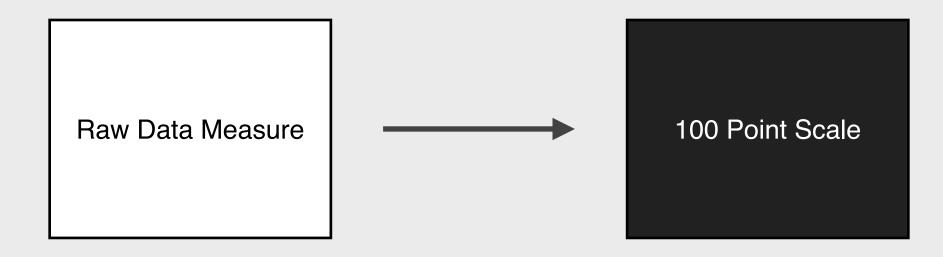
#### **ADA-PARC Scorecard Information**

## Data: Where is it coming from?

Data used for the development of ADA-PARC scorecards derives from the U.S. Census - American Community Survey (ACS) year 2023.

## Theory: Why Scorecards?

Purpose of ADA-PARC Scorecard development is to translate raw measures into easily interpretable and comparable indices of quality of life for the disabled population.



## Visualizing This Process

Disabled Population in State X

VS

Disabled Population in Median State

% of People with Disabilities in Poverty (Illinois)

VS

% of People with Disabilities in Poverty (Median State)

# Calculating Scores

How are raw values placed on a 100 point scale? It takes only two steps!

## Step 1: Z-Score

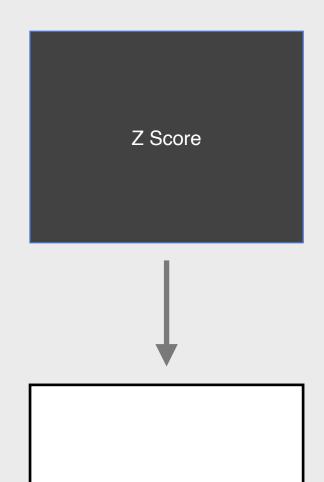
#### Calculate Z-Score for each State

Note: Z-score for each measure is clipped between -3 and 3 (reversing if a higher score on a measure is undesirable (e.g. lessthan\_highschool\_pct) Raw Data Measure Z Score

# Step 2: Normalize

In order to convert z-scores scaled from -3 to 3 into a 100 point scale for each measure, the formula is:

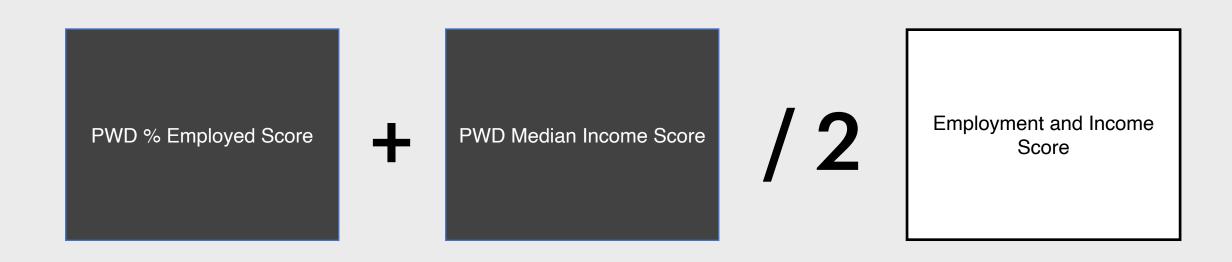
50/3z + 50



100 Point Score

# Step 3: Indices

For scorecard measures such as 'Employment and Income', take state average for relevant measures.



# Scores Calculation: Example

State Name	Raw Score	Z-Score	100pt Score
Pretendland	pwd_home_pct	z_pwd_home_pct	100pt_pwd_home
-	98%	2	85

# Interpretation

```
0 less favorable more favorable
```

Higher # Better outcomes for people with disabilities.

Higher # Represented by darker color.

#### Interpretation: Positive Indicator Example

State Name	Raw Score	Z-Score	100pt Score
-	pwd_median_income	z_pwd_median_income	Median Income Score
Hawaii	\$37,779	2.09	76
Vermont	\$23,809	-1.26	33

## In this condensed table, two states are displayed to highlight how scores are developed and can be compared.

- In Hawaii, the median income for the disabled population is \$37,779 significantly better than average, thus corresponding to a z-score of +2.09 and a 100pt score of 76.
- In Vermont, the median income for the disabled population is \$23,809 which is worse than average, thus corresponding to a z-score of -1.26 and a 100pt score of 33.

#### Interpretation: Negative Indicator Example

State Name	Raw Score	Z-Score	100pt Score
	pwd_below_poverty_pct	z_pwd_below_poverty_pct	Below Poverty Relative Score
Utah	18.06	1.52	69.09
Kentucky	30.83	-1.09	36.27

## In this condensed table, two states are displayed to highlight how scores are developed and can be compared.

- 18% of the disabled population lives in Utah lives in poverty, since this is significantly better than average, Utah ends up with a positive z-score, and thus a 100pt score above 50.
- 30% of the disabled population in Kentucky lives in poverty, this is worse than average, corresponding to a z-score of -1.09, thus Kentucky has a 100pt score below 50.

## Quartiles

For an added layer of nuance, quartiles are also available to compare states.

Q4 = Best Scores : Top 25% of states

Q3 = Above Average Scores: Top 50% of states

Q2 = Below Average Scores: Bottom 50% of states

Q1 = Worst Scores: Bottom 25% of states

# Categories

For this process, scores were calculated for each of our three categories of focus in ADA-PARC:

Community
Living

Community
Participation

Community
Economic

# Community Living

Measures in this category are related to the living situation of the disabled population for each state.

#### **Community Living: Measures**

- Home: % of disabled population living at home.
- Nursing Home % of disabled population % of disabled population age 18-64 living in nursing home.
- Institutionalized Group Quarters: % of disabled population living in institutionalized group quarters.
- Non-Institutionalized Group Quarters % of disabled population living in non-institutionalized group quarters.
- Public Housing: % of disabled population living in public housing.
- Housing Choice Voucher: % of disabled population using housing choice voucher.
- Correctional Facility: % of disabled population in a correctional facility.

#### **Community Living: Scorecard Indices**

Name of Index	Variable 1	Variable 2	Variable 3
Living in Community Score	PWD % Living at Home	PWD % Living in Nursing Homes	PWD % Living in Institution
Affordable Housing Score	PWD % in Public Housing	PWD % Receive Housing Voucher	-

### **Community Participation**

Measures in this category are related to means through which the disabled population is empowered to participate in society.

#### **Community Participation: Measures**

- Uninsured Age 19-64: % of disabled population age 19-64 without health insurance.
- Public Insurance: % of disabled population with public health insurance.
- Private Insurance Age 19-64: % of disabled population age 19-64 with private health insurance.
- Private Insurance Age 65+: % of disabled population age 65+ with private insurance.
- Commute Public Transportation: % of working disabled population commuting by public transportation.
- Commute Car Alone: % of working disabled population commuting by car alone.
- Less Than High School: % of disabled population age 25+ with less than a high school education.
- High School Equivalent: % of disabled population age 25+ with a high school equivalent education.
- Associates Degree: % of disabled population age 25+ with an associates degree or higher level of education.
- Bachelors Degree: % of disabled population age 25+ with a bachelors degree
- Computer Access: % of disabled population with access to a computer.
- Internet Access: % of disabled population with internet access.
- Smartphone Access: % of disabled population with smartphone access.

#### **Community Participation: Scorecard Indices**

Name of Index	Variable 1	Variable 2	Variable 3
Tech Access Score	PWD % Access to Computer	PWD % Access to Smartphone	PWD % Access to Internet
Insurance Access Score	PWD % Public Insurance	PWD % Uninsured	PWD % Private Insurance
Education Access Score	PWD % Less Than High School	PWD % High School Equivaleny	PWD % Bachelors Degree
Transportation Score	PWD % Commute to work by Public Transit	PWD % Commute to Work by Car Alone	-

#### **Work Economic**

Measures in this category are related to labor force characteristics of the disabled population.

#### **Work Economic: Measures**

- Below Poverty: % of Disabled Population living below poverty line.
- Employment: % of working age Disabled Population that is employed.
- Unemployment % of working age Disabled Population that is unemployed.
- Median Income: median individual income for working age disabled population.
- Not In Labor Force: % of working age disabled population not in the labor force

#### **Work Economic: Scorecard Indices**

Name of Index	Variable 1	Variable 2
Employment and Income	PWD % Employed	PWD Median Income
Poverty and Lack of Work	PWD % Below Poverty	PWD % Not in Labor Force