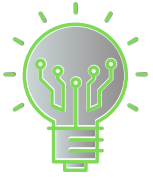# FUTURE FOCUS

HUDSON, OHIO

TECHNOLOGY

remote services,
high speed internet,
safety & security

COMMERCIAL

downtown, small
businesses, office,
industrial

RESIDENTIAL

aging in place,
housing stock,
renting & buying

FINANCIAL

tax changes, revenue
impacts, downtown
spaces

Prepared July 2020

OVERVIEW

What we found is that the COVID-19 story isn't so much "before and after" as it is "before and faster." - Deloitte

This document is the result of research the administration completed about trends that may have been accelerated by the COVID-19 pandemic. The trends are not necessarily specific to COVID-19, though many have been receiving increased attention due to the pandemic. The information is being presented at this time due to predictions that trends which existed before the pandemic may be accelerated and trends that arose during the pandemic may be permanently adopted. The administration wants to equip Council with insight that may help to inform pressing decisions in the remainder of 2020.
The four focus areas of this document are:

Technology, Commercial, Residential, Financial.

The goal of this document is only to provide education about trends that cities are facing and solutions that cities are implementing. The administration would ask that Council review the trends and consider how we may proactively address them in Hudson. Staff will provide additional supporting research about any of the trends at Council's request. Staff will then propose recommended solutions to respond to the trends that Council finds most compelling at this time.

SEE 'SOURCES' PAGES FOR SUPPORTING EVIDENCE.
Sources are numbered by section. Example: if you are searching for Source 8 from the Residential section, be sure to visit '8' under 'Residential Sources'.

TECHNOLOGY TRENDS

Trending before Spring 2020...

SAFETY AND SECURITY

One of the most trending uses of technology is to improve safety outcomes. Cities are installing kiosks with 911 call buttons [1], using video to identify suspicious anomalies in downtown activity [2], investing in cybersecurity to protect citizen's information, and much more. [3]

"Once you lose the public's trust, it's very hard to earn it back... cybersecurity ties very well into the mindset of our elected officials and our city managers, because they don't want to be seen as the people who violate the public's trust." [3]

ENERGY EFFICIENCY

Sensors built into appliances gauge usage and adjust to typical use patterns of occupants. This technology can reduce costs, improve health, and conduct demand response. [4] Keeping energy local can also make cities more physically and financially resilient. [5]

- Smart environments (ex. heating, cooling, lighting)
- Smart water and electric meters
- Micro-grids of energy to protect critical infrastructure [5]

In 2018, U.S. electric utilities had about 86.8 million advanced (smart) metering infrastructure (AMI) installations. [6]

EFFICIENT VEHICLE CIRCULATION

Sensors in traffic lights create highly responsive traffic systems that keep cars moving smoothly based on real-time demand. Technologies can be applied to determine optimal routes for commercial vehicles in order to reduce congestion, reduce labor costs, and provide more efficient services. [7]

- Adaptive signals
- Intelligent rideshare
- Route optimization (ex. sensors in trash bins report how full they are to prioritize pickup) [8]

"A more intelligent steering of traffic lights alone could reduce street congestion by 25%." [9]

OPTIMIZING PARKING SPACE

Cities are making parking easier by tracking the occupancy of spaces. [10] With real-time occupancy info, citizens can quickly be directed to an open space without the headache of circling through downtown or a garage. Other parking solutions include technologies such as drone delivery that keep extra vehicles off the road while providing faster service. [11]

- Smart parking spaces (ex. Westerville, OH) [12]
- Apps with real-time occupancy info
- Autonomous or drone delivery [11]

HYPER EFFICIENT SERVICE DELIVERY

Cities are using data to streamline processes and allocate resources more efficiently than was possible before the technologies of today. [13] Organizations are focusing on retraining their employees for future skills, such as those related to artificial intelligence or blockchain. [14]

- Proactively stage employees
- Use sensors for real-time data
- "Upskill" employees

"By 2025, 75% of organizations will be investing in employee retraining in order to fill skill gaps caused by the need to adopt artificial intelligence." [15]

TECHNOLOGY TRENDS

Likely accelerated by events of Spring 2020...

REMOTE SERVICES

COVID-19 has accelerated the growth of remote services that have already been trending for years. **Telecommuting ("remote work")[16], telehealth[17], online payments[18], and other remote opportunities** are expected to keep gaining popularity in 2020 and beyond. Even many types of entertainment and personal services may continue to be offered remotely. Governments are increasingly offering **contactless payment options**[19] such as PayPal or Apple Pay so that residents do not have to rely on cash or checks if they prefer a faster, paperless experience.

- Remote work[20]
- Telehealth
- Paperless payments (ex. Brampton, Canada)[21]
- Online classes (ex. college course, gym class)
- Online ordering
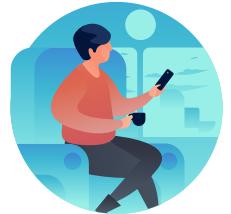
RISE OF VIDEO
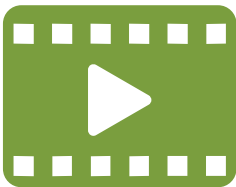
Video media has increased for both personal and professional use. Customer acquisition has accelerated, especially in paid streaming video, music, and gaming subscriptions.[22] **Citizens are streaming more video than ever** through services such as Netflix, Hulu, and YouTube.[23] Video-conferencing and video marketing are rising in the business world.[24] Video takes up a lot of space on digital networks[25] and creates need for additional bandwidth to maintain speed and quality.[26]

- Streaming (ex. on-demand tv)
- Recording (ex. cell phones, downtown cameras)
- Communicating (ex. video-conferencing, marketing)

"By 2022, 82% of the global internet traffic will come from video streaming and downloads." [27]

HIGH SPEED INTERNET ACCESS

Citizens rely on internet for work, school, and entertainment. There is increasing demand for continuity of connection that allows citizens to stay connected wherever they are, on any device.[28] **81% of adults say they are online daily**, with 28% reporting they are online "almost constantly".[29]

- Public WiFi (ex. Jaycees Park)[30]
- Mobile availability[31]
- Adoption of 5G[32]
- WiFi as staple in modern education[33]

"With global Internet traffic growing by an estimated 22% per year, the demand for bandwidth is fast outstripping providers' best efforts to supply it." [34]

ACCESS TO INFORMATION
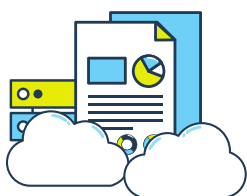
We are producing more information than ever, which is accompanied by an increasing demand for access to that information. Technology offers solutions for providing convenient information for citizens.[35] Cities are improving transparency with open data portals that offer insight into City decisions. They are implementing chatbots to help citizens navigate websites and installing information kiosks in town.[36]

- Service chatbots[37]
- 311 systems (phone numbers or apps for making non-emergency service requests)[38]
- Kiosks (ex. St. Louis, MO)[39]

"By 2022, 30% of customer experiences will be handled by conversational agents, up from just 3% in 2017." [40]

COMMERCIAL TRENDS

Trending before Spring 2020...

TACTICAL URBANISM

Tactical urbanism, also known as urban prototyping, is defined as "short-term, low-cost, and scalable interventions to catalyze long-term change."[1] It means devising a creative solution and **showing it rather than telling it.** Examples might be using large potted plants to block off a street for outdoor dining, delineating pick-up zones with spray paint, or allowing temporary structures such as canopies for critical services.[2]

- Happens quickly
- Is tangible
- Can be easily undone
- Typically is low-cost
- Offers opportunity for increased feedback before policy
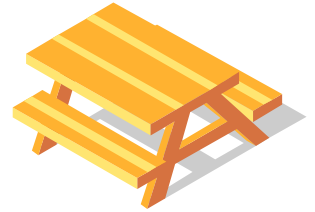
ADAPTIVE REUSE

Encourage new businesses to **repurpose existing and historical structures.** Can help avoid large commercial vacancies. Use large unoccupied buildings for small and boutique merchants. Allow seasonal occupancy. City may provide a tax incentive for reuse.[10]

- Many small merchants instead of one large
- Shared spaces
- Matching complimentary uses to capitalize on resources like parking space at different times of day

NON-TRADITIONAL BUSINESS SUPPORT

Collaborate on financial and non-financial support means for businesses. Financial assistance may take the form of grants or even a city public bank as a **community-based financial institution** to cultivate and sustain the local economy.[11] Non-financial may mean offering **marketing support such as promoting businesses on social media** or endorsing online shopping.[12] It could also be creating a city team to provide consulting services[13] or developing a crowdfunding campaign to kickstart new business and grow a network of followers.[14]

- Municipal financial assistance
- Social currency
- Small business advocacy
- Crowdfunding

RISE OF PUBLIC HEALTH

Increased scrutiny of public health efforts and growing interest in personal wellness. **People spend about 90% of their time inside**, and poor indoor air quality has been shown to have effects on productivity, decision-making, and well-being. Green technologies can improve ventilation and quality[19]. People are also interested in spending more time outside, such as in outdoor fitness classes.[20]

- Focus on air quality
- Outdoor exercise[21]
- Retrofitting buildings with green technologies to improve circulation
- Rise of biophilic spaces (designing buildings to create increased connection to nature; ex. "living walls")[22]

COMMERCIAL TRENDS

Likely accelerated by events of Spring 2020...

VOLATILITY OF OFFICE & RETAIL SPACE

Forecasts about change in office space post-COVID-19 have little evidence at this time. Some organizations may reduce office space and allow employees to work remotely, while others may repurpose office space.[23] Co-working spaces may become an attractive option for remote employees who do not want to work "from home".[24] In the retail industry, there is growing evidence that brick and mortar stores will decline.[26] A large number of small businesses will close permanently.[27]

- More office space may be demanded in short-term[25]
- Employers may downsize office leases in long-term[23]
- Demand for flexible/multi-purpose space may stay (ex. CUBE Workspace in Hudson)
- Retail likely to decline

UPDATING REGULATIONS

Temporarily or permanently adjusting city regulations in order to **accommodate more diverse needs.** May involve allowing temporary signage or drive-through lanes[15], extending compliance deadlines, utilizing courtesy letters, or excusing nuisance violations. Safety-related regulations remain strictly enforced.[17]

- Expansion of outdoor dining[16]
- Allowance of accessory structures
- Focus on speed in permitting and inspection[18]
- Allowance of the drive-through

MICRO-EVENTS

Provide special events geared towards existing businesses on a smaller scale. **Offer destination attractions** to stimulate economy while maintaining social distance.[4] Find ways to bring outlying business downtown.

- Summer Music Nights
- Pop-up shops
- "Streetery" (close a street for outdoor dining)[8]
- Using right-of-way or street for an event [9]

DOWNTOWN ASSOCIATIONS
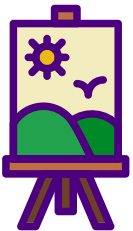
A collaborative effort for **community members, stakeholders, and city representatives to drive creative economic growth.** Could take the form of city-as-sponsor. City could sponsor artspots, walking tours, events, downtown living, etc. In these partnerships, the city often contributes space.[4]

- DORA (Designated Outdoor Refreshment Area) *in progress*
- Merchants have stated Art on the Green is one of the best drivers for foot traffic: could expand through downtown
- Small business support networks (ex. BizGrid)

PUBLIC INFRASTRUCTURE

There is an **intensifying need for public outdoor spaces and services.** Public infrastructure creates a more convenient experience for patronizing local businesses. It can encourage shoppers to visit more often and stay longer. People also have a growing desire to utilize sidewalks and bike trails to get to destinations.[7]

- Public restrooms[6]
- Outdoor handwashing stations[5]
- Trash and recycling bins
- Outdoor furniture in areas of high foot traffic[9]

RESIDENTIAL TRENDS

BUYING OVER RENTING

53% of 1,000 home buyers surveyed say they are more likely to buy a home in the next year due to the coronavirus outbreak. **First-time home buyers and millennials may be the most eager to buy within the next 12 months.** There is a rising share of first-time buyers as investor buyers retreat.[1]

- Ability to save for a larger down payment due to reduced spending
- Allure of a larger home
- Record low mortgage rates

POTENTIAL SUBURBAN BOOM

There is a **growing desire for suburban living with urban amenities.** Younger and older home buyers alike want vibrant and walkable town centers that have friendly home-town character, upscale shopping, fine dining, cafes, and cultural events. Aging homebuyers want to live in communities with inter-generational characteristics, typically lacking in senior living.[4]

- Akron-Canton/Cleveland metro areas ranked highly favorable for millennium homebuyers[6]
- Overall housing market recovery index for Cleveland, Ohio is high[7]
- Increasing need to build for diversity (style, age, price, etc.)[5]

HOMEOWNERS WANT THEIR SPACE

Some homeowners still want personal space. Buyers report interest in dedicated home offices, larger yards, and less dense neighborhoods.[8] A survey by Fresenius Medical Care found that **only 33% of adults feel they will be able to attain their goal to age-in-place** due to considerations such as having limited access to medical care and the livability of their current home.[10]

- Balance between public access and private space
- Gap between the desire and ability to age in place
- Desire for space is a motivator for homeownership
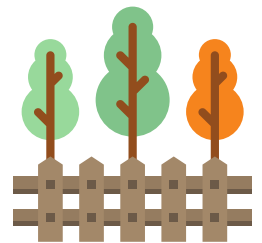
HUDSON'S RESIDENTIAL PROFILE

70% of Hudson's houses were built after 1970. Hudson's aging population and growth of the senior population may require a more senior-friendly housing stock of multi-family, townhome, and senior living options. Attracting and retaining young families is not only important to maintaining a vibrant community, it sustains market demand for the homes of empty nesters seeking to downsize or move to retirement housing.[11]

FINANCIAL TRENDS

Changes in Income Tax

The City is monitoring tele-remote workers and state decision impacts on income tax revenue as **an estimated 25-30% of the American workforce will be working from home multiple days a week by the end of 2021.**[6] Coronavirus-related relief legislation passed earlier this year by the Ohio General Assembly provided that work being done by an employee remotely or at home, because of the State of Emergency, is deemed to be performed at the employee's principal place of work. As a result of this provision, employers continue to withhold tax for their employees' principal place of work municipality, even while employees are working from home or a different location. Staff will determine the impact of further action by the General Assembly once it is known. One baseline number for determining the potential impact is noted on the chart to the right. This shows the gross income of all Hudson residents versus the taxable income generated by employees working in Hudson.

Income Tax Analysis (2018 Data)

Gross Income of Residents:	$1,303,189,571
Tax Rate:	2%
Expected Revenue:	$26,063,791
Actual Revenue:	$23,669,729
Difference:	**$2,394,062**

Data from Hudson Finance Dept.

TAX REVENUE RECOVERY
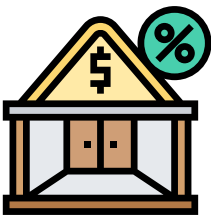
When suffering loss of tax revenue, cities tend to increase rates to find balance again. Some solutions are temporary, such as a 3-year property tax levy. Others are more permanent, such as voter approval on an incremental increase to income tax.

- Barberton, OH is pursuing a 3-mill, three-year property tax to offset 2020 losses[3]
- When the Twinsburg, OH Chrysler closed in 2012, residents approved a 0.25% income tax rate increase to recoup the $2.2M loss. The quarter percent increase yields about $2.7M a year.[16]

DELINQUENCIES AND VALUATIONS

Delinquencies and increases in write-offs could potentially impact property valuations and taxes. COVID-19 hotspots and tourism-convention destinations experienced the largest spike in early-stage delinquencies[17]. In June, **national delinquencies in commercial mortgage-backed securities had their largest one-month surge since Fitch Ratings began tracking the metric** nearly 16 years ago.[15]

- The national delinquency rate hit 3.59% in June, an increase from 1.46% in May[15]
- Nationally, new delinquencies totaled $10.8 billion in June, raising the total delinquent pool to $17.2 billion[15]

Revenue Potential

	🛒	💼
Sq. Feet:	50k	50k
Avg. Income Tax Revenue (per sq. ft.):	$3.35	$6.56
Est. Annual Revenue:	**$168k**	**$328k**

Data from Hudson Finance Dept.

OPTIMIZING DOWNTOWN SPACE

With the rise of remote work, it is unclear whether companies will continue to use commercial properties as they have in the past. Estimated income tax generated by commercial and retail per square foot shows that **commercial generates nearly double retail.** See table on left.

- Hudson may benefit from an analysis of downtown office space, especially Class A space
- May benefit from research on city-within-a-city concept (blending entertainment, commercial and residential at a scope and scale that promotes walkability, commerce, and culture)

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