

# Comparison of proportional average working time per zone

## General remarks

**Project 1, Frauenfeld, historical Museum:** encompassed 28'000 objects. Mainly small to midsize objects, midsize furniture, mainly small to midsize paintings.

The contaminated storage rooms were directly linked to the cleaning zone by an airlock. Objects were cleaned, clearance measured, packed for immediate transportation (by road, 20 minutes ride) and placed into a new storage premise. No registration/cataloguing or photography took place.

The project took place in 2019 with a cleaning period of 4 months and additional 1.5 months with reduced staff for finishing up storing objects in the new storage facility and cleaning up cleaning zones in the contaminated building.

Staff: 13.75 equivalent fulltime positions, 30 persons. All personal was external to the institution.

**Project 2 "collection 2",** historical and art and folk-art collection, 59'000 object units, 9'000 database-entries.

About ½ of the collections were paintings and sculpture, most of the medium size, only few small or large size, ½ mixed objects and furniture (mainly mid-size cupboards).

The contaminated storage rooms were directly linked to the cleaning zone by an airlock. Objects were cleaned, clearance measured, packed for later transportation (except for paintings) and put back into the same, but meanwhile cleaned storage rooms. Parts of the cleaned collection were photographed and registered/catalogued by staff of the collection, while all the other personal was external to the institution.

The project took place in 2020 over a period of 7 months with 1 month of preparing the zones before and 0.5 months of cleaning and disassembling the zones after the cleaning projects, each with reduced staff.

Staff: 17.55 equivalent fulltime positions, 41 persons

**Project 3 "collection 3",** historical and art collection. Ongoing project 202/2021. As of 30.4.2021: 58'000 object units, 15'000 database entries

Mixed objects including a lot of uniforms and militaria, very fragile large paintings, large/ very large furniture, upholstered furniture. Large proportions of the collection showed a grimy, sticky surface soiling that made removal of asbestos fibers very difficult.

The storage rooms holding contaminated collections were located on several floors throughout a non-contaminated professional art-warehouse and had to be transported to the cleaning zone by closed containers held at low pressure to prevent contamination from spreading.

Objects were cleaned, clearance measured, photographed, registered/catalogued, underwent urgent stabilization (for extremely fragile paintings and sculpture), were packed for later transportation (except for paintings) and put back into the same, but meanwhile cleaned storage rooms. All the personal was external to the institution except for 3 persons checking off-site (online catalogue) on the quality of the cataloguing.

32 equivalent fulltime positions, 60 persons

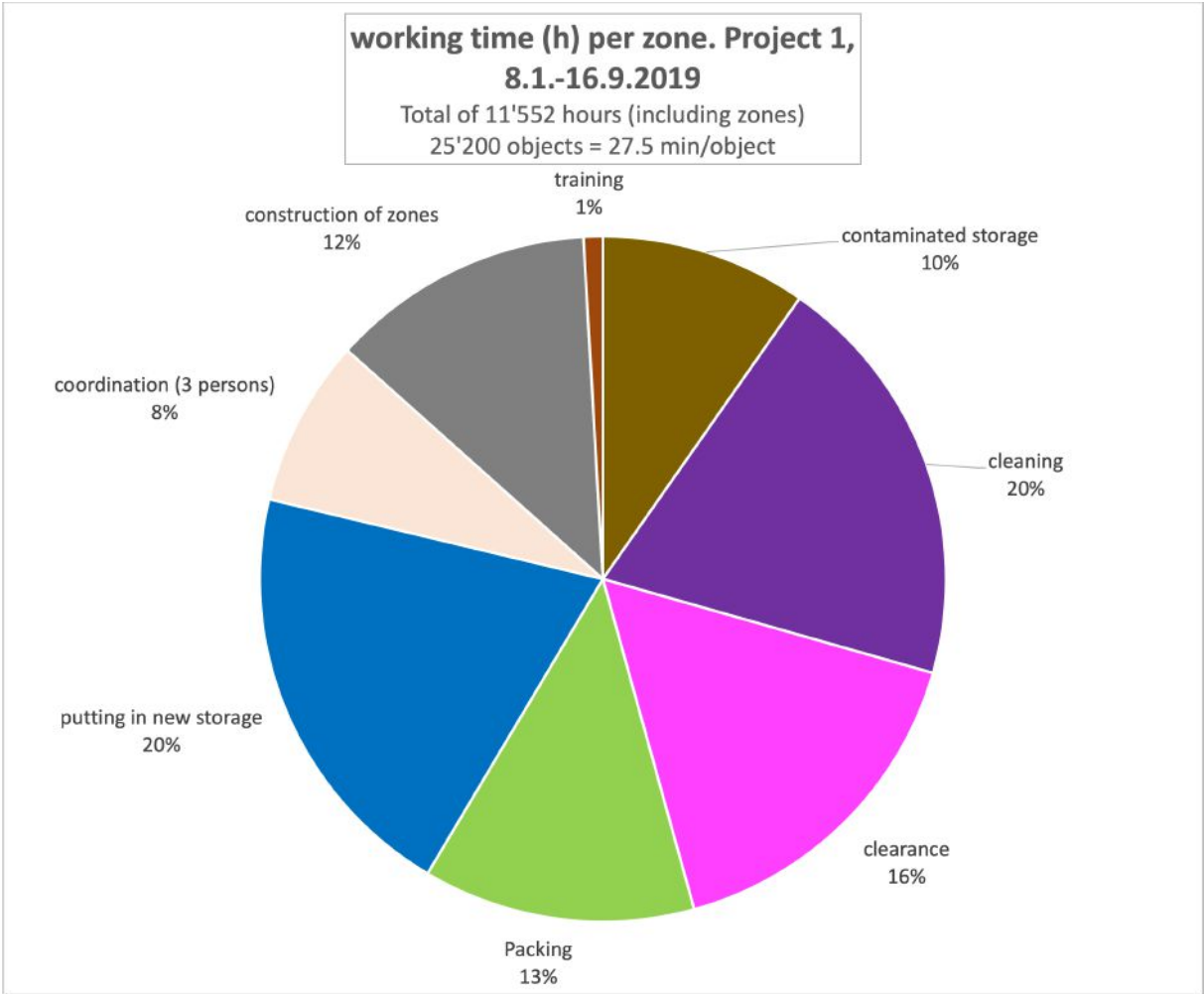
Not all three projects needed the same steps in the working process. Cataloguing and photographing might not always be necessary. Or packing needs might vary.

While the objects of the first collection were rather clean, the second collection had dusty and moldy soil and the third collection in addition to dust and mold showed a grimy, sticky surface soiling, probably stemming from a previous storage facility next to a car parking zone in a basement.

Therefore, average cleaning times were different, as was the distribution of workload in the various working areas. The dirtier the collection, more time took cleaning and clearance measuring compared to photography and registration.

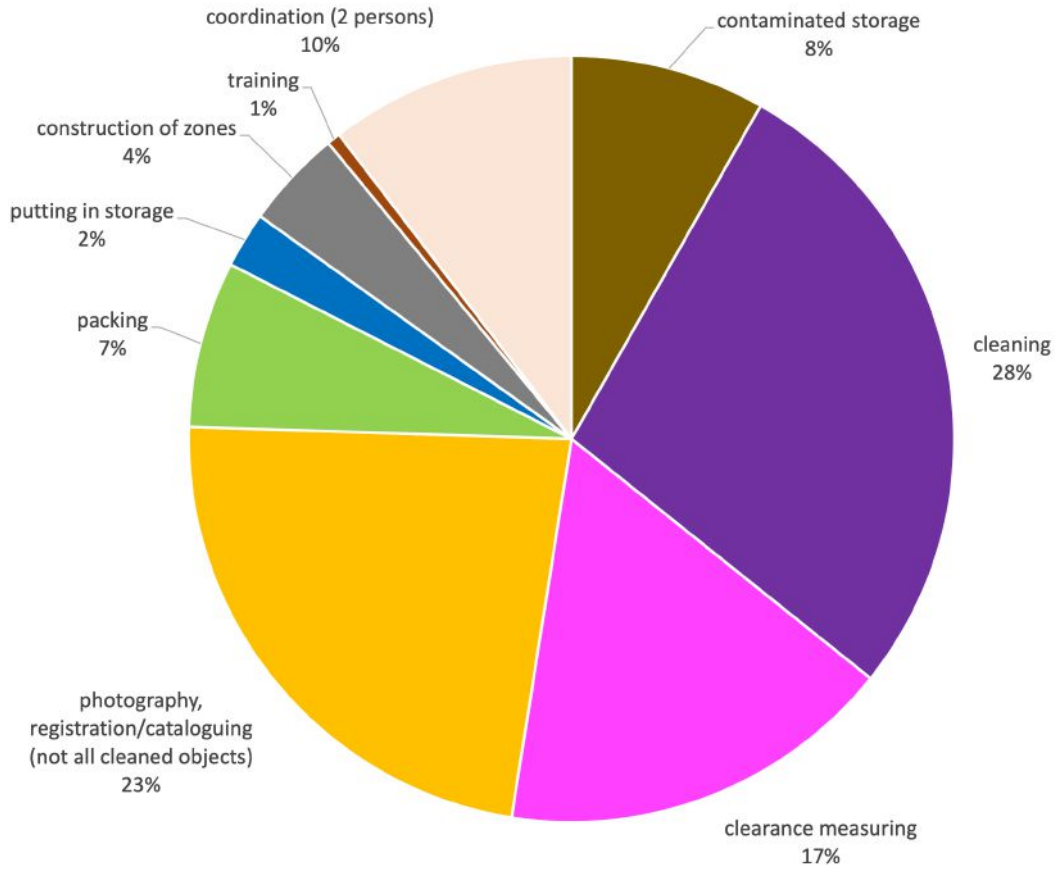
The following diagrams show the average percentage of workhours for the total of work done in all the zones.

Important: The percentage of time needed to build, change, and dismantle zones, as well as time needed for training staff will decrease with the length of the project. The smaller/shorter a project, the more important become these parts of the work.



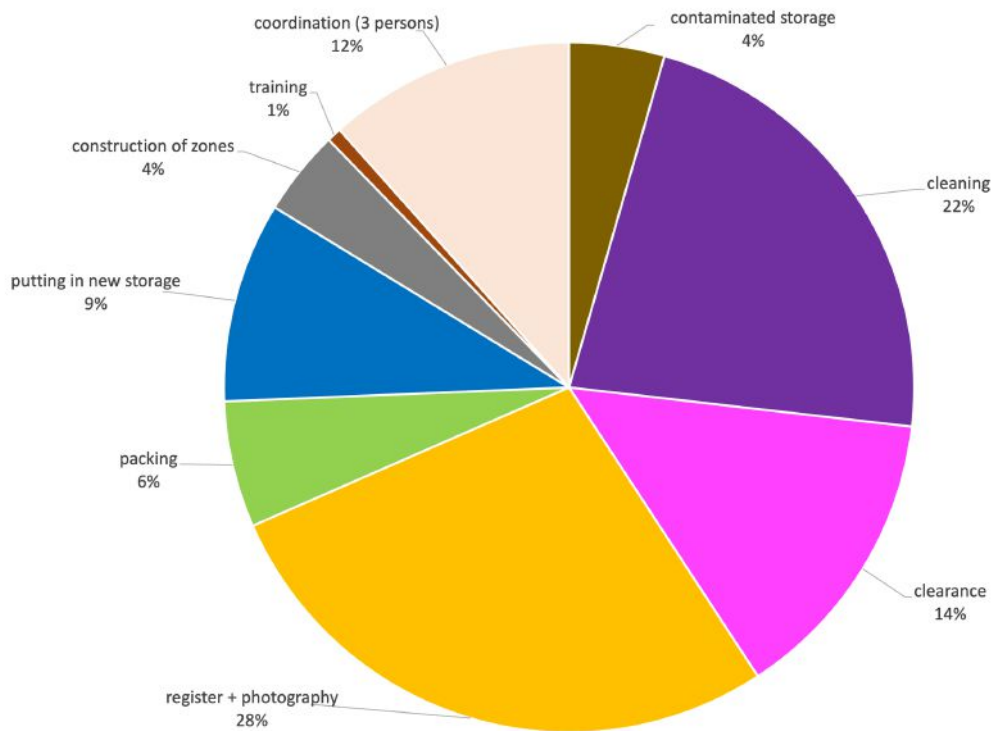
*1: working time per zone for project 1, Historical Museum Frauenfeld. No photography and cataloguing of the objects took place. Very difficult to construct zones necessitating a decontamination before constructing the zones, and constructing low-pressure zones within a overpressure zone.*

**working time by zones, project 2, 1.1.-26.8.2020**  
**Total 18'035 hours**  
**for 57'803 cleaned objects = 20 min./object**



2: working time by zone project 2. Only part of the collection was photographed and catalogued, therefore this time attribution is not correct. Packing for later transportation.

**working time per zone, project 3**  
25.8.20-30.4.21  
total 29'968 hours, 57'571 objects treated = 30 min. /object

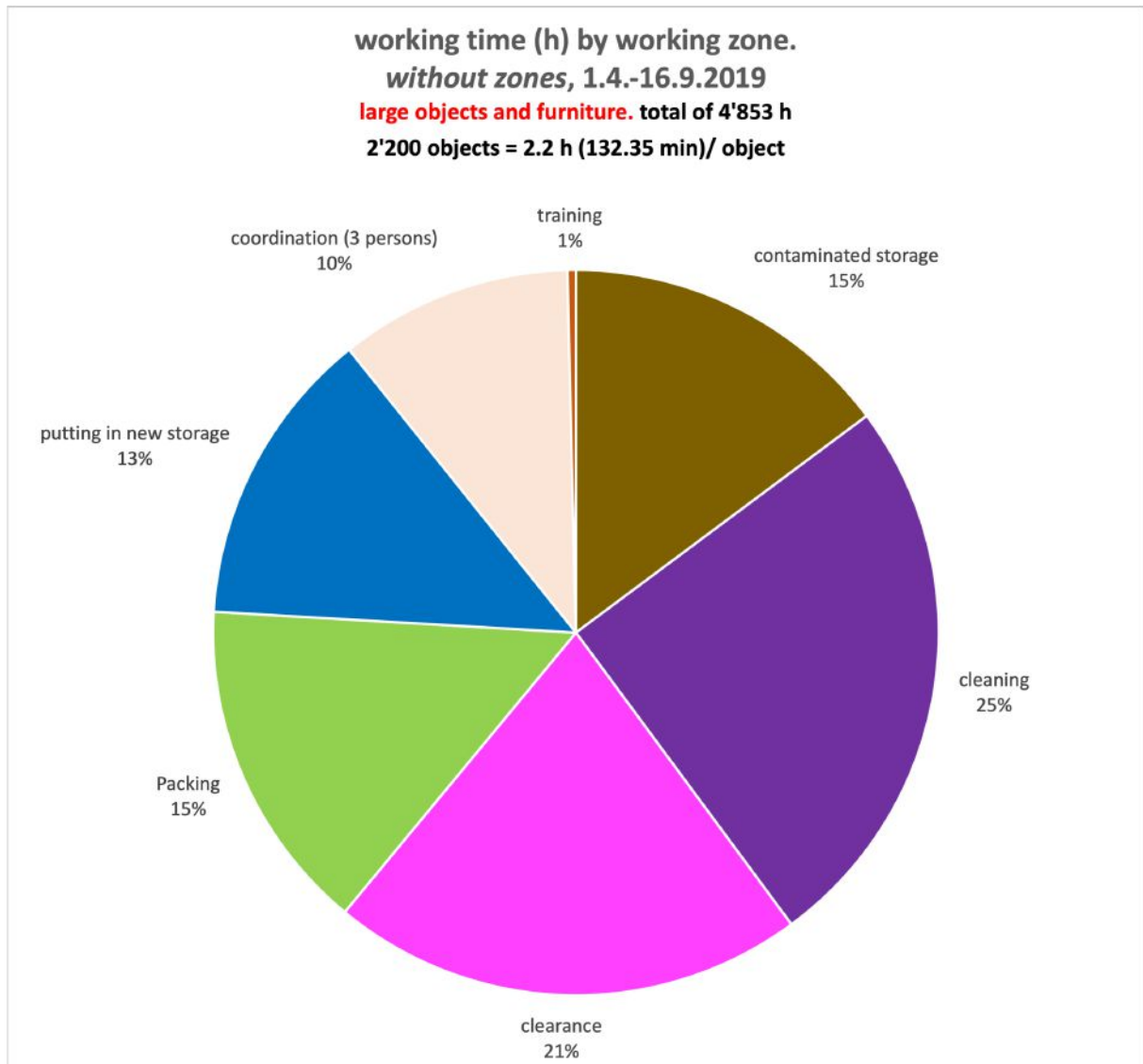


3 working Time per zone for project collection 3. There were extremely large, fragile paintings, very large furniture and grimy surface soiling causing cleaning and clearance to take more time than in previous projects.

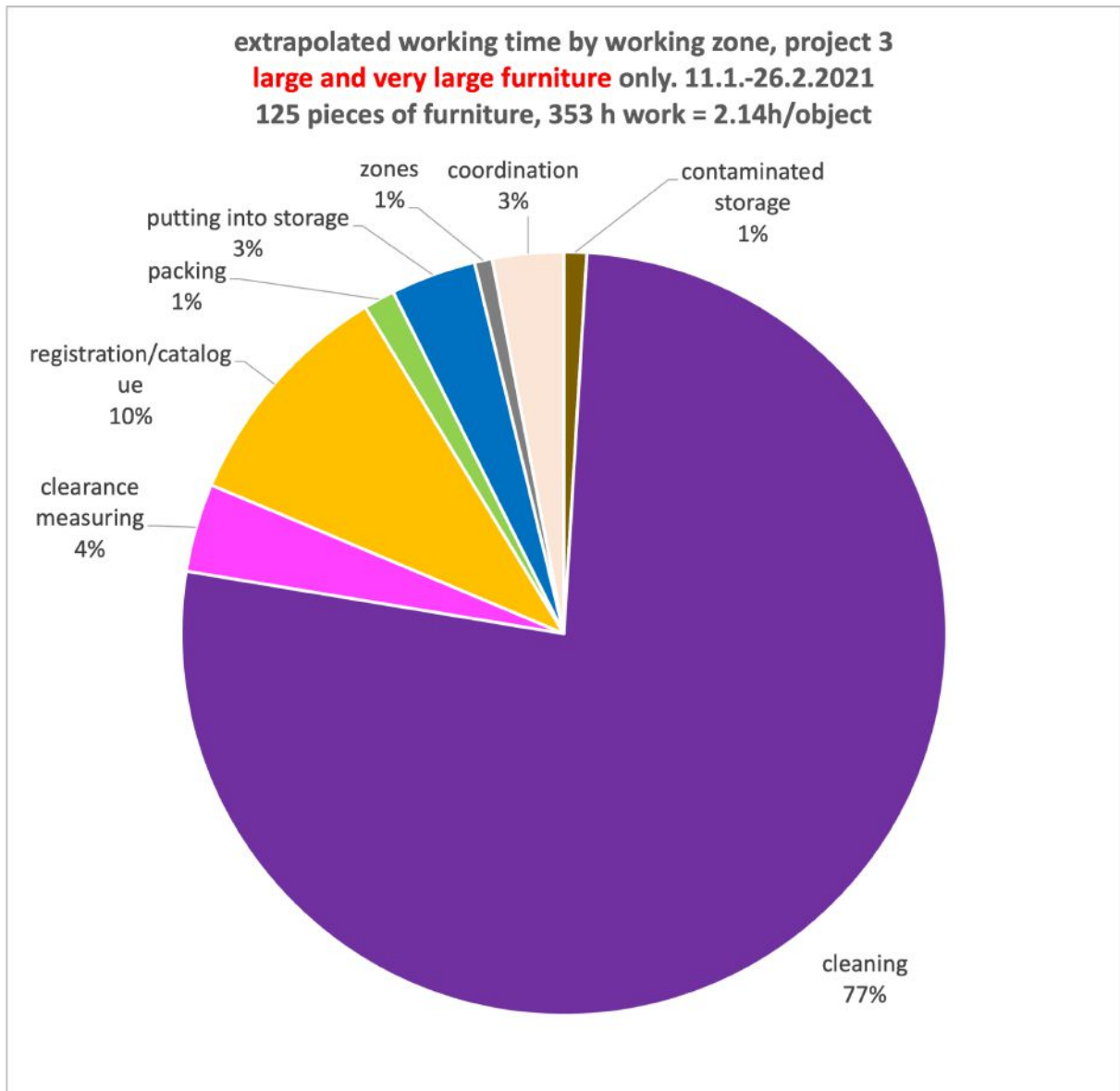
## Large and difficult objects only

In addition to overall project averages, the following diagrams might be of interest showing time-distribution for more difficult to clean objects. If the balance between the work zones gets out of balance, a better mix of different types of objects needs to be directed toward cleaning, so that registration and packing will have enough work. Most of the time, bringing more people into the cleaning zone will not be possible due to the limited resources in asbestos-vacuum cleaners, pressurized air workstations etc.

This imbalance was encountered with e.g. large paintings with frames, large furniture, very dirty objects (long-haired fur-lined military coats) or very large objects, where the whole cleaning team has to come together to clean one single object (e.g. Savonnerie-rug of 4.85x 4.15 m or gigantic unmounted and unframed canvas paintings (4 x 8 m).



4: Project 1, large furniture only. Please note, that this diagram does not contain time for building the zones as it was not possible to say how to split this time amongst different object groups.



5: extremely large furniture with grimy surface dirt. In this case, the equilibrium between workstations completely collapsed. Even though 9 persons were giving their best in cleaning, the other stations did not have enough work.



6: example of very large furniture (see the door in comparison) The room has a height of 3.5 m.