

Benton-Franklin e-Newsletter - 2018 Q1

Welcome! News from the Region:



Data tells stories.

The Benton Franklin Trends website tracks a large number of statistics in our community. Data on health and education, housing and economic s, and the environment and agriculture, reveal a wealth of information about our area.

Topics for this newsletter are personal income growth, increase in households with the internet, and the dramatic increase in suicide and suicide attempts by youth. What story does this data tell? One narrative is that higher incomes bring better access to the internet, Facebook, cell phones, etc. If you Google “data correlating teen suicide and social media access” you will find many studies linking the two. Increased access to sharing applications at first feels welcoming, but then it turns to isolation, inadequate comparisons, and bullying. Left unsupervised, the not yet matured psyche experiences despondence.

Seeing the high jump in suicides and attempts by our youth, what are we prepared to do? Does exposure to social media have a negative impact? We as the collective Benton and d Franklin population need to turn this curve downward. And we can follow that progress because of the data Benton and Franklin Trends gathers. Identifying issues and rallying the community around them is one of the top reasons to follow the website. It might just save lives.

Carrie A. Green, Executive Director, Three Rivers Community Foundation

Indicators in the News:

Search Function is Now Live by Holly Miller



Located in the top right corner of the Spokane Community Indicators website, you will find a completely new feature: a search function. Entering a keyword into the search bar gives quick results on the topic of interest. The feature searches in-site only, and the results show the indicators in which the keyword, or similar terminology was found. For example, typing "air quality" into the search bar results in one indicator found: [Air Quality Days by Severity Level](#).

This new feature is very useful to those who have a specific measure in mind, or when lack of time doesn't allow for a leisurely stroll through the Benton - Franklin Trends website.

Make Room for Population Growth in Benton and Franklin Counties By Emily Wavra



The Growth Management Act was adopted in 1990 to help manage and accommodate growth and development in all counties across the state of Washington. Under this act, the Office of Financial Management (OFM) develops population projections for each county in Washington, and the counties use these projections to make decisions on growth and development. The population projections and more information [can be found here](#).

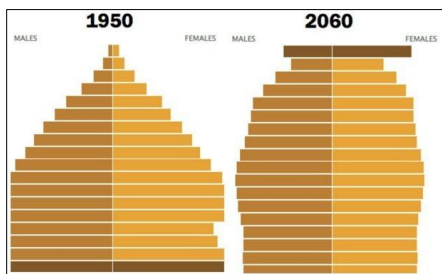
When the OFM calculates population projections, they use the most recent census data, in this case, they used the 2010 census and they calculate three different projections: low, medium, and high. The low and high projections represent the upper and lower bounds of the population projection, since estimating population can be uncertain. The medium projection is therefore the most optimal projection and the most likely to occur.

In 2017, OFM put Benton County's population at 193,500. Using the medium projection, OFM estimated the county's population for 2025 at nearly 216,000. That implies a compounded annual growth rate of about 1.9%. In 2017, Franklin County's population at 124,100, and the projected population for 2025 is 114,000. This implies a compounded annual growth rate of about 2.9%. Benton and Franklin counties combined have a compounded annual growth rate of 1.9%. This compares to the projected Washington State rate over the period of 1.2%.

The projected Benton County population for the year 2030 is nearly 228,200, implying a compounded annual growth rate from the present to then at about 1.3%. Franklin County's population projection for the year 2030 is nearly 128,000, implying a compounded annual growth rate from the present to then at about 2.7%. Additionally, this would imply the combined county rate is 1.7%. The similar WA rate is 1.2%.

Make room in Benton and Franklin Counties for 72,000 more people within the next 12-years!

[Two Dramas in Slow Motion](#) by Scott Richter



Population changes, at first, might not appear that interesting. But a good data visualization can often make the mundane exciting and alive - as is the case with population changes.

According to Pew Research, the two dramas occurring in slow motion are 1) the U.S. is "becoming majority non-white", and 2) "a record share is going gray." In short, the U.S. is becoming more diverse and we are living longer.

But wait - the most startling aspect is the "age pyramid". Age pyramids, typically used by demographers to show a breakdown of the population by age in comparison to other age groups, have always been in the shape of a pyramid. [Pew Research states](#) "In every society since the start of history, whenever you broke down any population this way, you'd always get a pyramid."

But the pyramid will keep evolving to look more and more like a rectangle as we continue to live longer and maintain low birthrates. Although 2060 is more than 40 years away, understanding these estimates now and what they mean to the future, will help guide both government and the private sector to better understand the changing demands of a growing and changing population.

Indicator Main Articles:

Youth Suicide and Suicide Attempts

Increasing by Scott Richter and Dr. Patrick Jones

The question of art imitating life or life imitating art doesn't really have a definitive answer because both inspire each other. This question isn't problematic when experiencing positive thoughts and behaviors that are likely to inspire the same positive aspects. But when negative thoughts and behaviors are inspired and copied, that's a different matter.

According to the [Parent Resource Program](#), during 2016 suicide was the second leading cause of death in the U.S. for youth ages 10-24 ([second only to accidents / unintentional injuries](#)), with a daily average of more than "3,470 attempts by young people grades 9-12."

There are most often multiple overlapping reasons a youth considering suicide actually might make an attempt. Depression and other mental illnesses are known to play a huge role.

Kristi Haynes, Prevention Education Consultant / Trainer with Educational Services District 123 says "Suicide is a multi-factorial and complex issue. There is never just one cause. [T]he majority of people who die by suicide have an underlying and often untreated mental illness."

When it comes to the influence of the media, which very much includes social media, there are [two different schools of thought](#) regarding the effect of media on people contemplating self-harm. The first is the Werther effect. In the late 1700's, a suicide depicted in *The Sorrows of*

Young Werther, written by Johann Wolfgang von Goethe, led to not only an increase in the number of young men who were choosing to end their lives, but many of the suicides copied, or mimicked, the suicide depicted in the book. The other is the Papageno effect. Papageno, a character in Mozart's opera titled *The Magic Flute* had planned his suicide but was talked out of it at the last minute by three youth.

In reality, perhaps both Werther and Papageno are at play. Media exposure to high profile suicides, like that of [Robin Williams in August, 2014](#) whose hanging suicide was associated with a 10% increase in suicides across the U.S. from August to December, 2014 - which included a 32% increase in suicides from suffocation, which hangings are classified as. Additionally, an Internet search for suicide prevention and resources produce nearly an endless number of legitimate results.

There are studies clearly connecting an increased amount of time spent engaging social media are linked to higher rates of depression. The root cause behind this is believed to be that an increase of time spent on social media is replacing much of the face-to-face time people used to be spend together. Perceptions of young users about the general happiness and well-being of their fellow social media users can often be misconstrued as being better than their own, adding to their negative self-thoughts and perceptions. There are also studies where the results are more unclear or point to a low association between the media, social media, and youth suicides. Once again,

perhaps Werther and Papageno are both at play at the same time.

Research conducted by Igor Pantic titled *Online Social Networking and Mental Health*, points out “Several studies have indicated that the prolonged use of social networking sites (SNS), such as Facebook, may be related to signs and symptoms of depression.” [Pantic discovered](#) “a statistically significant positive correlation between depressive symptoms and time spent on social networking sites.”

As we examine the [Total Number of Suicide and Suicide Attempts & Rate per Youth Ages 10-17](#)

indicator, two main aspects stand out. First, the overall decreases during the 2000’s, and second, the steady increases in the number of youth suicide and suicide attempts since 2011. Beginning in 2011, both the combined counties and the state started to

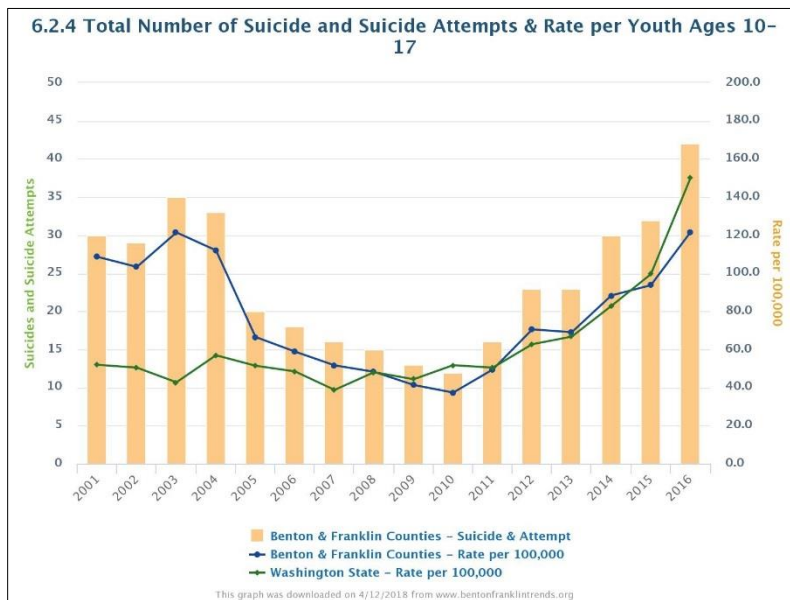
increase. The highest jump in the series occurred between 2015 and 2016.

Benton and Franklin Counties, as well as Washington State, are unfortunately not an anomaly. According to [Governing](#), in the U.S. from 2007 to 2015, “the number of girls age 15 to 19 committing suicide doubled” and the number of suicides committed by boys in the same age range “climbed by more than 30 percent.”

According to the [U.S. Centers for Disease Control and Prevention](#), the International

Classification of Diseases, Tenth Revision, Clinical Modification, or ICD-10-CM, is used to code medical conditions that best explain a cause of death, as well as being used to describe different types of illnesses and injuries for medical records and epidemiological purposes.

[Psychiatryonline.org](#) says the transition from ICD-9-CM to ICD-10-CM in the fall of 2015 “Marked changes in coding of intent for injuries and poisonings...almost certainly represent artifacts of coding changes rather than true changes in suicidal behavior.”



These “artifacts” might best explain the relatively large increase from 2015 to 2016, but they do not explain the increased number of youth suicides and suicide attempts that started to uptick around 2011.

Previous to the ICD-10-CM, self-harm was coded as either “definitely self-inflicted” or “unknown if accidental or self-inflicted”. The revised ICD-10-CM has updated codes for providing the cause of self-harm injuries and deaths “within the primary diagnosis by a required cause-of-injury code.”

When law enforcement responds to a death, they determine whether it was a result of natural causes, an accident, a suicide, or a homicide.

Sgt. Aaron Clem, Community Services Division of the Kennewick Police Department says “If we respond to a suicide threat and/or attempt we make contact with the victim and first make sure they are safe. That may mean calling for Kennewick Fire Department to transport them to Trios Hospital or just making sure they don’t have anything in the immediate area to carry out a threat. We talk with them about their situation and attempt to help them with anything we can.”

“Rural counties like Benton/Franklin often have higher rates and I think access to services and stigma play a key role in that”, Haynes added.

[A side-by-side comparison](#) show how incidents of both “self-harm” and “undetermined intent” were affected by the October, 2015 revisions. Although this clarifies the methodology changes the results, but the trend is still moving in the wrong direction.

Income Rise in the Area but for Reasons You May Not Think by Dr. Patrick Jones

Should residents of the greater Tri Cities feel like they have a little more coin in their pockets? The answer is yes, if one looks at the indicator [covering per capita personal income](#).

At \$42,156 for 2016, the average resident has experienced a 2.3% annual growth rate since the start of the Great Recession. This puts the Tri Cities’ matching stride with the U.S. at large.

The reasons for the increase may hold a surprise, however. It hasn’t been entirely due to local workers getting significant raises. The [average annual wage](#) has gone up about half a percentage point less than that of personal income. What else

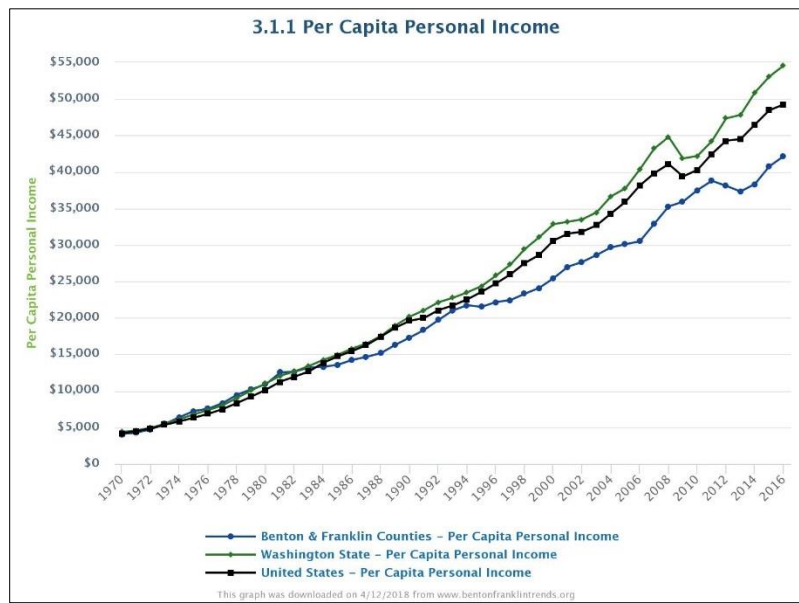
lies behind the recent rise in the average standard of living?

First, some basics. Per capita personal income (PCPI) is defined as the total dollars flowing to persons (not companies), divided by the entire population. And it consists of three legs – wages

& salaries (including benefits), investment income and federal transfer payments. The complete answer to the area’s increase lies with one of these other two legs.

Investment income doesn’t provide the answer. As a

share of PCPI, the returns from physical investments, personal savings, equities and debt have hovered around 16% in the nine years since 2008. The other leg, however, holds a major clue. It consists of federal transfer payments.



This graph was downloaded on 4/12/2018 from www.bentonfranklintrends.org

Defined as flows from the federal government for work not currently rendered, transfer payments consist of dozens of programs. They can be sorted into the following categories: medical benefits, social security, income maintenance, Veterans payments, unemployment insurance, and education and training payments. Medical benefits consist of both Medicare & Medicaid flows. Income benefits run the gamut of society's many "welfare" programs, such as food stamps, Supplemental Assistance to Needy Families and disability. An important distinction for the Tri Cities: transfer payments do not include any flows of dollars to those directly or indirectly on a federal payroll.

Transfer payments in the two counties have increased by nearly 6% per year since the start of the Great Recession. That growth rate is over 30% higher than the increase in total wage income. As a result, federal transfer payments contributed nearly 20% to total personal income in 2016. Contrast this to the share of 17.5% in 2008 for the greater Tri Cities. And contrast this to the share of 11% in the Seattle metro area for 2016. With a fifth of all dollars circulating in the regional economy due to transfer payments, this leg of personal income has grown to a significant share.

What has driven up the flows from Washington, D.C.? In a word, medical programs. While social security payments to the greater Tri Cities have grown, the rates of increase from both

Medicare and Medicaid have been twice as large. As a result, they have displaced social security as the top categories of transfer payments. There are undoubtedly several reasons for this, among them aging Baby Boomers reaching Medicare age and a growing healthcare sector that attracts residents and non-residents alike. Medicaid dollars, however, have increased more than Medicare, undoubtedly due to the passage of the Affordable Care Act.

So how do we assess the recent track record of PCPI, one of the ultimate measures of economic success? First, the level is relatively high: Among all the metro areas in Eastern Washington, per capita personal income in the Tri Cities ranked a close second to the greater Wenatchee area in 2016. But the growth rate is a different story. Here the two counties rank near the bottom among Eastern Washington metros. The recovery from the Great Recession has not been swift.

What will drive average incomes higher here? More transfer payments? Greater return on personal investments? A rise in average wages? If the last item will move the needle the most, which seems desirable, what industries can we expect to lead the charge? And will these industries be able to ramp up productivity to afford paying higher wages? Over the next five years, this will be a key dimension of economic development in the two counties.

Households with the Internet Continues to Increase

by Scott Richter and Dr. Patrick Jones

Designed by the U.S. military and completed in 1946, the world's first programmable computer, [ENIAC](#), or Electronic Numerical Integrator and

Computer, took up a 50x30 foot basement of a school. ENIAC had "approximately 18,000 vacuum tubes, 70,000 resistors, 10,000 capacitors, 6,000 switches, and 1,500 relays" and was originally designed to compute values for military artillery range tables.

[Today's smartphones](#) are “millions of times more powerful than all of NASA’s combined computing in 1969.” The ability to connect a computer to an endless number of computers via the Internet in less than 30-years has brought with it advances on the order of magnitude of the industrial revolution.

The internet itself has undergone quite a bit of change in the last 10-years. A website, www.tenyearsago.io, offers a look back at how 15 popular websites looked like exactly 10-years ago. [Internet World Stats](#) shows how the growth of internet users has grown from about 16 million users in 1995 to about 4.2 billion by the end of 2017.

Today, most households have access to the Internet through their home connections or a cellphone, but the share hasn’t reached 100% yet.

These simple connections not only link, people but billions of other devices worldwide. [Cisco Systems](#) projects that there will be 50 billion devices connected to the internet by the year 2020.

What the Internet really represents is access to information, devices, and other people. So those who do not have internet access simply do not have access to the unfathomable amount of information. Students who do not have access to the internet at home are at risk of falling behind their fellow students who do. Access at school is something all students have, but access at home, which can be used in

conjunction with homework, as well as the ability to “surf the net” without time restraints that exist at school. The freedom to spend the time chasing down ideas, and well as more formal uses of the internet create a distinct advantage to those with the internet at home, and a disadvantage to those who do not.

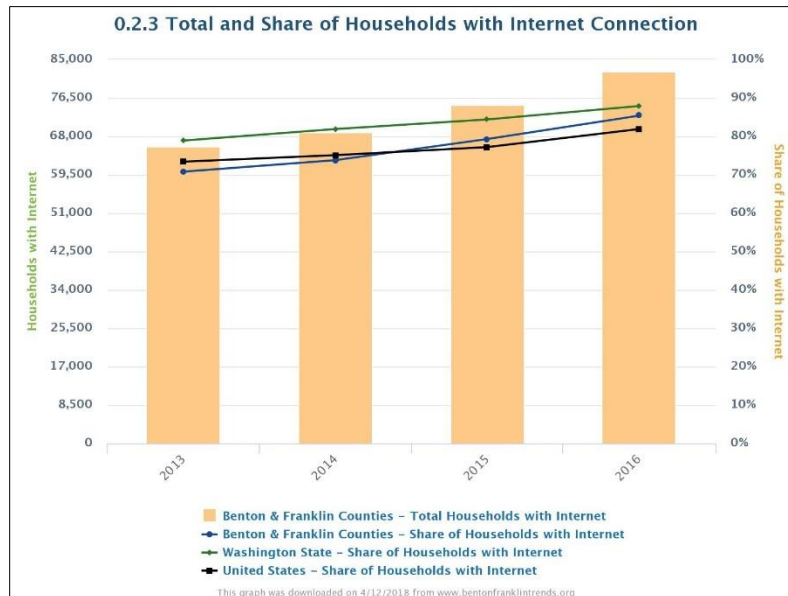
Rich Nall, Network Coordinated Services Director of [Northwest Open Access Network](#) (NoaNet) says “When NoaNet was founded, the overarching goal was to make high speed broadband available in areas unable to get it with an underlining objective to reach out to the

schools, libraries, hospitals and government agencies. By focusing on these areas, NoaNet and its PUDs members knew broadband would provide a tremendous asset to our communities’ quality of life and the economy.”

“To date, all

schools located in Benton PUD’s service area are connected to NoaNet and Benton PUD’s network. This includes small communities such as Benton City, Finley, Prosser as well as the City of Kennewick and the surrounding area”, said Nall.

According to [Pew Research](#), during 2013, of Americans who do not use the internet, those ages 65+ are most likely to have never used the internet; 35% did not have a high school education; 19% made less than \$30,000 a year, and those living in rural areas were “twice as likely as those who live in urban or suburban settings to never use the internet.”



Looking at the [Total and Share of Households with Internet Connection](#) indicator, we see that the number of households in the combined counties with an Internet connection increased from about 66,000 to just over 82,000 from 2013 to 2016 - roughly an increase of 24%. Also by 2016, the share of all households with an Internet connection in the combined counties was over 85%.

Stephen Hawking once said this about the internet: "We are all now connected by the Internet, like neurons in a giant brain." Former

President Barack Obama said "The Internet is not a luxury, it's a necessity."

As these quotes suggest the importance of Internet access, the households with an Internet connection is expected to continue to rise. Perhaps when the share of households with an Internet connection is about 95% or more, this indicator might lose its importance. But with still around 15% of households without Internet access, it still is a very important indicator to track.
