

ann arbor area BUSINESS MONTHLY

New Tax Law Affects Businesses In Many Ways

By Duane Ramsey

The new tax law means changes for businesses as well as individuals. Businesses include self-employed individuals, limited liability companies and corporations in the legislation.

The U.S. House and Senate voted and approved the Tax Cuts and Jobs Act and President Trump signed it into law on December 22, 2017.

The bill is the most significant overhaul of America's tax system in decades and considered a significant legislative victory for Congressional Republicans as the \$1.5 trillion tax bill will have broad effects on the economy and taxpayers.

"There are always winners and losers every time the tax laws are changed," stated Steve Schneider, a principal at WSR, Certified Public Accountants, P.C. of Ann Arbor. "The changes are very complex at times and your readers should be cautioned to contact their tax professionals for more detailed advice."



The big issue is the tax rates, according to Schneider.

The business world saw the corporate tax rate drop permanently from 35 to 21 percent on January 1, the lowest rate since 1939. Also starting in 2018, interest deductions will be limited to 30 percent of earnings before interest, taxes, amortization and depreciation.

The self-employed individuals and individuals owning pass-through companies like LLC's and S-corporations get a 20-percent deduction

calculated on Qualified Business Income at the individual taxpayer level. This deduction has phased out provisions based on income.

"The deduction is intended to reduce their tax rate indirectly," Schneider stated.

Several other affects the new tax law will have on businesses include:

- D e d u c t i b l e entertainment expenses have been eliminated.
- Bonus depreciation is increased from 50 to 100 percent.

- Repeal of corporate alternative minimum tax (AMT).

- Section 179 expensing of assets has been increased from \$500,000 to \$1 million.

- Elimination of the Section 199 deduction, also commonly referred to as the domestic production activities deduction or manufacturers' deduction — effective for tax years beginning after December 31, 2017, for non-corporate taxpayers and for tax years beginning after December

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Swisher Commercial Welcomes New President & CEO

Join us in welcoming Mike Jurgenson, CCIM as the new President and CEO while we countdown to 50 years in Ann Arbor commercial real estate. Look for more updates as we celebrate this momentous milestone.



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New Tax Laws (From page 1)

31, 2018 for C corporation taxpayers.

- New rule limiting like-kind exchanges to real property that is *not* held primarily for sale.

- New tax credit for employer-paid family and medical leave — through 2019
- New limitations on excessive employee compensation

- New limitations on deductions for employee fringe benefits, such as entertainment and, in certain circumstances, meals and transportation.

The Tax Cuts and Jobs Act is already having an impact on businesses across the USA,” stated James Sundberg, a CPA and instructor at Cleary University. “A number of large companies have given increased bonuses to their employees from the savings they will realize from a lower corporate tax rate.”

Another benefit to most businesses large and small is the extra depreciation deduction that is allowed for the purchase of certain assets like equipment, truck, tools, etc. This makes it easier for entrepreneurs to start a business. And it helps the seller of the equipment or the truck or the tools. Overall this stimulates the economy, Sundberg explained.

The new tax laws will have a significant impact on the banking industry,

according to Peter Schork, president and CEO of Ann Arbor State Bank.

Banks have few means of reducing gross income (legal deductions) thus have historically paid near the maximum authorized tax levels.

It appears that most of the previous deductions will be allowed in the new tax code. The significant move to 21% will enhance virtually every bank’s bottom line starting in 2018.

“Most banks will have to make some significant adjustments to their 2017 earnings. These adjustments are to account for the changed tax rate on both tax deferred assets and liabilities that are on their balance sheets,” Schork explained.

Some examples of bank related items are municipal and federal government bonds held at both losses and at gains, but with no intention to sell in the future. Banks must carry these assets at book value (including a tax consequence if sold).

Banks also hold FDIC required reserves known as ALLL (Allowance for Loan and Lease Losses) that are assets that have a taxable concern.

“The significant drop in tax rates for corporations will hopefully level the playing field with credit unions, which are not subject to federal income taxes,” stated Schork

This report is a brief overview of some of the most significant provisions of the Tax Cuts and Jobs Act Law. There are additional rules and limits that apply, and the law includes many additional provisions.

“There are a number of negatives under the new tax law -- there are always winners and losers. For example, the new tax laws have eliminated the ability of businesses to deduct interest on business loans to a certain extent” said Noel Brock, assistant professor at Eastern Michigan University.

Because most large businesses are structured as c-corporations, and because c-corporations received a

straight 14% reduction in tax rate across the board (versus a 20% deduction subject to a complicated set of limitations), in general, large businesses got a larger tax break than did most small businesses, he explained.

A 14% rate reduction is more valuable than a 20% deduction,” Brock states. A deduction is only worth the individual’s highest rate multiplied by the amount of the deduction. So, if an individual taxpayer is in the 35% bracket, for example, the 20% deduction would be worth 7% (34% tax rate x 20% deduction amount 7%)--half the benefit provided to C corporations (via a straight 14% rate reduction).

Professor Brock recently delivered a 9-part partnership tax seminar to a local company. The seminar covered a number of partnership tax issues as well as how to read and understand a partnership agreement. ■

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Mcity Announces Affiliate Members In Second Phase Of Funding



Photo courtesy U-M Aerials and September 2016 BUSINESS MONTHLY.

Forty-two companies have committed to investing \$150,000 each in Mcity as Affiliate members over the next three years.

Mcity is the University of Michigan-led public-private R&D initiative leading the transformation to connected and automated mobility.

The Affiliate members represent a broad range of industry sectors that reflect Mcity's success in building an ecosystem of companies committed to the center's mission to accelerate the development and implementation of connected and automated vehicles to improve traffic

safety, conserve energy and increase accessibility to transportation.

"Motor vehicle crashes kill about 37,000 people every year in the United States and 1.2 million people globally every year," said Hwei Peng, Mcity director and the Roger L. McCarthy Professor of Mechanical Engineering at U-M. "If we use new technologies right, we can save lives."

Affiliate companies include automotive manufacturers, suppliers, chip and hardware makers, insurance providers and companies engaged in technologies such as

advanced modeling, big data acquisition and intelligent transportation systems.

"Mcity is tackling an aggressive research agenda to accelerate progress towards a world with safer and more efficient mobility through connected and autonomous vehicles," said Jeff Hood, principal with Deloitte Digital. "As an affiliate member, Deloitte Consulting is able to collaborate with a diverse group of Mcity participants to help shape that future of mobility."

Affiliate members complement Mcity's 11 Leadership Circle member

companies, who have each committed a total of \$1 million over three years to support Mcity and its programs in this second phase of funding.

"Incorporating the 'voice of the customer' into the development of automated vehicles is a critical part of consumer acceptance, and that's why J.D. Power is associated with Mcity," said Kristin Kolodge, executive director of driver interaction and human machine interface at J.D. Power. "Mcity is doing valuable research

Continued Next Page

in mobility that will have significant influence.”

The new funding comes as Mcity has established itself as a leading voice in connected and automated mobility. Bringing together industry, government and academia, Mcity is the only advanced mobility R&D center that combines early-stage research testing in the state-of-the-art, real-world environment of the Mcity Test Facility; and on-road vehicle deployments to further prove new technologies.

“Subaru is looking forward to further collaboration with Mcity in the future,” said Subaru vice president Kiminaga Shirakawa. “The various connectivity and sensor-oriented tests that we have performed within the Mcity (Test Facility) environment, along with the potential for autonomous vehicle technology development, make Mcity a very beneficial resource for our company.”

To date, Mcity has invested about \$20 million in 40 research projects. The total investment at Mcity and the U-M Transportation Research Institute in connected and automated vehicle research, development and deployment activities will exceed \$100 million by 2020, with funding from U-M, government agencies, and industry.

“As an industry leader in the drive to make transportation predictive, safer and more efficient, Savari values being a member of Mcity and their quest to lead the transformation of connected and automated vehicles,” said Farooq Ibrahim, executive director of Savari Inc.

In addition, dozens of faculty and hundreds of students are engaged in work to advance mobility. New capabilities have recently been added to the Mcity Test Facility, including a traffic control

center with augmented reality testing capability, and connectivity between vehicles and the traffic infrastructure.

Research vehicles at Mcity include a 15-passenger driverless shuttle and two open-source connected and automated vehicles, which are platforms to help U-M faculty and researchers speed innovation. Mcity is preparing to launch a driverless shuttle on U-M’s North Campus.

Companies investing in second-phase funding as Mcity Affiliates members are: 3M, BMW, Deloitte Consulting, GAC Motor, HERE, J.D. Power,

Mechanical Simulation, NAVYA, PolySync, Realtime Technologies, Savari, Swift Navigation, Veoneer, Zenuity, Tweet, Aisin Group, Changan Automobile, Desjardins, Harada, Hitachi, Lear Corporation, Microsoft, Nexteer Automotive, PPG, Renesas Electronics, SF Motors, TASS International, Visteon, ZF, Analog Devices, Cohda Wireless, Fortive, Harman, Iteris, Magna, Miller Canfield, OnBoard Security, Progressive Insurance, SAIC Motor, Subaru, Velodyne LiDAR, Warner, Norcross & Judd.



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Affordable Housing Community Opens In Ypsilanti

\$17.9 Million New Parkridge Development Provides 86 Homes

It was a gathering of civic leaders and development partners who joined with newly moved-in residents to commemorate the official opening of New Parkridge, an affordable-housing community in the Heritage Park area of Ypsilanti.

The January 24 celebration marked the start for the vibrant development that cost \$17.9 million to build and features 86 duplexes, townhouses and apartments.

New Parkridge was developed by Ypsilanti Housing Commission and Chesapeake Community Advisors and replaces the 70-year-old Parkridge public housing complex.

UnitedHealthcare, which employs nearly 1,000 people in the state and serves the health care needs of 850,000 Michigan residents, was the largest investor in the development, providing \$8 million. The investment is part of a \$35 million initiative



by the company to help build new affordable housing communities across Michigan to connect people in need to quality housing and support services to help them live healthier lives.

As part of its “new urbanism” architectural design, New Parkridge connects its homes to the surrounding neighborhood with street-facing residences, front porches, sidewalks, driveways and yards. Support services for the residents are being provide by Eastern

Michigan University and Avalon Housing, offering residents greater access to health care, education, job training and childcare.

A multi-faceted community building is located at the center of the development and features a large community room, kitchen, computer lab, and offices for social workers and management staff. The building is dedicated in honor of Amos Washington, the first African-American city councilmember and director of the Ypsilanti

Housing Commission, who oversaw the original Parkridge community in the 1950s.

On hand for the ribbon cutting were several dignitaries and elected officials, including U.S. Rep. Debbie Dingell. Also, in attendance: Earl Poleski, executive director of the Michigan State Housing Development authority; Ronnie Peterson, Washtenaw County Commissioner; Dennis Mouras, CEO of UnitedHealthcare Community Plan of Michigan; Zachary Fosler, executive director, Ypsilanti Housing Commission and James Smith, president of Eastern Michigan University.

During the event, UnitedHealthcare employees donated welcome baskets filled with household items and healthy foods and presented them to each of the new residents to help welcome them into their new homes. ■

Tax Reform, Stock Prices Keep Confidence High

Consumer sentiment has remained largely unchanged for more than a year at very favorable levels, according to the University of Michigan Surveys of Consumers.

The January Sentiment figure was just 0.2 Index-points below December's, and just 1.1 points below the 2017 average of 96.8—which was the highest yearly average since 2000, said U-M economics Richard Curtin, director of the surveys.

Stock price increases and tax reforms were mentioned by all-time record numbers of consumers. To be sure, there were small offsetting declines among lower income households and residents of the Northeast.

Consumers continued to expect growth in jobs and incomes, but anticipated a slightly higher inflation rate during the year ahead. Overall, the data indicate that real personal consumption expenditures will expand by 2.8 percent in 2018.

“Perhaps the most significant change in economic assessments involves the motivating factors behind discretionary purchase

decisions,” Curtin said. “These forces have shifted from discounts on price and interest rates to increased confidence in future job security, growth in wages and financial assets.

“This basic sense of economic confidence only occurs after uncertainty is substantially reduced. Unlike earlier in the expansion when consumers were apprehensive about future prospects, this renewed sense of confidence has been responsible for spending decisions that pushed the savings rates to recent lows. Further gains in the pace of spending will crucially depend on the impact of tax cuts on spending decisions.”

Tax Reforms Viewed Positively on Balance

In the January survey, spontaneously favorable references to government economic policies were made by 35 percent of all consumers, the highest level recorded in more than a half century. Most of these references involved the recently passed tax reforms.

Across all respondents and all open-ended questions, 22 percent of consumers spontaneously

mentioned that the recent tax reforms would have a favorable impact, 6 percent cited a negative impact, and 4 percent mentioned both negative and positive aspects of the tax reform. Moreover, consumer who favorably mentioned the tax legislation had values on the Expectation Index that were twice as high as those with negative views.

Gains in Jobs, Wages, Stock Prices

The finances of consumers continued to benefit from gains in jobs, wages and financial assets. When asked to explain in their own words how their personal finances had changed, the highest proportion ever recorded mentioned that the value of their household's asset holding had increased. These favorable reports were concentrated among those with incomes in the top third, with 29 percent reporting increased net wealth holding—the second highest since 32 percent in 2007.

Expected income gains also improved slightly, as consumers anticipated an annual gain of 2.1 percent, up from 1.9 percent one month and one year ago; those

under age 45 anticipated an income gain of 3.4 percent.

Consumer Sentiment Index

The Consumer Sentiment Index was 95.7 in the January 2018 survey, marginally below the 95.9 in December, and down from 98.5 in January 2017. The Current Conditions Index was 110.5 in January, down from last month's 113.8 and last year's 111.3. The Expectations Index was 86.3 in January, between last month's 84.3 and last year's 90.3

About the Survey

The Survey of Consumers is a rotating panel survey based on a nationally representative sample that gives each household in the coterminous U.S. an equal probability of being selected. Interviews are conducted throughout the month by telephone. The minimum monthly change required for significance at the 95-percent level in the Sentiment Index is 4.8 points; for Current and Expectations Index the minimum is 6 points.

Article from U-M News Services. ■

New “One-Community” Equity Initiative Launches

“One community: Advancing Racial Equity in Ann Arbor & Washtenaw County” is the newly launched equity initiative focused on creating a just and equitable community for all Washtenaw County residents.

Washtenaw County—and in particular the City of Ann Arbor—is one of the most economically vibrant, educated and healthy place in Michigan, but not all residents share in the prosperity that defines our quality of life. When we examine indicators of opportunity such as wealth, educational attainment, and job growth, we see that they are not equitably distributed throughout our region.

- Washtenaw County is the eighth most economically segregated metropolitan region in the country.

- There is a 10-year difference in life expectancy between African American and white resident in Washtenaw County, and a 16-year difference in life expectancy between Latino/a/x and white residents.

- 60% of African-Americans in Washtenaw County live in low-opportunity areas with limited job growth.

- Washtenaw County ranks 80 out of 83 counties in Michigan for income inequality.

- A 35-point gap on third grade reading tests between African-American and white students in Washtenaw County exists.

“We know that government has played a significant role in creating and perpetuating these disparities,” said Felicia Brabee, Washtenaw County Board of Commissioner. “It is therefore our responsibility to move past documenting disparity and actually do something about it.”

“We value our diversity here in Ann Arbor and Washtenaw County,” said Chuck Warpehoski, Ann Arbor City Council member. “And we firmly believe that our diversity should be celebrated, not determine how we fare in life. We can do better than that.”

Spearheaded by government leaders from both the City of Ann Arbor and Washtenaw County, “One Community” is a joint initiative with the Government Alliance on Race and Equity (GARE). GARE is a national network of governments working to achieve racial equity and advance opportunities for all.

“We know that in order to have an impact on racial disparity, we must have a clear focus,” said Howard Lazarus, City of Ann Arbor Administrator. “Diffuse strategies are

rarely effective, and we know that addressing a challenge as difficult as structural racism will require concentrated and consistent effort.”

“Some might question why we would limit our focus to advancing racial equity,” said Gregory Dill, Washtenaw County Administrator. “And to that I would say that we know that what holds back African Americans in our community is also holding back people of all races. If we are successful in addressing the reasons that one group isn’t succeeding, we know all people will reap the benefits.”

Kicking off formally with City and County staff in late January 2018, the initial phase of “One Community” will focus on educating government leaders to become aware of where inequity exists in our community and the role government may play

in creating or maintaining that inequity. After the educational phase: a plan to incorporate equity in community services, programs, hiring practices, service delivery model and interactions with the public and community partners will be developed.

GARE will be supporting the City and the County through this learning and plan development process. Formal communication to both the Board of Commissioners and City Council, as well as to the public, will be embedded into this process as well.

Learn how local government is working to create a just and equitable community for all at www.OneCmty.org. ■

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Small Business and the Internet: by Mike Gould

G-Whiz

This episode is brought to you by the number 5 and the letter G.

Sesame Street

As I write this, the infosphere is buzzing with the rumor that the Trump administration has been advised by the National Security Council to create a government-run 5G network, ostensibly to thwart the hacking of phone and data communications by the Chinese.

Still at the plausible-deniability stage, this plan is being roundly attacked by just about everybody in D.C., including the Republican head of the FCC. This would, after all, create the first federal network of anything since the establishment of the interstate highway system back during the Eisenhower administration.

I'll leave the politics for others to argue, but what is the deal with all these G's? We are currently in the 4G era, but what does this all mean?

The Big G Stands For Generation

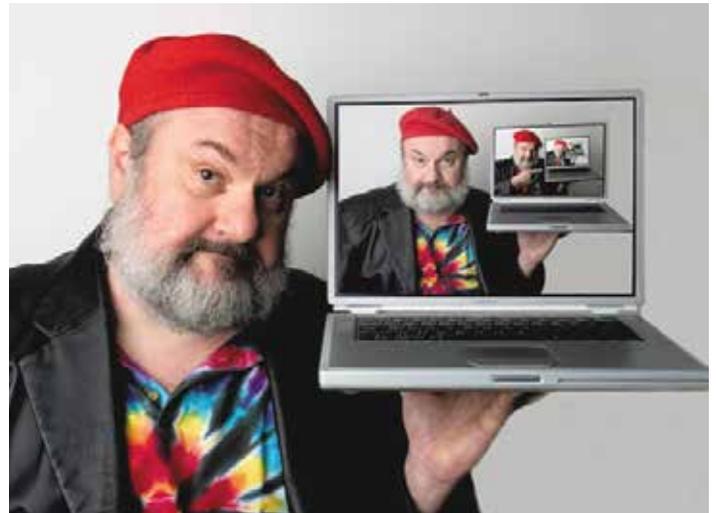
Our story begins back in 1980 when the Institute of Electrical and Electronics Engineers (IEEE) Standards

Association formed a committee to develop networking standards for the various networks that now make up our telephone and data environment. Ethernet, the original communication standard for the internet was born in 1983.

This covers the protocols that enabled the world's networks to link up and form the aggregate connected infomass that today supports email, the web, and everything else we take for granted in cyberland today. Because these specifications were world-wide in scope, everybody with an internet connection can talk to anybody else similarly wired (or wireless) around the globe. Meanwhile, the first mobile phone protocols were established and analog cell phones started to happen. This is now considered the first generation, or 1G era.

2G

Next up are the technological breakthroughs that led to more advanced cellphones in 1992. Phones started using digital transmission instead of analog, and the first truly portable systems would now fit in your pocket (creating a



large lump of flip phone, but hey, progress). The IEEE 802.11 protocol was introduced, which led to the development of wireless internet. Text is now available over phone lines.

3G

Flash forward to 1998, and the third generation systems started to arrive. These allowed multi-media support; i.e., pictures and movies could now be shared wirelessly. And you can now connect to the internet as well as cell telephone towers. Speed is increased, enabling much more content to make it to and from your device.

The first iPhone was introduced in 2007, and it has built-in WiFi. It also only runs on 2G networks and above.

LTE

Long-Term Evolution technology was introduced

in 2009. LTE is an upgrade to 3G that eventually came to be regarded as 4G. This enables high-speed communications and is what we are mostly dealing with today. I note on my iPhone that the upper left-hand menu bar says that I am getting two bars of ATT LTE. This doesn't sound like a lot, but two bars gets my hot-spot linked computer onto the internet at sufficient speed to research this article, and then send it in to Editor Jan.

The rules aren't hard and fast for G-ness; every 10 years or so newer stuff is thrown into the mix to improve speed, reliability, and bandwidth (how much content you can move into and out of your phone/pad/laptop per second.)

*Mike Gould
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Mike Gould

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5G

In 2013 the IEEE published the first article on what will become 5G in the fullness of technological time. They followed up in 2016 with an initiative to engage industry, academia, and government in the development of a unified set of standards for the emerging technology. This includes improvements in speed, security, and bandwidth.

So AT&T, Ericsson, Nokia, Qualcomm, Samsung, and Verizon, among other companies, are now feverishly at work figuring out how this will all work together.

So Why Do We Need All This?

After all, my phone or iPad can now do 90% of what I need to create cybernetically, and I can talk and send photos at will down a cheezy 2-bar phone connection, so what the hey?

Well...there are a lot of other technologies waiting in the wings that need much faster movement of ones and zeroes to realize their potential. The big two: driverless cars and the Internet of Things (IoT).

In order for driverless cars to work properly, they will all need to talk to each other to send information about speed, nearness of

other vehicles, and “Look out, I’m about to swerve into that ditch to avoid that bunny rabbit”. To make this happen, they obviously need to communicate wirelessly, and that data stream has to be as fast as possible to provide live updates on driving activities. So you need a big data pipe that can “talk” a lot of such data to other cars as well as to central highway monitors and the like.

IoT

I wrote about the Internet of Things back before it was called that, in 2013 (URL below).

This business, you recall has to do with the way all your appliances will be internet-enabled and talking to each other (and you) about system readiness (“Garage door opener standing by”), maintenance issues (“Oven needs cleaning”), and state of the buttermilk in the back of the fridge, etc.. All this cyber-chatter will need more digital mojo to support it in a timely manner, hence the need for upgraded networking.

5G Hacking

Which brings us back to the Chinese (or Russian, Eastern European, or other villain *du jour*) hacking that the National Security Council wants to protect us from. Needless to say, the

5G networks of the future will need a lot of many-layered security. But that is a tale for another time.

More about the White House memo about a nationalized 5G network: <https://arstechnica.com/information-technology/2018/01/some-trump-officials-want-to-build-government-run-mobile-broadband-network/>

History of 4G:

<https://www.techrepublic.com/blog/smartphones/the-history-and-evolution-of-4g/>

IoT Article:

<http://mondodyne.com/b2b/smbiznet.182.shtml>

Mike Gould is still limping along in the 4G era. He was a mouse wrangler for the U of M for 20 years, runs the MondoDyne Web Works/Macintosh Training/Photography mega-mall, is a laser artist, directs the Illuminatus Lasers, and welcomes comments addressed to mgould@mondodyne.com. ■

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Internet-Scanning U-M Startup Offers New Approach To Cybersecurity

Rolling out what it's calling a "street view of cyberspace," Censys—a tech startup based on technology developed at the University of Michigan—has launched a commercially available version of its internet-wide scanning tool.

Based on technology developed in the lab of U-M computer science and engineering professor J. Alex Halderman, Censys continuously scans for Internet, analyzing every publicly visible server and device. It uses the data that comes back to create a dynamic, searchable snapshot of the entire internet.

Censys is designed to be a cybersecurity defense tool for IT experts working to secure large networks, which are composed of a constantly changing array of devices ranging from servers to smartphones and internet-of-things devices.

One unsecured device is all it takes for a hacker to break in, and there's currently no good way for IT experts to get a comprehensive view of their own networks. Today, they must often battle hackers and other online threats without a complete understanding of their network's vulnerabilities. Censys aims to change that.

"Network security doesn't have to be black magic," Halderman said. "So much of security practice is based on untested assumptions, but in fact security can be quantified and studied the same way we use data to study human health."

Censys has been available for free to noncommercial users since it began as a U-M research project in 2015. During that time, it's been used in hundreds of peer-reviewed studies and helped researchers better understand some of the most significant internet security threats of recent years, Halderman said.

Over the past six months, the team worked closely with the U-M Office of Technology Transfer to license the technology and form a new company, making it available to commercial customers. Censys data will remain available free of charge for non-commercial use by researchers.

The data that powers Censys will also be available for license by companies who wish to build their own applications around it. Censys data will remain available free of charge for noncommercial use.

During the scanning process, Censys performs a brief data exchange called an "application-layer handshake" with every device that has a public internet address. It then dissects the data that comes back, pulling out useful nuggets of information like protocol, device type, manufacturer software version and age.

Censys also has tools that can scan for specific vulnerabilities. The system is designed so that additional scanners can be added as new threats emerge.

Halderman says that internet-wide scanning isn't



new—hackers have known about it for years. In fact, it's relatively common for them to use collections of hijacked machines called botnets to troll for vulnerable systems. In Halderman's view, Censys levels the playing field by making global scanning data available to internet defenders, including IT professionals and researchers.

"It's similar to Google Street view, where we're gathering what's already publicly visible and making it available in one place," he said. "To extend the analogy, we just take a picture from the sidewalk. We don't peek in the door, we don't jiggle the locks."

Any network that doesn't wish to be scanned can opt out, though Halderman says such requests have been rare during the five years that the scans have taken place.

Censys is an outgrowth of the ZMap Project, a suite of open-source internet scanning tools that Halderman's lab began developing at the U-M in 2013. While the ZMap Project tools remain freely available, Censys builds on them to provide an easy-to-use service that gathers and analyzes data automatically.

The company is based in Ann Arbor and has nine full-time employees. Censys CEO and co-founder Brian Kelly says that companies like Censys are helping to cement Ann Arbor's status as a hub for tech security companies.

"It's great to see that investors are no longer shy about investing in a company that isn't in Silicon Valley, and the talent pool here is phenomenal," Kelly said. "U-M in particular has been really helpful in creating an environment where we can take software products out of the lab and into the real world."

The technology behind Censys is detailed in "A Search Engine Backed by Internet-Wide Scanning", published in the Proceedings of the 22nd ACM SIGSAC Conference on Computer and Communications Security in 2015. The study was authored by Halderman; former U-M computer science and engineering students Zakir Durumeric, David Adrian and Ariana Mirian; and Michael Bailey of the University of Illinois.

Article from U-M News Services. ■

Residential Listing and Sales Prices Jumped in January

Average listing and sales prices for single family homes have risen significantly compared to a year ago, according to data released by the Ann Arbor Area Board of REALTORS®. The average residential listing price in January 2018 jumped 13.6% to \$317,646, compared to \$279, 673 in January 2017. Average residential sales prices for January 2018 are up a staggering 15.6% at \$313,361, compared to \$271,131 in January 2017.

Inventory continues to dip, as the number of new single-family listings dropped to 211 in January 2018 from 259 in January 2017, a difference of 18.5%. Total residential sales also dipped 5.7% from January 2017. Unsurprisingly, 22% of residential homes sold above list price in January 2018, likely due to sparse inventory.

Lawrence Yun, NAR chief economist, says pending sales edged up in December and reached their highest level since last March (111.3). “Another month of modest increases in contract activity is evidence that the housing market has a small trace of momentum at the start of 2018,” says Yun.

“Jobs are plentiful, wages are finally climbing and the prospect of higher mortgage rates are perhaps encouraging more aspiring buyers to begin their search now.”

Information provided by Ann Arbor Area Board of REALTORS®. ■

New Officers Installed For 2018 Ann Arbor Area Board of REALTORS®

The Ann Arbor Area Board of REALTORS® officially installed its 2018 Board of Directors at the General Membership Meeting in January.

Jodie Franklin of Workhorse Realty LLC is the 2018 AAABoR Board President.

Jackson Brown of Howard Hanna will serve as President-Elect for 2018. Chrissie George of Trillium Real Estate is the 2018 Treasurer, with Kirk Keebler of Berkshire Hathaway Home Services, Snyder and Company serving as the 2018 Treasurer-Elect.

The remaining 2018 Ann Arbor Area Board of REALTORS® Board of Directors include: Laurie Buys, The Charles Reinhart Company; Monica Juleff, Liberty Title; Todd Lands, The Charles Reinhart Company; Sara Maddock, Berkshire Hathaway Home Services, Snyder and Company; Kari Newman, The Charles Reinhart Company; Kim Peoples, The Charles Reinhart Company; Ed Ridha, The Charles Reinhart Company; Tracy Rose, Real Estate One and Don Wurtzel, Howard Hanna. ■

Ann Arbor Online Map Offers Virtual Tour of City's Champion Trees

The City of Ann Arbor's Champion Tree program identifies and catalogs the largest tree of each species within the city. The program was created in 1995 to highlight and recognize these remarkable trees and increase awareness of and appreciation for all of the trees that help make Ann Arbor “Tree Town.”

The City's 1995 Champion Tree list was recently reviewed and trees were verified, remeasured and photographed. The updated list of 55 unique species can be found at www.a2gov.org/champtrees. The map provides the species, size and location as well as the environmental, social and economic benefits of each tree. Champion Tree status is determined based on a point system calculated using measurements of the tree's circumference, height, and ¼ crown spread. The tree with the highest point total becomes the Champion for that species. Here are examples of just some of the trees selected as Ann Arbor Champion Trees:

- **PARK TREE.** The Pignut Hickory Champion Tree is located in Mixtwood Pomona Park and currently earns 195 Champion Tree points. It has a circumference of 102 inches, height of 80 feet and a crown spread of 51 feet. In addition to its impressive size and spread, this tree, alone, also provides approximately \$124 in energy savings, intercepts 6,058 gallons of storm water, and sequesters 940 pounds of carbon dioxide each year. All of these amount to about \$295 in overall total annual benefits.

- **STREET TREE.** The Slippery Elm Champion Tree is located at 2942 Sharon Drive and currently earns 253 Champion Tree points. It has a circumference of 151 inches, height of 81 feet and a crown spread of 84 feet. Over the course of a year, this tree provides \$171 in energy savings, intercepts 8,637 gallons of storm water, and sequesters 2,226 pounds of carbon dioxide. All of these amount to about \$472 in overall total annual benefits.

- **PRIVATE TREE.** The Tulip Poplar Champion Tree is located at 809 Oxford Road and currently earns 266 Champion Tree points. It has a circumference of 146 inches, height of 99 feet and a crown spread of 83 feet. In addition to its impressive size and spread, this tree, alone, also provides approximately \$135 in energy savings, intercepts 6,213 gallons of storm water, and sequesters 695 pounds of carbon dioxide each year. All of these amount to about \$433 in overall total annual benefits. ■

Briefs:



Beal

SVN Stewart Commercial Group, a full-service commercial real estate brokerage firm and part of the SVN® brand, welcomed new Associate Advisor, **Jeff Beal** to the firm. Beal is specializing in industrial property sales and leasing throughout Southeastern Michigan.

Beal previously was employed in medical sales devices as a Territory Lead in Southern California. He graduated from Quinnipiac University in 2009 and also completed 4 years of medical school in St. Kitts.

SVN International Corp., a full-service commercial real estate franchisor of the SVN® brand, is comprised of over 1,600 commercial real estate Advisors and staff.

■ **Online Tech, LLC** announced that it has been acquired by Schurz Communications Inc., a diversified media company.

Online Tech plans to leverage the investment capabilities of Schurz to expand to new markets across the United States and expand their product offerings. In connection with the acquisition, Online Tech will add industry veterans Brad Cheelde and Tom Wilten to its leadership team to serve as the company's new CEO and CFO, respectively.

Online Tech currently serves nearly 500 clients across the country with its network of seven data centers and full suite of hybrid cloud services including managed Microsoft Azure, Disaster Recovery as a Service, and Data Protection as a Service. With a focus on security and compliance, their expert engineers support mission-critical applications and their client portal provides a single pane of glass into managing their entire IT systems.

Online Tech plans to further expand its national footprint, enabling access to secure and compliant hybrid cloud solutions, superior customer support and managed IT services to a broader range of companies. ■

■ **The Ann Arbor Area Transportation Authority (TheRide)** has implemented new Route 81 – Ypsilanti Township Express, which serves

commuters traveling between Ypsilanti and Ann Arbor.

The Ypsilanti Township Express Route is the final service improvement promised to be implemented as part of the 2014 Public Transportation Improvement millage. Thanks to the voters in the cities of Ann Arbor, Ypsilanti, and Ypsilanti Charter Township, TheRide has improved access to neighborhoods and job centers and expanded services for seniors and people with disabilities. Since August 2014, TheRide has implemented more convenient and direct service throughout the greater Ann Arbor and Ypsilanti area including: operating service later on weekdays until 11:00 p.m. on most routes, until 10:45 p.m. on Saturdays and 7:45 p.m. on Sundays. A complete list of service enhancements is available at TheRideYourWay.org

The new Route 81 – Ypsilanti Township Express will offer two non-stop rush hour trips every weekday morning and afternoon between Ypsilanti Township and Ann Arbor. Ypsilanti area residents can connect to downtown Ann Arbor and the University of Michigan Central and Medical Campuses. The route has fewer bus stops and less stopping means a faster ride to provide better

access to destinations and transfer points. For route and schedule details, visit TheRide.org. To avoid parking fees and hassles there is designated free parking available at the Shell Gas Station on Joe Hall Drive at Huron Street.

■ Humantech continues to expand its technology team to provide solutions for managing workplace ergonomics. The team welcomes its newest hire, UX Designer, **Molly Robison**. Robison is responsible for enhancing and developing the visual aspects of the software with the end user in mind.

Previously, she worked for Ten-X, designing and prototyping user interfaces for its online real estate sales platform. She received a Bachelor of Science degree in Computational Informatics from the University of Michigan, and a Master of Information Management Systems degree from the University of California Berkeley School of Information where she focused on user interface design and development.

“As User Experience Designer, Robison is directly involved in the process of making a product useful, usable and enjoyable for its users. She will have a significant responsibility for

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Briefs:

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Humantech System clients' sense of quality in their interactions with our SaaS products," said President James Good.

For nearly 40 years, Humantech has provided workplace improvements. By combining their board-certified ergonomists with proprietary assessment tools and comprehensive software, they deliver integrated solutions that impact safety, quality and productivity. ■

AT&T added a new cell tower to its 4G LTE network in Ann Arbor to improve the coverage and capacity at the University of Michigan-North Campus.

The Gerald R. Ford Presidential Library, the colleges of engineering and architecture and the schools of art & design and music will benefit from the upgrade. The North Campus Research Complex and the VA Ann Arbor Healthcare System also are getting a network boost from the improvements.

AT&T invested nearly \$60 million in Ann Arbor wired and wireless networks during 2014-2016. These investments enhance reliability, coverage, speed and overall performance for residents

and businesses. They also improve critical services that support public safety and first responders.

AT&T Inc. helps millions around the globe connect with leading entertainment, business, mobile and high-speed internet services. ■

The Washtenaw County Health Department announced that **Jimena Loveluck**, MSW is the county's new deputy health officer. Loveluck brings 25 years of public health experience and extensive knowledge in health promotion, community engagement, and combating health disparities.

"Jimena has deep roots in the community," said Ellen Rabinowitz, health officer at the Washtenaw County Health Department. "Her skills will be a tremendous asset to our work of ensuring that all in our community have the opportunity to live their healthiest lives."

Prior to joining the Washtenaw County Health Department staff, Loveluck was the vice chair of the Washtenaw County Board of Health and vice president of community research and innovation for UNIFIED – HIV Health and Beyond. She also served as the president and CEO of the HIV/AIDS Resource Center for fifteen years. She has previously

served as the chair of the HIV/AIDS Alliance of Michigan and as a member of the Washtenaw Housing Alliance Board and the Ann Arbor Sexual Health Education Advisory Committee.

Loveluck is Washtenaw County's first deputy health officer. The role was created to provide guidance in developing a community-wide vision of health, and a culture of health equity. Loveluck will manage the design and implementation of policies, procedures and programs to promote the health of all Washtenaw County residents.

Loveluck holds a Master's Degree in Social Work from Boston College and a Bachelor's Degree from the University of Michigan. She has also completed a health care executive program at the University of California, Los Angeles.

The Washtenaw County Health Department promotes health and works to prevent disease and injury in our community. Their mission is to assure, in partnership with the community, the conditions necessary for people to live healthy lives through prevention and protection programs. The Washtenaw County Health Department has achieved national accreditation through the Public Health Accreditation Board. ■

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Briefs:

The University of Michigan Center for the Discovery of New Medicines has awarded early-stage funding for seven new drug discovery projects by faculty from across U-M.

Six of the projects focus on treating disease including heart failure, runaway cell division in cancer, hypertension, Crohn's disease, a genetic heart disorder and neurological damage. A seventh project aims to improve agents used in positron emission tomography, or PET scanning, which doctors use to evaluate tumors and other tissues.

"The diversity of these latest project speaks to the breadth and depth of the university's translational research programs and the great entrepreneurial spirit at U-M to move biomedical knowledge toward improving the life of patients," said Vincent Groppi, the center's director.

This marks the ninth round of funding since the center launched in 2012 as a partnership between several campus units to provide mentorship and early-stage support for drug discovery projects.

Including these latest seven projects, the center has invested nearly \$1.75 million in 52 projects. They, in turn, have gone on to secure more than \$17 million in federal

grants and other support. Several projects have received patent protection or have been licensed by a commercial partner.

The grants—of up to \$50,000 each—primarily support work in four university core laboratories: The Center for Chemical Genomics and Center for Structural Biology at the U-M Life Sciences Institute, and Pharmacokinetics Core and Vahlteich Medicinal Chemistry Core at the College of Pharmacy.

The latest grants were awarded to:

Sami Barmada, assistant professor of neurology in the Medical School, to screen for compounds that can induce a cellular cleanup system known as autophagy, and thereby potentially reduce the loss of neurons associated with amyotrophic lateral sclerosis, more commonly known as ALS or Lou Gehrig's disease, and also with frontotemporal dementia.

Allen Brooks, research investigator in the Department of Radiology in the Medical School, to obtain data to support an investigational new drug application with the U.S. Food and Drug Administration for a new agent for use in PET scanning that may produce better quality images with a lower dose of radiation. The approach would produce a fluorine-18 labeled analog of a better-known agent, NP-59,

which was developed at U-M in the 1970s.

Sharlene Day, associate professor of cardiology in the Medical School, to screen compounds toward the development of a targeted therapy for hypertrophic cardiomyopathy—a genetic heart condition. Heart samples showed patients with the condition had a significant reduction of a protein known as MYBPC3 (myosin binding protein C). The research aims to find compounds that can restore levels of MYBPC3 without affecting other related proteins.

Peter Higgins, associate professor of gastroenterology in the Medical School, to design and develop novel inhibitors for a receptor that is involved in the development of intestinal fibrosis associated with Crohn's disease. The proliferation of this thickened, scarred tissue can lead to organ failure.

Ryoma "Puck" Ohi, associate professor of cell and developmental biology in the Medical School and affiliate faculty member at the LSI, to isolate "natural products"—chemical compounds derived from living organisms—that can inhibit proteins that function during cell division and thus could serve as anti-cancer agents.

Marschall Runge, professor of cardiology in the Medical School and executive vice president for medical affairs for Michigan Medicine, to perform several types of

studies to identify inhibitors of enzymes whose activity is increased in patients with dangerously high blood pressure, also known as hypertension.

Andrew White, research associate professor of medicinal chemistry in the College of Pharmacy and co-director of the Vahlteich Medicinal Chemistry Core, to build on previous work to develop compounds that can selectively inhibit B protein-coupled receptor kinase 2 (GRK2), a protein kinase that becomes over-expressed when people have heart failure.

Together, the Center for the Discovery of New Medicines and its affiliated cores help guide researchers through the many stages of the drug discovery process—from validation of a drug target to optimizing drug safety and effectiveness for human clinical trials.

The center is funded by the Office of the Provost, College of Pharmacy, Life Sciences Institute, Comprehensive Cancer Center and, at the Medical School, the Department of Internal Medicine, Department of Pathology and an endowment for the basic sciences. Its executive committee includes senior researchers and administration from the U-M College of Pharmacy, Comprehensive Cancer Center, Medical School and Life Sciences Institute.

Article from U-M News Services. ■



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