

Socioeconomic status scores for districts and neighbourhoods

Based on data on welfare, level of education and labour participation (SES-WOA)

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Run-up



Run-up to the project

- SCP stopped calculating SES scores for postal code areas
 - Doubts on the reliability of datasources
 - Doesn't fit in regular work program SCP
 - Mapping in districts/neighbourhoods CBS makes more sense
- Pharos, VNG en RIVM: aspire a restart
- Ministry of Health decides in spring 2021 to finance a project at CBS

Projectgoal

- Calculate a widely applicable objective SES score for each municipality/district/neighbourhood, based on solid and future proof datasources at CBS
- Exact method of calculation determined in consultation with group of external experts
VNG, Pharos, RIVM, SCP, Erasmus, GGD-GHOR, gemeenten/VSO, VWS, CBS

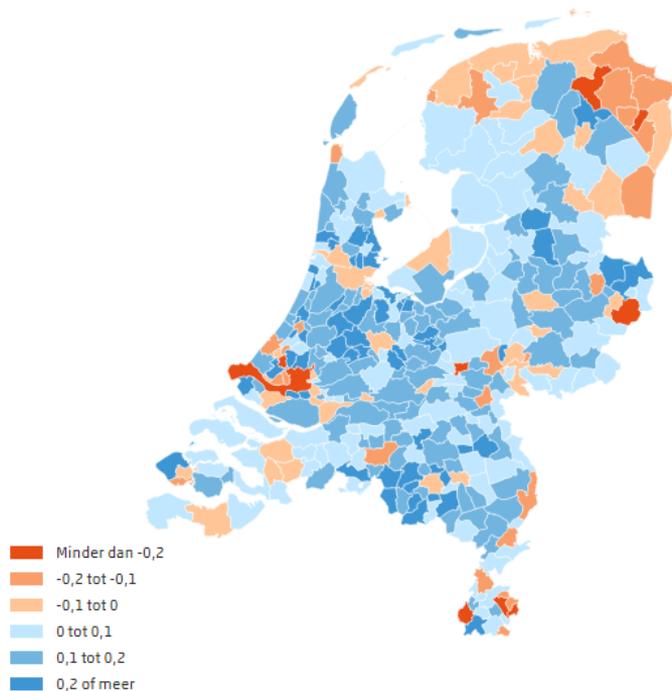


Results



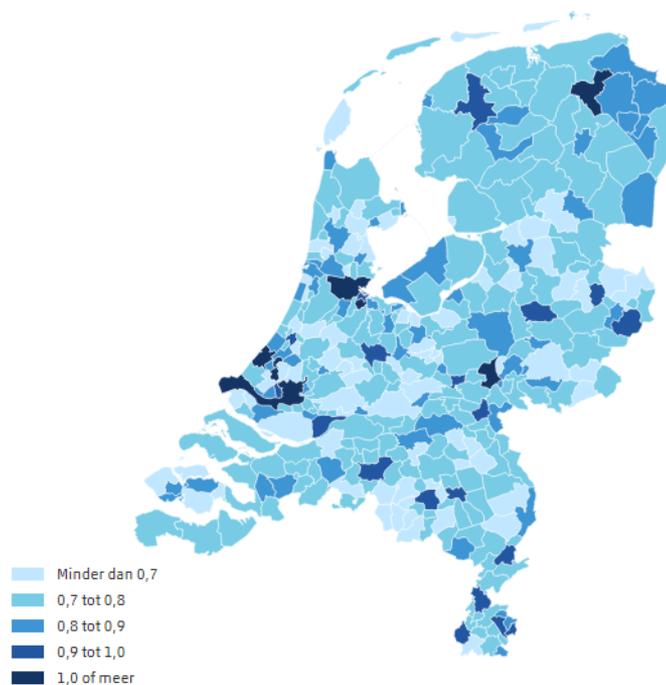
Total score and dispersion: municipalities

SES-WOA-score¹⁾ per gemeente, 2019



¹⁾ sociaaleconomische statusscore o.b.v. welvaart, opleidingsniveau en arbeidsmarktdeelname

Spreiding in SES-WOA-scores¹⁾ per gemeente, 2019



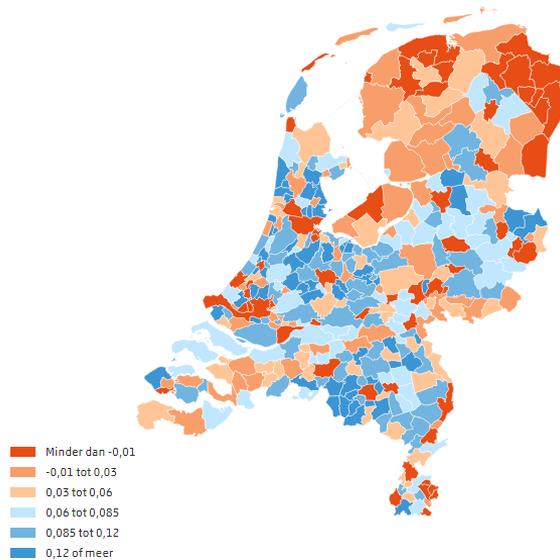
¹⁾ sociaaleconomische statusscore o.b.v. welvaart, opleidingsniveau en arbeidsmarktdeelname



Subscores for municipalities

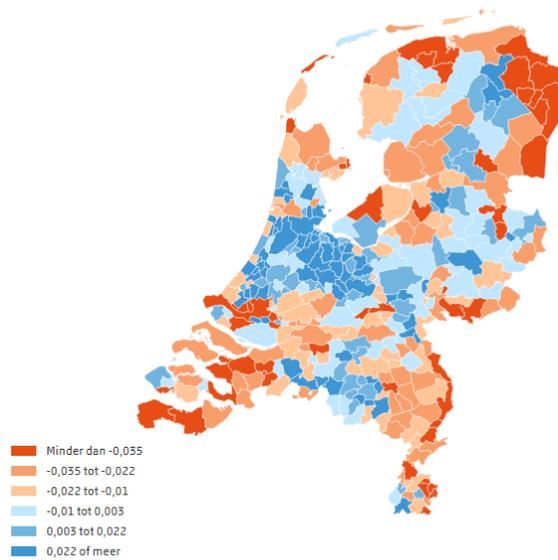
Welfare

SES-WOA welvaart score per gemeente, 2019



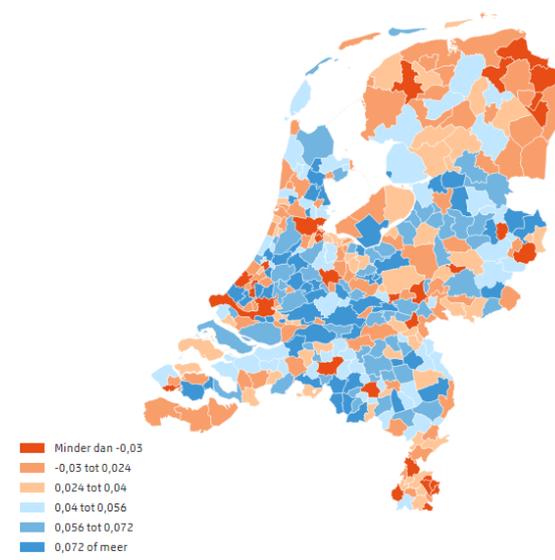
Level of education

SES-WOA opleidingsniveau score per gemeente, 2019



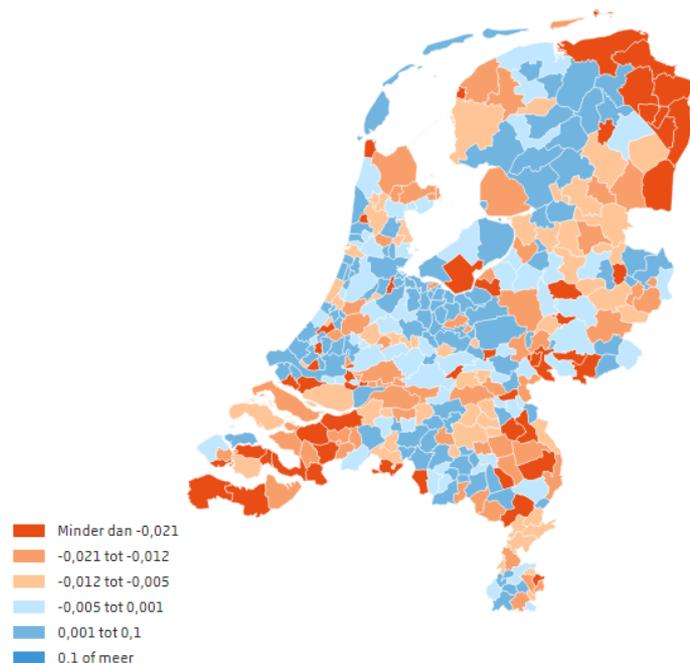
Recent labour participation

SES-WOA arbeidsverleden score per gemeente, 2019



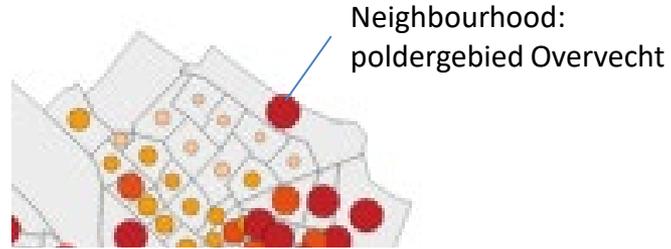
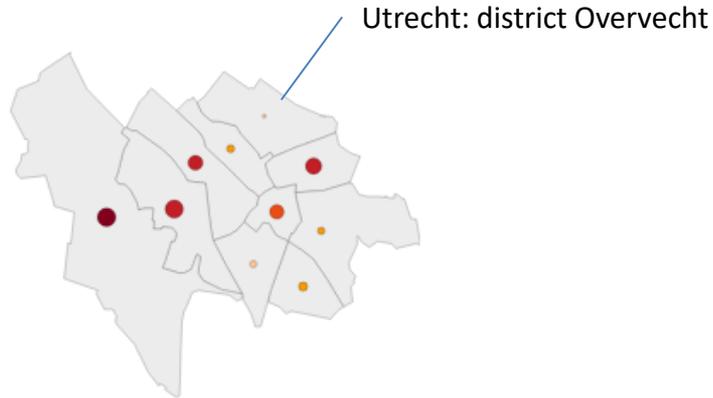
SES-WOA totalscore: difference 2019 - 2014

SES-WOA-score¹⁾ per gemeente, verschil 2019 tov 2014

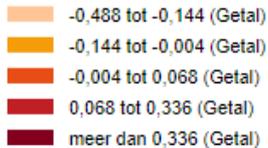


¹⁾ sociaaleconomische statusscore o.b.v. welvaart, opleidingsniveau en arbeidsmarktaandeel

Total scores for districts/neighbourhoods



What does the dispersion show?



StatLine table with scores 2014 t/m 2019

| SES-WOA | | | |
|-------------------------------|--------------|-------|--|
| Totaalscore | | | |
| Ondergrens 95%-interval | Getal | 0,134 | |
| Gemiddelde score | Getal | 0,138 | |
| Bovengrens 95%-interval | Getal | 0,141 | |
| Deelscore financiële welvaart | | | |
| Gemiddelde score | Getal | 0,084 | |
| Deelscore opleidingsniveau | | | |
| Ondergrens 95%-interval | Getal | 0,016 | |
| Gemiddelde score | Getal | 0,020 | |
| Bovengrens 95%-interval | Getal | 0,023 | |
| Deelscore arbeidsverleden | | | |
| Gemiddelde score | Getal | 0,034 | |
| Spreiding | | | |
| Spreiding totaal | | | |
| Ondergrens 95%-interval | Getal | 0,716 | |
| Waarde | Getal | 0,719 | |
| Bovengrens 95%-interval | Getal | 0,723 | |
| Spreiding welvaart | | | |
| Waarde | Getal | 0,325 | |
| Spreiding opleidingsniveau | | | |
| Ondergrens 95%-interval | Getal | 0,277 | |
| Waarde | Getal | 0,280 | |
| Bovengrens 95%-interval | Getal | 0,284 | |
| Spreiding arbeidsverleden | | | |
| Waarde | Getal | 0,275 | |

<https://opendata.cbs.nl/statline/#/CBS/nl/dataset/85163NED>

+ microdatafile on RA with scores for every household

| | | |
|------------------------------------------|---------------|--------|
| Particuliere huishoudens | Aantal | 11 100 |
| Financiële Welvaart | | |
| 1e tot en met 40e percentielgroep | % | 29,4 |
| 41e tot en met 80e percentielgroep | % | 46,1 |
| 81e tot en met 100e percentielgroep | % | 24,5 |
| Gemiddelde percentielgroep | Getal | 57,0 |
| Gestandaardiseerd inkomen | | |
| 1e tot en met 40e percentielgroep | % | 33,6 |
| 41e tot en met 80e percentielgroep | % | 44,0 |
| 81e tot en met 100e percentielgroep | % | 22,4 |
| Gemiddelde percentielgroep | Getal | 54,7 |
| Vermogen | | |
| 1e tot en met 40e percentielgroep | % | 27,1 |
| 41e tot en met 80e percentielgroep | % | 45,3 |
| 81e tot en met 100e percentielgroep | % | 27,5 |
| Gemiddelde percentielgroep | Getal | 58,7 |
| Opleidingsniveau | | |
| Laag | | |
| Ondergrens 95%-interval | % | 19,3 |
| Waarde | % | 19,9 |
| Bovengrens 95%-interval | % | 20,4 |
| Middelbaar | | |
| Ondergrens 95%-interval | % | 42,0 |
| Waarde | % | 42,5 |
| Bovengrens 95%-interval | % | 43,0 |
| Hoog | | |
| Ondergrens 95%-interval | % | 37,1 |
| Waarde | % | 37,7 |
| Bovengrens 95%-interval | % | 38,3 |
| Arbeidsverleden | | |
| Afgelopen 4 jaar voortdurend werkzaam | % | 51,4 |
| Afgelopen 4 jr niet voortdurend werkzaam | % | 7,4 |
| Afgelopen 4 jaar niet werkzaam | % | 3,9 |
| Gepensioneerd | % | 37,3 |



Method of calculation



Data sources

- Population = all private households*
- Data:
 - **Welfare:** income + wealth of household
 - **Level of education**
(maximum of main breadwinner + partner)
 - **Recent labour participation**
(maximum of main breadwinner + partner)

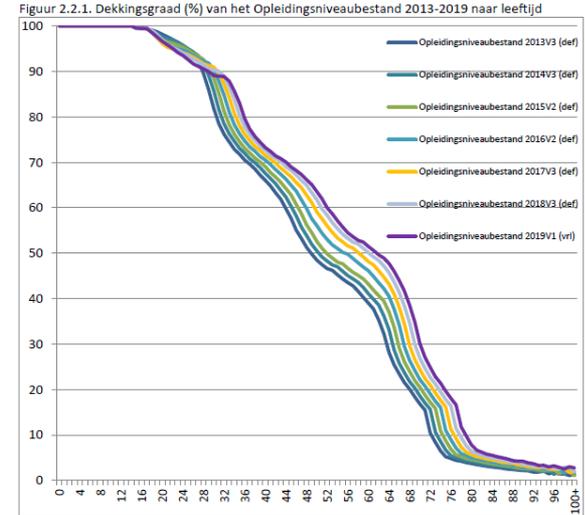


Welfare

- Consists of:
 - Standardized spendable income
(income from labour, self owned enterprise, wealth, benefits/social security etc)
 - Wealth
(bank- and savingaccounts, effects, house/real estate, enterprise value etc minus mortgage , student or other debts)
- Known for every household in population
- Input for SES-WOA score is relative welfare (welfare percentile/decile)

Level of education

- Highest level of education finished
- Known for ‘only’ 12 million people coverage decreases with age
- Missings are first imputed with auxiliary variables such as income, level of urbanity, age
- Input for SES-WOA is maximum of main breadwinner and partner
In 5 classes, following 2nd digit SOI
- Cause of uncertainty margins in results



Recent labour participation

- Extent to which a person has worked in the past 4 years (minimum of 1 h/w)
- Both employees and self-employed
- Doesn't have to be the main source of income
- Known for the entire population
- Input for SES-WOA is max of main breadwinner + partner

Grouping a number of categories (retired, fully, 3-4 yrs, 2-3 yrs, 1-2 yrs, < 1 yr, not at all)



Calculation of scores for each household

- Multiple Correspondence Analysis (MCA)
 - Numerical total score and 3 subscores
 - Total score is sum of subscores
- Baseline year for MCA is now 2019, 5-year revision



Municipality/district/neighbourhood scores

- Municipality/district/neighbourhood layout of 2021 (for all years!)
- Area score is the average of underlying household scores
 - Other regional areas are easily calculated
- Measure of dispersion also calculated
 - Extent to which households within the region differ from one another (mean absolute difference)



What isn't included?

- SES is far more comprehensive: social cohesion, safety, proximity to green space etc etc.
→ therefore SES-WOA as name
- Background variables that might explain (part of) the differences, for instance
 - Regional differences in costs of living
 - Changing demographics in the district population
- Scores for NL as a whole

What can you do with it?



Research on SES-WOA itself

- Detailed regional view on (differences in) vulnerabilities
 - Aids the development of focused regional policy making
- Research on the development of districts/neighbourhoods
 - Monitoring the effect of focused investments in certain areas
 - Shed light on gentrification
 - Etc etc



Auxiliary variables

- SES-WOA as an auxiliary variable in all kinds of research on differences between districts in topics like:
 - Use of health care
 - Livability
 - Broad welfare
 - Participation
 - Welfare
 - Education
 - Behaviour
 - Life style

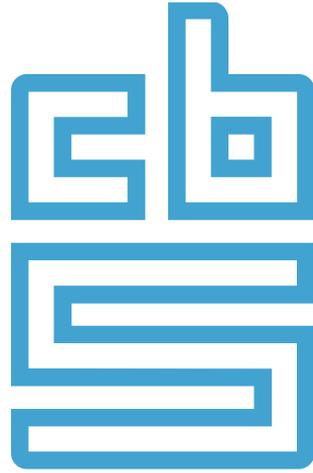


Use in models dividing funds?

- In the past SES-scores from SCP were also used for :
 - Dividing extra budget for GP's in low-SES districts
 - Dividing 'Gezond in stad'-funds

Questions?





Facts that matter