# VALUATION Viewpoint

Fall/Winter 2020 Vol 25 No 3



# **The Complexity of Valuing Greenhouses**

by Henry Walter

The experience of driving through the fall countryside and seeing farmers and tractors harvesting crops may soon be replaced with visions of large industrial buildings packed with fully autonomous watering, air circulation, and advanced lighting systems. Global food and technology changes have accelerated this movement, which presents unique real estate valuation challenges for appraisers.

According to the Food and Agriculture Organization of the United Nation (FAO), border closures, nationwide quarantines, and supply chain strains from the 2020 Global Pandemic have limited communities' access to food. Additionally, the growing global

population is predicted to reach 9.1 billion people by 2050, which the FAO predicts will necessitate an increase in food production of 70% globally. With supply chain disruptions, food access, and the growing global population gaining

#### **National Market Trends & Value Indicators**

High Qual. Institut'l Grade	Value ∆ Over Past 12 Mo.
Office	-8%
Mall	-28%
Strip Retail	-14%
Industrial	10%
Apartment	-5%
Health Care	-6%
Lodging	-25%
Manufactured Home Park	8%
Self-Storage	-5%
Student Housing	-11%
	YoY Change
New Housing Starts - Q3 Midwest*	26.8%
Productivity**	4.1%
U.S. Unemployment***	92%
Consumer Confidence Index****	-19.60%

Real Estate Indicators from Green Street Advisors CPPI Report,
\*Source: St. Louis FRED, \*\* 3Q 2019/3Q 2020 – Source: Bureau of
LaborStatistics, \*\*\* Oct 2019/Oct 2020 – Source: Bureau of Labor Statistics,
\*\*\*\* Nov 2019/Nov 2020 – Source: The Conference Board



attention, entrepreneurs and investors are experimenting with ways to maximize yields while decreasing their footprint.

Conventional farming uses manpower, heavy machinery, and farm animals to till the soil in large agricultural fields. Over time, this process degrades soil, depriving it of vital nutrients and minerals required to maintain high plant yields. Technological advancements in farming can improve this process and produce higher yields, as demonstrated by agricultural output in the Netherlands. A nation that is approximately the size of Connecticut, the Netherlands is the second largest agricultural exporter, by value, in the world thanks to the use of high-tech greenhouses. In addition to producing higher yields, high-tech greenhouses are more environmental-friendly compared to conventional farming since they use a fraction of the water, fertilizers, and land. These facilities also benefit from lower labor and transportation costs because they can locate closer to metropolitan areas.

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# **COVID-19 and Currency Circulation**

by Emma Niemela

Across the United States, businesses are displaying signs stating, "no cash", "credit or debit only", or "exact change only". These signs appeared in July, seemingly connected to COVID-19. Concerned about whether cash is becoming extinct, I investigated why these signs are appearing and what it means for the future of coins and cash in America.

At a high-level, this issue is rooted in the national reaction to COVID-19. Ever since March, people have changed their habits, making efforts to stay isolated, doing more shopping online, and using touchless payment methods. As a result of these actions, coin circulation in the United States has dramatically declined.

To clarify, there is not a shortage of currency in the United States. There is actually currently more currency in circulation than in recent years. This is illustrated in the following chart from the Federal Reserve Bank of San Francisco. The chart below documents the accelerated increase in currency issued by the Fed beginning in March of 2020, compared to the annual increase in currency circulation from 2017 through 2019.

information on consumer payment choices in their supplemental Diary of Consumer Payment Choice (Diary) which was published in July of 2020, including data from April and May of 2020. This supplementary Diary was created to examine consumer habits during COVID-19 because of the increased demand for currency and claims that consumer payment habits were dramatically changing.

The July 2020 Diary asked participants about their cash holdings, changes in payment behavior, and cash avoidance. The Diary data supports four main conclusions: many people did not make in-person payments, most people are not avoiding cash, people are holding more cash, and online payment behavior does not appear substantially different.

The participants answered questions between April 15, 2020 and May 12, 2020. During this time period, 63% of participants reported they had not made any in-person payments since March 10, 2020. The fact that a majority of participants went a month, or perhaps two without making a single in-person payment shows the dramatic effect of initial social distancing efforts. However, it is

noteworthy that only 28% of the total participants stated they were avoiding cash, a much smaller number than the 63% which had not made in-person payments.

On average, participants carried \$81 in cash, an increase from \$69 in 2019. The average amount of cash stored elsewhere also rose to \$483, compared to \$257 in 2019. This tendency to hold onto cash has contributed to the fewer coins in circulation.

The impact of business reopening is not captured well by this data set. A majority of states

began to re-open throughout May, whereas the last Diary participants responded on May 12. This limits the data's use in predicting future habits, as the majority of businesses were closed during the study period.

Some businesses have struggled to react to the coin shortage, especially if their customers tend to make smallvalue payments. The 2019 Diary of Consumer Payment

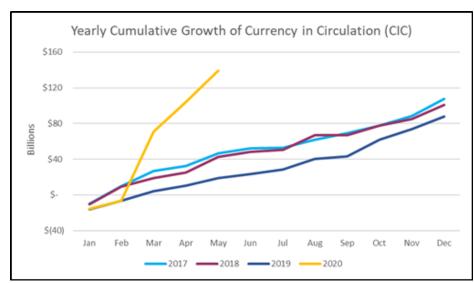


Image: Federal Reserve Bank of San Francisco

It is important to note the above chart includes both cash and coins. Looking specifically at coins, the U.S. Mint has increased coin production from the 2019 average of 1 billion coins per month to about 1.6 billion coins in June and expects to produce about 1.65 billion coins monthly through the year end.

The Federal Reserve Bank of San Francisco also provided

## **COVID-19 and Currency Circulation**

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Choice found cash represented 49% of payments under \$10 in October of 2019. Chipotle is one business falling into this categoryand facing a potential class action lawsuit as a result.

Plaintiffs in Pennsylvania accuse Chipotle employees of repeatedly shortchanging customers; for example, one customer paid with a \$20 bill and received \$4 in change instead of \$4.49. The plaintiffs ask the Court to stop Chipotle from refusing to provide cash-paying customers with correct change, require Chipotle give cash-paying customers a credit toward future purchases if they lack correct change, stop Chipotle from charging consumers more for not

using a credit card, and to award any other relief deemed appropriate. These accusations highlight the struggles some companies have faced while responding to the lack of coins.

It appears the shortchanging may have been a store-specific issue and result of miscommunication among employees. Chipotle's Chief Corporate Affairs and Food Safety Officer, Laurie Schalow responded to Delish, a website focusing on food news and recipes, with the following statement: "Chipotle's policy is to give customers the exact change they are owed when making a cash purchase in our restaurants. If a restaurant is low on change as a result of the nationwide coin shortage, our policy is to only accept exact change or other noncash forms of payment. Restaurants that are impacted have signage posted on the door as well as inside, and employees have been instructed to alert guests prior to ordering. We encourage customers to contact us immediately with any concerns so we can

investigate and respond quickly to make things right."

Given that coins will take some time to get back to normal circulation, it is important that businesses have a plan in place to deal with the present situation. Many companies have created plans similar to Chipotle, though there are also stories of business owners who needed coins and drove many miles to get them or organized a community coin drive.

The U.S Coin Taskforce was created to make recommendations to resolve the issue of low coin

circulation. The taskforce includes members of the American Bankers Association, Independent Community Bankers of America, Credit Union Associations, Department of the Treasury (U.S. Mint), Armored Carriers Industry, Food Marketing Institute, Coin Aggregator Industry, and the Federal Reserve System. This taskforce is collaborating to strategically allocate coin inventories by simplifying the process consumers use to deposit loose change, discouraging stockpiling by individual institutions, and working with the Mint to determine necessary coin supply levels.



Image: US Coin Taskforce

It does not appear that coins and cash are about to become extinct, simply that they, like all of us, have been affected by COVID-19. The U.S. Mint is running at maximum production, and many stakeholders are working together to return coin circulation to normal. The most impactful recommendation from the U.S Coin Taskforce is for consumers to bring in change to trade for cash. It will take time, but currency circulation is expected to return to normal.

## The Complexity of Valuing Greenhouses

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High-tech greenhouses are a newer form of real estate, which presents challenges for valuing these assets. The advanced design and technology featured in these specialized properties require a detailed and diligent analysis in order to provide a reliable and well-supported opinion of value. The appraiser must develop a thorough understanding of how these special-use buildings function in order to understand the value potential.

Oncetheappraiserhasidentified and fully researched the variety of features present in a greenhouse being appraised, he or she must then consider these unique property features when applying all applicable approaches to value. Real estate appraisers may employ three approaches to value: the cost approach, the sales comparison approach, and the income capitalization approach.

 The income capitalization approach estimates the value of a property by analyzing its income streams and/or its potential to produce income.

- The sales comparison approach uses the principle of substitution to determine how much a buyer would pay for a comparable property.
- The cost approach is a valuation method estimating the price a buyer should pay for real estate based on the cost of building an equivalent building. The costs include acquisition of land and total construction costs, less economic depreciation.

Valuing high-tech greenhouses requires more due diligence from the appraiser for several reasons: the income capitalization and sales comparison approaches lack sufficient reliable market data. This is due to the fact that many facilities are owner-operated, and typically, the owner is leasing the real estate back to a related company. Rental rates in these situations do not reflect market rents, so rents must be adjusted to reflect the appropriate market rates. However, without reliable market data, it is challenging to accurately adjust rents. The application of the income capitalization approach depends

#### What does an automated greenhouse look like?

Greenhouses are encased by double polymer sheeting or laid with acrylic glass that allows for maximum light penetration to the plants. The double polymer sheeting is a lower end feature that is cost conservative but requires a higher level of maintenance and more rapid replacement compared to acrylic glass which is sold at a premium price, but does not require



the same level of maintenance and has a longer useful life. Typically, at the base of either the polymer or glass structure lies concrete flooring, sometimes with elaborate plumbing systems below for flood floors. There are several autonomous systems that enable the farmer to produce high-quality products. Hydroponic systems utilize water as the soilless medium, in which plants float on the surface while the root systems absorb nutrients, as needed. Automated drip irrigation feeds each plant through a series of tubes after sensors calculate the necessary amounts and distribute it to the root system. Facilities equipped with state-of-the art HVAC systems can utilize evaporative cooling, where water acts as the coolant to hot dry air and releases cool humid air that feeds the plant. These systems are best fitted for desert-like climates. Smaller scale greenhouses may install mist irrigation, a system that releases a fine mist that cools the hot air trapped at the top. Flood floors are a cost-effective alternative, that rely on plumbing below the concrete that guite literally floods the floor to deliver water and nutrients to the plants and then drains the excess after a designated period.

# **The Complexity of Valuing Greenhouses**

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on if data sufficient to support this approach is available.

An appraiser may elect to apply a sales approach, but like other approaches to value, he or she may be limited by the availability of data. Shenehon tracks the sale of specialized real estate assets such as high-tech greenhouses. For example, we have been tracking several Real Estate Investment Trusts (REITs) that are actively acquiring mechanized medical marijuana greenhouses through sale-leaseback arrangements. REITs are interested in these medical marijuana greenhouses because the supply of these property types is limited, and there is a growing demand for their use. Medical marijuana is legal in only 33 states, all of which require several permits to operate and may have state mandated limits to how many greenhouses can grow this plant. The sale-leaseback program allows medical marijuana companies to reinvest the proceeds of the sale into their operations since obtaining financing is often tricky for such companies as their product is federally prohibited from utilizing traditional financing sources.

In 2020, Industrial Innovative Properties, Inc. (IIPR) acquired several medical cannabis greenhouses, with the intention of improving and expanding capabilities and capacity of each facility through their tenant improvements. According to IIPR's sale-leaseback program, they aim for:

- Deals in the \$5 million to \$30+ million range.
- Lease terms for 10 to 20 years on a triple net lease.
- Initial base rent that is 10% to 16% of the total investment.
- Rental rate annual escalations of 3% to 5%

Their acquisitions ranged from \$5.5 million with \$29.5 million in tenant improvements in New Jersey to \$26.8





million with \$22.2 million in tenant improvements in Massachusetts. These sales provide useful data for determining value using the sales approach.

The cost approach is one of the more accurate ways to value the greenhouse due to highly specialized buildouts, but only if records of construction costs were kept. If the sworn construction statement is available, a thorough analysis of the building's physical depreciation, as well as estimating the functional and economic obsolescence present in the property, must be completed. In cases where construction statements are unavailable, estimating the building construction costs can vary widely, resulting in significant differences in opinions of value. The plant intended to be grown in the greenhouse also has a major impact on the cost to build the structure. For example, Bayer CropScience built a 300,000 square foot automated greenhouse in Marana, Arizona for their corn-genetics research for \$100 million compared to Bright Farm's 280,000 square foot specialized greenhouse in Sellingrove, Pennsylvania designed to grow lettuce, which was built for \$20 million. Different light cycles, temperatures, and carbon dioxide levels of plants require varying degrees of automation and sophistication in the buildouts.

From rural farm to city center, acrylic to polycarbonate, hydroponic to flood floors, and tomatoes to marijuana, no one high-tech greenhouse is the built the same. The limited market data and the difference in tenant improvements, purchase price, and construction costs highlight the complexity of evaluating such a unique asset. Understanding that complexity and valuing unique properties is one of things Shenehon does well.

# **Market Transaction**

Real Estate

Buyer: CBRE Glober Investors Ltd dba CPUS Millwright, LP Seller: Artis Real Estate Investment Trust and Ryan Companies

US, Inc. dba Artis/Ryan Millwright, LP

**Property:** Millwright Building, 533 S 3rd Street, Minneapolis, MN

PID: 23-029-24-34-0718 **Sale Price:** \$51,200,000 Website: millwrightmpls.com

#### Sale of the Millwright Building

In September, the Millwright Building, a multi-tenant office building located in the Downtown East neighborhood, sold for \$51,200,000, or \$295.14 per square foot. CBRE Global Investors Ltd through CPUS Millwright, LP purchased the Millwright Building from Artis/Ryan Millwright, LP, acting for the Artis Real Estate Investment Trust and Ryan Companies US, Inc. The three-year-old building sits on 1.00 acre of land and contains 173,476 square feet of Class A office space. At the time of sale, the building was 97% leased, as reported by the buyer. Tenants include Ryan Companies, one of the prior owners and the developer and builder of the Millwright Building, who has headquartered from the space since its completion in 2017. Other tenants in the building include Provation and Rally Health.

downtown Minneapolis, the Millwright Building is blocks sale in the Downtown East/East Town neighborhood bodes from U.S. Bank Stadium, the Mississippi River, Mill Ruins well for future developments in the area.

Park, Gold Medal Park, and the iconic Stone Arch Bridge. Over the past few years, this neighborhood has undergone a transformation from the significant capital investment that surrounded the construction of U.S. Bank Stadium and the redevelopment of the former Star Tribune offices into a new corporate campus for Wells Fargo.

This transaction was the first significant sale in the downtown area since the onset of the COVID-19 pandemic, and it is the only marquee downtown office sale since then that has closed. The sale also garnered attention for bringing such a high price in its submarket for a couple reasons. The property sold with a mix of local business tenants who, while reputable, do not have institutional credit, and sales of this type and at this price have historically been relegated to the Central Located at 533 South Third Street on the eastern side of Business District or North Loop neighborhoods. A high value



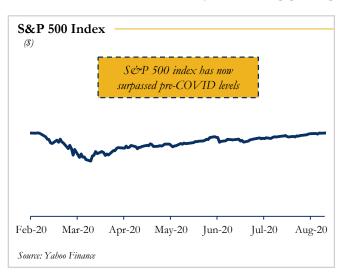
# Market Transaction Business

by Jim Clancy, Managing Director, Hennepin Partners

# **Substantial Economic Rebound Following Initial Halt Due to COVID**

At the beginning of the 2020 global pandemic, economic activity slowed significantly, as state and local quarantine orders were put in place and travel was suspended. Initially, unemployment rates skyrocketed and the stock market plummeted. Since then, equity markets have rebounded past pre-COVID levels -- while unemployment rates have improved to 7.9%, down from 14.7% at the height of COVID¹ but still much higher than the 3.5% pre-COVID level. Now that we have navigated our third quarter of living with this pandemic, the US is beginning to adapt to its "new normal," and economic activity has picked up significantly in many industries.

While COVID curtailed M&A activity deeply in April-June 2020 across most industries, activity has roared back since May 2020. As shown in the chart below, aggregate US M&A transaction value in August was \$170 billion, representing a 40% increase in aggregate value vs. pre-COVID February 2020. With the resurgence in deal activity, the rules of engagement between buyers and sellers has needed to adapt, including getting



comfortable with conducting diligence meetings and even facilities visits virtually. Across day-to-day business, we all know that video-conferencing platforms have become the "new normal", and it is no different in the deal world. Despite the uncertainty COVID has presented to the world, the US M&A market has proven extremely resilient – and continues to be attractive to investors.

<sup>1</sup>US Bureau of Labor Statistics



#### **HP Transaction Spotlight**

In a recently closed transaction, Hennepin Partners served as the sell-side advisor to Bedford Technology, a portfolio company of Hillcrest Capital Partners, on Bedford's sale to Tangent Technologies, a portfolio company of the Sterling Group. Bedford Technology converts recycled plastics into various types of plastic lumber, including furniture grade, standard plastic, and structural plastic. The buyer, Tangent Technologies, did not have standard plastic capabilities but was the clear market leader in the manufacture of furniture-grade plastic lumber. Bedford's additional capabilities in standard plastic made it very attractive to Tangent who ultimately prevailed in the sale process.

Hennepin Partners LLC is a boutique investment bank that provides M&A advisory services and strategic advice to entrepreneurs, private equity firms, and corporations. Member FINRA/SIPC. For more information, visit www.hennepinpartners.com



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#### **VALUATION VIEWPOINT NEWSLETTER INSIDE**

SHENEHON COMPANY IS A REAL ESTATE AND BUSINESS VALUATION FIRM, serving both the private and public sectors throughout the United States. Our unique combination of real estate and business valuation expertise allows us to provide a wide range of services to offer innovative solutions to difficult valuation issues. Shenehon Company is committed to equipping its clients with the tools necessary to make informed and knowledgable decisions regarding their capital investments.

- Allocation of purchase price
- Asset depreciation studies
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- Condemnation
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- Feasibility analyses
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- Industrial properties
- Insurance indemnifications
- Intangible asset valuation
- Internal management decisions
- Investment counseling
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- Lease and rental analyses
- Lost profit analyses

- Marriage dissolution
- Mortgage financing
- Multifamily residential properties
- Municipal redevlopment studies
- Potential sales and purchases
- Railroad right-of-ways
- Special assessment appeals
- Special purpose real estate
- Tax abatement proceedings
- Tax increment financing
- Utility and communication easements

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