DEED Taps a New Data Source: Driver's Licenses

A data exchange with the Department of Public Safety will provide a wealth of new information.

The use of administrative records for economic analysis has grown dramatically as a source of information that is often more detailed than what is available from sample-based surveys. DEED's Labor Market Information Office has been providing employment and wage data compiled from administrative Minnesota Unemployment Insurance Program records at extremely detailed levels for years.

A new agreement with the Minnesota Department of Public Safety (DPS) allows us to link these employee records with the date of birth and gender data contained in driver's license records. This provides information on the demographic characteristics of our workforce that has not been available before.

Not all employees have driver's licenses, but we found that 90 percent or more each quarter over the past 15 years did match.

This decent "hit rate" gives us confidence that the resulting information is accurate enough to draw conclusions about the age and gender characteristics of our workforce, while at the same time requiring care in interpreting this information. Given the significance of the information that these new data will provide, this is a tradeoff worth taking.

Consider the impact that our aging population will have on the number of people leaving the workforce through retirement. Our administrative records linked to driver's license data reveal that the share of our working population that is 55 and older ranges from 16.7 percent in Washington County to 29.8 percent in Grant County. Of the 18 counties with one-

fourth or more of their workers in the 55 and over age cohort, all but four are on our western or southern border (the exceptions being Cook, Red Lake, Aitkin and Grant counties). Of the 19 counties with shares of these older workers below 20 percent, all but two, Beltrami and Steele, are in one of our metropolitan statistical areas.

The impact of aging is also having differential effects across industries in Minnesota, and these data help us identify and quantify these as well.

While only 7.9 percent of those working in accommodation and food services are 55 or older, 29.9 percent of those in mining are nearing retirement age. Transportation and warehousing and the utilities sector are two other industries where older workers comprise more than 25 percent of the workforce, while administrative services, construction, professional and technical services, and arts, entertainment and recreation are sectors with less than 18 percent in that group.

These data also allow a similarly detailed analysis of gender differences. For example, women make up a majority of job holders in 61 of our 87 counties, with the share of jobs held

by women ranging from 38.1 percent in Dodge County to 58.6 percent in Kanabec County. In all 87 counties, the median hourly wage paid to women falls short of that paid to men, with Clearwater County having the most significant gap at 63.4 percent and Cook County's 96.5 percent being the smallest.

Industry of employment also influences the gender makeup of the workforce – perhaps not surprisingly. Mining (8.9 percent) and construction (11.7 percent) are sectors with very few women, while health care and social services (79.1 percent) and educational services (68.2 percent) have very high concentrations of women workers.

Women also earn lower median hourly wages than men in all 20 major industrial sectors, with the smallest gap appearing in accommodation and food services at 99.5 percent and the largest in professional and technical services at 69.5 percent.

The above examples only scratch the surface of the wealth of information that this new data exchange with DPS will provide. In the coming months, we'll be releasing a new data tool on our website that will allow users to explore this information

themselves. We will also be using these data to address significant issues around aging and gender equality in future issues of Trends.

But the availability of such detailed information on the demographic characteristics of our workforce also illustrates the importance of administrative records for economic analysis, and the benefits of secure, limited interagency sharing of these administrative records.

By linking DEED employment records with DPS driver's license records in a way that ensures strict adherence to confidentiality requirements, we are now able to provide clear answers to significant questions that we had to guess at previously. T