

Scorecard & Tableau : Development & Documentation

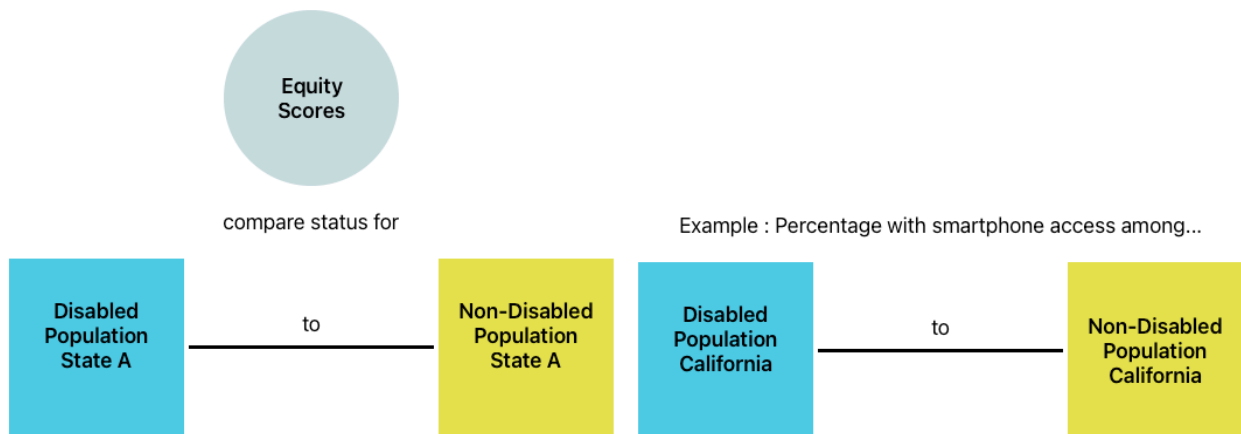
#adaparc

Theory

there are three ways we can think about the 'state of affairs' for the disabled population in any given state x for metric y:

1. how does disabled population in state x fare on metric y compared to disabled population in other states (relative)
 2. how does disabled population in state x fare on metric y compared to non-disabled population in own state (disparity/equity)
 3. how does disabled population in state x fare on metric y, compared to **both** the non-disabled population of its own state and the disabled population of other states (overall)
- Overall scores take the average of a state's relative and equity score on a given metric.





Files

- ADA-PARC-Website-Design
 - Type_Category_Dash.twb
 - between_states
 - within_states
- dashboards are in Website Design folder
- spreadsheet scorecards for relative scores in the between_states folder
- spreadsheet scorecards for disparity / equality scores in the within_states folder

Scorecards

Flowchart : How Indexes Build On Each Other



Logical Structure

- scorecards
 - ADA-PARC Overall
 - ◆ ADA-PARC Combined
 - relative
 - ◆ Relative Overall
 - ◆ Community Living Relative
 - ◆ Community Participation Relative
 - ◆ Work Economic Relative
 - disparity / equity
 - ◆ Equity Overall
 - ◆ Community Living Equity
 - ◆ Community Participation Equity
 - ◆ Work Economic Equity

Calculation / Scale

Relative Scores

- 100 point scale achieved

- calculating z-score for each measure capped between -3 and 3 (reversing if a higher score on a measure is bad e.g. less_than_highschool_pct)
 - then using formula $16.6666667z + 50$ to generate index score
 - taking row average(s) of index scores to calculate score for categories or overall score
- Relative scores indicate how favorable conditions are for a given state's disabled population compared to the disabled population of other states.

Equity Scores

- 100 point scale : achieved by
 - calculating 'disparity' value for each measure by subtracting measure from pwd by pwd (e.g. pwd_smartphone - pwod_smartphone)
 - calculating z-score (capped b/w -3 and 3) for each measure's disparity value, reversing if higher score is bad
 - then using formula $16.6666667z + 50$ to generate index score
 - taking row average(s) of index scores to calculate score for categories or overall score
- Equity scores measures how favorable conditions are for a given state's disabled population relative to the non-disabled population of the same state.

header variables

- **GEOID**
 - ACS identification number for state
- **NAME**
 - name of state
- **ABBR**
 - abbreviation for state
- **year**
 - year of the temporal snapshot for measure

Overall Scorecard

12 indices

all columns

- **Community Living Equity Score**

- A state's average equity score across the measures of the community living category.
- **Community Participation Equity Score**
 - A state's average equity score across the measures of the community participation category.
- **Work Economic Equity Score**
 - A state's average equity score across the measures of the work economic category.
- **ADA-PARC Equity Score**
 - A state's average equity score across all three of the community living, community participation, and work economic categories
- **Community Living Relative Score**
 - A state's average relative score across the measures within the community living category.
- **Community Participation Relative Score**
 - A state's average relative score across the measures within the community participation category.
- **Work Economic Relative Score**
 - A state's average relative score across the measures within the work economic category.
- **ADA-PARC Relative Score**
 - A state's average relative score across all three of the community living, community participation, and work economic categories.
- **ADA-PARC Community Living Score**
 - A state's average score on the relative dimension and equity dimension within the community living category.
- **ADA-PARC Community Participation Score**
 - A state's average score on the relative dimension and equity dimension within the community participation category.
- **ADA-PARC Work Economic Score**
 - A state's average score on the relative dimension and equity dimension within the work economic category
- **ADA-PARC Score**
 - State's average score across all categories (CL, CP, WE) and both dimensions (Relative, Equity)

Relative Scorecards

Relative Community Living

7 base measures, z-scores, indices

all columns

- pwd_nursing_18_64_pct
- z_pwd_nursing_18_64_pct
- index_pwd_nursing_18_64_pct
 - A state's relative score on the percentage of disabled individuals aged 18-64 living in a nursing home.
- pwd_grpquarters_institution_pct
- z_pwd_grpquarters_institution_pct
- index_pwd_grpquarters_institution_pct
 - A state's relative score on the percentage of disabled individuals living in an institutionalized group quarters setting.
- pwd_grpquarters_noninstitution_pct
- z_pwd_grpquarters_noninstitution_pct
- index_pwd_grpquarters_noninstitution_pct
 - A state's relative score on the percentage of disabled individuals living in a non-institutionalized group quarters setting.
- pwd_home_pct
- z_pwd_home_pct
- index_pwd_home_pct
 - A state's relative score on the percentage of the disabled population living at home.
- pwd_corrections_pct
- z_pwd_corrections_pct
- index_pwd_corrections_pct
 - A state's relative score on the percentage of the disabled population living in a correctional facility.
- pwd_housing_choice_voucher_pct
- z_pwd_housing_choice_voucher_pct
- index_pwd_housing_choice_voucher_pct
 - A state's relative score on the percentage of the disabled population accessing housing through vouchers.
- pwd_pubhousing_pct
- z_pwd_pubhousing_pct
- index_pwd_pubhousing_pct
 - A state's relative score on the percentage of the disabled population who live in public housing.
- Community Living Relative Score

Relative Community Participation

13 base measures, z-scores, indices

all columns

- pwd_19_64_uninsured_pct
- z_pwd_19_64_uninsured_pct
- INDEX_pwd_19_64_uninsured_pct
 - A state's relative score on the percentage of disabled individuals 19-64 who have access to health insurance.
- pwd_19_64_insured_public_pct
- z_pwd_19_64_insured_public_pct
- INDEX_pwd_19_64_insured_public_pct
 - A state's relative score on the percentage of disabled individuals who are covered by public health insurance.
- pwd_19_64_insured_private_pct
- z_pwd_19_64_insured_private_pct
- INDEX_pwd_19_64_insured_private_pct
 - A state's relative score on the percentage of disabled individuals who are covered by private health insurance.
- pwd_grtoeq_65_insured_private_pct
- z_pwd_grtoeq_65_insured_private_pct
- INDEX_pwd_grtoeq_65_insured_private_pct
- pwd_commute_public_pct
- z_pwd_commute_public_pct
- INDEX_pwd_commute_public_pct
 - A state's relative score on the percentage of the disabled population who commute via public transportation.
- pwd_commute_car_alone_pct
- z_pwd_commute_car_alone_pct
- INDEX_pwd_commute_car_alone_pct
 - A state's relative score on the percentage of the disabled population who commute alone via car.
- pwd_less_than_highschool_pct
- z_pwd_less_than_highschool_pct
- INDEX_pwd_less_than_highschool_pct
 - A state's relative score on the percentage of the disabled population who are less than high school educated.

- pwd_highschoolequiv_pct
- z_pwd_highschoolequiv_pct
- INDEX_pwd_highschoolequiv_pct
 - A state's relative score on the percentage of the disabled population who are high school educated.
- pwd_degree_aa_pct
- z_pwd_degree_aa_pct
- INDEX_pwd_degree_aa_pct
 - A state's relative score on the percentage of the disabled population who have achieved an associate's degree.
- pwd_degree_grtoeq_ba_pct
- z_pwd_degree_grtoeq_ba_pct
- INDEX_pwd_degree_grtoeq_ba_pct
 - A state's relative score on the percentage of the disabled population who have achieved a bachelors degree.
- pwd_computer_pct
- z_pwd_computer_pct
- INDEX_pwd_computer_pct
 - A state's relative score on the percentage of the disabled population who have access to a computer.
- pwd_int_pct
- z_pwd_int_pct
- INDEX_pwd_int_pct
 - A state's relative score on the percentage of the disabled population who have access to the internet.
- pwd_smartphone_pct
- z_pwd_smartphone_pct
- INDEX_pwd_smartphone_pct
 - A state's relative score on the percentage of the disabled population who have access to a smartphone.
- Community Participation Relative Score

Relative Work Economic

5 base measures, z-scores, indices

all columns

- pwd_below_poverty_pct
- z_pwd_below_poverty_pct
- INDEX_pwd_below_poverty
 - A state's relative score on the percentage of the disabled population who are below the poverty line.
- pwd_employed_pct
- z_pwd_employed_pct
- INDEX_pwd_employed_pct
 - A state's relative score on the percentage of the disabled population who are employed.
- pwd_unemployed_pct
- z_pwd_unemployed_pct
- INDEX_pwd_unemployed_pct
 - A state's relative score on the percentage of the disabled population who are unemployed.
- pwd_notlabor_pct
- z_pwd_notlabor_pct
- INDEX_pwd_notlabor_pct
 - A state's relative score on the percentage of the disabled population who are not in the labor force.
- pwd_grtoeq_16_med_individual_income
- z_pwd_grtoeq_16_med_individual_income
- INDEX_pwd_groteq_16_med_individual_income
 - A state's relative score on the median income of the adult disabled population.
- Work Economic Relative Score

Equity Scorecards

Equity Community Living

5 relevant disparity measures, z-scores, indices

All Columns

- pwd_nursing_18_64_pct
- pwod_nursing_18_64_pct
- disparity_nursing_18_64_pct
- z_disparity_nursing_18_64_pct
- index_disparity_nursing_18_64_pct
 - A state's equity score for percentage of disabled individuals aged 18-64 living in a nursing

home.

- pwd_grpquarters_institution_pct
- pwod_grpquarters_institution_pct
- disparity_grpquarters_institution_pct
- z_disparity_grpquarters_institution_pct
- index_disparity_grpquarters_institution_pct
 - A state's equity score for percentage of disabled individuals living in institutionalized groupquarters setting.
- pwd_grpquarters_noninstitution_pct
- pwod_grpquarters_noninstitution_pct
- disparity_grpquarters_noninstitution_pct
- z_disparity_grpquarters_noninstitution_pct
- index_disparity_grpquarters_noninstitution_pct
 - A state's equity score for percentage of disabled individuals living in noninstitutionalized groupquarters setting.
- pwd_home_pct
- pwod_home_pct
- disparity_home_pct
- z_disparity_home_pct
- index_disparity_home_pct
 - A state's equity score for percentage of disabled individuals living at home.
- pwd_corrections_pct
- pwod_corrections_pct
- disparity_corrections_pct
- z_disparity_corrections_pct
- index_disparity_corrections_pct
 - A state's equity score for percentage of disabled individuals living in correctional facilities.
- Community Living Equity Index

Equity Community Participation

7 relevant disparity measures, z-scores, indices

All Columns

- pwd_19_64_uninsured_pct
- pwod_19_64_uninsured_pct
- disparity_pwd_19_64_uninsured_pct
- z_pwd_19_64_uninsured_pct
- index_pwd_19_64_uninsured_pct

- A state's equity score for percentage of disabled individuals aged 19-64 without insurance.

- pwd_grtoeq_65_uninsured_pct
- pwod_grtoeq_65_uninsured_pct
- disparity_pwd_grtoeq_65_uninsured_pct
- z_pwd_grtoeq_65_uninsured_pct
- index_pwd_grtoeq_65_uninsured_pct

- A state's equity score for percentage of disabled individuals 65 and over without insurance.

- pwd_lessthan_highschool_pct
- pwod_lessthan_highschool_pct
- disparity_pwd_lessthan_highschool_pct
- z_pwd_lessthan_highschool_pct
- index_pwd_lessthan_highschool_pct

- A state's equity score for percentage of disabled individuals with less than a highschool education.

- pwd_degree_grtoeq_ba_pct
- pwod_degree_grtoeq_ba_pct
- disparity_pwd_degree_grtoeq_ba_pct
- z_pwd_degree_grtoeq_ba_pct
- index_pwd_degree_grtoeq_ba_pct

- A state's equity score for the percentgae of disabled individuals with a bachelors degree.

- pwd_computer_pct
- pwod_computer_pct
- disparity_pwd_computer_pct
- z_pwd_computer_pct
- index_pwd_computer_pct

- A state's equity score for the percentage of disabled individuals with access to a computer.

- pwd_int_pct
- pwod_int_pct
- disparity_pwd_int_pct
- z_pwd_int_pct
- index_pwd_int_pct

- A state's equity score for the percentage of disabled individuals with access to the intenet.

- pwd_smartphone_pct
- pwod_smartphone_pct
- disparity_pwd_smartphone_pct
- z_pwd_smartphone_pct
- index_pwd_smartphone_pct

- A state's equity score for the percentage of disabled individuals with access to a smartphone.
- Participation Equity

Equity Work Economic

6 relevant disparity measures, z-scores, indices

All Columns

- pwd_below_poverty_pct
- pwod_below_poverty_pct
- pwd_below_poverty_disparity
- pwd_below_poverty_z
- pwd_below_poverty_index
 - A state's equity score for the percentage of the disabled population below poverty.
- pwd_employed_pct
- pwod_employed_pct
- pwd_employed_disparity
- pwd_employed_z
- pwd_employed_index
 - A state's equity score for the percentage of the adult disabled population employed.
- pwd_unemployed_pct
- pwod_unemployed_pct
- pwd_unemployed_disparity
- pwd_unemployed_z
- pwd_unemployed_index
 - A state's equity score for the percentage of the adult disabled population unemployed.
- pwd_notlabor_pct
- pwod_notlabor_pct
- pwd_notlabor_disparity
- pwd_notlabor_z
- pwd_notlabor_index
 - A state's equity score for the percentage of the disabled population not in the labor force.
- pwd_grtoeq_16_med_individual_income
- pwod_grtoeq_16_med_individual_income
- pwd_grtoeq_med_individual_income_disparity
- pwd_grtoeq_med_individual_income_z
- pwd_grtoeq_med_individual_income_index
 - A state's equity score for the median income of the adult disabled population.

- pwd_fulltime_pct
- pwod_fulltime_pct
- pwd_fulltime_disparity
- pwd_fulltime_z
- pwd_fulltime_index
 - A state's equity score for the percentage of the adult disabled population working full time.
- Work Equality Score

Tableau

files saved in Website Design folder

- Overall Workbook
- Community Living - Relative Workbook
- Community Participation - Relative Workbook
- Work Economic - Relative Workbook
- Relative Overall Workbook
- Community Living - Equity Workbook
- Community Participation - Equity Workbook
- Work Economic - Equity Workbook

Logical Structure

- overall
 - relative
 - ◆ overall
 - ◆ Community Living
 - ◆ Community Participation
 - ◆ Work Economic
 - equity
 - ◆ overall
 - ◆ Community Living
 - ◆ Community Participation
 - ◆ Work Economic