# Looking Beyond Activity Labels: Mining Context-Aware Resource Profiles using Activity Instance Archetypes (Demonstration)

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|  |  |
| --- | --- |
| Attribute | Description |
| Phase | The phase within the process. Derived from the “concept.name” attribute, where the first digit of the last part expresses a phase within the process. A total of nine phases are present: Phase 0 – 8 |
| Resource | he unique identifier of the resource who executed this activity instance, e.g. “560462” |
| Case Procedure | Either *blank* (no value), “Regulier” (regular), or “Uitgebreid” (comprehensive) |
| Case Status | Either “G” or “O”. We filtered out “T”, because this only applied to two cases across all logs |
| Weekday | Number indicating the day of the week, starting with “1” for Monday. Derived from the timestamp indicating when the activity was completed |
| Case Parts | The category/ies the application relates to. Derived from the “(case) parts” attribute and transformed into dummy variables. An activity instance applies to at least one category, but multiple categories could be applicable. Some categories were aggregated to limit the number of variables, e.g. everything related to environment was bundled into one dummy. A total of fourteen categories are present, although not every municipality dealt with all categories: “Aanleg” (installation), “Bouw” (construction), “Brandveilig” (fireproof), “Flora en fauna” (flora and fauna), “Gebiedsbescherming” (area protection), “Handelen in strijd met regels RO” (acting in violation of spatial planning rules), “Inrit/uitweg” (entrance/exit), “Integraal” (integral), “Kap” (tree felling), “Milieu” (environment), “Monument” (monument), “Reclame” (advertisement), “Roerende zaken” (movable property), and “Sloop” (demolition) |

Amount of clusters: where the BIC bends (no significant improvement anymore) and no cluster should be smaller than 5%

Activity instance archetypes:

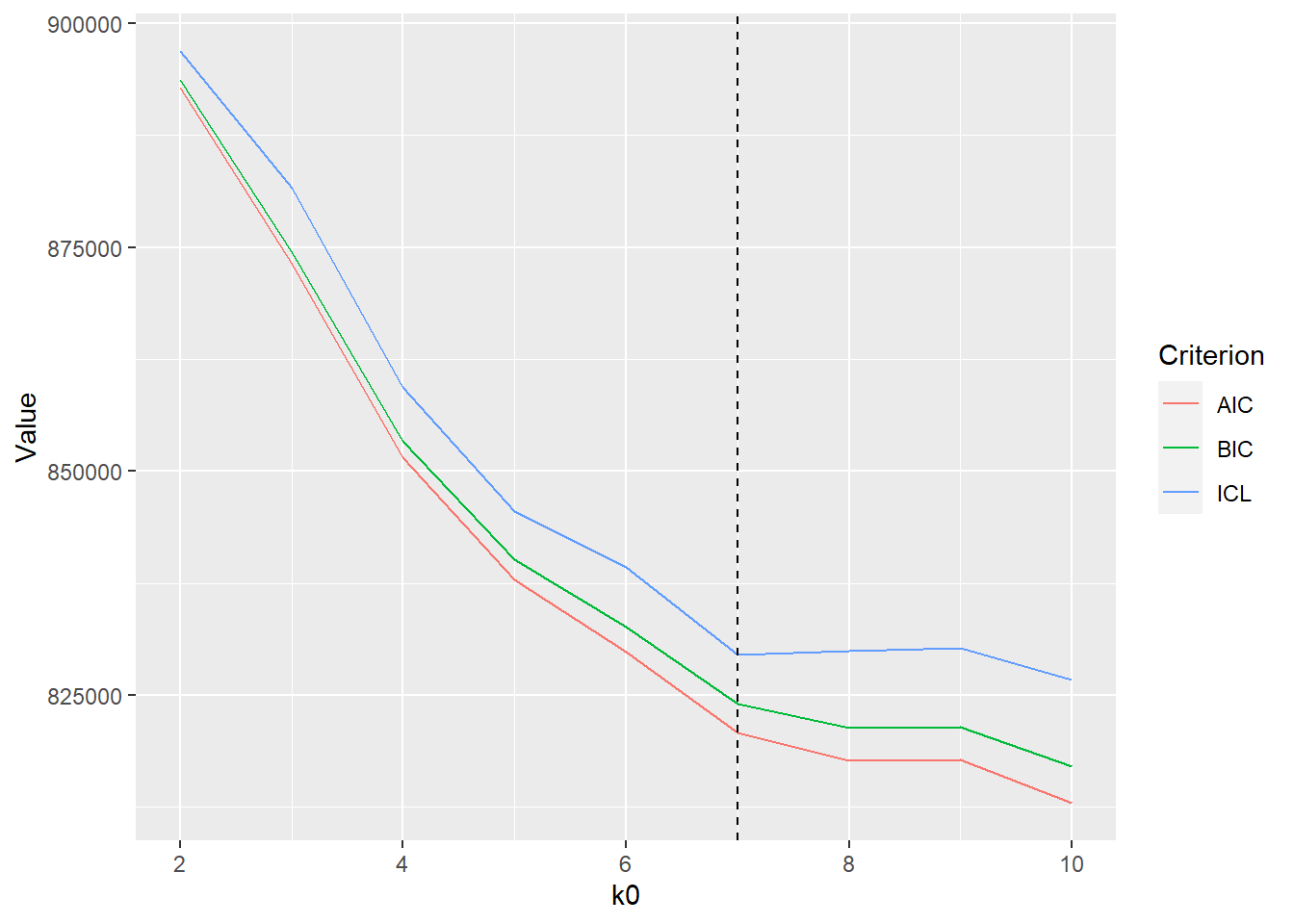
* Phase: add until 70%
* Weekday: Monday+Thursday+Friday = “beginning/end of week”, Tuesday+Wednesday = “midweek”, Saturday+Sunday = “weekend”

Specialism:

* Either 1 or two activity instance archetypes (>70%, rest < 10%) + at least one group with 50%
* All resources in 1 clusters should satisfy

## Municipality 1

7 clusters:



## Cluster n rel

## 1 1 4681 0.08966402

## 2 2 4089 0.07832433

## 3 3 9369 0.17946213

## 4 4 9279 0.17773819

## 5 5 17848 0.34187641

## 6 6 4225 0.08092940

## 7 7 2715 0.05200552

## Phase Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7

## 1 phase0 50.89% 31.43% 88.27% 18.89% 35.47% 28.19% 35.56%

## 2 phase1 12.64% 11.87% 11.35% 2.95% 19.5% 11.62% 18.91%

## 3 phase2 4.23% 6.03% 0% 1.62% 11.61% 7.65% 10.66%

## 4 phase3 4.12% 7% 0% 1.44% 13.04% 8.86% 9.2%

## 5 phase4 13.83% 17.22% 0% 25.73% 18.97% 25.59% 14.83%

## 6 phase5 7.72% 15.19% 0.02% 46.04% 1.19% 16.28% 10.23%

## 7 phase6 0.79% 0% 0% 0.05% 0.05% 0.08% 0%

## 8 phase7 1.82% 3.45% 0.11% 0.93% 0.08% 0.4% 0.52%

## 9 phase8 3.95% 7.81% 0.25% 2.34% 0.09% 1.33% 0.09%

## CaseProcedure Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7

## 1 35.98% 100% 93.62% 89.41% 96.65% 91.85% 94.32%

## 2 Regulier 0% 0% 1.55% 3.44% 1.5% 0.88% 2.26%

## 3 Uitgebreid 64.02% 0% 4.84% 7.15% 1.85% 7.27% 3.42%

## CaseStatus X1 X2 X3 X4 X5 X6 X7

## 1 G 81.21% 89.13% 47.62% 48.29% 50.68% 26.86% 85.43%

## 2 O 18.79% 10.87% 52.38% 51.71% 49.32% 73.14% 14.57%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7

## 1 1 21.89% 37.13% 34.57% 15.33% 22.43% 21.36% 23.15%

## 2 2 13.52% 5.23% 8.60% 46.06% 25.89% 34.50% 36.23%

## 3 3 6.61% 4.99% 4.60% 10.60% 14.94% 13.93% 15.31%

## 4 4 36.85% 37.62% 40.84% 9.78% 21.32% 10.42% 13.61%

## 5 5 21.06% 15.01% 10.93% 18.19% 15.38% 19.80% 11.69%

## 6 6 0.04% 0.00% 0.22% 0.03% 0.03% 0.00% 0.00%

## 7 7 0.04% 0.02% 0.24% 0.00% 0.00% 0.00% 0.02%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7

## 1 Begin/end of week 79.79% 89.76% 86.34% 43.30% 59.13% 51.58% 48.45%

## 2 Midweek 20.13% 10.21% 13.20% 56.67% 40.83% 48.42% 51.54%

## 3 Weekend 0.08% 0.02% 0.46% 0.03% 0.04% 0.00% 0.02%

## CasePart X1 X2 X3 X4 X5 X6 X7

## 1 Aanleg 0.00% 1.65% 5.60% 0.39% 0.50% 28.96% 0.00%

## 2 Bouw 21.24% 0.00% 83.70% 100.00% 100.00% 17.49% 16.38%

## 3 Brandveilig 0.74% 0.00% 2.96% 2.12% 0.40% 13.12% 0.00%

## 4 FloraFauna 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%

## 5 Gebiedsbescherming 4.81% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%

## 6 HandelenInStrijd 5.40% 0.00% 15.43% 8.43% 7.81% 45.98% 0.49%

## 7 Kap 0.24% 100.00% 1.17% 1.24% 0.47% 3.72% 3.18%

## 8 InritUitweg 0.00% 0.00% 1.54% 0.77% 0.76% 4.95% 0.00%

## 9 Milieu 100.00% 0.00% 6.04% 5.76% 6.38% 0.84% 0.00%

## 10 Monument 0.00% 0.00% 4.41% 9.17% 3.91% 3.97% 6.99%

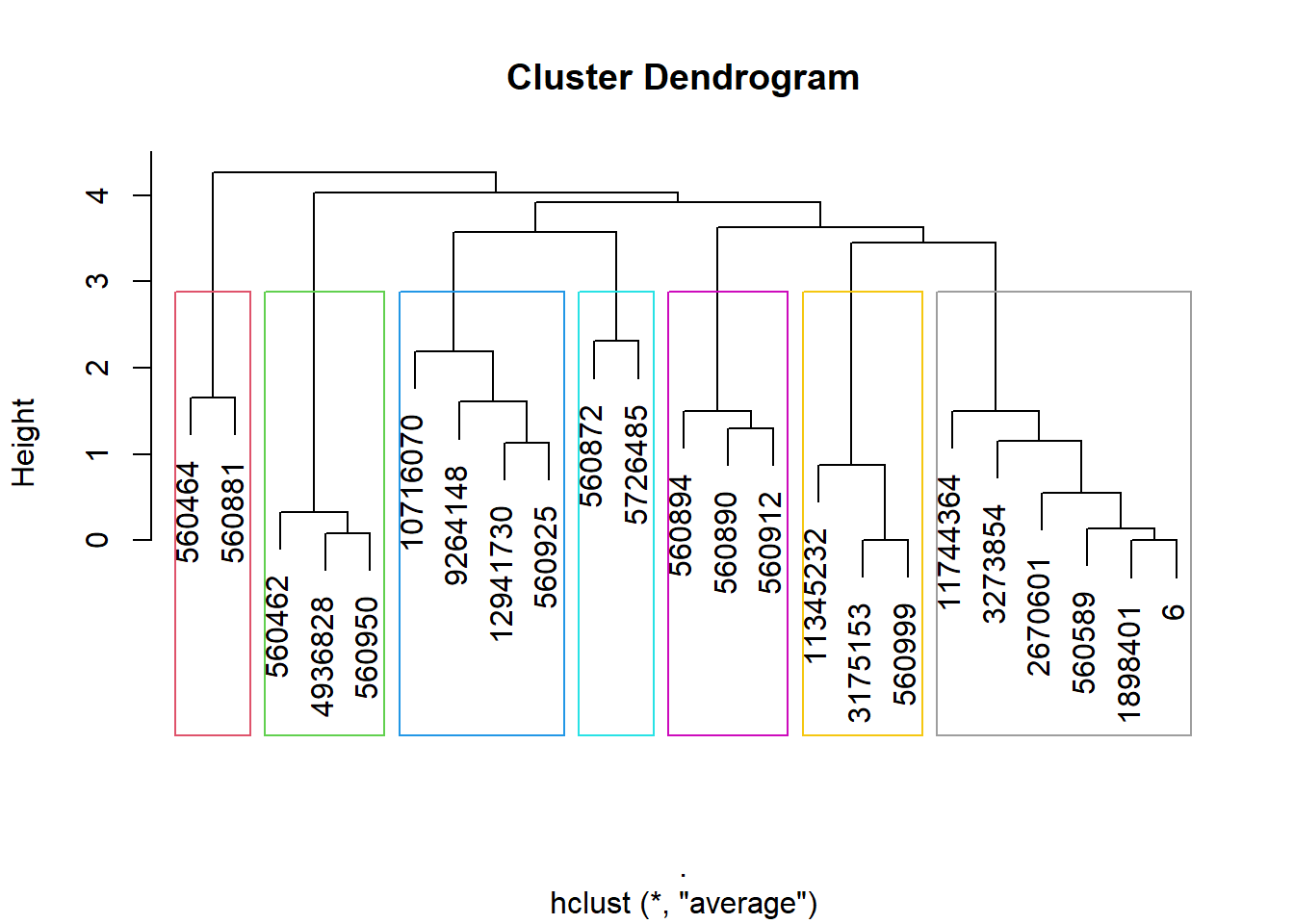
## 11 Reclame 0.00% 0.00% 1.77% 1.10% 0.85% 6.57% 0.00%

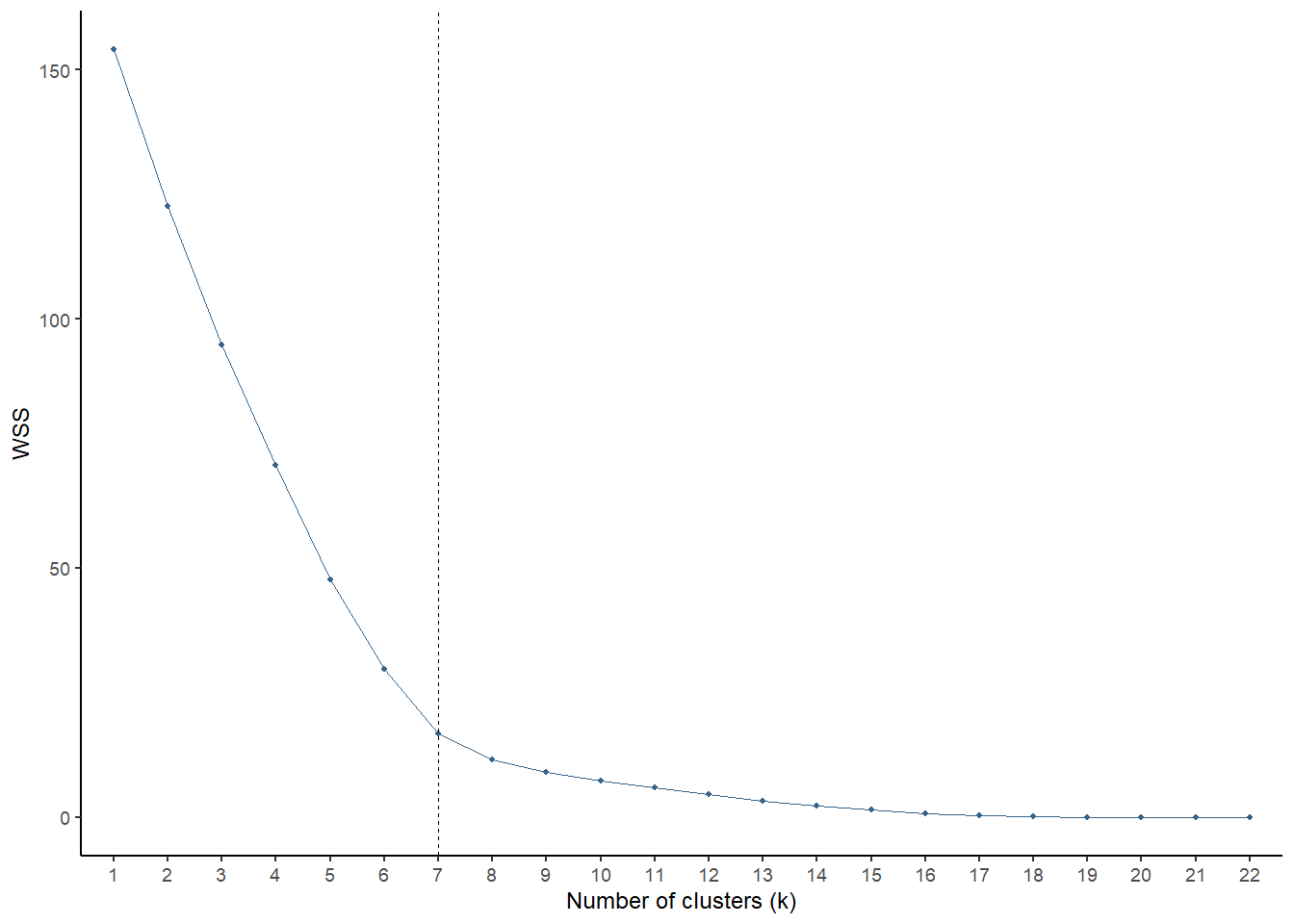
## 12 Sloop 0.30% 0.00% 4.16% 4.39% 3.04% 0.01% 98.42%

|  |  |  |  |
| --- | --- | --- | --- |
| Clust | Label | Description | Size (%) |
| 1 | Environment cases | Mainly occur at the beginning/end of the week, more likely require a comprehensive procedure, with typically a “G” case status | 8.97% |
| 2 | Tree felling cases | Mainly occur at the beginning/end of the week, always have a “blank” procedure, with typically status “G” | 7.83% |
| 3 | Construction cases in phase 0 | Mainly occur at the beginning/end of the week, typically have a “blank” procedure, and are evenly split between status “G” and “O” | 17.95% |
| 4 | Construction cases in phase 4,5 | Occur evenly across the week, typically have a “blank” procedure, and are evenly split between status “G” and “O” | 17.77% |
| 5 | Other construction cases | Occur evenly across the week, typically have a “blank” procedure, and are evenly split between status “G” and “O” | 34.19% |
| 6 | Other cases | Occur evenly across the week, typically have a “blank” procedure with status “O” | 8.09% |
| 7 | Demolition cases | Occur evenly across the week, typically have a “blank” procedure with status “G” | 5.20% |

Activity instance archetypes:

Profiles:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Clust7 Archetype

## 1 10716070 0.00% 0.00% 63.72% 35.85% 0.42% 0.00% 0.00% 3

## 2 12941730 0.00% 0.00% 100.00% 0.00% 0.00% 0.00% 0.00% 3

## 3 560925 3.93% 6.26% 81.64% 0.05% 0.12% 0.00% 8.00% 3

## 4 9264148 2.22% 16.91% 80.87% 0.00% 0.00% 0.00% 0.00% 3

## 5 11345232 0.00% 0.00% 20.00% 0.00% 0.00% 80.00% 0.00% 6

## 6 3175153 0.00% 0.00% 0.03% 0.00% 0.00% 99.97% 0.00% 6

## 7 560999 0.00% 0.00% 0.00% 0.00% 0.00% 99.99% 0.00% 6

## 8 11744364 0.00% 0.00% 0.00% 0.00% 59.59% 40.41% 0.00% 5

## 9 1898401 0.00% 0.00% 0.03% 0.00% 99.97% 0.00% 0.00% 5

## 10 2670601 0.10% 0.33% 0.09% 0.03% 85.21% 13.02% 1.22% 5

## 11 3273854 0.00% 0.00% 2.08% 0.01% 80.24% 5.43% 12.25% 5

## 12 560589 0.00% 0.00% 0.00% 2.59% 97.40% 0.00% 0.00% 5

## 13 6 0.00% 0.00% 0.01% 0.00% 99.99% 0.00% 0.00% 5

## 14 4936828 99.99% 0.00% 0.01% 0.00% 0.00% 0.00% 0.00% 1

## 15 560462 94.98% 2.72% 2.30% 0.00% 0.00% 0.00% 0.00% 1

## 16 560950 98.53% 0.00% 0.00% 1.47% 0.00% 0.00% 0.00% 1

## 17 560464 0.00% 0.00% 20.20% 22.57% 22.68% 0.00% 34.56% 7,5

## 18 560881 0.29% 0.54% 0.37% 0.00% 53.19% 2.29% 43.31% 7,5

## 19 560872 18.03% 29.06% 50.86% 0.00% 0.00% 0.00% 2.05% 2,3,5

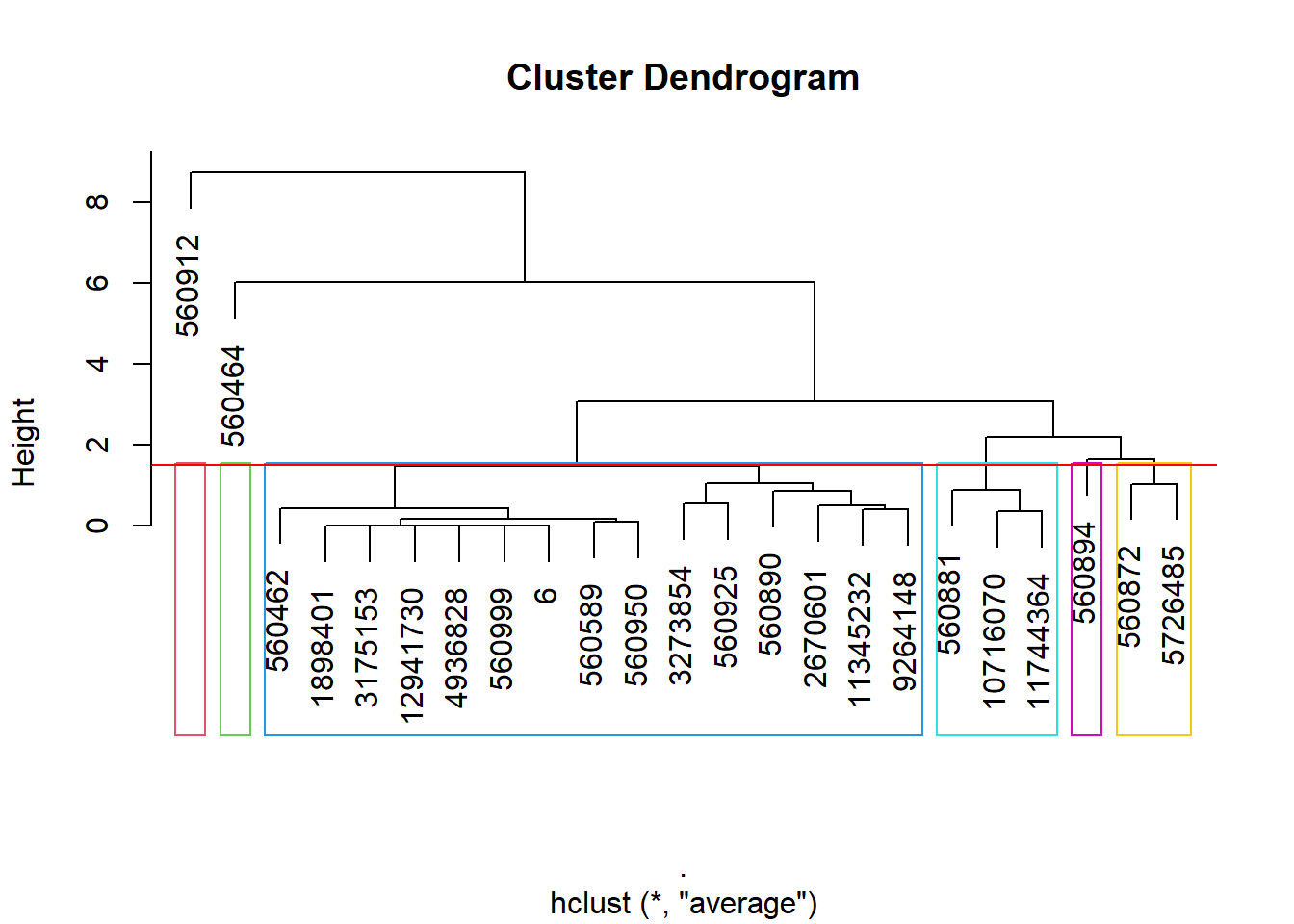
## 20 5726485 0.00% 34.17% 0.00% 12.54% 53.29% 0.00% 0.00% 2,3,5

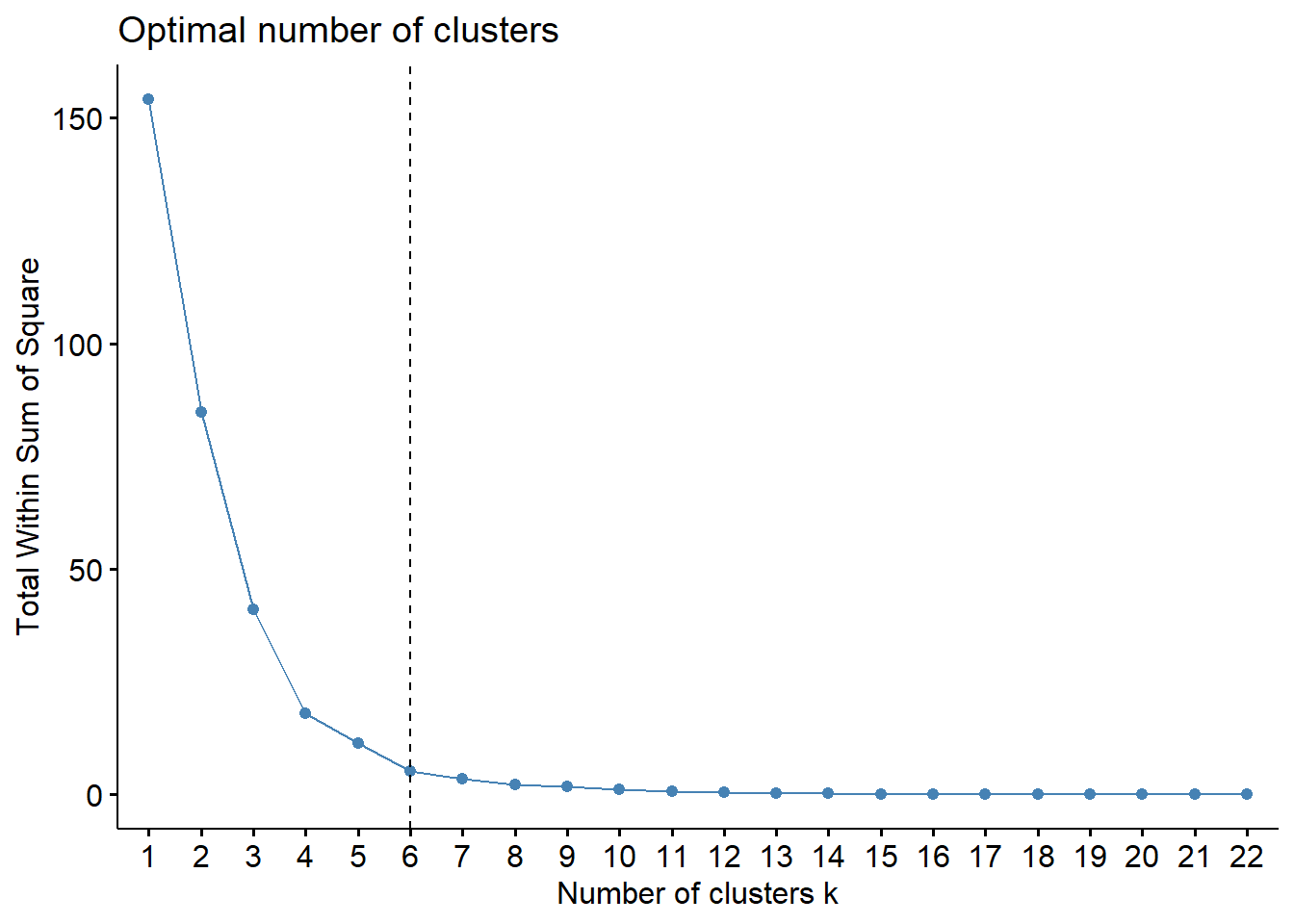
## 21 560890 0.17% 0.00% 0.00% 75.95% 0.00% 17.83% 6.06% 4,6

## 22 560894 0.00% 0.00% 4.77% 44.31% 0.00% 42.38% 8.54% 4,6

## 23 560912 5.16% 2.94% 18.62% 54.00% 4.71% 12.50% 2.08% 4,6

Specialism:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Clust7 Specialism

## 1 12941730 100.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 2 560999 99.99% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 3 6 99.99% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 4 4936828 99.99% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 5 1898401 99.97% 0.03% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 6 3175153 99.97% 0.03% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 7 560950 98.53% 1.47% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 8 560589 97.40% 2.59% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 9 560462 94.98% 2.72% 2.30% 0.00% 0.00% 0.00% 0.00% 1

## 10 2670601 85.21% 13.02% 1.22% 0.33% 0.10% 0.09% 0.03% 1

## 11 560925 81.64% 8.00% 6.26% 3.93% 0.12% 0.05% 0.00% 1

## 12 9264148 80.87% 16.91% 2.22% 0.00% 0.00% 0.00% 0.00% 1

## 13 3273854 80.24% 12.25% 5.43% 2.08% 0.01% 0.00% 0.00% 1

## 14 11345232 80.00% 20.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 15 560890 75.95% 17.83% 6.06% 0.17% 0.00% 0.00% 0.00% 1

## 16 10716070 63.72% 35.85% 0.42% 0.00% 0.00% 0.00% 0.00% 2

## 17 11744364 59.59% 40.41% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 18 560881 53.19% 43.31% 2.29% 0.54% 0.37% 0.29% 0.00% 2

## 19 5726485 53.29% 34.17% 12.54% 0.00% 0.00% 0.00% 0.00% 3

## 20 560872 50.86% 29.06% 18.03% 2.05% 0.00% 0.00% 0.00% 3

## 21 560912 54.00% 18.62% 12.50% 5.16% 4.71% 2.94% 2.08% 4

## 22 560894 44.31% 42.38% 8.54% 4.77% 0.00% 0.00% 0.00% 5

## 23 560464 34.56% 22.68% 22.57% 20.20% 0.00% 0.00% 0.00% 6

Specialists: cluster 1+2 (18)

Combination (Profile – Specialism):

## Profile Archetypes `1` `2` `3` `4` `5` `6`

## 1 1 3 3 1 0 0 0 0

## 2 2 6 3 0 0 0 0 0

## 3 3 5 5 1 0 0 0 0

## 4 4 1 3 0 0 0 0 0

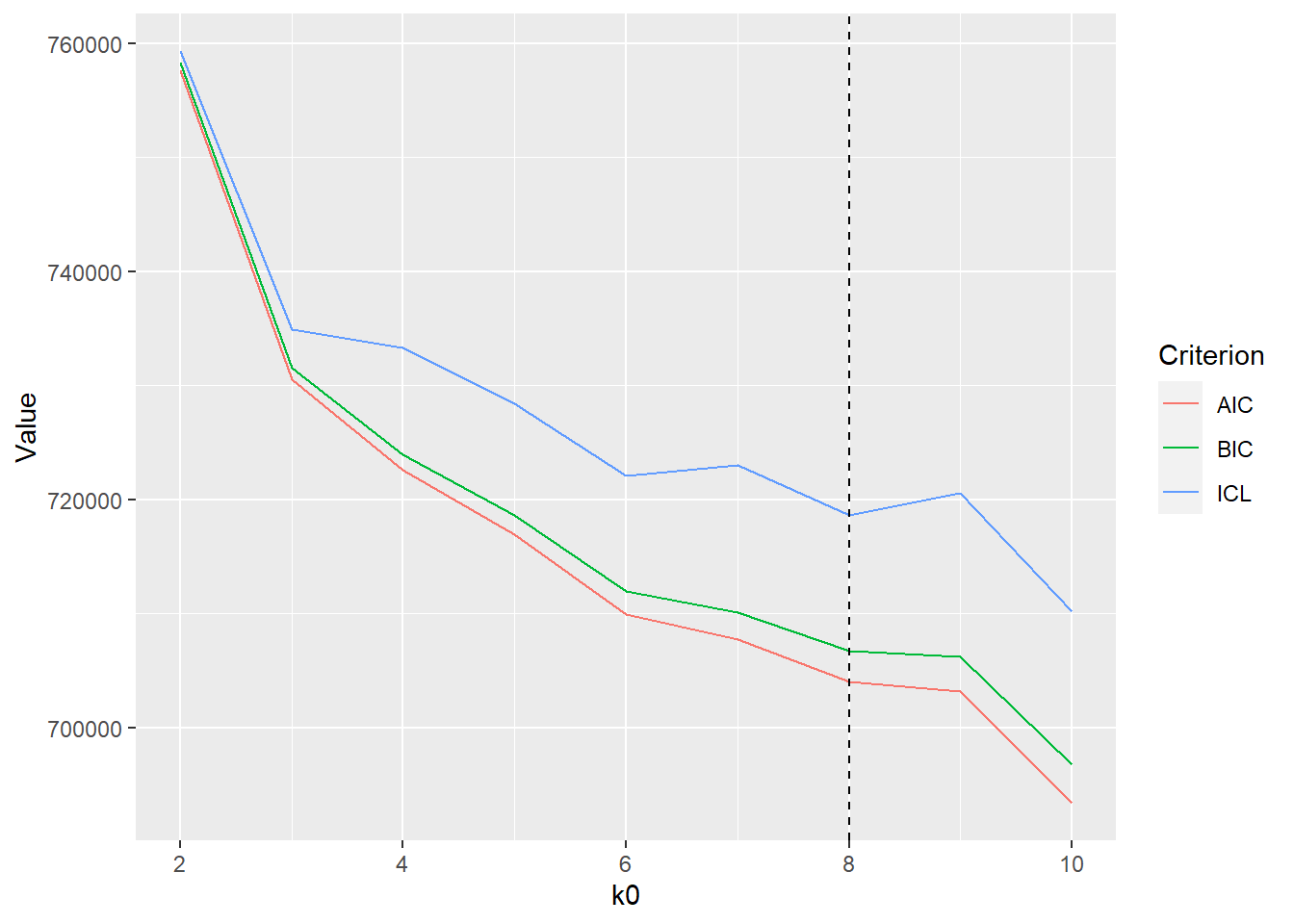
## 5 5 7,5 0 1 0 0 0 1

## 6 6 2,3,5 0 0 2 0 0 0

## 7 7 4,6 1 0 0 1 1 0

## Municipality 2

8 clusters:



## Cluster n rel

## 1 1 8407 0.18954322

## 2 2 7190 0.16210488

## 3 3 3778 0.08517834

## 4 4 3930 0.08860531

## 5 5 3299 0.07437886

## 6 6 7418 0.16724534

## 7 7 2992 0.06745728

## 8 8 7340 0.16548677

## Phase Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7 Comp.8

## 1 phase0 45.81% 49.17% 39.29% 33.25% 46.88% 32.33% 37.35% 31.48%

## 2 phase1 11.22% 12.21% 14.41% 15.97% 11.34% 8.98% 8.59% 8.75%

## 3 phase2 3.65% 4.65% 7.3% 12.73% 5.04% 6.51% 4.23% 6.38%

## 4 phase3 3.82% 3.95% 5.98% 12.52% 4.43% 6.56% 4.75% 8.14%

## 5 phase4 11.62% 14.15% 13% 21.94% 17.2% 16.06% 15.72% 18.57%

## 6 phase5 15.31% 7.89% 13.77% 2.39% 6.89% 16.98% 17.4% 14.87%

## 7 phase6 0.22% 1.2% 0.01% 0.02% 2% 0.03% 0.11% 0.06%

## 8 phase7 2.45% 2.86% 2.17% 0.4% 2.32% 4.62% 3.33% 3.77%

## 9 phase8 5.9% 3.92% 4.06% 0.78% 3.91% 7.93% 8.5% 7.97%

## CaseProcedure Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7 Comp.8

## 1 81.06% 20.39% 100% 91.93% 0.01% 85.66% 86% 80.93%

## 2 Regulier 1.25% 0% 0% 7.49% 2.99% 10.85% 2.75% 19.07%

## 3 Uitgebreid 17.69% 79.61% 0% 0.59% 97% 3.49% 11.24% 0%

## CaseStatus X1 X2 X3 X4 X5 X6 X7 X8

## 1 G 94.79% 90.16% 90.56% 79.79% 88.68% 99.26% 89.02% 99.73%

## 2 O 5.21% 9.84% 9.44% 20.21% 11.32% 0.74% 10.98% 0.27%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7 Comp.8

## 1 1 29.07% 35.34% 22.14% 29.14% 13.5% 1.23% 22.91% 2.2%

## 2 2 10.83% 25.13% 12.36% 26.44% 38.05% 46.63% 31.62% 48.31%

## 3 3 34.62% 18.49% 29.58% 34.07% 16.65% 5.34% 13.58% 4.94%

## 4 4 4.44% 8.89% 15.78% 10.3% 28.37% 44.15% 20.33% 39.71%

## 5 5 20.75% 12.15% 19.92% 0% 3.41% 2.57% 11.3% 4.79%

## 6 6 0.22% 0% 0.08% 0.02% 0% 0.07% 0.11% 0%

## 7 7 0.07% 0% 0.15% 0.03% 0.03% 0.01% 0.15% 0.05%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7 Comp.8

## 1 Begin/end of week 54.25% 56.38% 57.84% 39.44% 45.27% 47.95% 54.54% 46.70%

## 2 Midweek 45.45% 43.62% 41.94% 60.51% 54.69% 51.97% 45.20% 53.25%

## 3 Weekend 0.30% 0.00% 0.23% 0.05% 0.03% 0.08% 0.26% 0.05%

## CasePart X1 X2 X3 X4 X5 X6 X7 X8

## 1 Aanleg 0% 0.92% 14.14% 3.17% 0.76% 0.21% 4.42% 5.75%

## 2 Bouw 100% 19.06% 4.24% 95.87% 72.24% 100% 43.1% 2.16%

## 3 Brandveilig 0.59% 0% 2.29% 0.57% 23.02% 0.18% 0% 1.04%

## 4 Gebiedsbescherming 0% 6.18% 0% 0% 0% 0% 0% 0%

## 5 HandelenInStrijd 6.83% 3.64% 0% 18.25% 42.66% 4.18% 100% 0%

## 6 Kap 0% 0% 41.5% 0.54% 0% 0% 0% 54.14%

## 7 InritUitweg 1.35% 0.13% 7.03% 5.71% 0.98% 1.19% 0.05% 28.79%

## 8 Milieu 6.04% 100% 0% 3.85% 22.39% 5.92% 0% 0.55%

## 9 Monument 0.18% 0% 0% 0% 3.04% 0% 0% 0%

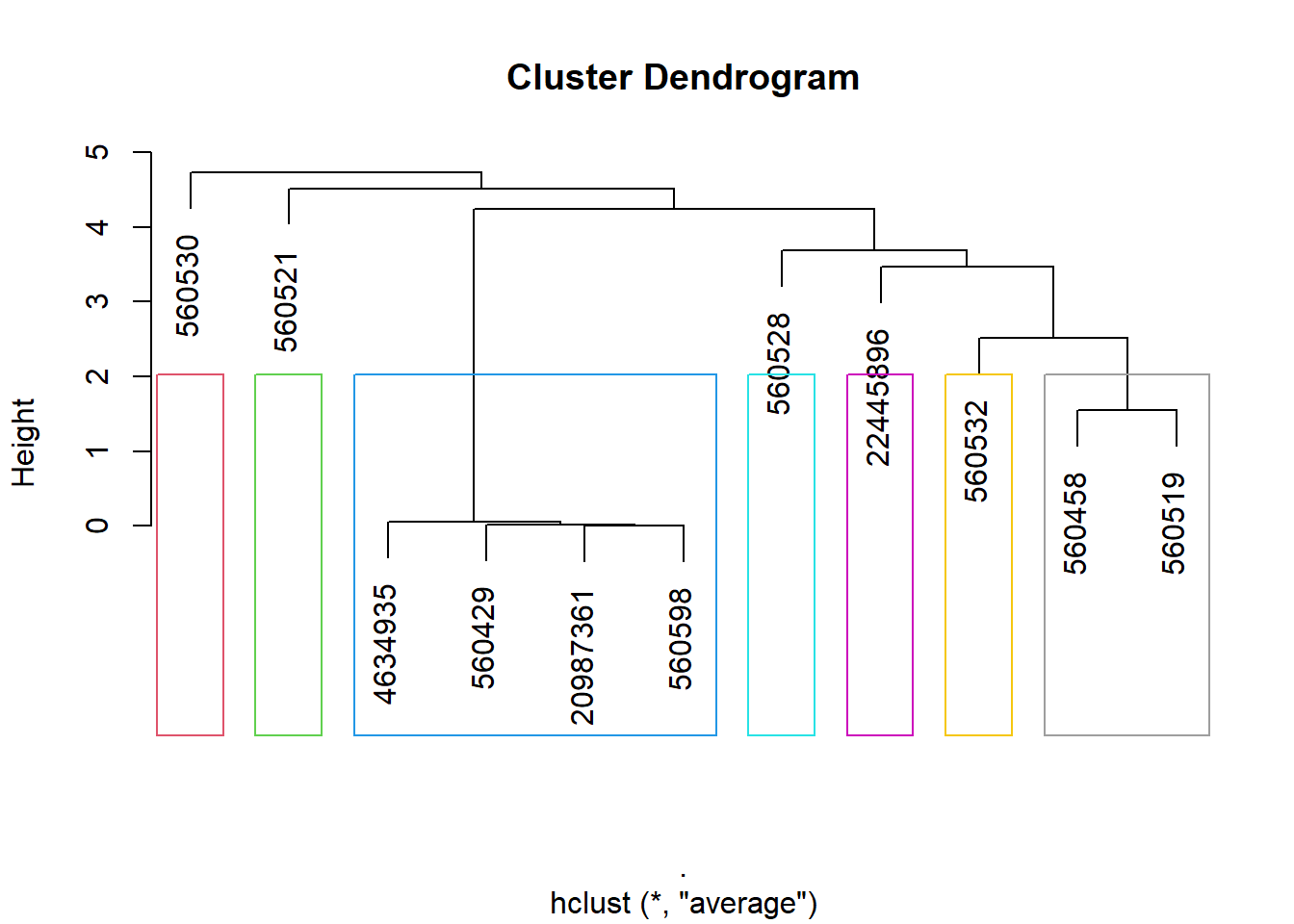
## 10 Reclame 0.45% 0% 1.23% 3.15% 0% 1.31% 0% 0%

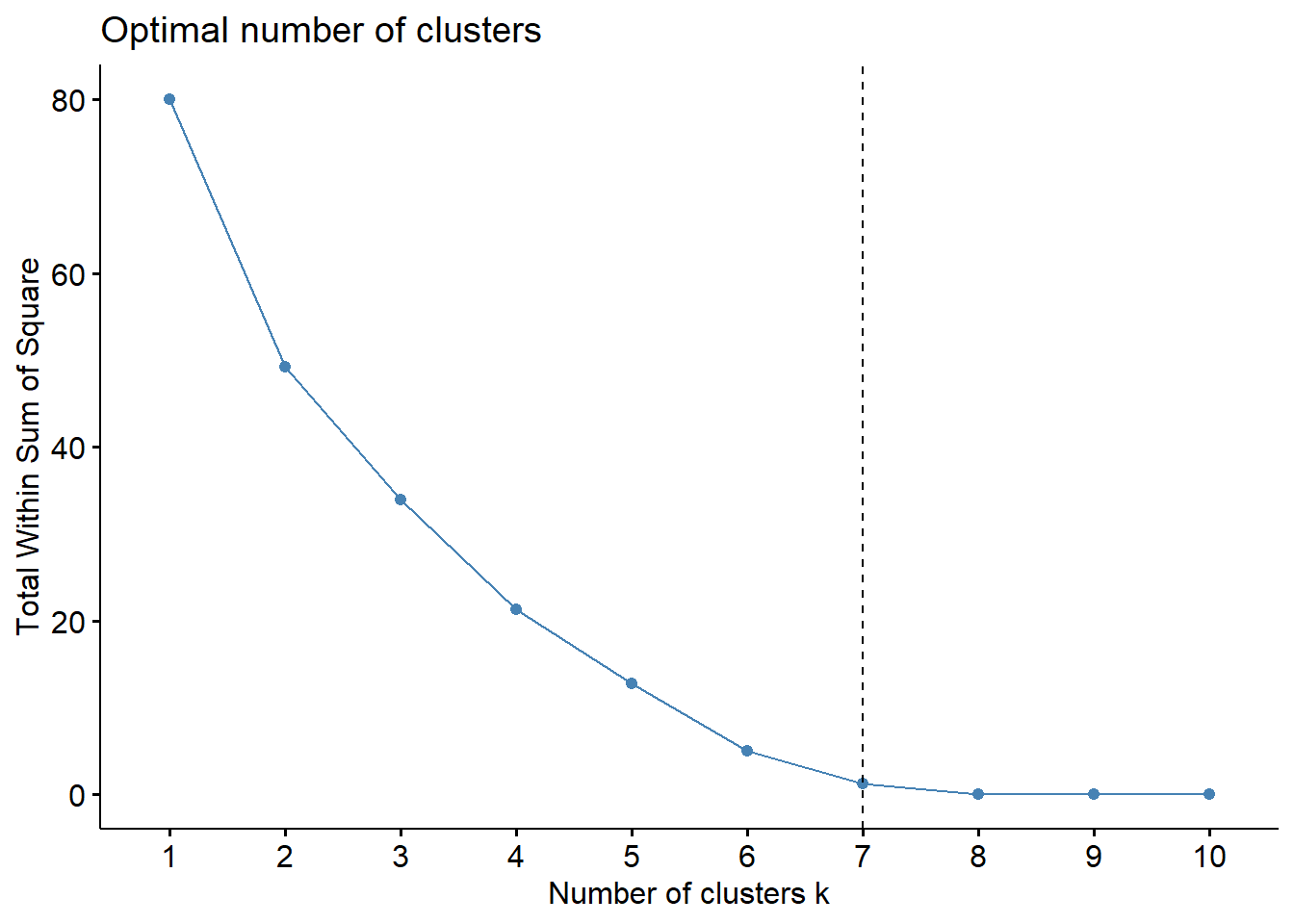
## 11 Sloop 3.92% 1.03% 37.43% 0% 0% 5.05% 0% 13.09%

Activity instance archetypes:

|  |  |  |  |
| --- | --- | --- | --- |
| Clust | Label | Description | Size (%) |
| 1 | Construction cases in phase 0,4,5 | Blank case procedure, status G, spread over week, not Thursday | 18.95% |
| 2 | Environment cases | Comprehensive procedure, status G, spread over week | 16.21% |
| 3 | Tree felling and demolition cases | Blank procedure, status G, spread over week | 8.52% |
| 4 | Construction cases in phase 0,1,4 | Blank procedure, status G, spread over week, not Friday | 8.86% |
| 5 | Construction comprehensive cases | Comprehensive procedure, status G, spread over week, not Friday | 7.44% |
| 6 | Construction cases in phase 0,1,4,5 | Blank procedure, status G, Tuesday and Thursday | 16.72% |
| 7 | Act in violation of spatial planning cases | Blank procedure, status G, spread over week | 6.75% |
| 8 | Other cases | Blank procedure, status G, Tuesday and Thursday | 16.55% |

Profiles:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Clust7 Clust8 Archetype

## 1 20987361 0.00% 99.97% 0.00% 0.00% 0.00% 0.00% 0.02% 0.01% 2

## 2 4634935 0.22% 98.77% 0.00% 0.00% 0.00% 1.00% 0.00% 0.00% 2

## 3 560429 0.00% 99.62% 0.00% 0.05% 0.00% 0.27% 0.03% 0.03% 2

## 4 560598 0.00% 99.96% 0.00% 0.01% 0.00% 0.03% 0.00% 0.00% 2

## 5 22445896 1.62% 1.24% 19.24% 28.51% 0.00% 22.44% 19.99% 6.95% 3,4,6,7

## 6 560458 29.26% 16.08% 14.38% 0.00% 10.80% 13.37% 7.58% 8.54% 1,2,3,5,6

## 7 560519 22.77% 1.75% 10.12% 16.89% 9.31% 21.56% 13.84% 3.76% 1,3,4,6,7

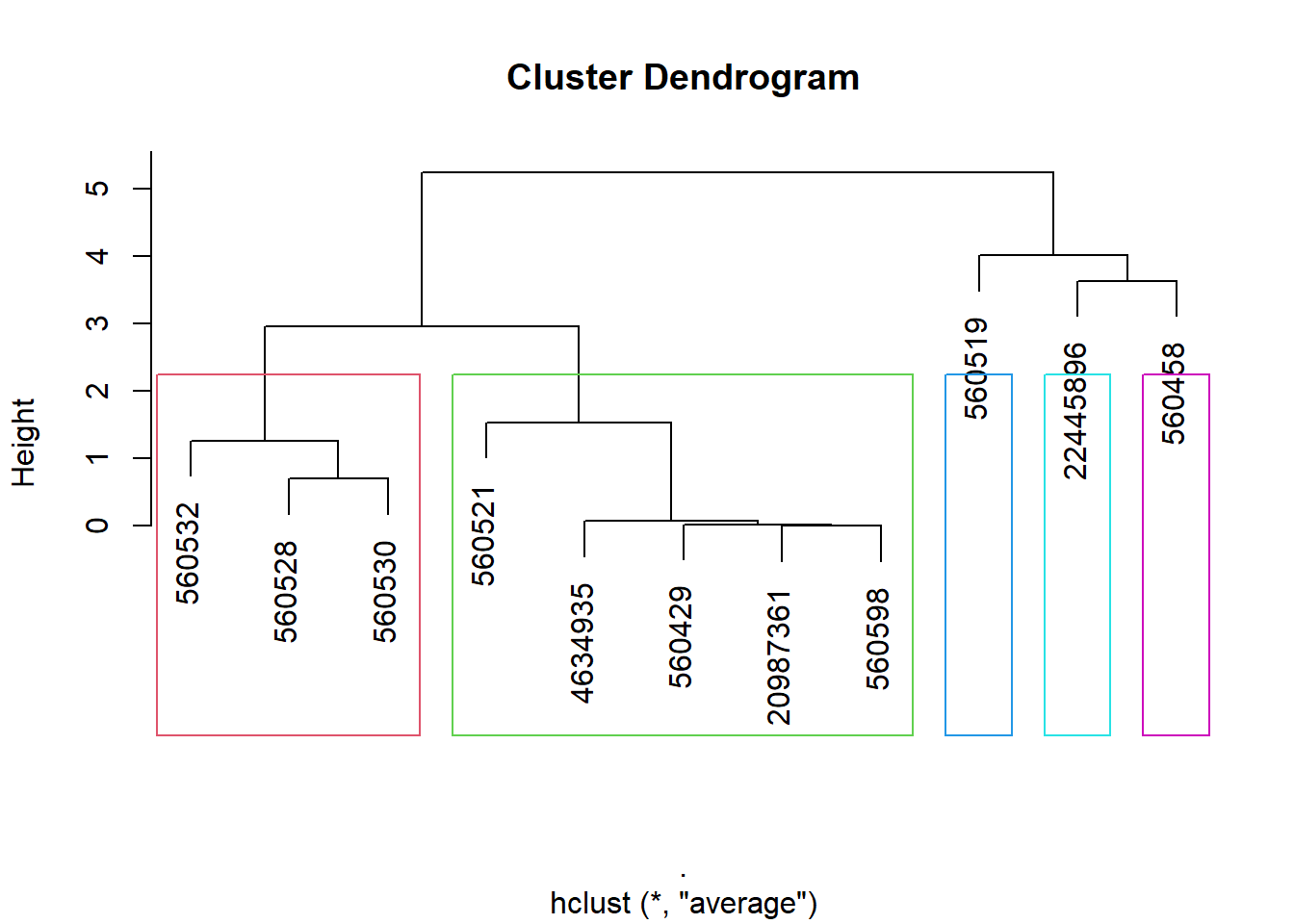
## 8 560521 1.09% 0.63% 6.03% 75.89% 11.50% 0.00% 2.98% 1.88% 4

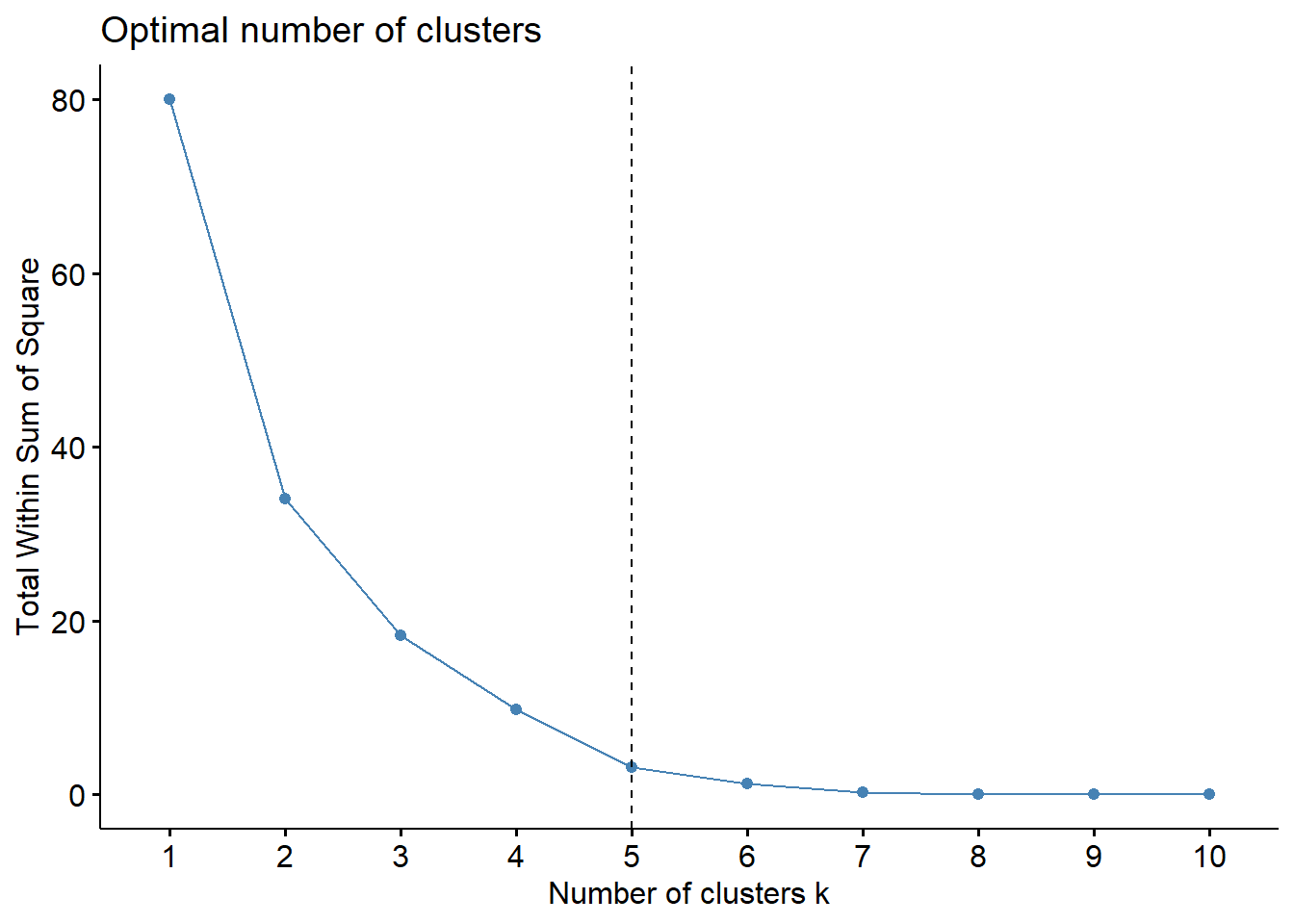
## 9 560528 28.96% 0.00% 11.35% 0.03% 0.00% 59.61% 0.02% 0.02% 1,6

## 10 560530 0.00% 0.57% 0.00% 0.00% 8.39% 33.46% 3.07% 54.52% 6,8

## 11 560532 39.70% 37.56% 13.15% 2.73% 1.36% 0.00% 5.51% 0.00% 1,2

Specialism:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Clust7 Clust8 Specialism

## 1 20987361 99.97% 0.02% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 2 560598 99.96% 0.03% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 3 560429 99.62% 0.27% 0.05% 0.03% 0.03% 0.00% 0.00% 0.00% 1

## 4 4634935 98.77% 1.00% 0.22% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 5 560521 75.89% 11.50% 6.03% 2.98% 1.88% 1.09% 0.63% 0.00% 1

## 6 22445896 28.51% 22.44% 19.99% 19.24% 6.95% 1.62% 1.24% 0.00% 2

## 7 560458 29.26% 16.08% 14.38% 13.37% 10.80% 8.54% 7.58% 0.00% 3

## 8 560519 22.77% 21.56% 16.89% 13.84% 10.12% 9.31% 3.76% 1.75% 4

## 9 560528 59.61% 28.96% 11.35% 0.03% 0.02% 0.02% 0.00% 0.00% 5

## 10 560530 54.52% 33.46% 8.39% 3.07% 0.57% 0.00% 0.00% 0.00% 5

## 11 560532 39.70% 37.56% 13.15% 5.51% 2.73% 1.36% 0.00% 0.00% 5

Specialists: cluster 1 (5)

Combination (Profile – Specialism):

## Profile Archetypes `1` `2` `3` `4` `5`

## 1 1 2 4 0 0 0 0

## 2 2 3,4,6,7 0 1 0 0 0

## 3 3 1,2,3,5,6 0 0 1 1 0

## 4 4 1,3,4,6,7 1 0 0 0 0

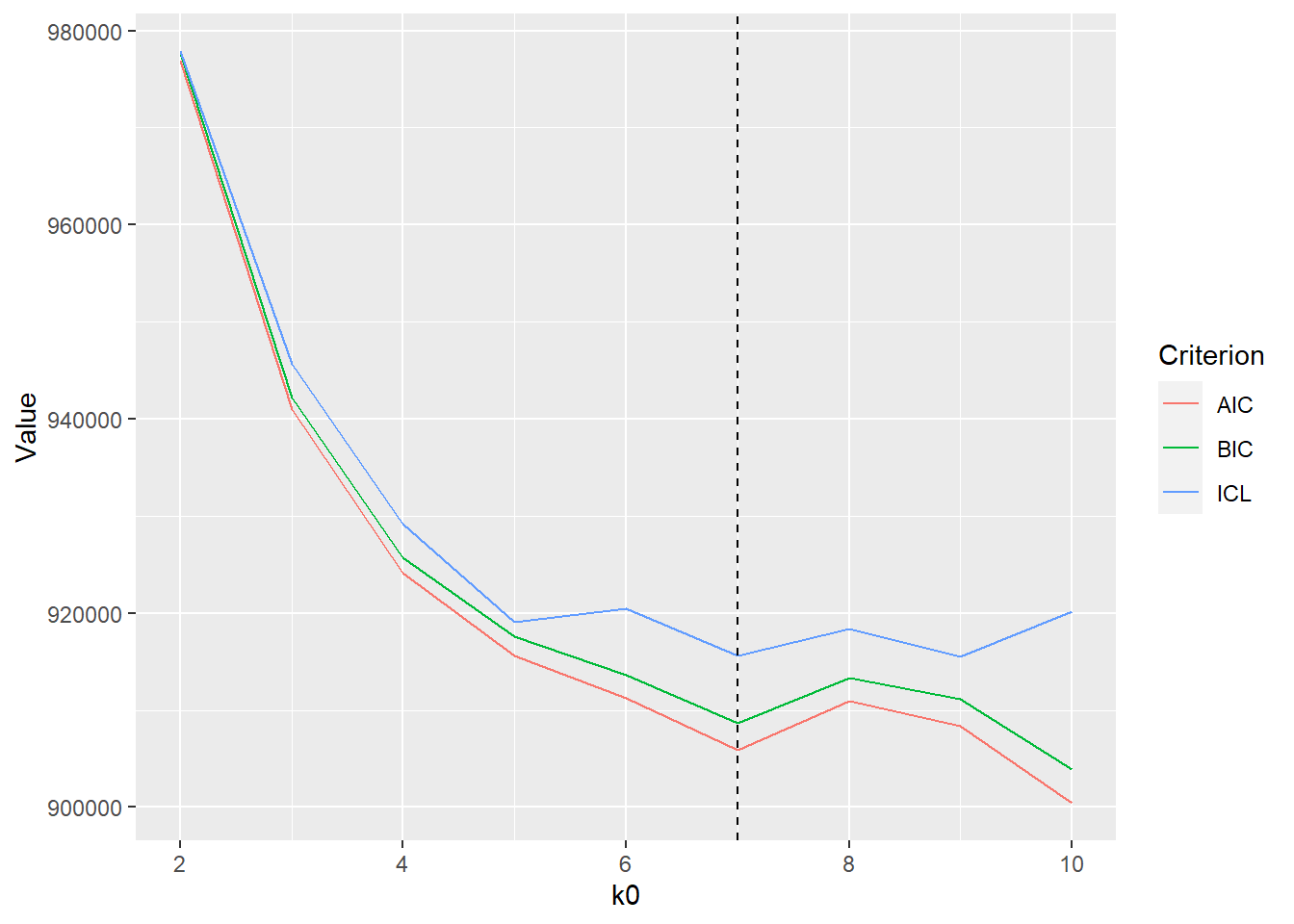
## 5 5 4 0 0 0 0 1

## 6 6 1,6 0 0 0 0 1

## 7 7 1,2 0 0 0 0 1

## Municipality 3

7 clusters:



## Cluster n rel

## 1 1 4912 0.08230425

## 2 2 21903 0.36700122

## 3 3 11154 0.18689365

## 4 4 11098 0.18595533

## 5 5 3503 0.05869540

## 6 6 3328 0.05576314

## 7 7 3783 0.06338701

## Phase Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7

## 1 phase0 51.91% 43.83% 43.85% 37.89% 48.75% 44.13% 38.48%

## 2 phase1 12.24% 16.96% 0% 11.57% 11.3% 14.4% 12.15%

## 3 phase2 4.64% 10.16% 0.01% 7.31% 6.54% 8.89% 8.29%

## 4 phase3 4.97% 11.87% 0.07% 8.57% 7.1% 8.82% 8.77%

## 5 phase4 16.4% 16.3% 18.63% 20.15% 22.41% 16.85% 19.03%

## 6 phase5 7.67% 0.41% 37.03% 14.28% 3.2% 6.18% 13.28%

## 7 phase6 0.33% 0.05% 0.02% 0.02% 0.02% 0.03% 0%

## 8 phase7 0.9% 0.12% 0.04% 0.16% 0.22% 0.19% 0%

## 9 phase8 0.94% 0.3% 0.34% 0.04% 0.47% 0.51% 0%

## CaseProcedure Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7

## 1 37.01% 93.57% 91.82% 95.13% 58.44% 88.26% 95.78%

## 2 Regulier 6.77% 0.33% 0.36% 4.87% 3.06% 1.41% 4.22%

## 3 Uitgebreid 56.22% 6.1% 7.82% 0% 38.51% 10.34% 0%

## CaseStatus X1 X2 X3 X4 X5 X6 X7

## 1 G 87.6% 97.36% 97.96% 98.28% 91.42% 93.99% 98.7%

## 2 O 12.4% 2.64% 2.04% 1.72% 8.58% 6.01% 1.3%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7

## 1 1 17.95% 22.33% 17.93% 25.45% 23.69% 19.62% 26.98%

## 2 2 27.75% 24.88% 19.78% 17.21% 21.89% 24.94% 20.82%

## 3 3 20.19% 26.57% 24.31% 32.48% 20.61% 23.96% 18.25%

## 4 4 21.12% 18.55% 19.89% 16.15% 20.33% 22.92% 22.05%

## 5 5 12.05% 6.91% 16.4% 7.78% 13.17% 7.26% 10.74%

## 6 6 0.94% 0.73% 1.43% 0.79% 0.31% 1.15% 1.02%

## 7 7 0% 0.03% 0.27% 0.15% 0% 0.16% 0.14%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7

## 1 Begin/end of week 51.12% 47.79% 54.22% 49.37% 57.19% 49.80% 59.77%

## 2 Midweek 47.94% 51.46% 44.08% 49.68% 42.50% 48.90% 39.07%

## 3 Weekend 0.94% 0.76% 1.70% 0.95% 0.31% 1.31% 1.16%

## CasePart X1 X2 X3 X4 X5 X6 X7

## 1 Aanleg 0% 0.36% 0.54% 1.57% 7.06% 3.28% 9.17%

## 2 Bouw 18.81% 100% 93.52% 0% 58.06% 11.74% 0.72%

## 3 Brandveilig 0% 0% 0.53% 0% 0% 32.98% 0%

## 4 FloraFauna 1.89% 0% 0% 0% 0% 0% 0%

## 5 Gebiedsbescherming 6.52% 0% 0% 0% 0% 0% 0%

## 6 HandelenInStrijd 1.89% 10.19% 14.85% 0.36% 99.48% 0% 0%

## 7 Kap 0% 2.09% 1.61% 100% 0.16% 1.81% 4.42%

## 8 InritUitweg 0% 5.74% 5.49% 0% 8.5% 0% 79.29%

## 9 Milieu 93.38% 1.32% 0.98% 0% 3.14% 0% 0%

## 10 Monument 0% 1.49% 1.57% 0% 0% 0% 0%

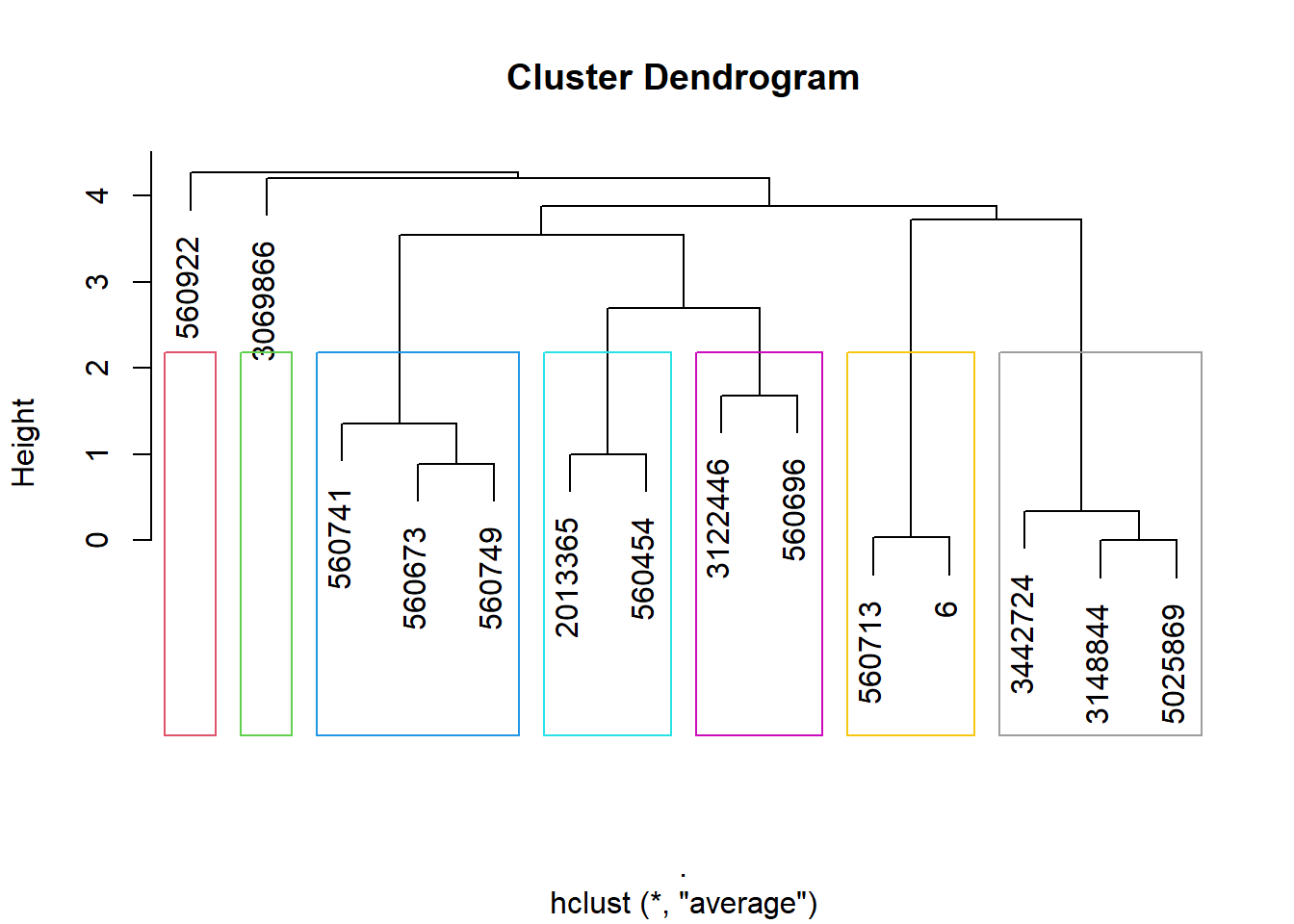
## 11 Reclame 0% 3.96% 4.43% 0% 3.53% 7.52% 0%

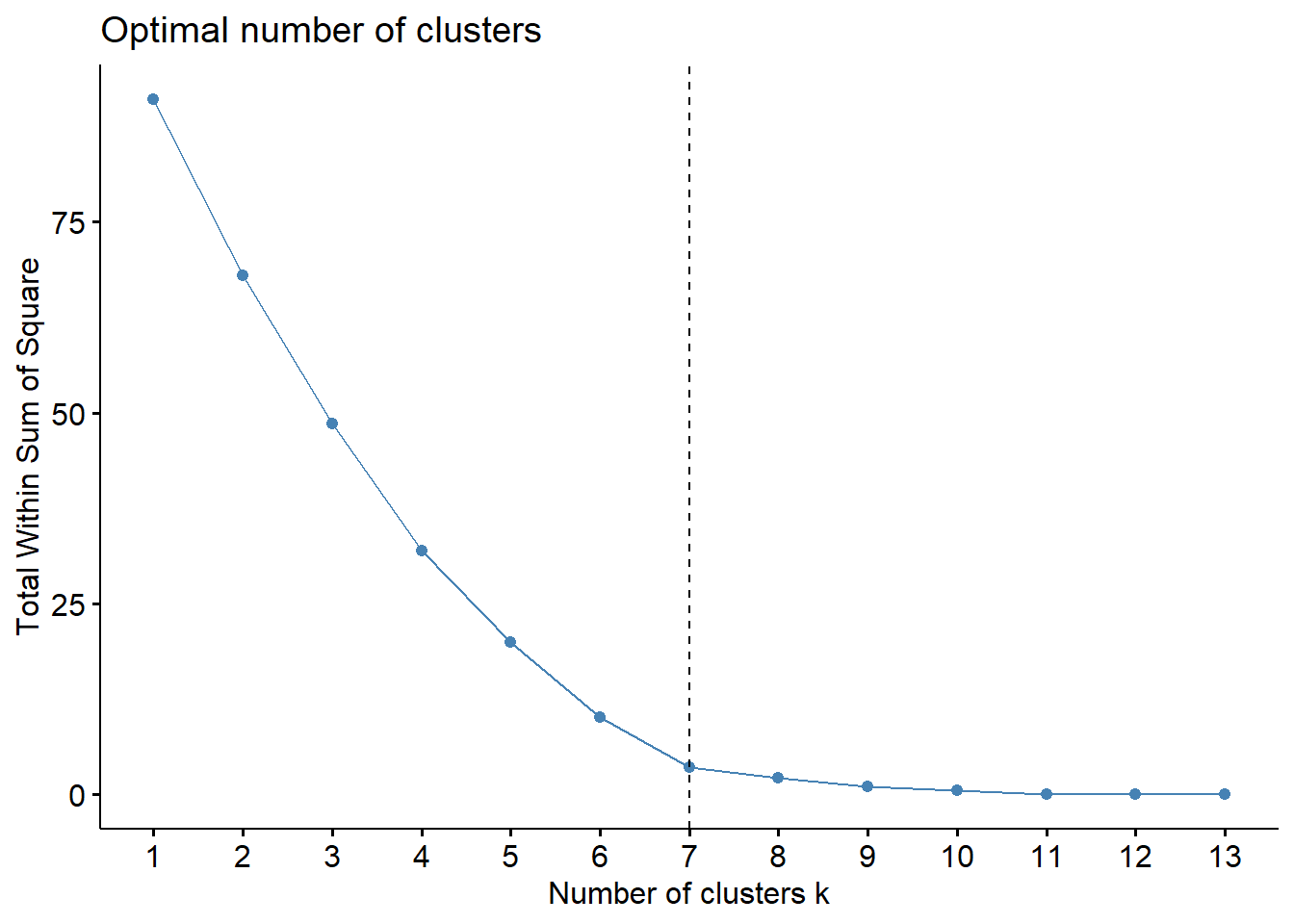
## 12 Roerende Zaken 0% 0% 0% 0% 0.34% 0% 0%

## 13 Sloop 2.39% 8.31% 5.62% 0.02% 0.41% 45.4% 0%

|  |  |  |  |
| --- | --- | --- | --- |
| Clust | Label | Description | Size (%) |
| 1 | Environment cases | Comprehensive procedure + sometimes blank, status G, spread over week | 8.23% |
| 2 | Construction cases in phase 0,1,4 | Blank procedure, status G, spread over week, not Friday | 36.70% |
| 3 | Construction cases in phase 0,5 | Blank procedure, status G, spread over week | 18.69% |
| 4 | Tree felling cases | Blank procedure, status G, spread over week, not Friday | 18.60% |
| 5 | Act in violation of spatial planning cases | Blank procedure, + sometimes comprehensive, status G, spread over week | 5.87% |
| 6 | Other cases | Blank procedure, status G, spread over week, not Friday | 5.58% |
| 7 | Entrance/exit cases | Blank procedure, status G, spread over week | 6.34% |

Profiles:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Clust7 Archetypes

## 1 2013365 0.00% 78.43% 0.26% 1.78% 8.23% 7.55% 3.76% 2,6

## 2 560454 0.00% 80.32% 0.00% 0.07% 6.98% 11.05% 1.58% 2,6

## 3 3069866 0.00% 0.00% 0.00% 99.99% 0.00% 0.00% 0.00% 4

## 4 3122446 0.00% 58.67% 0.15% 0.00% 21.48% 0.00% 19.70% 2,4,5,7

## 5 560696 0.73% 42.36% 1.57% 27.72% 13.91% 3.50% 10.21% 2,4,5,7

## 6 3148844 99.99% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 7 3442724 89.59% 3.46% 3.13% 0.28% 2.95% 0.00% 0.58% 1

## 8 5025869 100.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 9 560673 2.11% 0.98% 42.06% 40.24% 2.52% 4.85% 7.23% 3,4

## 10 560741 2.84% 0.82% 53.12% 19.60% 7.44% 5.64% 10.54% 3,4

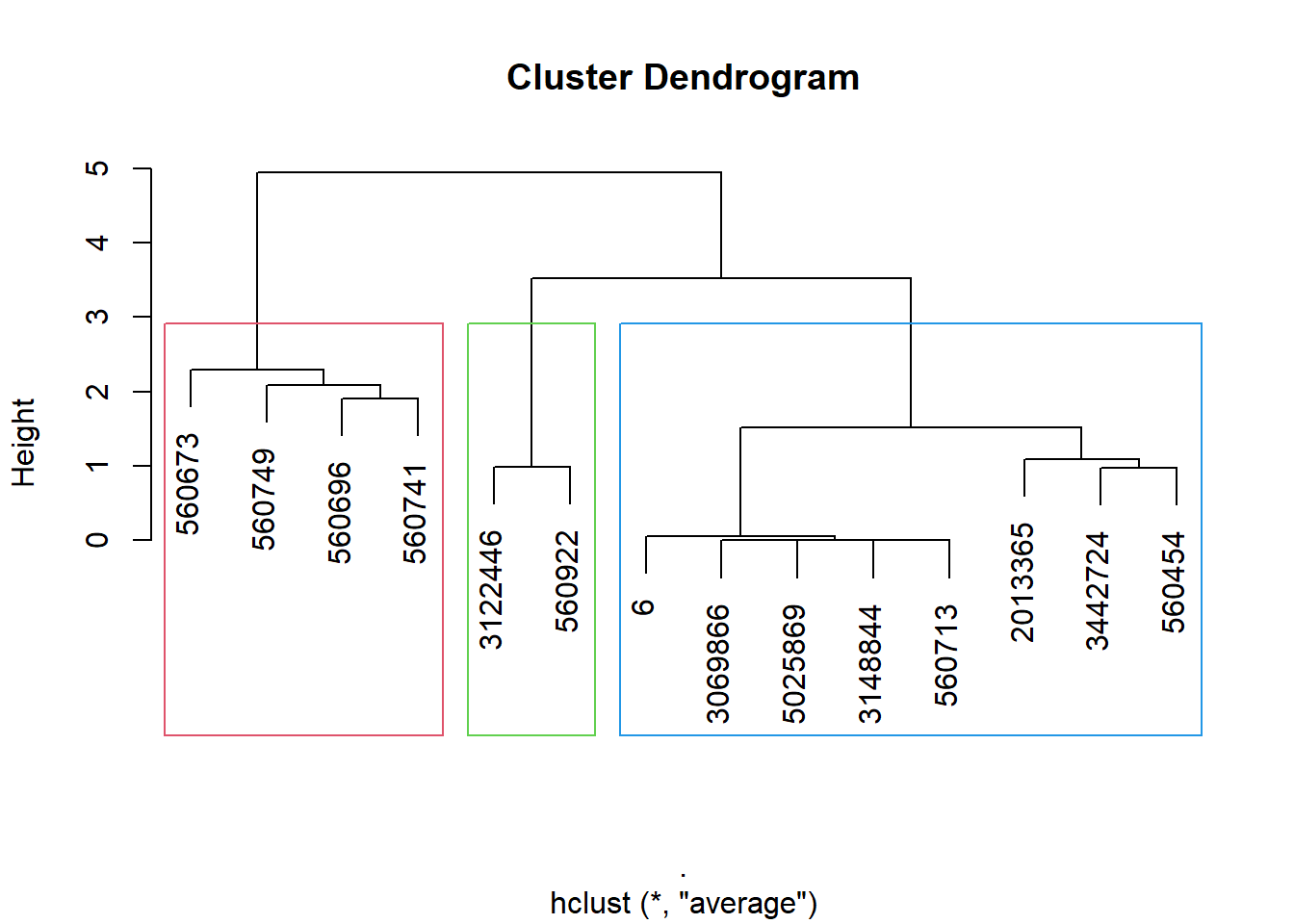
## 11 560749 10.22% 1.41% 28.59% 42.15% 3.80% 3.57% 10.25% 3,4

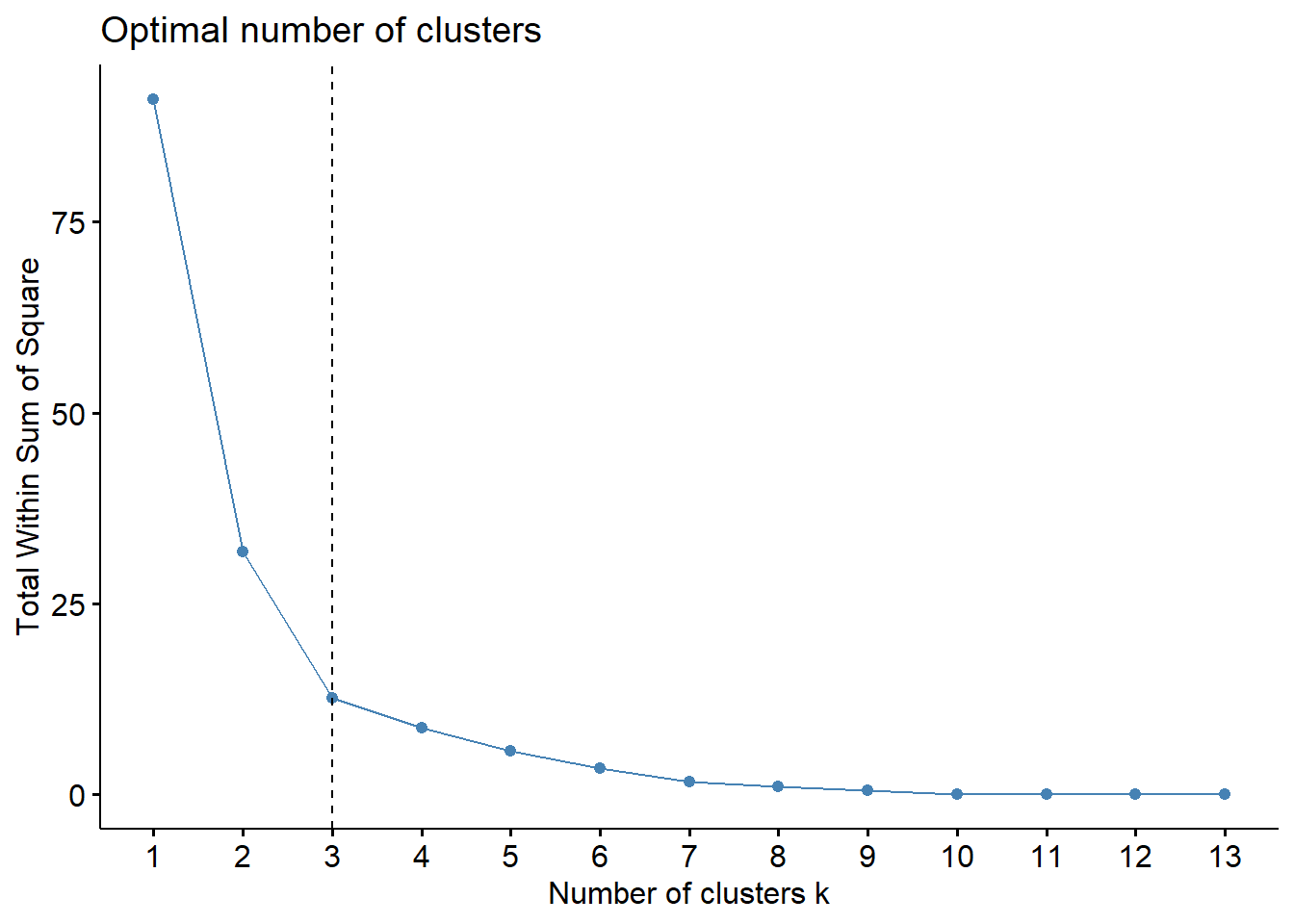
## 12 560713 0.00% 0.00% 0.00% 0.00% 99.99% 0.00% 0.00% 5

## 13 6 0.02% 0.74% 0.00% 0.00% 99.22% 0.00% 0.01% 5

## 14 560922 32.73% 0.00% 0.00% 21.84% 0.00% 0.00% 45.43% 1,4,7

Specialism:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Clust7 Specialism

## 1 5025869 100.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 2 3069866 99.99% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 3 560713 99.99% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 4 3148844 99.99% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 1

## 5 6 99.22% 0.74% 0.02% 0.01% 0.00% 0.00% 0.00% 1

## 6 3442724 89.59% 3.46% 3.13% 2.95% 0.58% 0.28% 0.00% 1

## 7 560454 80.32% 11.05% 6.98% 1.58% 0.07% 0.00% 0.00% 1

## 8 2013365 78.43% 8.23% 7.55% 3.76% 1.78% 0.26% 0.00% 1

## 9 3122446 58.67% 21.48% 19.70% 0.15% 0.00% 0.00% 0.00% 2

## 10 560922 45.43% 32.73% 21.84% 0.00% 0.00% 0.00% 0.00% 2

## 11 560741 53.12% 19.60% 10.54% 7.44% 5.64% 2.84% 0.82% 3

## 12 560696 42.36% 27.72% 13.91% 10.21% 3.50% 1.57% 0.73% 3

## 13 560749 42.15% 28.59% 10.25% 10.22% 3.80% 3.57% 1.41% 3

## 14 560673 42.06% 40.24% 7.23% 4.85% 2.52% 2.11% 0.98% 3

Specialists: cluster 1 (8)

Combination (Profile – Specialism):

## Profile Archetypes `1` `2` `3`

## 1 1 2,6 2 0 0

## 2 2 4 1 0 0

## 3 3 2,4,5,7 0 1 1

## 4 4 1 3 0 0

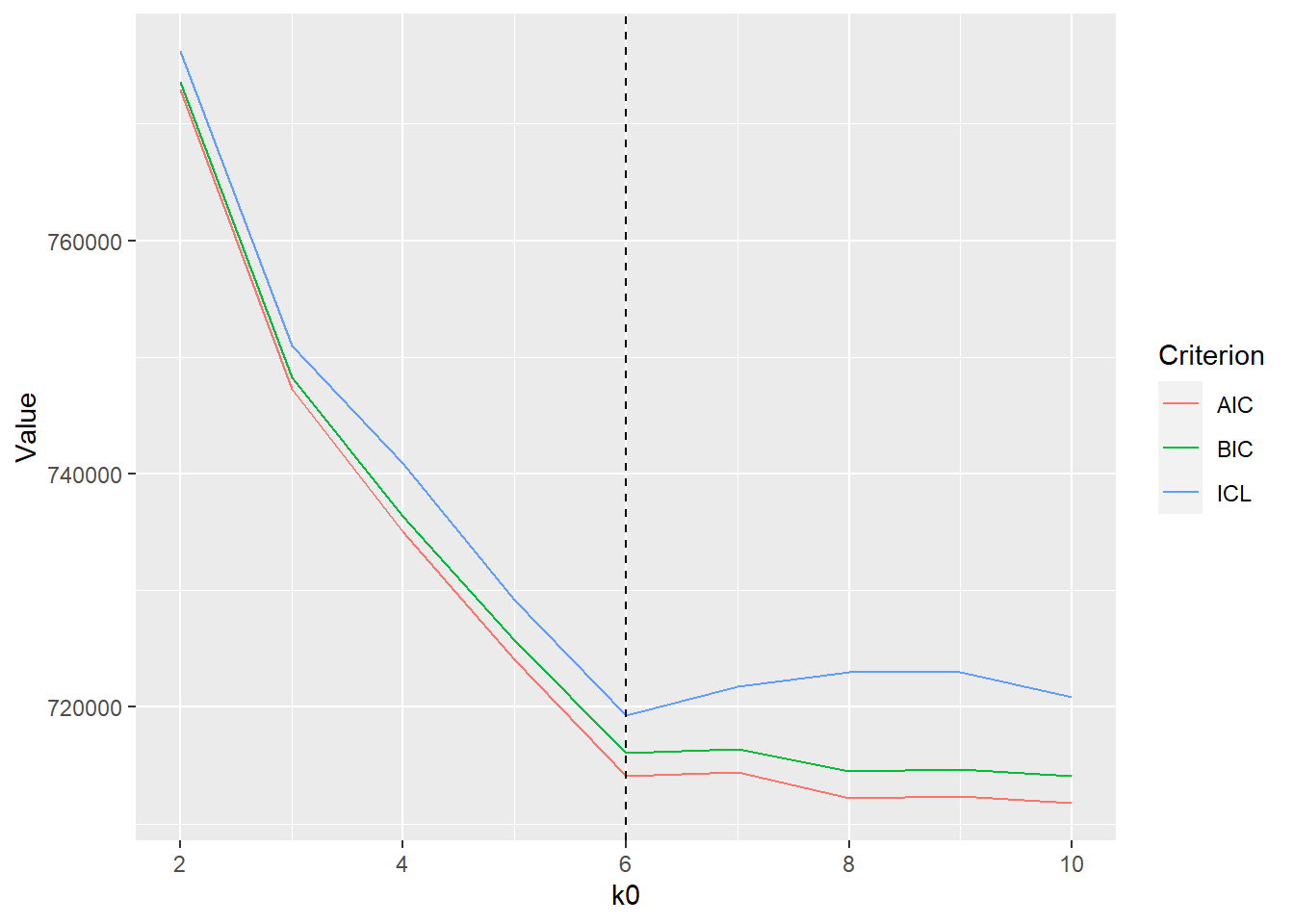
## 5 5 3,4 0 0 3

## 6 6 5 2 0 0

## 7 7 1,4,7 0 1 0

## Municipality 4

6 clusters:



## Cluster n rel

## 1 1 2747 0.05808471

## 2 2 3933 0.08316241

## 3 3 6781 0.14338274

## 4 4 15771 0.33347430

## 5 5 5715 0.12084241

## 6 6 12346 0.26105343

## Phase Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6

## 1 phase0 36.92% 52.87% 34.71% 49.35% 41.44% 30.4%

## 2 phase1 16.53% 10.09% 9.86% 7.07% 9.29% 17.63%

## 3 phase2 10.54% 4.44% 6.75% 0.3% 5.57% 13.97%

## 4 phase3 8.7% 4.48% 7.91% 0.01% 6.76% 16.02%

## 5 phase4 14.52% 16.08% 19.18% 12.78% 18.74% 21.69%

## 6 phase5 12.43% 7.82% 16.54% 24.11% 13.8% 0%

## 7 phase6 0.04% 1.04% 0.04% 0.14% 0.23% 0.01%

## 8 phase7 0.26% 1.5% 2.85% 3.36% 1.97% 0.03%

## 9 phase8 0.08% 1.68% 2.15% 2.87% 2.2% 0.26%

## CaseProcedure Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6

## 1 96.8% 19.91% 100% 89.81% 84.28% 91.65%

## 2 Regulier 3.2% 0% 0% 0% 2.45% 0%

## 3 Uitgebreid 0% 80.09% 0% 10.19% 13.27% 8.35%

## CaseStatus X1 X2 X3 X4 X5 X6

## 1 G 71.32% 47.94% 94.12% 45.52% 25.72% 43.66%

## 2 O 28.68% 52.06% 5.88% 54.48% 74.28% 56.34%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6

## 1 1 24.06% 16.53% 14.58% 17.64% 16.77% 15.79%

## 2 2 29.97% 29.29% 29.58% 21.39% 21.26% 25.46%

## 3 3 16.46% 15.04% 19.74% 23.4% 23.19% 24.39%

## 4 4 19.17% 23.1% 20.35% 20.71% 16.82% 19.69%

## 5 5 10.34% 15.78% 15.65% 16.69% 21.83% 14.67%

## 6 6 0% 0.25% 0.03% 0.09% 0.09% 0.01%

## 7 7 0% 0% 0.07% 0.09% 0.05% 0%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6

## 1 Begin/end of week 53.57% 55.41% 50.58% 55.04% 55.42% 50.14%

## 2 Midweek 46.43% 44.34% 49.32% 44.78% 44.44% 49.85%

## 3 Weekend 0.00% 0.25% 0.10% 0.18% 0.14% 0.01%

## CasePart X1 X2 X3 X4 X5 X6

## 1 Aanleg 0% 0% 0.41% 0.41% 9.76% 0.42%

## 2 Bouw 2.59% 27.28% 0.5% 99.95% 1.96% 100%

## 3 Brandveilig 0% 7.13% 0% 0% 0% 0%

## 4 Gebiedsbescherming 0% 3.49% 0% 0% 0% 0%

## 5 HandelenInStrijd 0% 3.12% 0% 17.22% 87.51% 16.66%

## 6 Kap 0% 0% 100% 0.26% 0.44% 0.33%

## 7 InritUitweg 10.81% 0% 0% 1.83% 0% 1.33%

## 8 Milieu 1.59% 86.21% 0% 1.98% 0% 3.67%

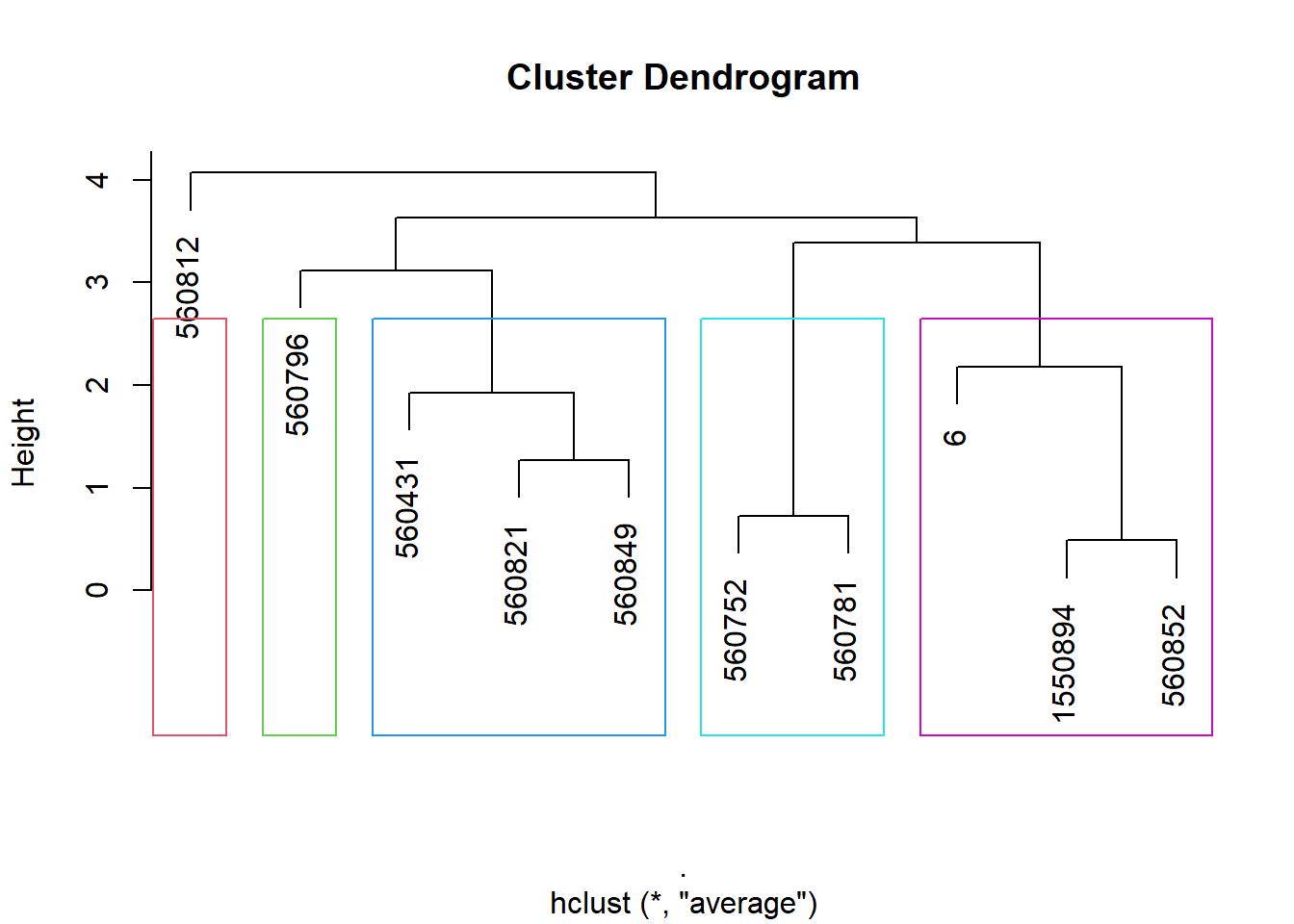
## 9 Monument 0% 1.37% 0% 2% 2.72% 2.44%

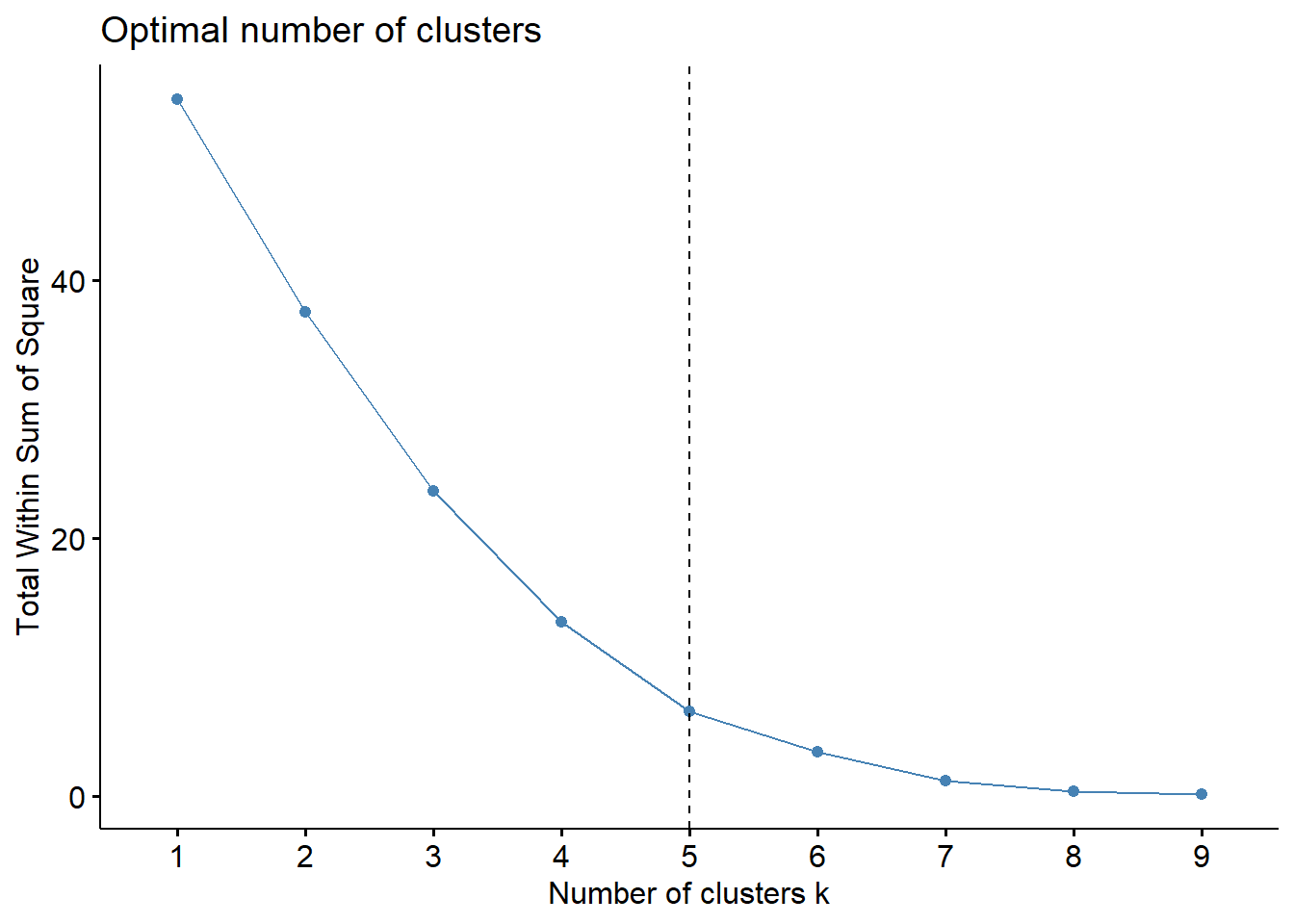
## 10 Reclame 2.03% 0% 0% 0.4% 0% 0.42%

## 11 Sloop 80.43% 2.85% 0% 2.82% 0.85% 3.78%

|  |  |  |  |
| --- | --- | --- | --- |
| Clust | Label | Description | Size (%) |
| 1 | Demolition cases | Blank procedure, status G, spread over week | 5.81% |
| 2 | Environment cases | Comprehensive procedure, spread over week | 8.32% |
| 3 | Tree felling cases | Blank procedure, status G, spread over week | 14.34% |
| 4 | Construction cases in phase 0,5 | Blank procedure, spread over week | 33.35% |
| 5 | Act in violation of spatial planning cases | Blank procedure, status O, spread over week | 12.08% |
| 6 | Other construction cases | Blank procedure, spread over week | 26.11% |

Profiles:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Archetypes

## 1 1550894 0.61% 2.12% 0.08% 6.02% 17.12% 74.05% 6

## 2 560852 0.00% 0.00% 0.00% 1.25% 14.68% 84.06% 6

## 3 6 0.00% 0.00% 0.00% 0.00% 1.09% 98.91% 6

## 4 560431 76.49% 0.00% 0.00% 0.00% 0.08% 23.43% 1,2

## 5 560821 35.60% 34.58% 4.63% 17.09% 4.26% 3.83% 1,2

## 6 560849 54.49% 45.50% 0.00% 0.00% 0.01% 0.00% 1,2

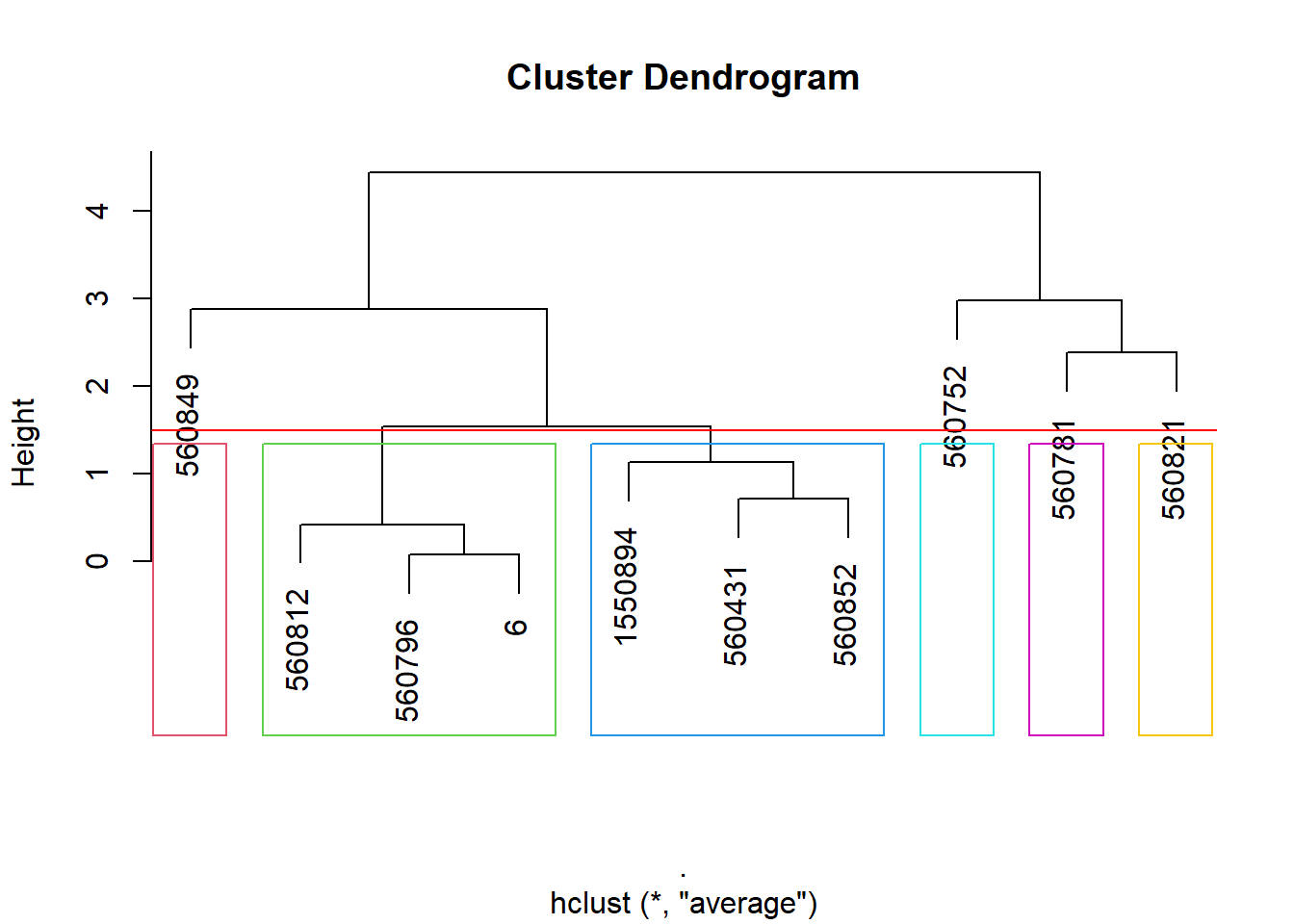
## 7 560752 4.96% 17.24% 13.39% 51.82% 11.16% 1.43% 3,4,5

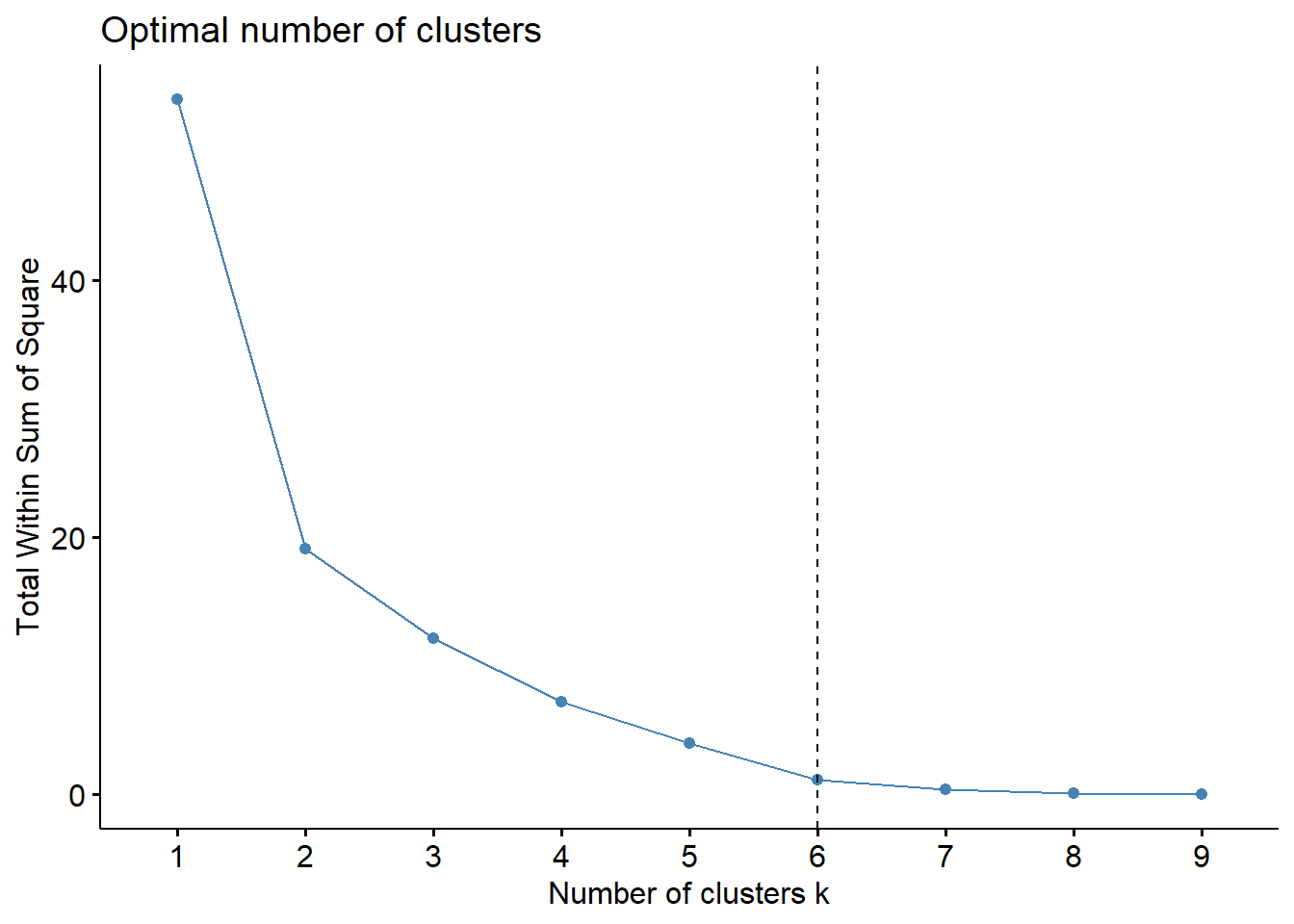
## 8 560781 2.64% 2.06% 27.52% 53.14% 12.96% 1.68% 3,4,5

## 9 560796 0.00% 99.79% 0.00% 0.00% 0.21% 0.00% 2

## 10 560812 5.83% 0.00% 94.17% 0.00% 0.01% 0.00% 3

Specialism:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Specialism

## 1 560852 84.06% 14.68% 1.25% 0.00% 0.00% 0.00% 1

## 2 560431 76.49% 23.43% 0.08% 0.00% 0.00% 0.00% 1

## 3 1550894 74.05% 17.12% 6.02% 2.12% 0.61% 0.08% 1

## 4 560752 51.82% 17.24% 13.39% 11.16% 4.96% 1.43% 2

## 5 560781 53.14% 27.52% 12.96% 2.64% 2.06% 1.68% 3

## 6 560796 99.79% 0.21% 0.00% 0.00% 0.00% 0.00% 4

## 7 6 98.91% 1.09% 0.00% 0.00% 0.00% 0.00% 4

## 8 560812 94.17% 5.83% 0.01% 0.00% 0.00% 0.00% 4

## 9 560821 35.60% 34.58% 17.09% 4.63% 4.26% 3.83% 5

## 10 560849 54.49% 45.50% 0.01% 0.00% 0.00% 0.00% 6

Specialists: clusters 1+4+6 (7)

Combination (Profile – Specialism):

## Profile Archetypes `1` `2` `3` `4` `5` `6`

## 1 1 6 2 0 0 1 0 0

## 2 2 1,2 1 0 0 0 1 1

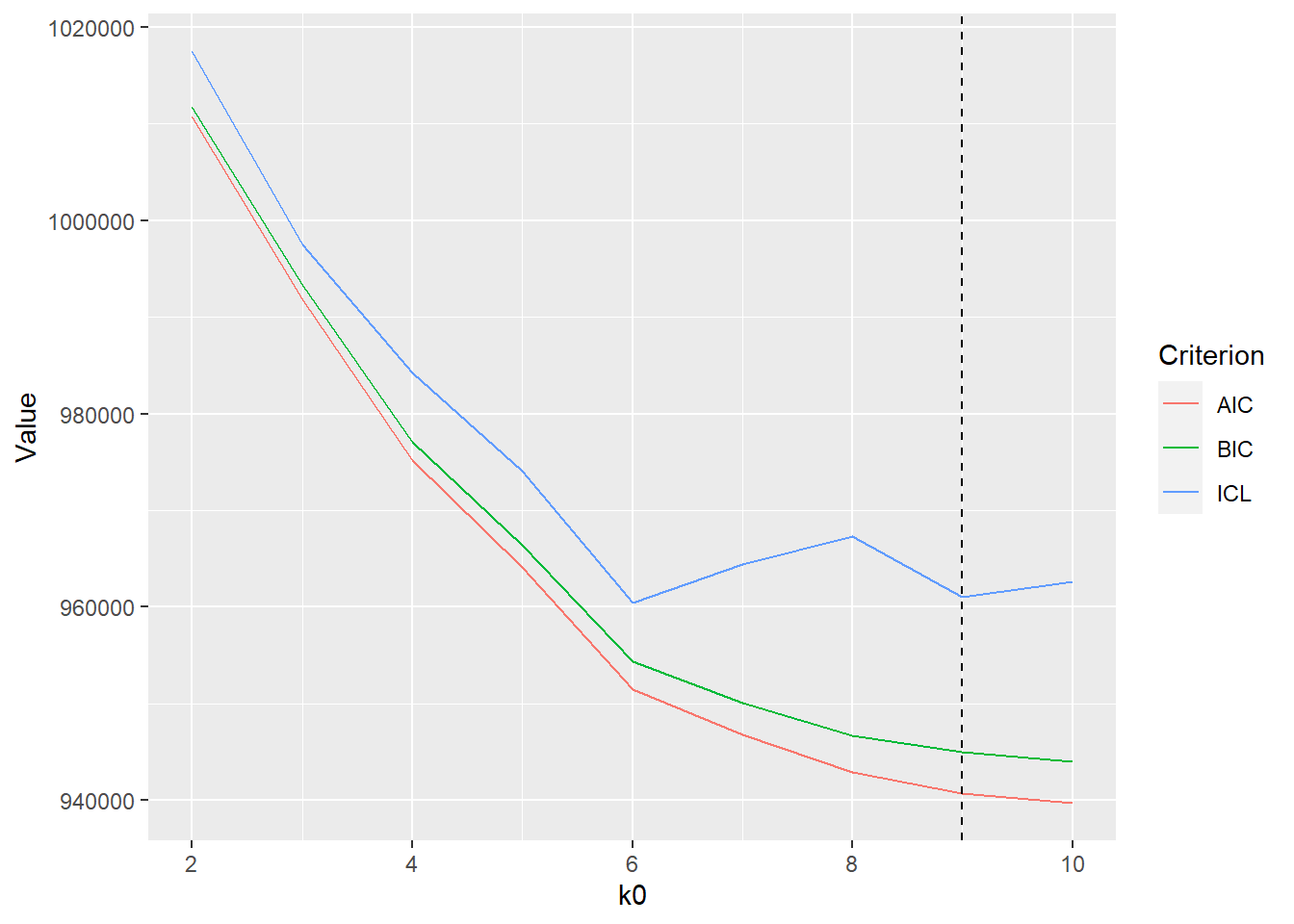
## 3 3 3,4,5 0 1 1 0 0 0

## 4 4 2 0 0 0 1 0 0

## 5 5 3 0 0 0 1 0 0

## Municipality 5

9 clusters => 10 clusters would go under 5% cluster size



## Cluster n rel

## 1 1 3519 0.05961477

## 2 2 3467 0.05873384

## 3 3 11151 0.18890715

## 4 4 3073 0.05205916

## 5 5 3946 0.06684850

## 6 6 21786 0.36907283

## 7 7 3330 0.05641295

## 8 8 5681 0.09624083

## 9 9 3076 0.05210998

## Phase Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7 Comp.8 Comp.9

## 1 phase0 36.81% 34.39% 32.63% 44.28% 51.59% 31.97% 35.85% 70.98% 55.19%

## 2 phase1 25.93% 0% 1.84% 17.84% 12.14% 23.05% 11.77% 0.29% 9.62%

## 3 phase2 12.23% 0% 0.25% 8.7% 4.73% 11.85% 6.75% 0% 3.3%

## 4 phase3 10.18% 0.01% 0.3% 10.05% 4.7% 12.36% 7.06% 0% 2.82%

## 5 phase4 12.8% 12.7% 16% 14.72% 13.87% 17.47% 16.64% 5.23% 17.96%

## 6 phase5 0.78% 34.32% 36.71% 1.87% 5.95% 0.21% 14.04% 10.3% 10.21%

## 7 phase6 0% 0.77% 0% 0.16% 0.71% 0.04% 0.17% 0.15% 0.07%

## 8 phase7 0.37% 11.43% 3.53% 0.53% 1.85% 0.35% 2.75% 6.8% 0.09%

## 9 phase8 0.9% 6.38% 8.75% 1.87% 4.46% 2.71% 4.97% 6.25% 0.75%

## CaseProcedure Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7 Comp.8 Comp.9

## 1 97.6% 93% 98.02% 83.18% 26.3% 97.58% 100% 94.36% 61.72%

## 2 Regulier 0.93% 0.79% 0.72% 3.11% 5.48% 0.91% 0% 0.62% 6.11%

## 3 Uitgebreid 1.47% 6.21% 1.26% 13.7% 68.22% 1.52% 0% 5.02% 32.16%

## CaseStatus X1 X2 X3 X4 X5 X6 X7 X8 X9

## 1 G 100% 100% 94.76% 96.35% 89.39% 95.77% 90.44% 99.78% 39.35%

## 2 O 0% 0% 5.24% 3.65% 10.61% 4.23% 9.56% 0.22% 60.65%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7 Comp.8 Comp.9

## 1 1 21.26% 14.4% 23.32% 20.73% 18.62% 19.13% 21% 12.92% 16.89%

## 2 2 18.09% 25.42% 19.44% 24.44% 20.99% 19.94% 24.48% 38.37% 24.39%

## 3 3 22.22% 30.38% 33.38% 20.45% 27.69% 26.09% 22.57% 3.66% 22.59%

## 4 4 24.43% 21.23% 21.46% 19.63% 28.07% 20.46% 22.89% 20.11% 24.85%

## 5 5 14% 8.4% 2.24% 14.72% 4.6% 14.37% 8.94% 24.65% 11.17%

## 6 6 0% 0.13% 0.07% 0.03% 0.03% 0% 0.06% 0.18% 0.01%

## 7 7 0% 0.04% 0.09% 0% 0% 0% 0.06% 0.11% 0.11%

## Weekday Comp.1 Comp.2 Comp.3 Comp.4 Comp.5 Comp.6 Comp.7 Comp.8 Comp.9

## 1 Begin/end of week 59.69% 44.02% 47.02% 55.07% 51.30% 53.96% 52.83% 57.67% 52.90%

## 2 Midweek 40.31% 55.80% 52.82% 44.89% 48.68% 46.04% 47.05% 42.03% 46.97%

## 3 Weekend 0.00% 0.17% 0.15% 0.03% 0.03% 0.00% 0.12% 0.29% 0.13%

## CasePart X1 X2 X3 X4 X5 X6 X7 X8 X9

## 1 Aanleg 1.15% 9.77% 0% 25.3% 5.14% 0% 1.43% 0% 12.19%

## 2 Bouw 48.09% 43.13% 100% 0.57% 31.35% 100% 0% 100% 67.98%

## 3 Brandveilig 2.2% 7.04% 0% 24.93% 0.9% 0.43% 0% 0% 7.74%

## 4 FloraFauna 7.27% 0.89% 0% 0% 0% 0% 0% 0% 0%

## 5 Gebiedsbescherming 0.77% 0.32% 0% 0% 1.82% 0% 0% 0% 0%

## 6 HandelenInStrijd 15.62% 33.8% 14.03% 42.79% 15.02% 18.53% 0% 19.73% 61.95%

## 7 Kap 6.88% 4.27% 0.16% 0% 0.12% 0.45% 100% 0.49% 0.75%

## 8 InritUitweg 1% 2.53% 1.29% 3.1% 0% 1.53% 1.33% 1.23% 0%

## 9 Integraal 4.71% 0% 0% 0% 0% 0% 0% 0.2% 0%

## 10 Milieu 10.03% 8.12% 3.35% 0% 100% 5.24% 0% 6.76% 2.61%

## 11 Monument 5.58% 2.28% 2.47% 0% 0% 2.14% 0% 2.95% 1%

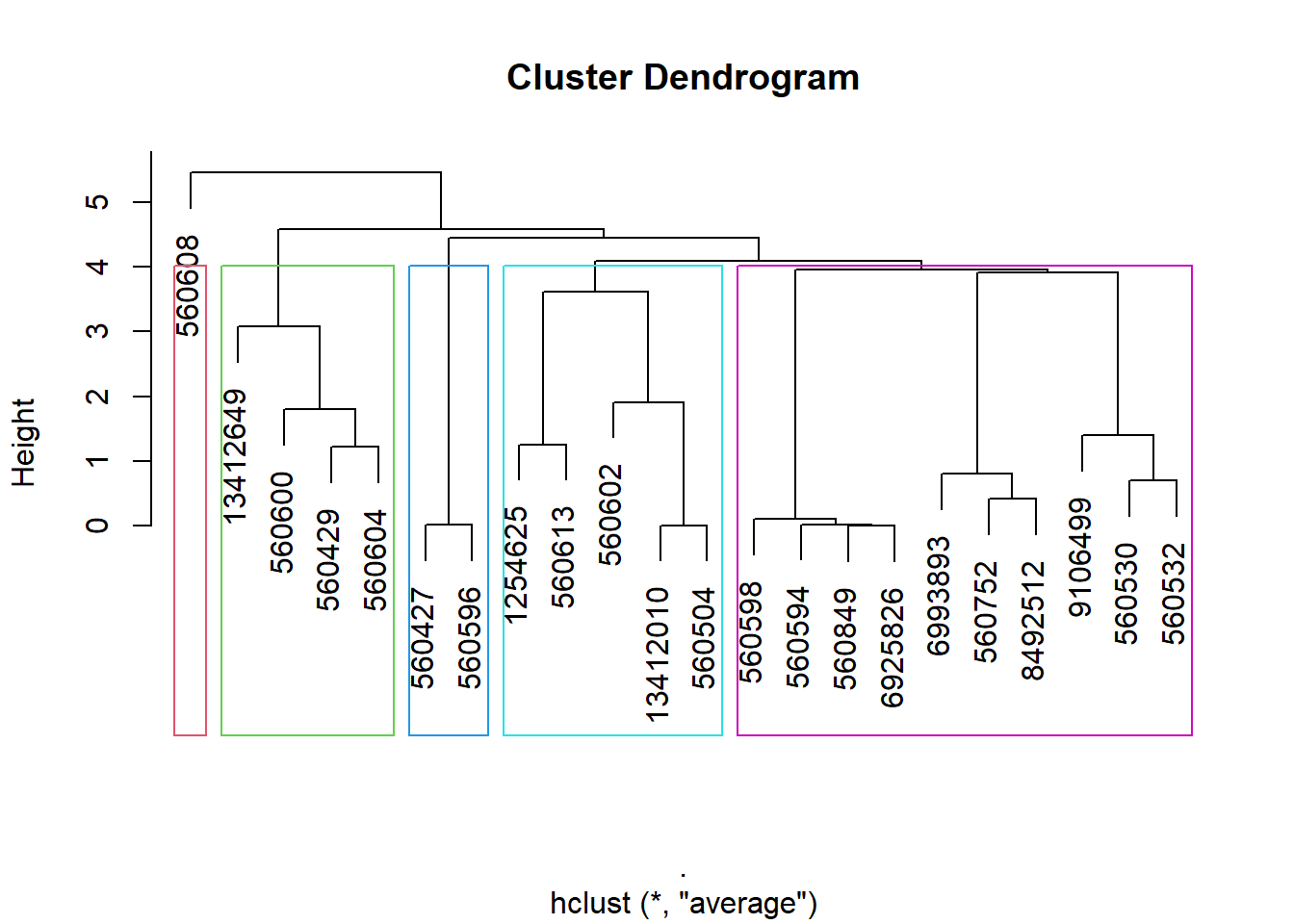
## 12 Reclame 0% 1.69% 1.52% 4.97% 0% 1.52% 0% 1.61% 5.85%

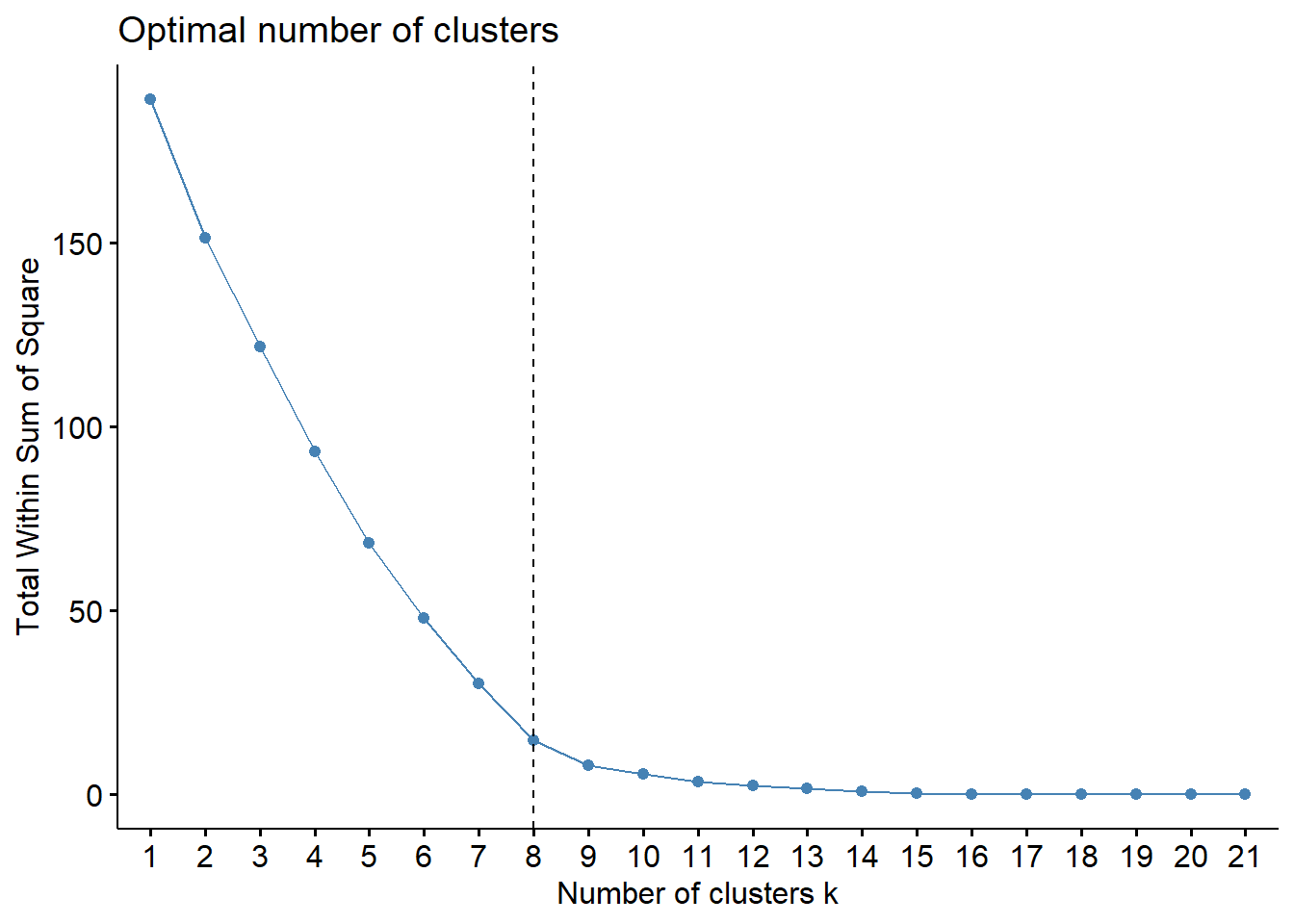
## 13 Roerende Zaken 0% 0% 0% 0% 0% 0% 0% 0% 1.06%

## 14 Sloop 87.17% 35.44% 0% 0% 2.94% 0% 0% 0.79% 0%

|  |  |  |  |
| --- | --- | --- | --- |
| Clust | Label | Description | Size (%) |
| 1 | Demolition cases | Blank procedure, status G, spread over week | 5.96% |
| 2 | Other cases in phase 0,5,7 | Blank procedure, status G, spread over week, less likely Friday | 5.87% |
| 3 | Construction cases in phase 0,5 | Blank procedure, status G, spread over week, not Friday | 18.89% |
| 4 | Other cases in phase 0,1,4 | Blank procedure, status G, spread over week | 5.21% |
| 5 | Environment cases | Comprehensive procedure, status G, spread over week, not Friday | 6.68% |
| 6 | Construction cases in phase 0,1,4 | Blank procedure, status G, spread over week | 36.91% |
| 7 | Tree felling cases | Blank procedure, status G, spread over week, less likely Friday | 5.64% |
| 8 | Construction cases in phase 0 | Blank procedure, status G, spread over week, not Wednesday | 9.62% |
| 9 | Other cases in phase 0,4 | Blank procedure + sometimes comprehensive procedure, more likely status O, spread over week | 5.21% |

Profiles:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Clust7 Clust8 Clust9 Archetypes

## 1 1254625 1.18% 31.43% 38.23% 0.08% 5.50% 0.42% 6.00% 17.16% 0.00% 2,3,8

## 2 560613 0.00% 39.58% 16.54% 0.00% 1.21% 0.94% 7.18% 34.56% 0.00% 2,3,8

## 3 13412010 0.01% 0.00% 99.98% 0.00% 0.00% 0.01% 0.00% 0.00% 0.00% 3

## 4 560504 0.03% 0.00% 99.92% 0.00% 0.00% 0.04% 0.00% 0.00% 0.00% 3

## 5 560602 0.04% 15.27% 63.50% 2.35% 5.46% 0.57% 5.13% 0.45% 7.24% 3

## 6 13412649 0.00% 0.00% 0.01% 0.00% 0.00% 99.99% 0.00% 0.00% 0.00% 6

## 7 560429 11.43% 2.84% 2.44% 2.45% 4.14% 52.49% 3.56% 11.80% 8.85% 6

## 8 560600 18.15% 0.03% 0.91% 4.74% 1.26% 60.66% 0.00% 14.26% 0.00% 6

## 9 560604 9.60% 0.00% 0.56% 2.93% 0.00% 81.94% 1.06% 0.19% 3.72% 6

## 10 560427 0.04% 0.00% 0.16% 0.00% 0.00% 0.00% 99.80% 0.00% 0.00% 7

## 11 560596 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 100.00% 0.00% 0.00% 7

## 12 560530 2.42% 0.00% 28.25% 0.00% 7.65% 0.00% 12.19% 0.00% 49.49% 3,7,9

## 13 560532 0.00% 1.82% 32.60% 1.06% 0.00% 0.00% 9.02% 8.24% 47.26% 3,7,9

## 14 9106499 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 30.68% 18.47% 50.85% 3,7,9

## 15 560594 0.00% 0.00% 0.00% 0.00% 99.41% 0.59% 0.00% 0.00% 0.00% 5

## 16 560598 0.00% 0.00% 0.00% 0.00% 98.30% 0.00% 0.00% 0.00% 1.70% 5

## 17 560849 0.00% 0.00% 0.00% 0.00% 100.00% 0.00% 0.00% 0.00% 0.00% 5

## 18 6925826 0.00% 0.00% 0.01% 0.00% 99.99% 0.00% 0.00% 0.00% 0.00% 5

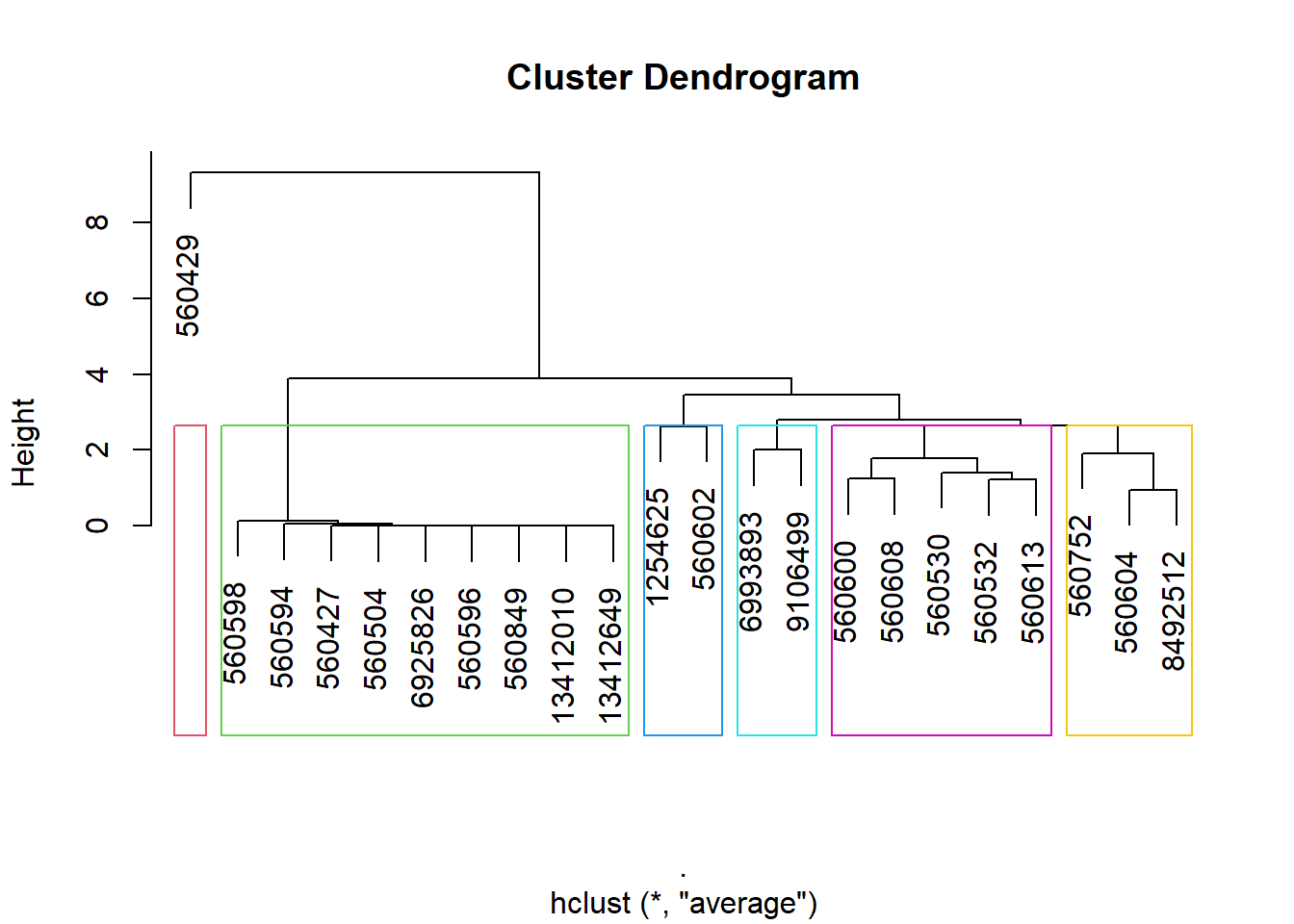
## 19 560608 0.00% 0.23% 0.00% 52.29% 0.00% 18.60% 5.56% 0.24% 23.09% 4,9

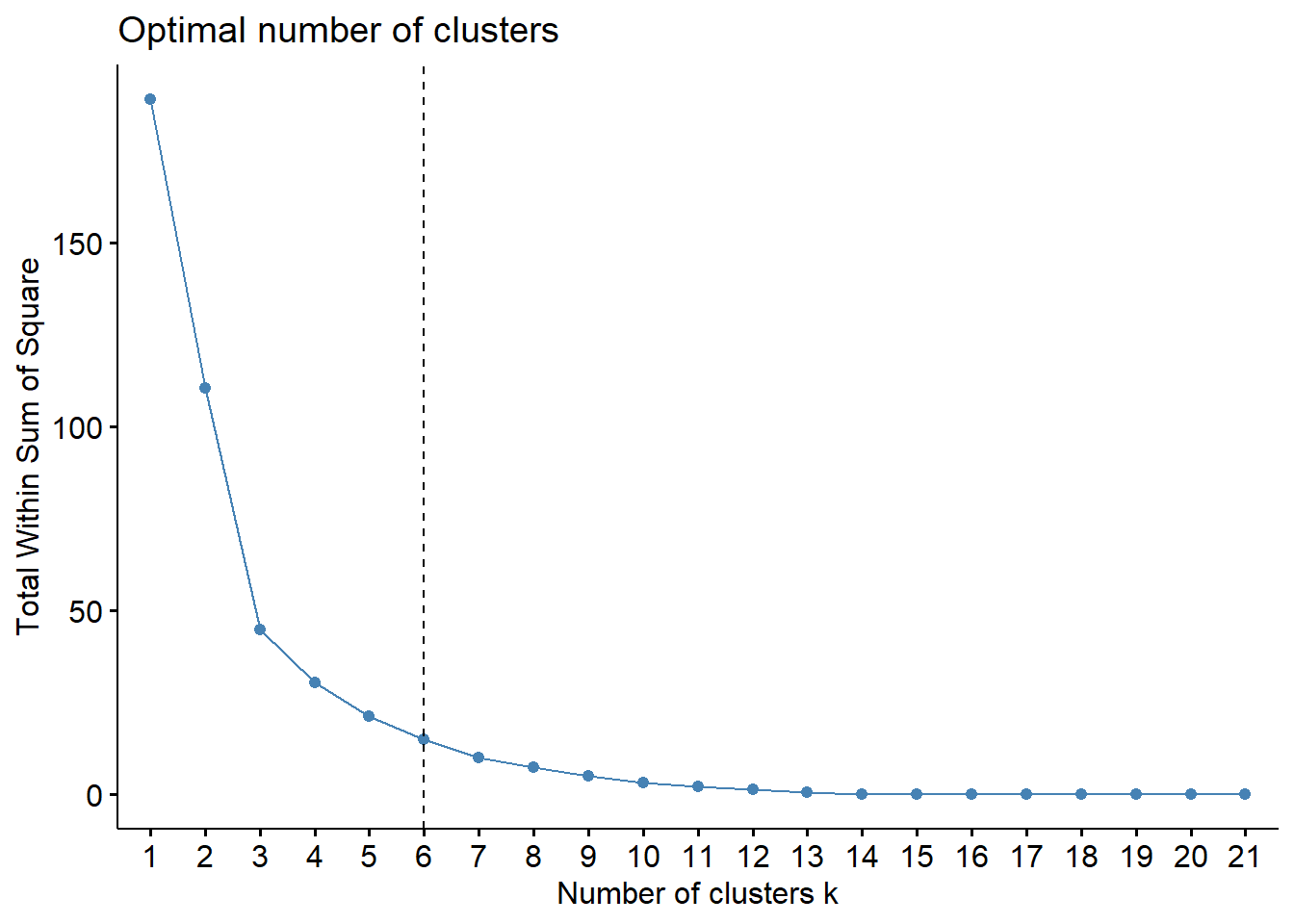
## 20 560752 0.00% 1.94% 2.73% 8.90% 9.03% 0.00% 7.20% 70.20% 0.00% 8

## 21 6993893 0.00% 0.00% 0.00% 12.90% 0.00% 0.00% 0.00% 75.55% 11.55% 8

## 22 8492512 0.84% 0.00% 0.00% 9.02% 5.72% 0.00% 5.08% 77.48% 1.86% 8

Specialism:





## Resource Clust1 Clust2 Clust3 Clust4 Clust5 Clust6 Clust7 Clust8 Clust9 Specialism

## 1 560602 63.50% 15.27% 7.24% 5.46% 5.13% 2.35% 0.57% 0.45% 0.04% 1

## 2 1254625 38.23% 31.43% 17.16% 6.00% 5.50% 1.18% 0.42% 0.08% 0.00% 1

## 3 560596 100.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 4 560849 100.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 5 6925826 99.99% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 6 13412649 99.99% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 7 13412010 99.98% 0.01% 0.01% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 8 560504 99.92% 0.04% 0.03% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 9 560427 99.80% 0.16% 0.04% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 10 560594 99.41% 0.59% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 11 560598 98.30% 1.70% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2

## 12 560429 52.49% 11.80% 11.43% 8.85% 4.14% 3.56% 2.84% 2.45% 2.44% 3

## 13 560600 60.66% 18.15% 14.26% 4.74% 1.26% 0.91% 0.03% 0.00% 0.00% 4

## 14 560608 52.29% 23.09% 18.60% 5.56% 0.24% 0.23% 0.00% 0.00% 0.00% 4

## 15 560530 49.49% 28.25% 12.19% 7.65% 2.42% 0.00% 0.00% 0.00% 0.00% 4

## 16 560532 47.26% 32.60% 9.02% 8.24% 1.82% 1.06% 0.00% 0.00% 0.00% 4

## 17 560613 39.58% 34.56% 16.54% 7.18% 1.21% 0.94% 0.00% 0.00% 0.00% 4

## 18 560604 81.94% 9.60% 3.72% 2.93% 1.06% 0.56% 0.19% 0.00% 0.00% 5

## 19 8492512 77.48% 9.02% 5.72% 5.08% 1.86% 0.84% 0.00% 0.00% 0.00% 5

## 20 560752 70.20% 9.03% 8.90% 7.20% 2.73% 1.94% 0.00% 0.00% 0.00% 5

## 21 6993893 75.55% 12.90% 11.55% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 6

## 22 9106499 50.85% 30.68% 18.47% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 6

Specialists: clusters 2+5 (12)

Combination (Profile – Specialism):

## Profile Archetypes `1` `2` `3` `4` `5` `6`

## 1 1 2,3,8 1 0 0 1 0 0

## 2 2 3 1 2 0 0 0 0

## 3 3 6 0 1 1 1 1 0

## 4 4 7 0 2 0 0 0 0

## 5 5 3,7,9 0 0 0 2 0 1

## 6 6 5 0 4 0 0 0 0

## 7 7 4,9 0 0 0 1 0 0

## 8 8 8 0 0 0 0 2 1