Retail is Not Dead – It's Evolving

- Online shopping is expanding.
- Which Brick & Mortar stores will be around post-COVID19?
- Big box is integrating both with order online & pick up in store – "Click & Mortar."
- In-store experiences sharable across social media will grow retail – "Showrooming"
- Gen Z & Baby Boomers seek authentic, local shops

Retail Pull Factor

	2018	2019
Leavenworth	0.86	0.88
Leavenworth County	0.59	0.58

Sales Per Capita

	2018	2019	
Leavenworth	\$818.90	\$838.91	
Leavenworth County	\$557.41	\$556.74	

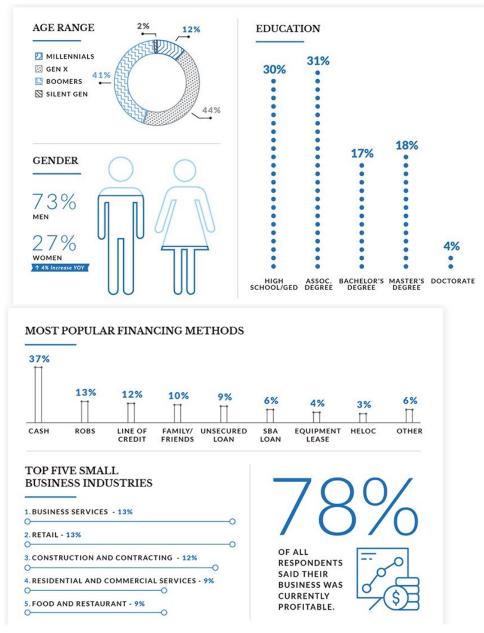


Source: kansasrevenue.org

Entrepreneurs Will Grow Economy

Small Businesses are Projected To Grow from 44% of US Economic Activity in 2019 at higher rate than past (3-4%) annually

- Advances in technology are becoming more accessible to more small businesses.
- More women are graduating from college than men and starting small businesses.
- Gen Z want to work for themselves.
- Having a side hustle can be extremely lucrative, as the gig workforce <u>adds \$715</u> <u>billion</u> to the economy each year.



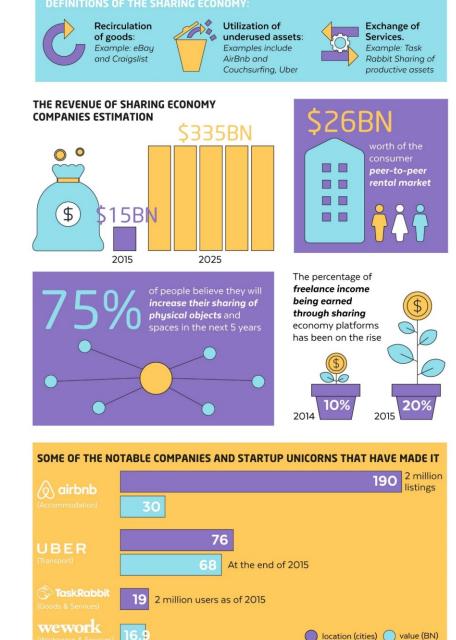
Shared Economy or Peer-to-Peer Economy will continue to Thrive

The "Sharing Economy" refers to shared access to goods and services. People share library books but they also share tools, and space in community gardens. Businesses share office space. Technology allows us to share our homes, bikes, cars with the click of a button through a phone app.

The sharing economy will also be driven by the **emerging middle class, women, and the elderly.**

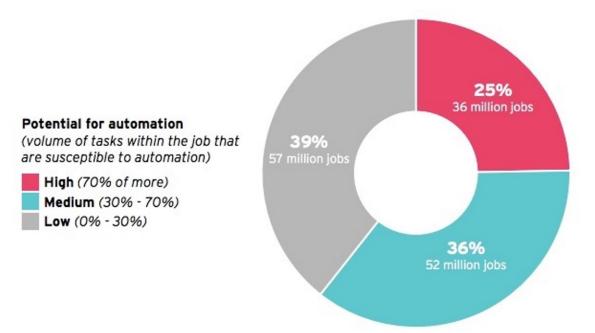
The future is likely to continue the trend of keeping costs down by sharing resources using technology.





Increasing Rates of Unmanning

Robotics and artificial intelligence means the types of jobs humans do and what computers will do will likely change over time.



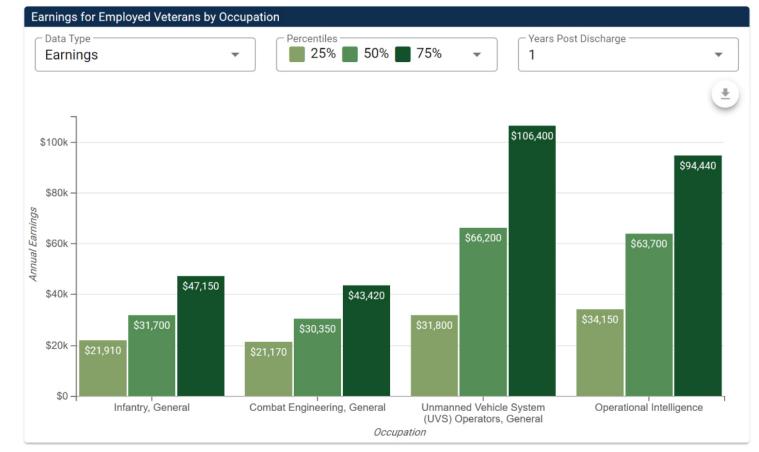
Essentially, the threat automation poses to a job boils down to the tasks required by that job. Routine, predictable and repeatable tasks are at the highest risk of automation. Tasks that require creativity, analysis and response to unpredictability are at the lowest risk of being automated.

Employment Post-Military Service

New U.S. Census Bureau data show that many veterans who left service during the Great Recession struggled to find stable post-military employment.

- Former infantry and combat veterans have lower earnings and employment rates after leaving service.
- Former U.S. Army soldiers who were drone operators, military intelligence, cyberspace or telecommunications specialists generally have the highest earnings in the civilian labor market after leaving service.
- High-paying jobs for these veterans are primarily in professional services — a sector that includes security and weapons development firms that are likely to value veterans' experience with military technology.

Earnings One Year after Leaving U.S. Army, by Former Occupation in the Military



Note: Screen capture is from Veteran Employment Outcomes application.

Source: U.S. Census Bureau, Veteran Employment Outcomes, enlisted U.S. Army veterans discharged between 2008 and 2015.

Demand for Authentic Experiences

Creating quality places for locals & daily livability increases property values & tourism dollars.

Gen Z and Millennials like to travel and spend money on experiences over things, this lends itself for opportunities within the tourism and hospitality market to match those desires. They go on trips 2 -3 times per year.

They are looking for curated authentic experiences as told and designed by locals.

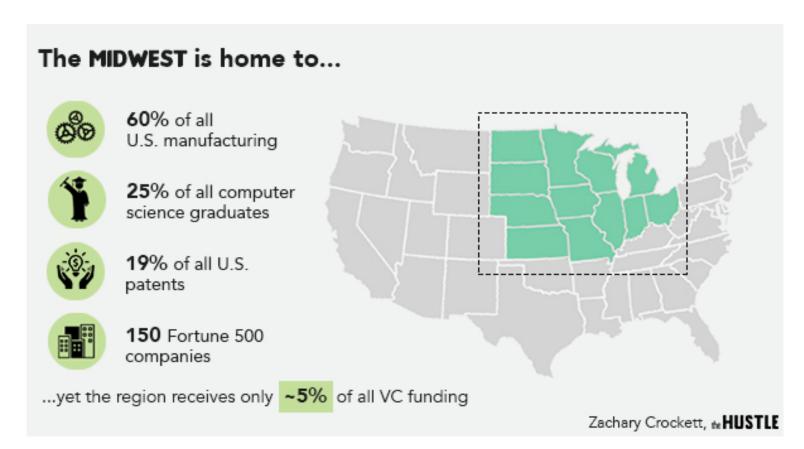


Innovative Tech is Coming to Flyover Country

Silicon valley used to be known as the heart of America's technology innovation. It was designed as a geographic area where leading-edge anchor institutions and companies cluster and connect with startups, business incubators and accelerators.

But Silicon Valley is becoming too expensive, with too much traffic, and businesses are moving to all over the US including the Midwest.

Innovators are looking for suburbs that are affordable but also physically compact, transitaccessible, and technically-wired offering mixed use housing, office, and retail.



The Internet of Things & Big Data

- The internet of things (Alexa find my phone, start my washer, turn down the thermostat, etc...) is exploding and collecting data on everything we do.
- In 2016, there were more than 4.7 billion things connected to the internet. Fast-forward to 2021 - the market will increase to nearly 11.6 billion not just connected to the internet but connected to each other (IoT devices).
- With the ability to lower costs and generate life-changing insights, big data offers a tremendous amount of value to local governments. As information is collected, municipalities of any size can make data-backed decisions that reduce crime, lower traffic congestion and improve the environment and health, among other upgrades.

The Rise of Superstar Firms

- Wealth is concentrating in Superstar Firms. Profits are increasingly shifting from heavy industry to idea-intensive sectors that revolve around research & development, brands, software, and algorithms. Sectors such as pharmaceuticals, media, finance, and information technology have the highest margins.
- They are developing a winner-take-all dynamic, with a wide gap between the most profitable firms and everyone else. This trend impacts workers and their buying power.

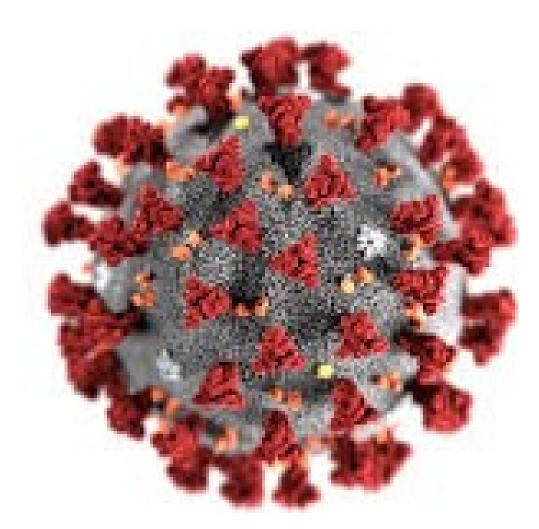


Green Consumerism & Investing

- People are more concerned with where the products they buy come from, ingredients, labor practices used to manufacture goods, the purity of food production, and the environmental impact of their purchases.
- Green consumerism is a form of consumption in which consumers want to buy things that have been produced in a way that protects the natural environment for future generations.
- It includes adoption of environmentally-friendly behaviors, such as the use of organic products and clean and renewable energy. The three principal areas of green consumerism are food, apparel, and energy.

Impacts from COVID-19

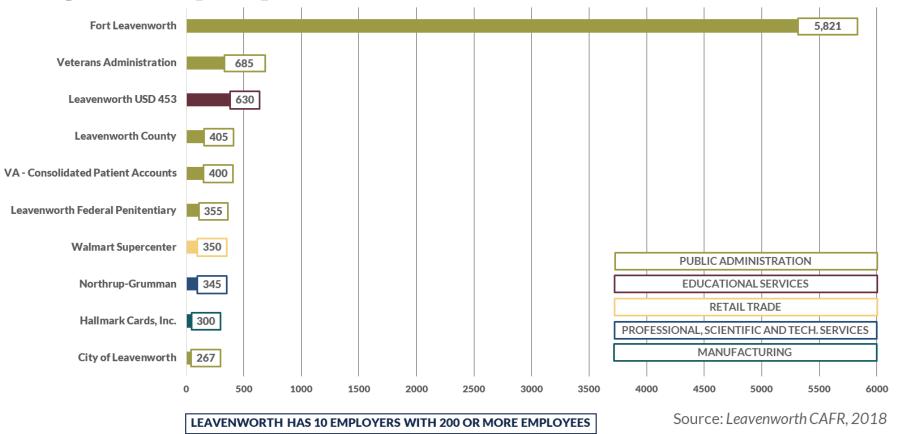
 COVID-19 has triggered a mass exodus from traditional office life. Now that the lucky among us have settled into remote work, many are left wondering if this massive, inadvertent work-fromhome experiment will change work for good.



Employment

More than 30 million small companies make up 99.9% of all U.S. businesses employ just under half of the workforce. If small businesses can't afford to rehire workers in the same numbers or are pushed to the brink of bankruptcy, advocates warn it could drastically hamper the country's postpandemic recovery. Some government officials optimistically forecast a slowdown to last a few months or years; the Congressional Budget Office projects <u>a</u> decade-long recession.

Major Employers in Leavenworth



Will 3/4ths of all women stay on the workplace?

- 72% of all U.S. women with children under 18 were working or looking for work
- The situation was very similar for mothers with spouses and those without them: 70% versus 77%.
- Childcare is becoming less available and more costly.
- The pandemic and future ones may increase the number of students educated at home online.
- Two in three U.S. families with two parents, both are working or looking for a job. That makes caring for kids when schools and day care providers are closed hard if not impossible.

Wage by Gender of Kansas Residents in Common Jobs

Source: DataUSA.io

AVERAGE MALE SALARY Miscellaneous Managers \$100,872 Registered Nurse \$61,970

\$60,808

\$43,397

AVERAGE MALE SALARY

Miscellaneous Managers \$68,561 Registered Nurse \$57,170

KC Region is Getting Warmer with More intense rains

Kansas City Metro can expect to become wetter and warmer. Average rainfall is expected to increase

roughly **1.5** inches by **2060** and average temperatures are on track to increase **4** degrees Fahrenheit by the same year.

Heat waves are projected to

increase, on average, by **5°F** by mid-century. The number of hot days when temperatures exceed

105°F is projected to increase in frequency from less than once per year to more than 5 times per year by mid-century.

Understanding Long-Term Climate Changes for Kansas City, Missouri: A Climate Assessment www.climatelook.com

Climate Outlook

Midwest Temperature Change By mid-century **20+** more days - Over **95** degrees **Concentrated rainfall events Increased length of consecutive** dry days in summer Source: Mid-America Regional Council Climate Outlook

Uncertainty about federal protections of the environment could be lawsuits for local governments

- The federal government is redefining the what is regulated as "Waters of the US." This is a reversal of the previous administration.
- Environmental groups may turn to filing suit against local and state governments.

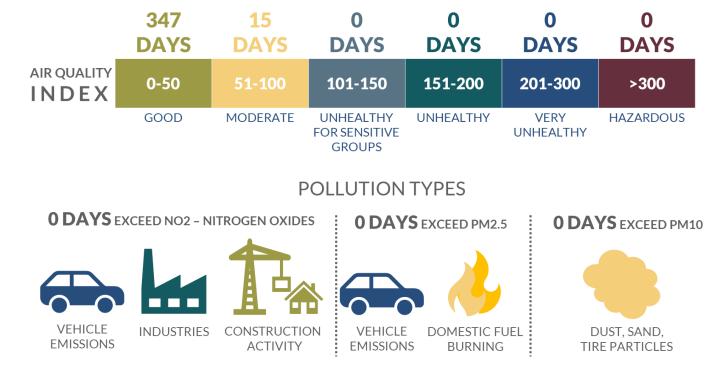
As required by the CWA, the Environmental Protection Agency (EPA) and the MDNR have completed an evaluation of Classified Waters within city limits (also known as Waters of the State). The following Classified Waters within Leavenworth city limits have been included on the KDHE Impaired Waters list. However, to date, a Total Maximum Daily Load (TMDL) has not been established for these impaired waters.

WATER BODY	YEAR	SIZE	POLLUTANT	SOURCE	TMDL PRIORITY; SCHEDULE
JERRY'S LAKE	2013	1 ACRE	PHOSPHOROUS	NON-POINT	LOW
SMITH LAKE	2016	588 ACRES	NUTRIENTS		TMDL NEEDED
MERRIT LAKE	2016	971 ACRES	NUTRIENTS		TMDL NEEDED

Source: Kansas Department of Health and Environment (KDHE) Website, 2020

Air Quality could be impacted as KC region grows

- The KC metropolitan area typically experiences 10 to 15 days each year on which air quality does not meet federal standards, primarily due to high concentration of ground-level ozone. Ozone, commonly known as smog, is a health risk.
- Ozone can trigger asthma attacks, which can be life threatening. More than 25,000 children in the Kansas City Area have asthma.
- Should the region go into non-attainment of air quality standards, that could limit future business expansion.



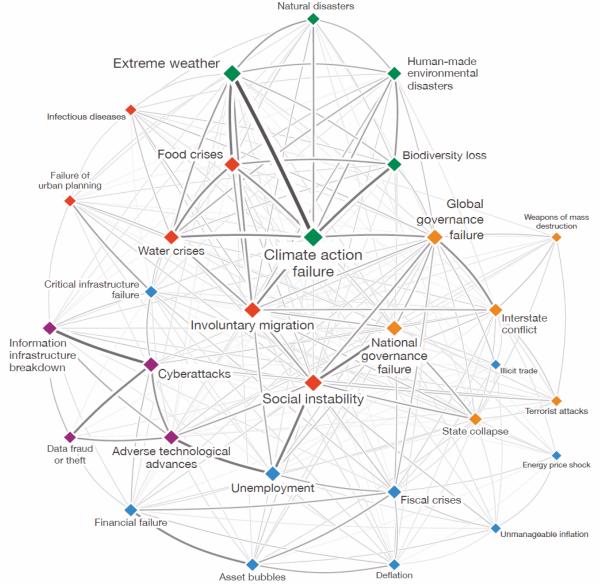
AIR QUALITY INDEX TOTALS BY CATEGORY

Source: Environmental Protection Agency (EPA), 2019 AQI - Leavenworth County, KS

Extreme Weather Increases Other Risks to Society Worldwide

- Increase frequency of extreme weather events cause risk to property, infrastructure, and human safety.

- Extreme weather events can increase biodiversity loss, water supply issues, population migration, and economic loss.



Suburbs That Sizzle Are Sexy Again



Kansas City's suburbs fueled population growth in the metro over the last 70 years. This growth will continue over the next 20 years and Millennials will drive that growth. Many high-income Millennials are choosing to live in the suburbs -- 84% of high income millennials in the Kansas City region live in the suburbs.



Millennials and Baby Boomers are drawn by suburbs that are becoming denser taking on certain characteristics that seem urban-like. They're be more diverse, have more mixed land use and more people commute to them as they become job centers. This is a gradual process that will change perception we have of the suburbs.



People of all generations are seeking homes connected to vibrant activity centers with walkable areas where every day needs are nearby. People used to move where the jobs are located. Now and into the future, jobs will move to where people want to live.

Future of the Family

- 53% of Americans say people will be less likely to get married in 2050
- 46% say people will be less likely to have children in 2050
- Today, 71% of parents younger than age 50 say they are unlikely to have more kids
- 37% of childless adults say they are unlikely to ever having kids



Multigenerational Housing & Co-Housing

Demand for multigenerational housing is on the rise. Older people are choosing to age in place – stay in their homes as long as possible. We are seeing more people building on to their existing home or as an accessory unit places for their parents to live or their children.

As our community becomes more diverse, many immigrant cultures have multiple generations living under one roof.

Roommates are not just for people in their 20's. Seniors are turning to cohousing to cut costs and loneliness.

Cohousing is community designed to foster connection. Physical spaces allow neighbors to easily interact with others just outside private homes. Common areas including kitchen, dining space and gardens bring people together. Collaborative decision-making builds relationships.

Affordability

With a median income in the US of \$33,883, millennials are encountering an average rental price of \$925 per month. This price point puts many luxury apartment rentals outside the reach of millennials and Gen Z.

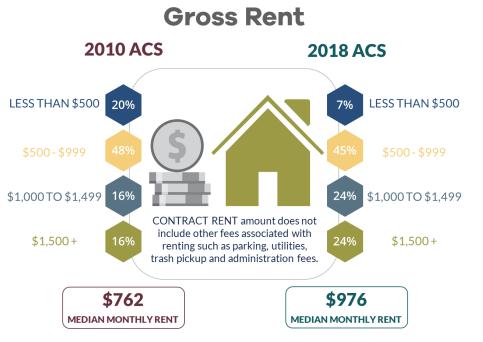
Leavenworth

Housing Affordability

Cost-burdened is described as spending 30% or more of monthly income on housing.



Source: Center for Neighborhood Technology, 2018



Source: 2010 and 2018 ACS

Housing Values & Affordability

- The national average single-family home price was \$356,160 in 2016, increasing 34 percent over a five-year period.
- For an average owner in US not to be cost burdened (less than 30%), their income would have to be \$103,200 annually to have afforded the "average" single-family home constructed in 2016.



Smart Cities Technology Will Reduce Overall Cost + Improve Quality of Life

A smart city incorporates information and communication technologies to enhance the quality and performance of urban services such as energy, transportation and utilities in order to reduce resource consumption, waste and overall costs.

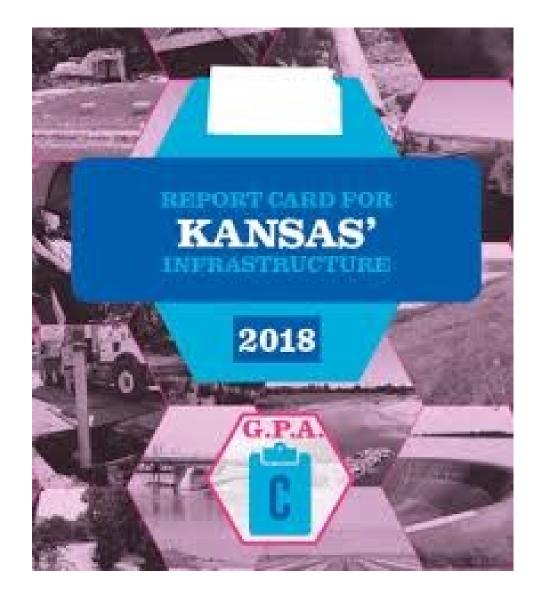
Digital applications are starting to also improve some key quality-of-life indicators by 10 to 30 percent—numbers that translate into lives saved, fewer crime incidents, shorter commutes, a reduced health burden, and carbon emissions averted.



Aging Infrastructure

Every 3 years, the American Society of Civil Engineers develops a grade card for Infrastructure in Kansas. It is part of a national effort to raise awareness about the condition and needs for infrastructure reinvestment.

The grade card recently released gave Kansas Infrastructure Overall a C which means mediocre, requiring attention. The good news is that it is overall better than the national average in terms of condition (D+). The bad news is that it hasn't improved over the last several rating cycles and in some categories it has declined.

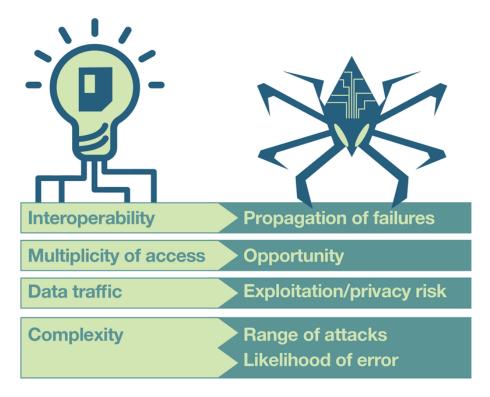


Increasing Risk of Disruption to Energy Grid

Large-scale cyberattacks rank fifth among the risks most likely to occur in the next 10 years. The cost of a cyberattack on the US smart power grid is estimated to be \$1 Trillion – roughly eight times the cost of cleaning up the Fukushima nuclear disaster.



Smart Grid features pose reciprocal threats



Increase in Energy Consumption & Water Demand

CLIMATE DRIVEN ENERGY & WATER CONSUMPTION WILL INCREASE

- The Kansas City metro area could see a likely increase of 8-19% in electricity demand (with a 1-in-20 chance of an increase over 23%) by end of century, even when combined with lower heating demand as winters become warmer, translating into a likely increase of 14% to 38% in energy costs, with a 1-in-20 chance of increases of more than 48% the highest energy cost increase of any Midwest metro area.
- Increasing periods of drought will put more demand on water supply and distribution.

Rapid Delivery

Order it at 11 p.m., it's at your door the next morning. Logistics infrastructure, technology and changing delivery systems are satisfying the shopping public that wants to get its items right away. This means developing large and efficient modern warehouses that can accommodate automation and robotics.

What's next? Smart lockers in neighborhood fulfillment centers and in residential blocks to allow for rapid and secure delivery and pick-up or drone delivery.

With delivery becoming a necessity to compete, retailers are examining how their real estate plays into the delivery supply chain.

There will need to be warehouse space in a close proximity to downtowns and urban areas to answer the demand for all the various delivery services. Metropolitan areas need to be aware of the logistical implications these services have for industrial and storage areas and road capacity.

Sense of Place Important

- People seek out places that are meaningful.
- Maintaining our sense of place, identity, and culture can be challenging in a growing and changing community.
- People desire places that celebrate the arts, culture, and creativity. Unique places reflect the character of a community or neighborhood by integrating arts and cultural industries throughout neighborhoods, developments, and other community assets. They act as a hub that connects people, businesses, and neighborhoods by reflecting the community's history, geography and values.

Moving Away from Fossil Fuels

Mass Energy Storage

- We are now entering the early growth stages of what will surely become a huge global industry – energy storage, likely in battery farms.
- This technology will both support and compete with conventional generation, transmission and distribution systems.
- Being able to store power makes wind and solar power more practical on a large scale but also on the individual lot scale.

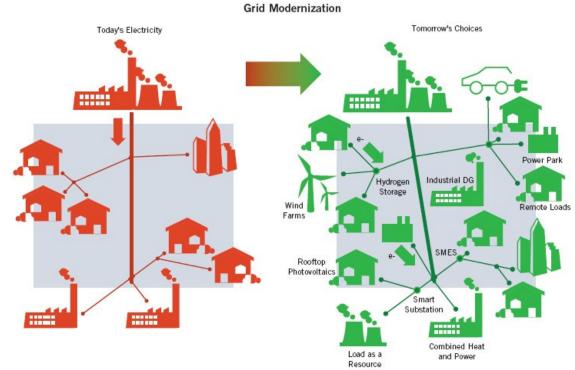
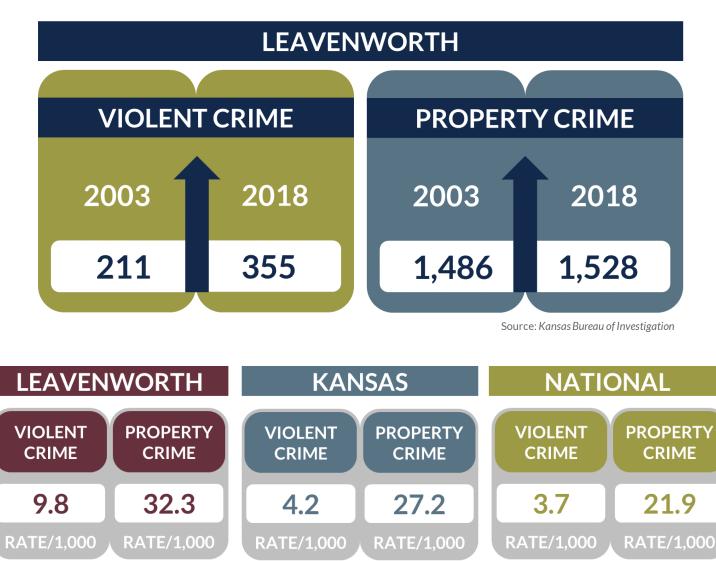


Fig. 1. The IEEE's version of the Smart Grid involves distributed generation, information networks, and system coordination, a drastic change from the existing utility configurations.

US Crime Stats and Perception of Crime don't always line up

- Violent crime in the U.S. has fallen sharply over the past quarter century.
- Property crime in the U.S. has declined significantly over the long term.
- About 6 in 10 people believe crime in US is rising.
- While perceptions of rising crime at the *national* level are common, fewer Americans tend to say crime is up when asked about the *local* level.



Source: Kansas Bureau of Investigation and FBI.gov

Evolving Definition of Healthy

- Gen Y & Z are shaping the definition of what it means to be healthy they take a holistic view of health, emphasizing physical fitness, health eating, and mental well-being.
- Gen Z struggle more with mental health and wellbeing, they **put more weight on managing stress and mental health than Millennials**, with 72 percent of Gen Zers saying it is their top priority.
- Gen Zers like to stay active as well, with as many as 87 percent reporting that they exercise 3 or more times per week. They tend to use fitness apps, workout from home, and like to take advantage of wearable technology to track their workouts. Although they accounted for 38 percent of gym sign-ups globally in 2018, 71 percent rely on social media to find new workouts.
- Gen Z values healthy and convenient food options that reflect their prudent nature. In addition, they favor high protein, low carb diets and see sugar as a barrier to health. Citing health and environmental concerns, nearly 80 percent of Gen Z plan to go meatless one to two times per week.

Quality of Life – Transit & Trails

- KC Metro Quality of Life Survey participants ranked transit as most desired service, being selected by **24 percent** of residents twice as high a share as trails, the next most sought-after amenity.
- The level of support for additional transit was highest for middle-aged and older adults, for whites, for those with high incomes and for those with high levels of education.
- **50 percent** of residents selected at least one of a group of six amenities dealing with being outdoors and recreating (including trails) as most important.

Perceptions of Quality of Life Differ by Income & Education Level – KC Regional Survey

- Income is strongly related to perceptions of quality of life, with 93
 percent of those earning \$150,000 or more rating their quality of
 life as good or excellent compared to only 56 percent of those
 earning \$25,000 or less.
- The situation is similar with education, as **90 percent** or more those with a bachelor's degree or higher rate their quality of life positively, compared to only **64 percent** of those with a high school degree.

Perceptions of Quality of Life Differ by Income & Education Level – KC Regional Survey

- Age is also positively related to perceptions of quality of life, with the share of older adults (65 or more years) rating their quality of life as good or excellent at **88 percent** compared to only **70 percent** for young adults (18-24 years).
- In fact, young adults appear to have experienced a significant decline in their quality of life. In 2018, **86 percent** of young adults rated their quality of life good or excellent, which was the highest of any age group.
- Large racial disparities in quality of life continued. In 2019, 82 percent of whites rated their quality of life good or excellent, compared to **72 percent** of Latinos, Asians and other minorities and **62 percent** of blacks.

People want to be and feel more connected

- Lower levels of intergenerational contact have been linked to more negative attitudes about older adults and aging.
- Research shows that if **people** improve **their** feelings of belonging, trust, and security, they are likely to be healthier.
- According to a national survey, loneliness levels have reached an all-time high, with nearly half of U.S. adults reporting they sometimes or always feel alone

New Models for Learning

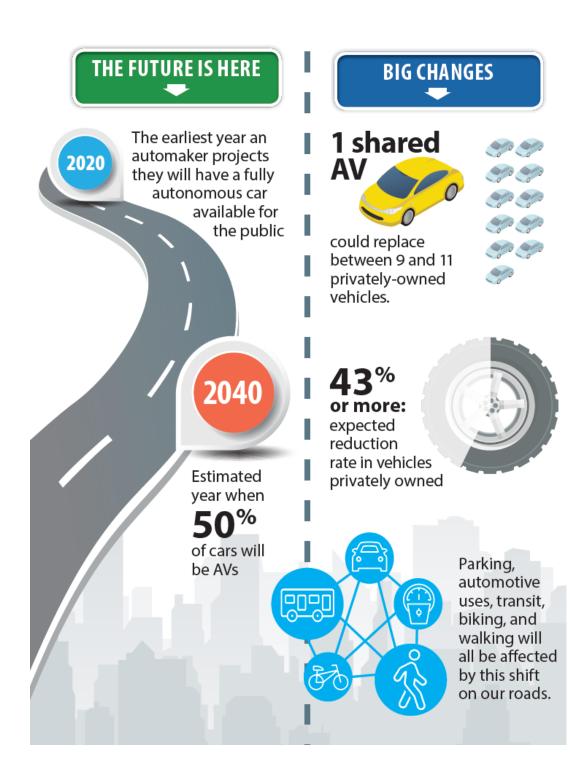
- The driver for education and learning will never disappear; educational models and delivery will just take different forms. The future of education is will focus on access and collaboration.
- Schools will have both traditional and online only students. E-Learning is already widely used where students use technology to access curriculum outside of the traditional classroom. Virtual Learning, where teachers provide course content through course management applications, is in its infancy.
- Individualized learning technology is leading to a new wave of interest-driven curriculum built around the specific interests of students.
- Skills will be assessed based on performance and students will learn with tools that adapt to their capabilities; students will be challenged with harder tasks and questions as levels are achieved.
- More people visited the library last year than the movie theaters in the US. Lifelong learning is on the rise as libraries transform themselves.

Elder Care Demand & Cost Growing

- In 1960, there were 6 working-age adults paying into social security for every person age 65 or older. Today, the elderly support ratio.
- in the United States is about 5, but this ratio is projected to decline further to just under 3 by 2050." In 2010 for the first time Social Security collected less in taxes than was paid out in benefits.
- The Social Security Trust Fund, which is designed to cover this type of shortfall, will be exhausted around 2037. Medicare expenditures are projected to exceed those for Social Security by 2030, driven by the rising cost and use of health care services, as well as an increase in the number of people receiving benefits.

Driverless Vehicles

Autonomous Vehicles (AV), or driverless cars, are on their way. Potential benefits include less improved traffic flow, fewer accidents, and enhanced mobility for populations that don't or can't drive. AVs could solve parking hassles, congestion, and many financial and environmental costs. However, large-scale infrastructure investments in dedicated lanes, car-free districts, and other issues must be considered to integrate AVs with our current transportation systems to significantly improve our community.



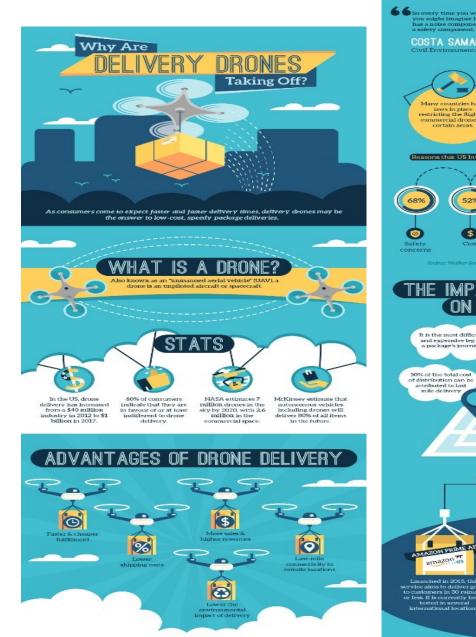
Integrated Transportation

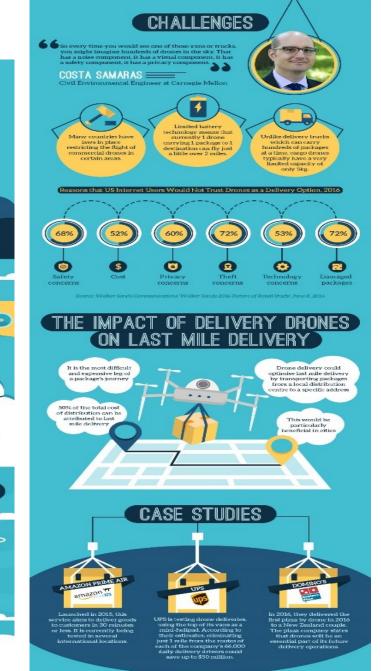
- Suburban dwellers desire a more comprehensive way to get around. These systems consider the integration all modes of transportation including walking, biking, and on-demand vehicle services such as car sharing, self-service carpools.
- Technology will also play a large role in how people move around cities and will revolutionize how we think about transportation, prioritizing more equitable and diverse options.
- In the past, taxpayers have funded both roadways and public transportation systems. In the future, employers will play a larger role in providing transportation systems for their workforce.



Drone Delivery Networks

According to the Association for **Unmanned Vehicles International**, once drones get okayed for commercial use, the first 3 years will produce a multi-billion dollar industry employing hundreds of thousands of new manufacturing jobs. But more than just manufacturing, there will be a need for drone pilots, drone farming specialists, drone security, drone data analysts, drone mosquito killers, and much more.





The Rise of the Electric Car

- Today 2% of passenger vehicles are electric.
- It is estimated that 32% of the world's passenger vehicles will be electric by 2040 (548 million).
- By 2040, electric cars could make up 57% of all new passenger car sales worldwide.



Microtransit

Microtransit providers could become the feeders to public transportation's core routes. They'd address what experts call the "first-mile, last-mile" problem—that gap at the start and end of every trip that's difficult for traditional transit operators to serve in a cost-effective way. Coverage to lowdensity corridors or remote neighborhoods is doable.

Three Revolutions in Urban Transportation

Business-as-Usual Scenario

20th Century Technology

Through 2050, we continue to use vehicles with internal combustion engines at an increased rate, and use transit and shared vehicles at the current rate, as population and income grow over time.

2 Revolutions (2R) Scenario

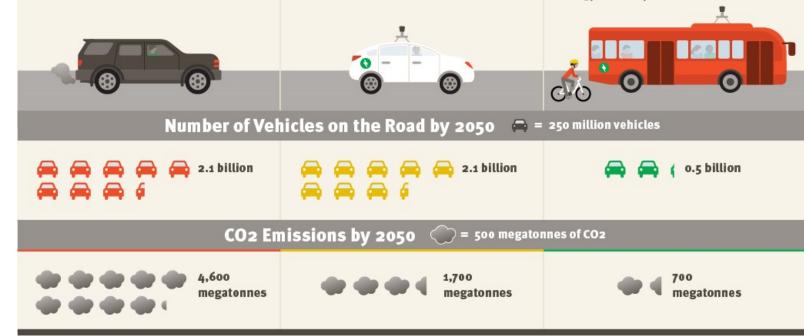
Electrification + Automation

We embrace more technology. Electric vehicles become common by 2030, and automated electric vehicles become dominant by 2040. However, we continue our current embrace of single-occupancy vehicles, with even more car travel than in the BAU.

3 Revolutions (3R) Scenario

Electrification + Automation + Sharing

We take the embrace of technology in the 2R scenario and then maximize the use of shared vehicle trips. By 2030, there is widespread ride sharing, increased transit performance—with on-demand availability—and strengthened infrastructure for walking and cycling, allowing maximum energy efficiency.

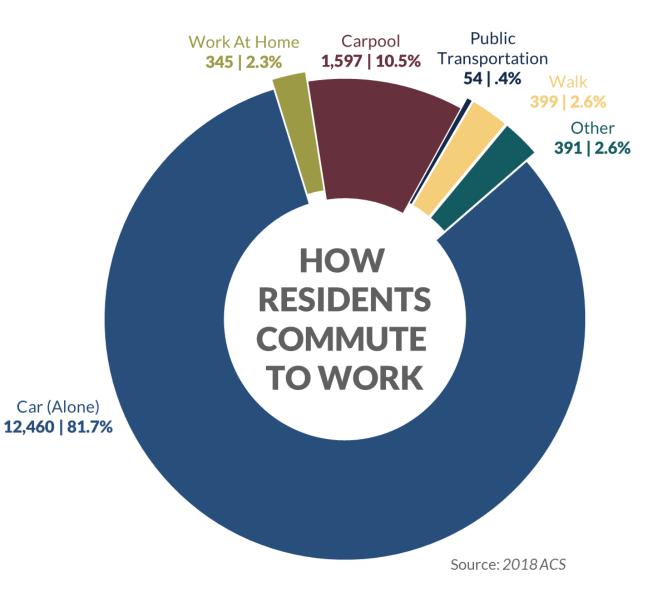


Pandemic & Technology Change Transportation Needs

- In the KC Metro, people are willing to drive far distances to work because our roadway network is relatively uncongested.
- More companies may move to employees working at home.
- Public transportation may change due to the need to social distance.
- People want to be healthier so they may want to walk or bike.

LEAVENWORTH MEAN TRAVEL TIME TO WORK





More people commute out from Leavenworth

 As the number of small businesses decline and the economy falls into a recession, will more people continue to commute outside of Leavenworth?

