

SOCIAL JUSTICE & MATHEMATICS

A. Demographics, especially over- or under-representation of different groups

1. Number of expected people in various groups if population were evenly distributed, e.g. women in state legislatures or black scientists, compared to reality
2. Immigration: who comes from where? Why? What percentage of people in [the US/the state/ the city or county] are immigrants?
3. Student population by race, ethnicity, and/or gender at different K-12 schools or colleges and universities, and how that compares to the population at large
4. Discipline rates and types at school by race, ethnicity, and/or gender (especially for a specific type or level of infraction), and how that compares to the overall school population
5. State populations: where people were born, and representing changes over time
6. Share of a group in the general population vs. share of that group in government positions (elected or appointed)
7. Homeless population (local or national): who is over/underrepresented compared to the general population?

B. Health

1. Nutrition: percent or amount of RDA for certain nutrients, percent or amount of carbohydrates or fats, calories, servings per amount available, cost of food
2. Infant mortality rates
3. Death rates from various causes, by location or population group (race, ethnicity, gender, income status, etc.)
4. Addiction rates (or imprisonment rates related to addiction) for various population groups
5. Money spent combating various types of drug/alcohol use or addictions: costs (e.g. incarceration costs or treatment costs) and/or amount per person

C. Government and Economics

1. Unemployment/employment rates: for each, how would you calculate it? How is it actually calculated?

2. Taxes (all types)
3. Transportation costs and/or average transportation time spent per person and what they depend on (for public transit, car(s), by destination type, etc.)
4. Wages/salaries: ratio of CEO wage to average- or lowest-paid worker's wage
5. Value of a dollar: how much of a chosen item or service could you buy with a dollar in different years?
6. Poverty line or free-and-reduced-lunch income level: how and where is it set? If a family income was at that level, how much would they be able to spend on housing, food, etc.?
7. Pay per hour/day/week/year of work for various jobs, for men vs. women, etc.
8. Federal and/or local government expenditures per capita (predicted or desired vs. actual)
9. Share of a group in the general population vs. share of that group in government positions
10. Voting rates or disenfranchisement rates (e.g. laws about felons and voting) for various population groups by race, ethnicity, age, etc.

D. Schools

1. Student population by race, ethnicity, and/or gender (or other categories for which there are data) at different K-12 schools/college, and how that compares to population at large
2. Discipline rates and types at school by race, ethnicity, and/or gender (especially for a specific type or level of infraction), and how it compares to the overall school population
3. Poverty line or free-and-reduced-lunch income level: how and where is it set? If a family income was at that level, how much would they be able to spend on housing, food, etc.?
4. Money per student, students per class, student:teacher ratio, student:staff ratio, hours of class time per subject, and other rates & ratios associated with schools (can also compare across states, districts, public vs. private, now vs. in past, etc.)

E. And More

1. Transportation: how does the time or cost an average person spends on transportation depend on where they live, where they go, and what form of transportation they use?
2. How would the geography of a place be affected if ocean levels rose? How much area of land would be lost?

3. Locations of housing and distances from sites of interest, including:
 - employment centers
 - grocery stores
 - public transit
 - schools
 - hazardous waste sites
 - liquor stores
 - health clinics or hospitals
4. Price distribution (and measures of center, measures of variability, etc.) of something for two or more different locations or groups of people (e.g. cost of a gallon of milk in different places)
5. Wealth or income distribution: Where are the median, mean, quartiles, etc.? How different are they for different countries/states/population groups?
6. Distribution of credit card, student loan, and/or housing debt: Where are the median, mean, quartiles, etc.? How different are they for different countries/states/population groups?
7. Statistical comparison of wages/salaries: distributions and measures of center and variability for male vs. female, union vs. non-union, etc.
8. Distribution of housing costs (renting or buying or both) and/or mean or median housing costs in different places or for different groups
9. Lotteries: likelihood of winning
10. Death penalty and DNA statistics: what do DNA results tell us about a person's likely guilt or innocence, and how accurate are they?
11. Accuracy of drug testing: probability of false positives or false negatives
12. Housing segregation: given local rates of various population groups by race or ethnicity, how probable is it that all the people in your or someone else's [block/apartment floor/etc.] would be the same race and ethnicity? How does that line up with your experience?
13. Relationships between statistical quantities like test scores vs. income, health insurance status vs. income, employment status vs. educational attainment, home ownership vs. income