

QWI Explorer – Exercise/Examples

Overview

The following example scenarios highlight some of the analyses possible using QWI Explorer: <http://qwiexplorer.ces.census.gov>. The first set of scenarios include step-by-step instructions, followed by some scenarios to try on your own.

Example Scenarios

1. Let's analyze employment growth in North Dakota's counties due to the recent oil/gas extraction boom. Which ND counties have highest employment in these industries? How fast has employment changed over time?
 - **Set State to "North Dakota" and Group to "Counties". Click the "None" link next to Industries in Filters/Aggregations. Select "NAICS 3-digit Subsectors" from the dropdown and click the checkboxes for "211 Oil and Gas Extraction" and "213 Support Activities for Mining". To see a longer longitudinal view of employment, click "20 Years/Quarters Selected" (under the X-Axis dropdown) and click the green checkmark under "Q2" and unselect all Q1, Q3, and Q4 checkboxes, then click "Set". If desired, counties with no employment can be removed from the analysis by clicking "53 Counties" (under the Group dropdown) and unchecking their boxes. Williams County has the largest total employment and growth, with Ward, Stark, Mountrail, McKenzie, and Dunn counties all growing as well.**
2. What are the average monthly earnings for these six counties in this sector? Have they been growing as well? How do earnings in these sectors compare to earnings in other subsectors in these counties?
 - **Set Indicator to "EarnS". Average monthly earnings for the six counties mentioned above range from \$7,100 to \$8,600. All have seen their earnings increase significantly since 1998. To compare earnings across industries, click the X-Axis dropdown and select "NAICS 3-digit Subsectors" (click "Continue" twice in each Settings Conflict popup). Click the column heading for each county twice to sort by the industries with the highest earnings. We can see that "Wholesale Electronic Markets", "Pipeline Transportation", "Support Activities for Mining", "Professional, Scientific, and Technical Services", and "Oil and Gas Extraction" have the highest earnings in most of these counties.**
3. How does employment in "Oil and Gas Extraction" in western Pennsylvania (Allegheny, Greene, Indiana, McKean and Washington counties) compare to those counties in North Dakota? Which set of counties have higher earnings?

- **Set State to “Pennsylvania” and indicator to “Emp”. Click “67 Counties” (under the Group dropdown) and check only the boxes for the five counties listed above. Click the “Show Line Chart View” button and click Continue. Click the “None” link next to Industries in Filters/Aggregations. Select “NAICS 3-digit Subsectors” from the dropdown and click the checkboxes for “211 Oil and Gas Extraction” and “213 Support Activities for Mining”. Employment has grown significantly over the last 16 years in these counties, but not quite at the rate of North Dakota. Change the indicator to “EarnS”. Earnings in 2013 Q2 range from \$5,900 to \$8,900, which is similar to the earnings in North Dakota.**
4. Switching gears, let’s look at new hires in Florida. What two counties hired the most young females (14-21 years of age) in 2012 Q4? What NAICS Sectors are the new hires in these counties taking place in? If we look at older females (55-99 years of age), are new hires taking place in different sectors?
 - **Set State to “Florida” and indicator to “HirN”. Click the trash can icon next to Filters/Aggregations to clear active filters and then set X-Axis to Counties. Click the “None” link next to Worker Characteristics in Filters/Aggregations. In the Sex/Age selections, activate the “Female”, “14-18” and “19-21” checkboxes and then click Set. Double click on the “All” column in the table to sort descending – Miami-Dade and Broward counties had the most new hires in 2012 Q4. Set Group to NAICS Sectors, click the pivot button, and then select only Miami-Dade and Broward counties as the Group. Double click each counties name in the column heading to sort descending – Retail Trade and Accommodation and Food Services account for most of the new hires. To see older worker new hires, click “14-18, 19-21” in Filters/Aggregations and check “55-64” and “65-99” as the age filters. For Broward County, new hires for this age group happen in “Admin and Support and Waste Management...” and “Heath Care”.**
 5. Video rental stores are slowly becoming a thing of the past - can we use QWI Explorer to see longitudinal trends in employment in this industry (5322 Consumer Goods Rental) in Florida? Do the trends in employment change when looking at large firms (i.e. Blockbuster) or small firms (i.e. mom/pop stores)? What happens if you change to a new state (i.e. are trends the same, more dramatic, etc.)?
 6. What NAICS Sector in Maine had the highest amount of turnover in 2012 Q2? What about in 1998 Q2? Is there much difference between the turnover rates for Males and Females in these NAICS Sectors?
 7. As of 2013 Q2, what metropolitan area in Ohio had the largest amount of firm job change? In what NAICS Sector did most of that metro area’s net increase come from? Did the increase in jobs come primarily from college educated workers or from a different educational attainment category?