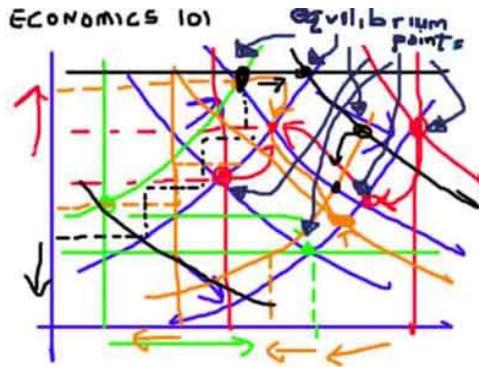


Measuring the Labor Market

Going Beyond Unemployment Rates



Economic Affairs Interim Committee
November 7, 2017
Helena, MT

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Chief Economist

Unemployment Rate

percent of the labor force looking for work

$$\text{Unemployment Rate} = \frac{\text{unemployed persons}}{\text{labor force}}$$



What does the Unemployment Rate Measure?

The unemployment rate measures how hard it is to find a job **if you are looking for a job.**

- Measures the health of the labor **market**, not the demand from the economy or the supply of workers.
- Indicates **changes** in the economy.
- Relative measure over time and across areas.
- Bounded by 0% and rarely will exceed 20%.
 - At higher rates, people will stop looking for a job
 - Higher rates usually indicate wars, dramatic shocks, typically will coincide with government instability, rising crime, protests, other instability

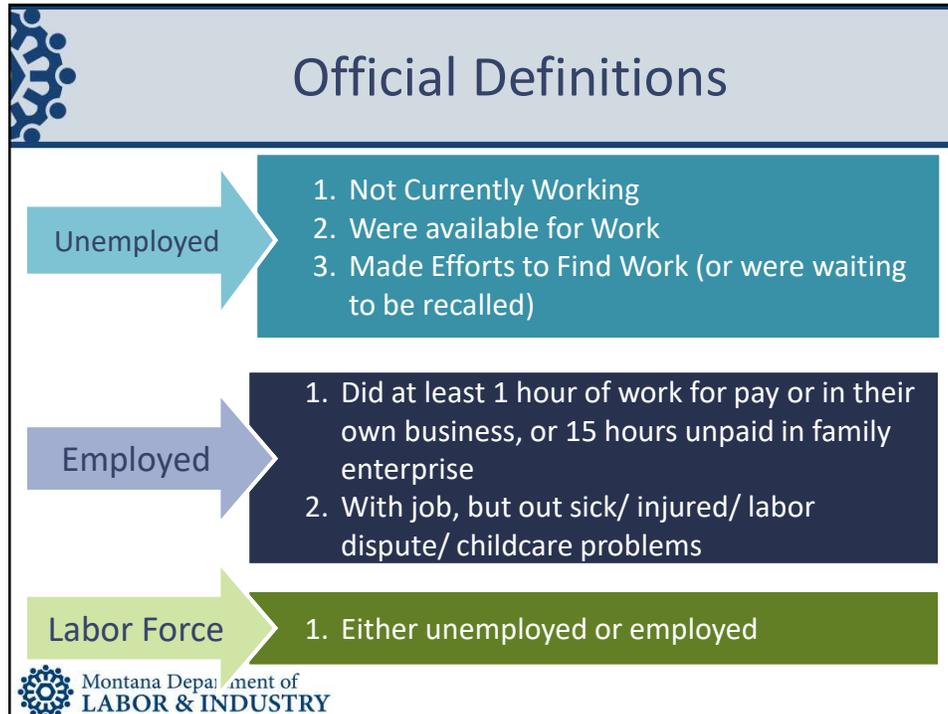



Who measures Unemployment Rates?

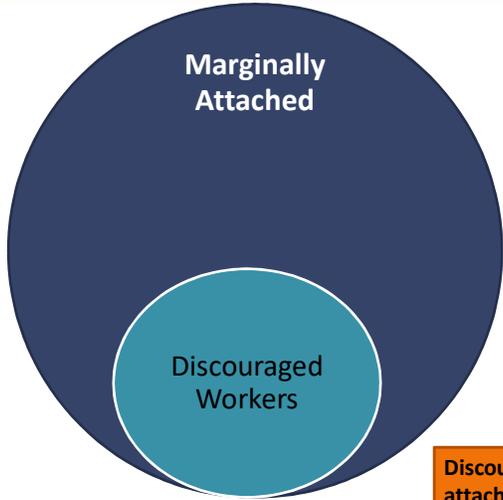
1. Bureau of Labor Statistics
 - Available monthly for U.S., state, county, MSAs, and Montana reservations.
 - Monthly data collected from 1,400 Montana households, 3,600 Montana businesses, plus claims.
 - Data drives model estimates, benchmarked annually
2. Census Bureau
 - 19,500 households & group quarters surveyed annually
 - Available for state and nation annually. Counties, cities, and reservations use 5-year averages.

Warning:
Other organizations collect labor market data, but not unemployment rates.





Marginally Attached vs. Discouraged



Marginally Attached

Discouraged Workers

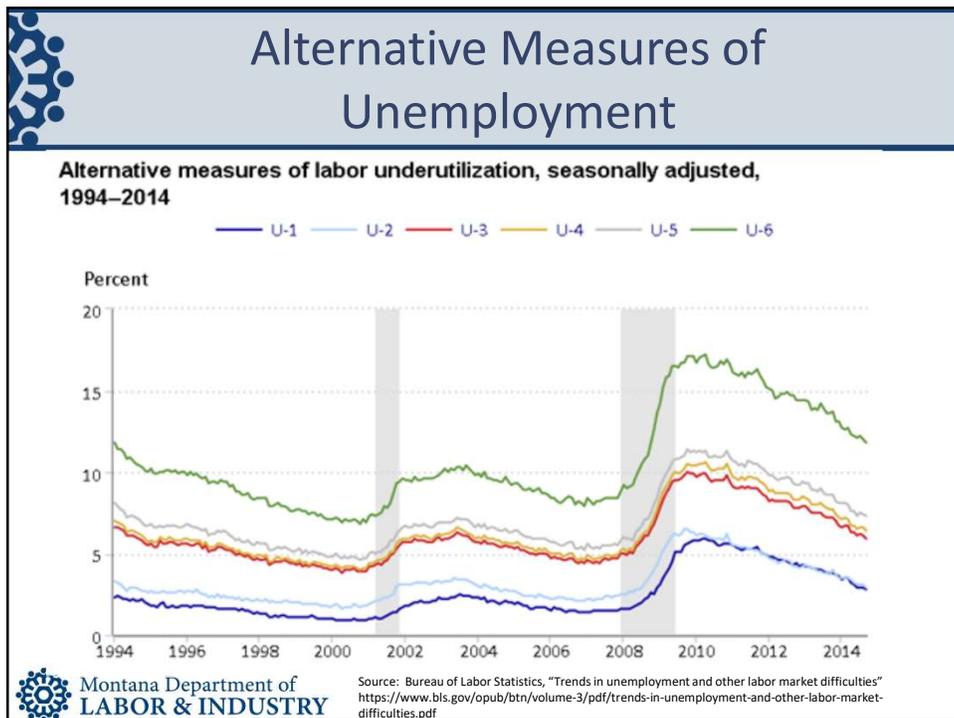
Looked for work in last year, but have not looked for work in the last month.

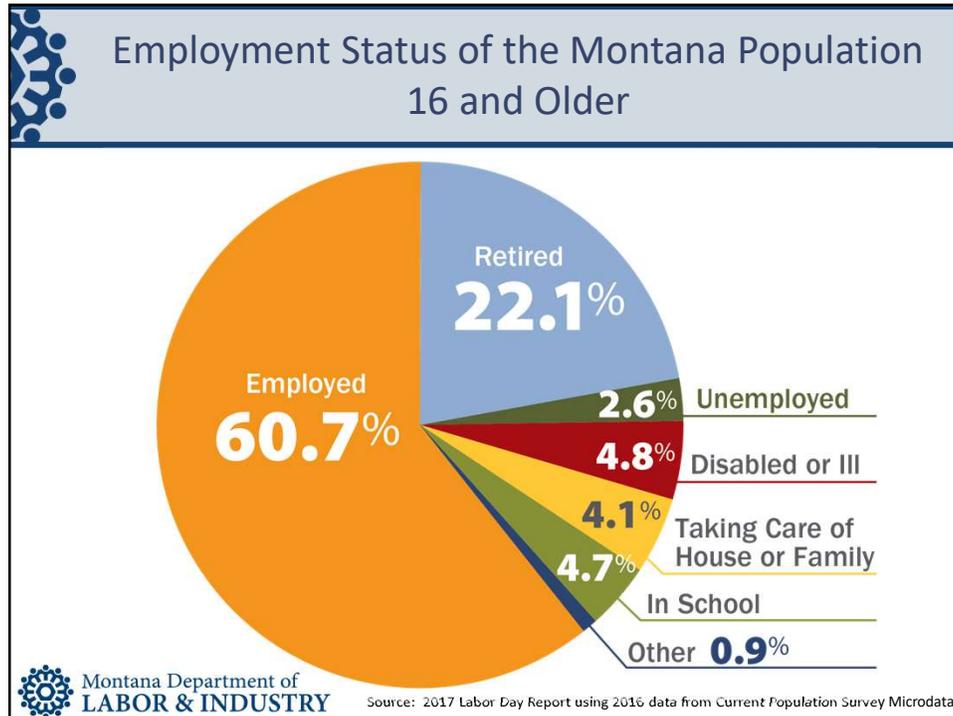
Lots of reasons why:

- Can't find suitable work.
- Can't find work that is enough to pay for childcare.
- Health reasons.
- Exploring self-employment (but did not have clients).
- Transportation issues.
- Ski / surfing season.

Discouraged workers are a sub-set of marginally attached that gave up looking because they couldn't find work.

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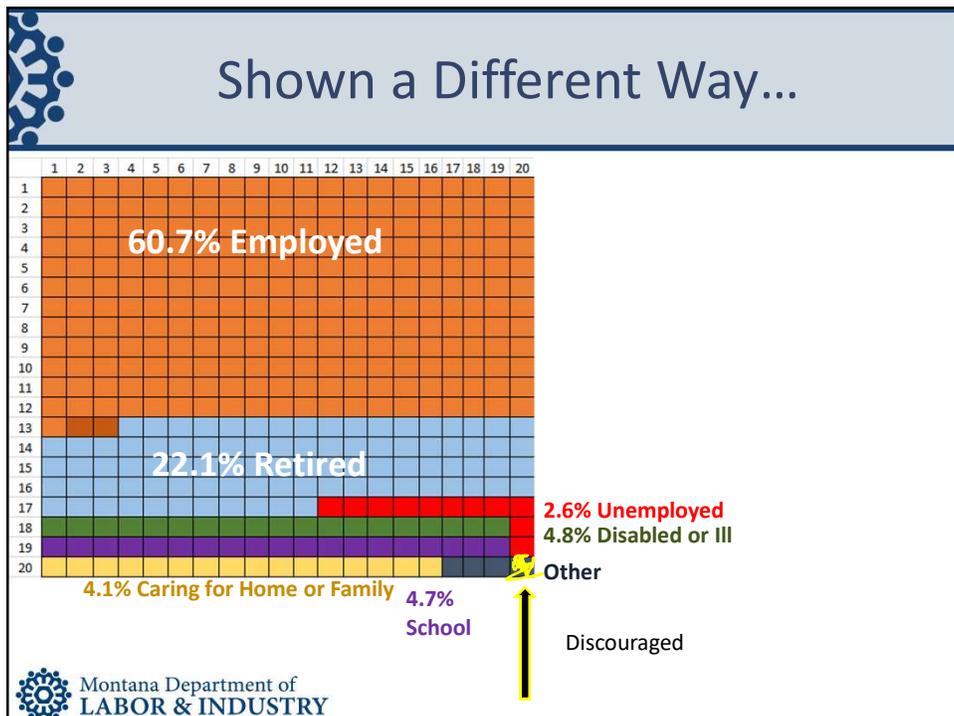
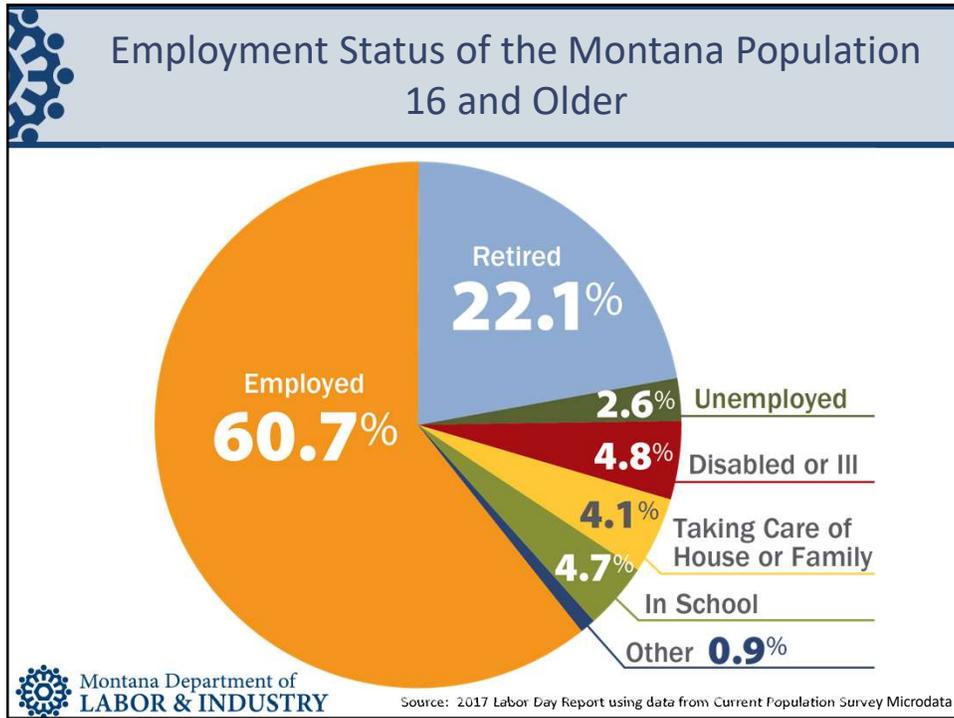




Why isn't there more unemployment information?

1. Doesn't add much additional information on economic changes.
 - Data is captured and can be used at state level.
2. Sampling is expensive because population is small.

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Let's Play Keno...

- Must be a random selection of squares / people.
- Try to hit the one square (#400) that is a discouraged worker.
- Gambling costs money, and so do surveys. Let's assume \$50 per person, and budget is \$500.

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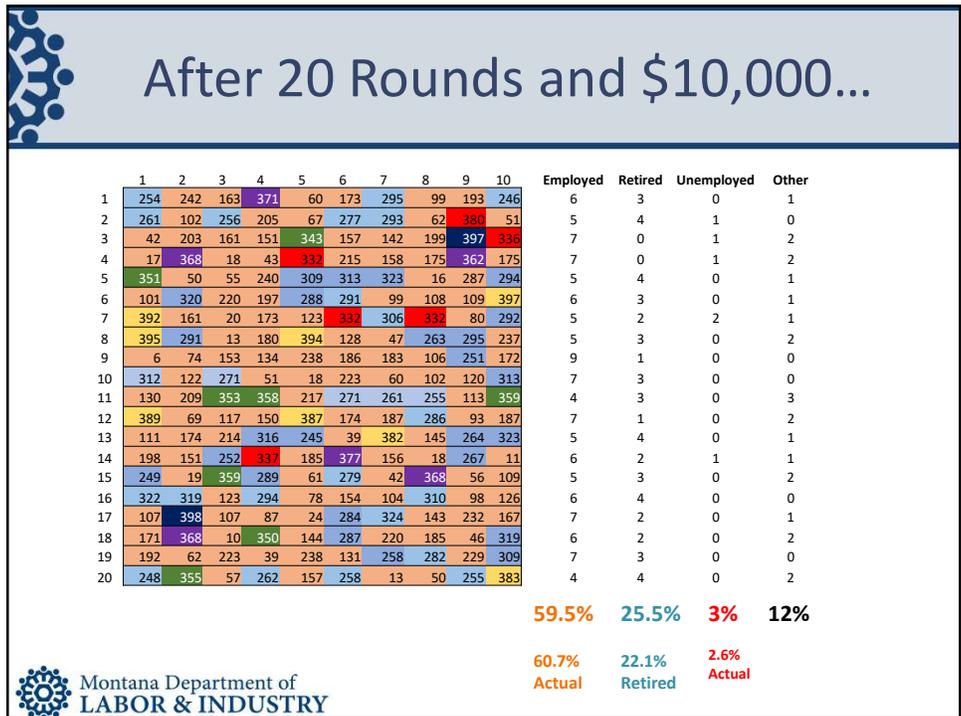
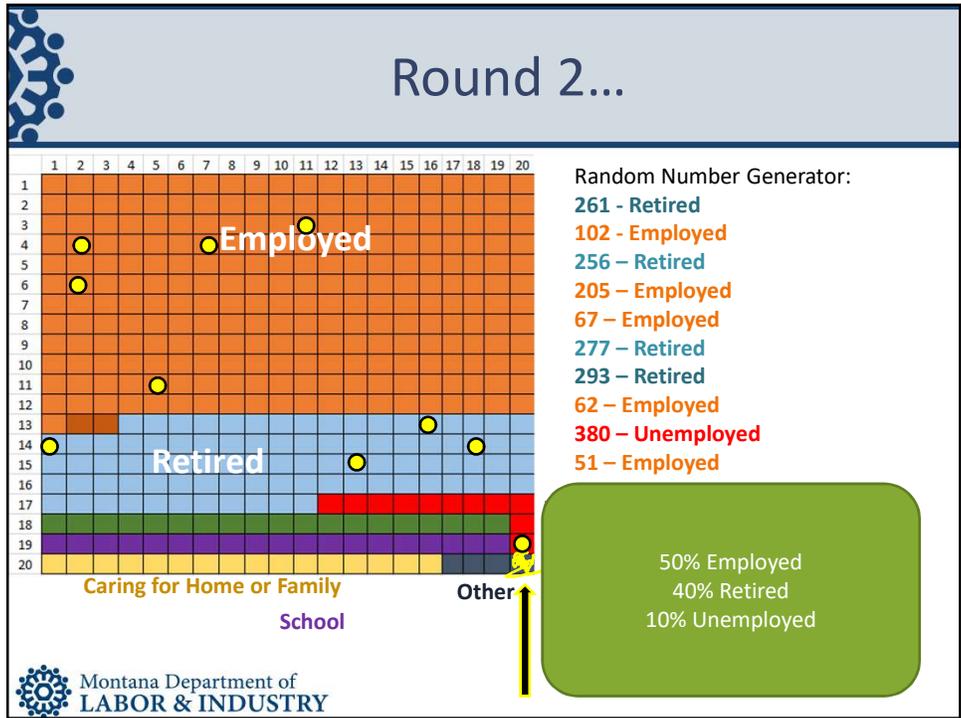
Let's Play Keno...

Random Number Generator:

- 254 - Retired
- 242 - Employed
- 163 - Employed
- 371 - In School
- 60 - Employed
- 173 - Employed
- 295 - Retired
- 99 - Employed
- 193 - Employed
- 246 - Retired

60% Employed
30% Retired
10% In School
0% Everything else

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Lessons Learned...

Category	Percentage
Employed	60.7%
Retired	22.1%
Caring for Home or Family	4.1%
School	4.7%
Other	8.4%

- It is easy to hit a big population.
 - Hitting a small population is very difficult unless you sample everyone.
- More sample would make it more likely to hit a small population.
 - But it also costs a lot more.
 - Rural sampling costs more.
- We occasionally need 100% sample to know what we are missing.

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Why is it so hard to measure rural economies?

- Small populations require costly and large samples
- Rural areas have the highest data collection costs due to population density
- Flaws in one data source affect other data
- For reservations, sovereignty may require cooperation between governments

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Why isn't there more unemployment information?

1. Doesn't add much additional information.
2. Sampling is expensive because population is small.
3. The unemployment rate is not the only measure of the labor market.
 - (and other measures might be better!)




Other Measures of the Labor Market and Economic Well-Being

- Labor force participation
- Employment to population
- Job openings
- Hours worked
- Wages / wage growth
- Employment levels
- Self-employment
- UI claims level
- Poverty rates
- Earned income
- Savings rates
- Personal income & GDP
- Vacancy rate
- Part-time work prevalence
- Education/ experience/ skills levels
- Job mobility
- Migration
- Commuting patterns
- Benefits

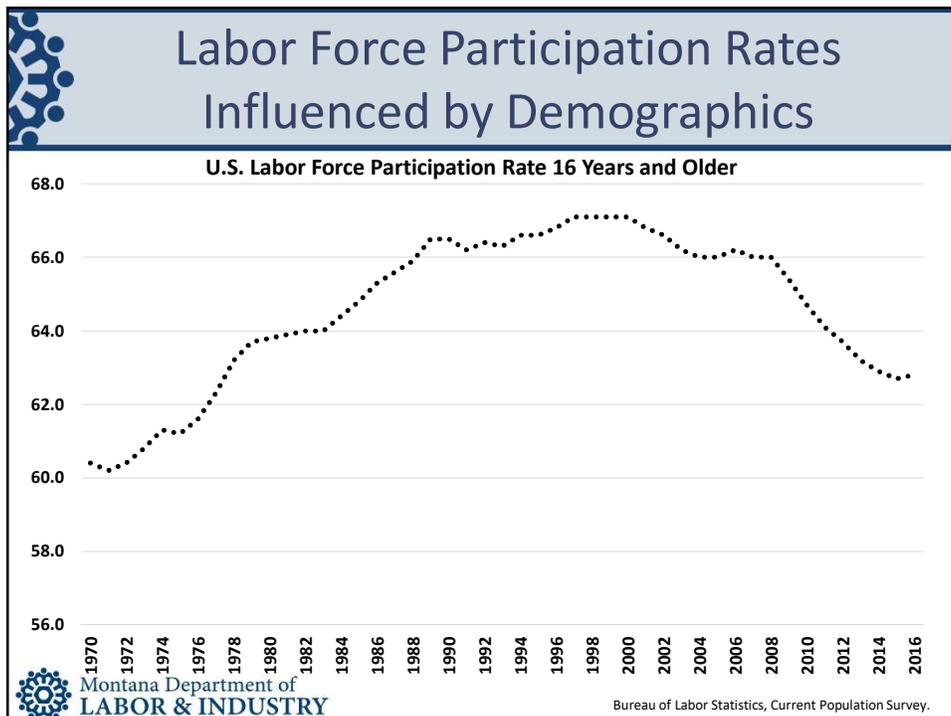
Key: Not available in Montana except by special research.
Only available at state level. Limited data available.

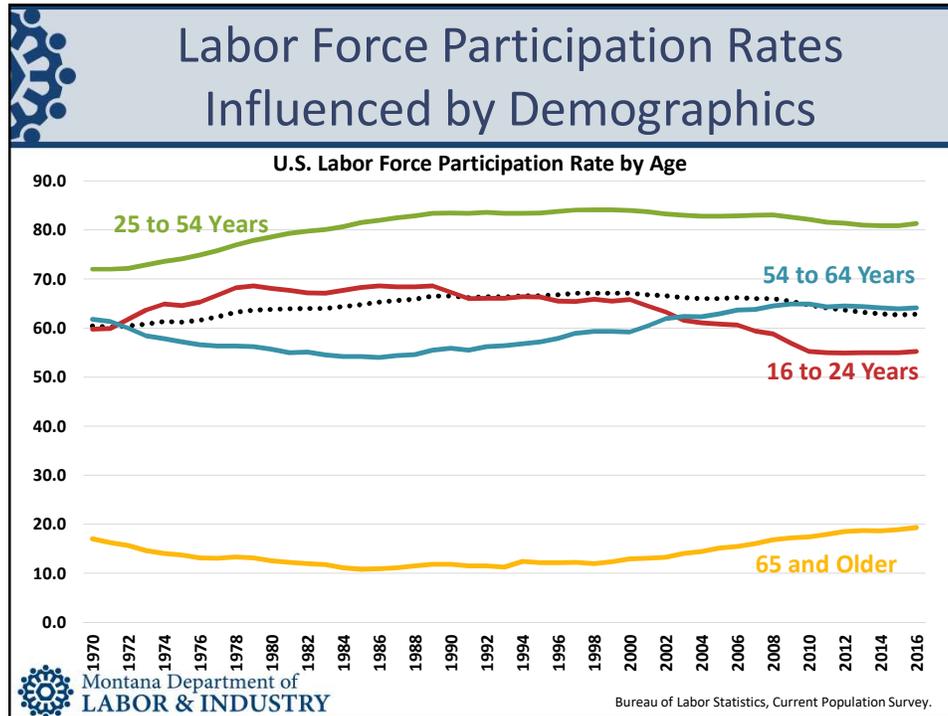


Other Employment Metrics: Labor Force Participation Rates

- Percent of the population over 16 in the labor force
- Used as a measure of economic engagement
- Affected by economic performance, age, demographics, wages, and more.
- Labor force participation for those of normal working age (16 to 64) becoming more important as baby boomer generation retires.


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Other Employment Metrics

Employment to Population Ratios

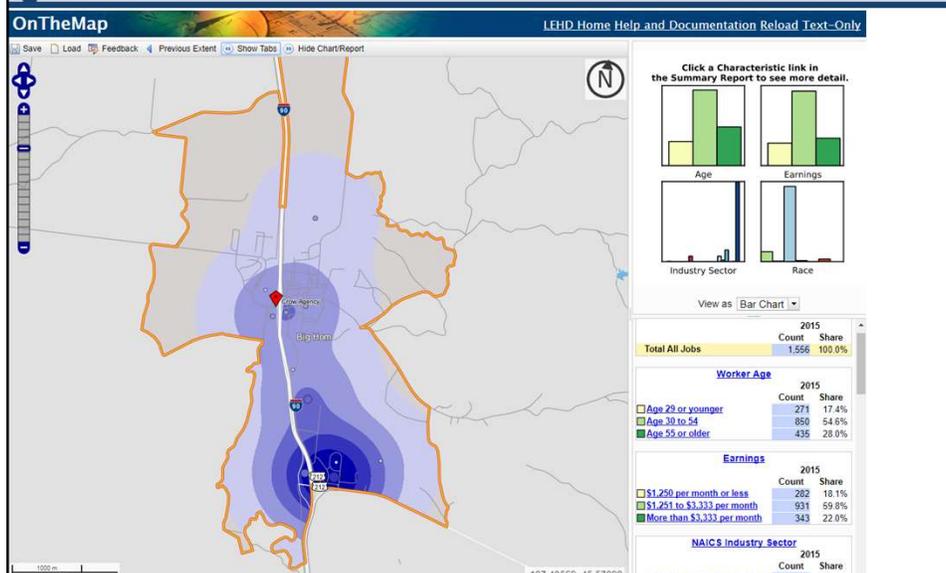
- Percent of population who are employed (Census)
- Affected by demographics
 - Sometimes adjusted for demographics using just people 16 to 64 years of age.
- Combination of labor force participation and unemployment rates.
- Better measure for persistently poor economic conditions, but not a measure of economic changes.

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Example of On The Map Data





Dangers to Data Quality

- Privacy concerns with sharing administrative data.
- Making the decennial Census optional.
- Census Bureau funding cuts / mis-management.
- National move to measure MSAs only.



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MORE INFORMATION AVAILABLE:

WWW.LMI.MT.GOV

SOURCES FOR LOCAL INFORMATION:
LOCAL AREA PROFILES: LMI.MT.GOV/LOCAL-AREA-PROFILES

QUARTERLY WORKFORCE INDICATORS
ON THE MAP
AMERICAN COMMUNITY SURVEY



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