recently provided civil engineering and surveying services under a subcontract to the Site Architect, for a multi-phased adaptive reuse of a 1,300 foot-long, historic steel mill (Mill 19) located within the Hazelwood Green development. This project is a 170-acre brownfield site that is being transformed into a highly sustainable, mixed-use development as well as permitting a land development approval for 1,000 acres and 4 million square feet of distribution space at the Westport interchange.

David E. Wooster and Associates, Inc.

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2 East Crafton Avenue, Pittsburgh, PA 15205-2804
19 Colannade Way, #117, PMB 269
State College, PA 16803
T: 412-921-3303 | C: 412-491-6132
www.dewooster.com
Chuck Wooster, President
chuckwooster@dewooster.com

Since 1971, our firm has been a highly regarded and respected leader in the traffic engineering industry. We are most proud of our uncompromising integrity. Our goal is to guide our clients through the rigorous process of real estate development and assist them by correctly identifying on-site and off-site traffic impacts, develop cost effective and efficient mitigation strategies, and seek and receive municipal and State DOT approvals and/or permits. Our skills include: Traffic Engineering Studies, Highway Occupancy Permits, Traffic Signal System Design, Roadway Design, Intersection Design, and Parking Studies.

ENVIRONMENTAL

KU Resources, Inc.

22 South Linden St., Duquesne, PA 15110
T: 412-469-9331 | F: 412-469-9336
www.kuresources.com
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FINANCE

Dollar Bank

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T: 412-261-7515
www.dollar.bank
David Weber, Senior Vice President
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dweber578@dollarbank.com.

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PNC Real Estate

300 Fifth Ave., Pittsburgh, PA 15222
www.pnc.com/realestate
T: 216-222-6025
Jason D. Phillips, Senior VP and Market Manager
jason.phillips@pnc.com

PNC Real Estate is a leading provider of banking, financing and servicing solutions for commercial real estate clients. Our capabilities include acquisition, construction and permanent financing for developers and investors; agency financing for multifamily properties; and debt and equity capital for the affordable housing industry. And, through Midland Loan Services, we provide third-party loan servicing, asset management and technology solutions.

INDUSTRY / TRADE GROUP

American Subcontractors Assn. of WPA

565 Callery Rd., Cranberry Twp., PA 16066
T: 724-538-8227 | F: 724-538-8227
www.asawpa.org
Angie Wentz, Executive Director
angie@asawpa.org

ASA is the united voice dedicated to improving the business environment and representing subcontractors before all branches of government, other construction industry groups, and the media. We strive to promote quality construction, ethical and equitable business practices, safety in the work environment, and best industry practices. ASA Western PA started a Scholarship Program in 2019 for students going into the construction trades. The program includes a Mentoring Program for the winners and there is a Partnership Program for businesses and schools who are interested in promoting the trades to students. The Women of ASA also promote the trades to local high school students in the area.

Labor & Management • Building Our Region's Success

Builders Guild of Western PA, Inc.

631 Iron City Drive, Pittsburgh, PA 15205
T: 412-921-9000
Jeff Nobers, Executive Director
jnobers@buildersguild.org

A unique, non-profit labor/management initiative, representing 16 building trade unions and nine affiliated contractor associations. The Builders Guild is a positive forum for labor, management, and community relationships, and fosters a cooperative and productive climate for regional commercial construction development. Through the Builders Guild, unions and management have forged fair and equitable working partnerships which promote economic and professional growth.

Guild initiatives include:

- Promoting the professionalism, skill, and pride inherent with union construction;
- Training for long-term careers in the construction trades;
- Providing a reliable, skilled and diversified workforce; Facilitating diverse partnerships with like-minded organizations throughout Western Pennsylvania.

CREW Pittsburgh

CREW Network
1201 Wakarusa Drive, Suite D, Lawrence, KS 66049
www.crewpittsburgh.org
Admin@crewpittsburgh.org

Commercial Real Estate Women (CREW) offers unparalleled business development, personal leadership growth, and networking opportunities, both in our local Pittsburgh market and across 75+ chapters in the US, Canada, and Great Britain with 12,000+ members. The Pittsburgh chapter has 20+ years of providing educational programs and networking events to its members and the CRE community. Whether male or female, join CREW to have a global commercial real estate network at your fingertips and your contact info in that worldwide network.

Ironworker Employers Association of Western Pennsylvania

Bailey Center II
135 Technology Drive #311, Canonsburg, PA 15317
T: 412-922-6855
www.iwea.org
Danielle Harshman, Executive Director
dharshman@iwea.org

The IWEA is a Trade Association of Union Contractors who work in all aspects of the Ironworking Trade within the Construction Industry. We are a resource for all owners, developers and contractors who are looking for a qualified contractor with a well-trained workforce. Visit our website or call our office for additional information.

Master Builders' Association

631 Iron City Dr., Pittsburgh, PA 15205
T: 412-922-3912
www.mbawpa.org
David D. Daquelente, Executive Director
dave@mbawpa.org

Leading the Industry, Building the Region! Our vision is to support and advocate for our members and community by promoting safety, diversity and inclusion, labor relations, and workforce development.

NAIOP Pittsburgh

PO Box 100085, Pittsburgh, PA 15233
www.naioppittsburgh.org
Brandon Mendoza, Executive Director
info@naioppittsburgh.org

NAIOP Pittsburgh is the regional association of developers, owners, investors, and professionals in commercial real estate. We are the leading industry resource to foster business relationships, promote responsible development and support growth of the region through education, leadership, and advocacy. Visit naioppittsburgh.com for additional information or contact info@naioppittsburgh.org.

Pittsburgh Works Together

631 Iron City Drive
Pittsburgh, PA 15205
Jeff Nobers, Executive Director
info@PghWorks.com
www.PghWorks.com

Pittsburgh Works is committed to creating an inclusive vision of economic progress that embraces and respects both traditional legacy industries and emerging ones, while honoring the diversity of cultures and traditions inherent to each, while ensuring a sustainable environment. We seek a Pittsburgh and a region in which the lines between "old" and "new" economy are erased and respect is shown for our work ethic and dedication to community, while building a future for all.

Pittsburgh Works Together knows that we need an economy that works for everybody. Created after meetings of union leaders and officials from the manufacturing, steel, and energy sectors, our organization is committed to working with leaders of tomorrow's industries by reminding them that without everybody, there is no New Pittsburgh.

Society for Marketing Professional Services

SMPS – Pittsburgh Chapter
www.smpspittsburgh.org
Aaron Roach, Chapter President 2021-2022
President@SMPSPittsburgh.org

The Society for Marketing Professional Services (SMPS) is a diverse community of marketing and business development professionals working together to move the Architecture/Engineering/Construction (A/E/C) industry forward. SMPS is the only organization dedicated to creating business opportunities in the A/E/C industry. Companies large and small are able to tap into our powerful national and regional network to form partnerships, secure business referrals, and benchmark performance. The Pittsburgh Chapter offers educational programs, professional development seminars, and networking opportunities to professionals from architectural, engineering, planning, interior design, construction, and consulting firms serving the Pittsburgh region. SMPS Pittsburgh has over 100 members representing more than 50 firms in the built industry.

INTERIOR DESIGNER

Design 3 Architecture PC

300 Oxford Dr. Suite 120, Monroeville, PA 15146
T: 412-373-2220
www.d3a.com
William Snyder – was@d3a.com

Design 3 Architecture has been offering architecture, planning, and interior design services to the Pittsburgh region since 1982. We view inherent project constraints as potential opportunities for innovative design solutions. With a philosophy grounded in team collaboration, providing both personal attention and project leadership, Design 3 Architecture does more than solve problems. We provide solutions that are unique, exciting and affordable.

LAND SURVEYORS

Lennon, Smith, Souleret Engineering, Inc.

846 Fourth Ave., Coraopolis, PA 15108
T: 412-264-4400
www.lsse.com
Kevin A. Brett, P.E. – kbrett@lsse.com

Established in 1985, LSSE is a civil engineering and surveying firm with offices located in Coraopolis, Allegheny County (headquarters); Greensburg, Westmoreland County (branch), Albion, Erie County (branch), Center Township, Beaver County (branch), Pennsylvania and Dublin, Franklin County (branch). LSSE has provided surveying services for sites throughout Pennsylvania, Ohio, and West Virginia. LSSE provides civil site/permitting for all parcels developed at Westport interchange in Findlay Township including the recently completed Building 100/200, Niagara Bottling LLC, and the 1.4mm square foot fulfillment center currently under construction.

Red Swing Group

Engineers and Surveyors

Penn Office Building
4314 Old William Penn Hwy, Suite 101
Monroeville, PA 15146
T: 724-325-1215
www.RedSwingGroup.com

Red Swing Consulting Services, a Veteran-Owned Business, views its Client as Partners; focusing first and foremost on building and maintaining strong relationships and trust. This mutual trust is the foundation of a solid business partnership. Red Swing offers Land Development Consulting Services to take a project from concept through construction. Red Swing has experience in Surveying, Civil Engineering, Utility, and Water Resource Projects. Red Swing effectively maximizes the return on investment through a collaborative design approach, utilizing a low impact design philosophy that reduces project capital costs and produces the competitive edge that we and our partners demand.


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NAIOP Pittsburgh is actively monitoring the local health conditions and is working with city and county officials to ensure this event is safe for all attendees. We will continue to monitor conditions and will keep our sponsors and attendees abreast of any changes to the program. Should the event need to be canceled, all registrants will be fully reimbursed.
For sponsorship and ticketing information, reach out to Brandon Mendoza
EMAIL: bmendoza@naioppittburgh.com
TEL. : 412.496.9892
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COMMERCIAL REAL ESTATE DEVELOPMENT ASSOCIATION
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Kevin T. Wills, Esquire
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Babst Calland's attorneys offer experienced legal counsel in real estate development, finance, construction, energy, environmental risk assessment, zoning and land use, tax assessment appeals, eminent domain, and other corporate and litigation services. We provide creative, pragmatic advice to developers, landlords, tenants, investors, brokers and managers of commercial real estate to help them reach their goals, through attentive service that keeps the client's bottom line in mind. From acquisition to disposition, our approach to the practice of law gives our real estate clients an edge.

Maiello Brungo & Maiello LLP

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Lawrence J. Maiello, Esq., Partner
412-242-4400
ljm@mbm-law.net

Maiello, Brungo & Maiello is a full-service law firm comprised of a team of diverse and experienced lawyers specializing in: Construction Law, Corporate Law, Education Law, Estate Planning, Employment Law, Litigation, Municipal Law, Real Estate Law, and Tax Assessment. We have been providing families, businesses, and individuals with high-quality legal advice since 1972. Our firm is highly regarded for our collaborative, hands-on approach when working with clients to find tailored and comprehensive legal solutions. In every aspect of our engagement, we will consistently demonstrate a firm commitment to you.

Meyer, Unkovic & Scott LLP

Henry W. Oliver Building
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T: 412-456-2800
www.muslaw.com
W. Grant Scott – wgs@muslaw.com
Patricia E. Farrell – pef@muslaw.com
Tony J. Thompson – tjt@muslaw.com

Our real estate lawyers understand each client's business objectives and provide timely, creative, and cost-effective solutions. We regularly represent those in the business of real estate and those who must have real estate in order to do business. Our clients include manufacturers and service providers as well as owners, developers, managers, lenders, landlords and tenants, investors, contractors, brokers, and design professionals. We represent clients in all facets of commercial real estate, retail, multifamily, office and industrial, working with them on purchases and sales, land use and development, financing, leasing, title insurance, property tax, and eminent domain throughout the region and across the US.

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REAL ESTATE BROKERS

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T: 412-261-2200
www.HannaLWE.com
A. J. Pantoni – ajpantoni@hannalwe.com

Hanna Langholz Wilson Ellis is rooted in the history of the Pittsburgh region. Our legacy in Pittsburgh real estate spans nearly 90 years through various companies & names, culminating with the merger of Langholz Wilson Ellis, Inc. and Hanna Commercial Real Estate. HannaLWE thrives by providing responsive, personalized service. Our disciplines of specialty include Retail, Office, Industrial, and Investment commercial brokerage services. We service all Western Pennsylvania and West Virginia. Our greatest asset is our people, who maintain the integrity of HannaLWE. Our unique structure creates an environment in which our agents and staff are often teamed together to extend both competence and energy to each client requirement.

NEWMARK

210 Sixth Avenue #600, Pittsburgh, PA 15222
T: 412-281-0100
www.nmrk.com
Gerard McLaughlin – Gerard.mclaughlin@nmrk.com
Louis Oliva – Louis.oliva@nmrk.com

At Newmark, we don't just adapt to what our partners need—we adapt to what the future demands. Since 1929, we've faced forward, predicting change and pioneering ideas. Almost a century later, the same strategic sense and audacious thinking still guide our approach. Today our integrated platform delivers seamlessly connected services tailored to every type of client, from owners to occupiers, investors to founders, and growing startups to leading companies. Tapping into smart tech and smarter people, Newmark brings ingenuity to every exchange and transparency to every relationship. We think outside of boxes, buildings and business lines, delivering a global perspective and a nimble approach. From reimagining spaces to engineering solutions, we have the vision to see what's next and the tenacity to get there first.

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DJ McClary, Vice President
DJMcClary@tsrepro.com

Tri-State has the staff, equipment and skills to design, produce and install each of your signage projects. With our background in the building industry, we are able to work directly with our clients from the design phase throughout construction and the branding of a company. We create ADA compliant Interior signs and directories fulfilling the need for building code. Our equipment is able to cut and produce custom acrylic with raised tactile symbols and braille type on a variety of substrates painted to the customer specification. Exterior signage including construction billboards and banners for jobsites are delivered to the construction site.

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jwhite@lliengineering.com

LLI Engineering provides mechanical, electrical, architectural, commissioning, and structural engineering services. Since 1910, LLI Engineering has been consistently recognized for providing top-quality engineering design services. We specialize in commercial, critical facilities, education, healthcare, industrial, infrastructure upgrades, green building design, energy conservation modifications, project engineering, and engineering estimates. Located in Pittsburgh, Pennsylvania, LLI Engineering has completed projects in over 20 different states.

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Gaven Industries, Inc.
Giffin Interior & Fixture, Inc.
Gregori Construction, Inc.
Gunning, Inc.
Geo. V. Hamilton, Inc.
Hanlon Electric Company
Harris Masonry, Inc.
Hatzel & Buehler, Inc.
HOFF Enterprises, Inc.
Howard Concrete Pumping, Inc.
Hunt Valley Environmental, LLC
J.J. Morris & Sons, Inc.
JLJI Enterprises, Inc.
Kalkreuth Roofing & Sheet Metal, Inc.
KELLER
Keystone Electrical Systems, Inc.
Kirby Electric, Inc.
Kusler Masonry, Inc.
L & E Concrete Pumping Inc.
Lighthouse Electric Company, Inc.
Limbach Company, LLC
Lisanti Painting Company
Marsa, Inc.
Massaro Industries, Inc.
Master Woodcraft Corporation
Matcon Diamond, Inc.
Maxim Crane Works, LP
McCrossin Foundations, LLC
McKamish, Inc.
Mele & Mele & Sons, Inc.
NAES Power Contractors
Nathan Contracting LP
Noralco Corporation
Paramount Flooring Associates, Inc.
Phoenix Roofing, Inc.
Pittsburgh Interior Systems, Inc.
Precision Environmental Company
RAM Acoustical Corporation
Redstone Flooring, LLC
Renick Brothers Construction Co.
Richard Goettle, Inc.
Right Electric, Inc.
Ruthrauff | Sauer, LLC
Saint's Painting Company, Inc.
Sargent Electric Company
Schindler Elevator
Schlaegle Design Build Associates, Inc.
Schnabel Foundation Company
Specified Systems, Inc.
Spectrum Environmental, Inc.
SSM Industries, Inc.
Swank Construction Company, LLC
T.D. Patrinos Painting & Contracting Company
Tri-State Flooring, Inc.
W.G. Tomko, Inc.
W.O. Grubb Steel Erection, Inc.
Wayne Crouse, Inc.
WGM Contractors, LLC
William. A. Fischer Carpet Company
Wyatt, Incorporated

AFFILIATE MEMBERS

4CTechnologies
84 Lumber
AE Works Ltd.
AEC Online Store LLC
African American Chamber of Commerce of Western PA
AHN Construction & Design
Allegheny County Airport Authority–Pittsburgh International Airport
Alliant
American Contractors Insurance Group
Amerisafe Group
AmeriServ Trust and Financial Services Company
A. R. Chambers and Son, Inc.
Arnett Carbis Toothman, LLP
Atlantic Engineering Services
Atlas Marketing
Atlas Wholesale Co., Inc.
AUROS Group
Babst | Calland
Baker Tilly Virchow Krause, LLP
BDO USA, LLP
Black Diamond Equipment Rental
Blumling & Gusky, LLP
Bowles Rice
Bronder & Company, P.C.
Buchanan Ingersoll and Rooney, P.C.
BuildingPoint Ohio Valley
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Burns White, LLC
Cadnetics
Case|Sabatini
CENTRIA
Chartwell Investment Partners
Chubb Group of Insurance Companies
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Clark Hill PLC
Cleveland Brothers Equipment Co., Inc.
CliftonLarsonAllen LLP
Cohen, Seglias, Pallas, Greenhall & Furman
Colliers Engineering & Design
Computer Fellows, Inc.
Cozen O'Connor
Crawford Consulting Services, Inc.
Dentons Cohen & Grigsby P.C.
DesignGroup
Dickie, McCamey & Chilcote, P.C.
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Dollar Bank
DRS Architects
Eckert Seamans Cherin & Mellott
ECS Mid Atlantic, LLC
EPIC Insurance Brokers & Consultants
FDR Safety, LLC
First National Insurance Agency
Frost Brown Todd, LLC
Gallaway Safety & Supply
The Gateway Engineers, Inc.
Graystone Consulting Pittsburgh Cleveland
Green Dot Active Solutions, Inc.
The Hartford Surety
Henderson Brothers, Inc.
Henry Rossi & Co., LLP
Highway Equipment Company
Hillis Carnes Engineering Associates, Inc.
Huth Technologies LLC
Intertek - PSI
J. S. Held
Karpinski Engineering
LaFace & McGovern Associates, Inc.
Langan Engineering & Environmental Services
Liberty Insurance Agency
Liberty Mutual Surety
Lytle EAP Partners/Lytle Testing Services, Inc.
Maiello, Brungo & Maiello
McKim & Creed, Inc.
Metz Lewis Brodman Must O'Keefe LLC
Meyer Unkovic & Scott, LLP
Meyers Company
Michael Baker International
Mobile Air, Inc.
Mobile Medical Corporation
MSA Safety
Multivista
NCI - Nursing Corps
New Millennium Building Systems
Ohio Valley Drywall Supply
Old Republic Surety Company
Pac-Van, Inc.
Philadelphia Insurance Companies
Pietragallo Gordon Alfano Bosick & Raspanti, LLP
Pittsburgh Mobile Concrete, Inc.
Providence Engineering Corporation
R.J. Bridges Corporation
Regional Industrial Development Corporation (RIDC)
Republic Services, Inc.
The Rhodes Group
Rimkus Consulting Group, Inc.
Schneider Downs & Company, Inc.
Scotti Law Group
Seubert & Associates, Inc.
Stanley Black & Decker
Suburban Propane
Tarax Service Systems, Inc.
Tom Brown, Inc.
Travelers Bond & Financial Products
Tucker Arensberg, P.C.
UPMC Work Partners
USI Insurance Services
VEBH Architects, P.C.
Werner Co
Willis of Pennsylvania, Inc.
WNA Engineering, Inc.
Zilka and Associates, Inc. Architects
Zurich NA Construction

CLOSING OUT

BY RICH FITZGERALD

While 2020 was the first time many of us experienced a pandemic, it's not the region's first. In 1918, Pittsburgh faced a Spanish Flu epidemic. Leaders made decisions based on the needs of business owners rather than listening to the medical community. As a result, this region had more deaths per capita than any other place in the country.

Fast forward a century. The confidence in our medical systems has never been greater. Its credibility goes back to Dr. Jonas Salk's creation of the polio vaccine in the 1950s and Dr. Starzl's transplantation work in the early 1980s. Over the last few decades, an incredible medical eco-system has developed that began with Pitt Med and UPMC which has evolved to include AHN, Heritage Valley, St. Clair, Butler, Excela and Washington. These medical professionals and institutions are trusted messengers advising residents on how to deal with the virus. Because of that confidence, our region has done better than many other areas of the country, particularly densely populated urban areas.

When the pandemic began in March of 2020, we immediately mobilized resources to fight the pandemic – not just government resources. We were fortunate that so many in the private sector stepped up as well including those in philanthropy, labor, corporations, faith-based, non-profits and more. They've all been part of dealing with this pandemic in a responsible way.

Part of that mobilization was also Dr. Debra Bogen taking the helm at the Allegheny County Health Department. Scheduled to begin in May, we were fortunate that she was able to start earlier because of the pandemic. Her connection to the medical eco-system also benefited our region because it naturally led to additional collaboration. Her efforts, and that of the Health Department, were instrumental in getting the word out about what we needed to do to protect ourselves. Her messages started with a March 15 video posted on Facebook before expanding to regular briefings, at least weekly and sometimes more frequently, over the next year and a half as conditions changed.

The pandemic has become part and parcel of our governance. I and members of my administration were at work every single day, even throughout the pandemic. We followed Dr. Bogen's advice closely and, as a result, could have robust, in-person discussions regarding the latest medical information from the CDC, the FDA and others doing research and work on COVID-19. That daily focus has been critical because of how it affects the entire region. It was particularly important as we focused on the continued operation of schools, business, financial institutions, construction, development, eds and meds, robotics, life sciences, movies and all of the various parts of our economy that make this community vibrant and robust.

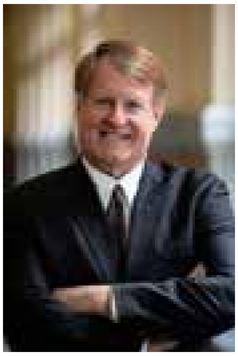
We began weekly meetings with our higher education institutions that, combined, have roughly 100,000 students. We worked hand in hand with the Pittsburgh Council on Higher Education (PCHE) to address concerns and share information. They have done a tremendous job in controlling the virus among its young people and that has been very helpful in this process.

The same can be said for so many others who stepped up and helped deal with this pandemic in a responsible way. Being able to rely on and work with so many partners and stakeholders has been a hallmark of what we do well in this county and region. And it has never more needed than during the pandemic.

We continue to follow the advice of Dr. Bogen and our medical professionals. She and her team have worked from day one to monitor and advise developments. Those efforts included ordering mitigation measures in late June and again in December as cases spiked. Her careful and thoughtful approach allowed us to return to green faster than other areas because the vast majority of people in our community followed Dr. Bogen's advice, keeping workers safe.

People have come to rely on Dr. Bogen's sound and practical advice. The Health Department's work has led to our county boasting a vaccination rate of nearly 77 percent as of the end of August (70 percent fully vaccinated and 7 percent partially vaccinated).

We cannot and should not forget the pandemic's human impact. Over 109,000 residents have tested positive, hospitalizations have topped 7,600 and over 2,000 county residents lost their lives. Unfortunately, we are still counting. Please, get vaccinated - for your safety, for your loved ones' safety, for a return to normal, and to wrest control of our lives away from this virus and put it back in our hands.



Rich Fitzgerald is the Allegheny County Executive.