Table 1: Test for variance among families and populations

Model: (rel\_growth\_rate^(1/3)) \* 100 ~ (1 | Population/Family) + Block

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Relative growth rate: 2020 | Family:Population | 2.349 | 1.209 | 5.327 | 0.0625 |
| Population | 0.091 | 0.112 | 0.493 | 0.3815 |
| Residual |  | 21.375 | 94.180 |  |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: (rel\_growth\_rate^(1/3)) \* 100 ~ (1 | Population/Family) + Block + City\_dist

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Relative growth rate: 2020 | Family:Population | 2.221 | 1.178 | 5.184 | 0.068 |
| Population | 0.129 | 0.135 | 0.593 | 0.36 |
| Residual |  | 21.403 | 94.223 |  |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Relative growth rate: 2020 | Block | 2.723 | 0.436 |
| Distance to City Center | 0.442 | 0.506 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: (rel\_growth\_rate^(1/3)) \* 100 ~ (1 | Population/Family) + Block + Urb\_score

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Relative growth rate: 2020 | Family:Population | 2.316 | 1.204 | 5.296 | 0.064 |
| Population | 0.151 | 0.147 | 0.648 | 0.349 |
| Residual |  | 21.384 | 94.056 |  |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Relative growth rate: 2020 | Block | 2.731 | 0.435 |
| Urbanization Score | 0.011 | 0.918 |