

Mapping San Luis Obispo's Economic Specializations

LQ Analysis with QCEW Data

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This project explores the industrial composition of San Luis Obispo (SLO) county by using Location Quotients (LQs) to identify industries that are more concentrated locally compared to the national economy. This purpose is to determine which sub-sectors and industries play a disproportionately significant role in SLO County's economy.

1. Loading and Preparing the Data

To begin this process, we loaded three data sets:

```
if (download) {  
  slo_county <- qcew_area(year, qtr, fips_county)  
  national <- qcew_area(year, qtr, fips_national)  
} else {  
  slo_county <- read_csv("data/slo.csv")  
  national <- read_csv("data/us.csv")  
}
```

```
Rows: 1766 Columns: 38
```

```
-- Column specification -----
```

```
Delimiter: ","
```

```
chr (6): area_fips, industry_code, qtr, disclosure_code, lq_disclosure_code...
```

```
dbl (32): own_code, agglvl_code, size_code, year, annual_avg_estabs, annual_...
```

```
i Use `spec()` to retrieve the full column specification for this data.
```

```
i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```
Rows: 4524 Columns: 38
```

```
-- Column specification -----
```

```
Delimiter: ","
```

```
chr (6): area_fips, industry_code, qtr, disclosure_code, lq_disclosure_code...
dbl (32): own_code, agglvl_code, size_code, year, annual_avg_estabs, annual_...
```

i Use ``spec()`` to retrieve the full column specification for this data.

i Specify the column types or set ``show_col_types = FALSE`` to quiet this message.

```
naics <- read_xlsx("data/naics.xlsx") %>%
  select(2:3) %>%
  rename(codes = 1, title = 2) %>%
  drop_na()
```

New names:

```
* `` -> `...4`
```

```
* `` -> `...5`
```