

ZONE-BASED COUNTING

PROCESS

Zone-based counting involves first dividing the event site into defined zones and then counting the number of visitors in each zone. For this it is crucial to know the total area available for visitors and to exclude any other parts of the site, such as parking spaces, stage areas and stalls, as they are not included in the area determination. After all, these are not included in the defined visitor area. The total visitor area is then divided into separate zones.

Aerial photo

Aerial photos form the best basis for zone-based counting. If the municipality agrees, one or more drones can be used to take aerial photographs of the total area at regular intervals – for instance, every hour. The aerial photo is then used to count all the people in each zone. Or a sample can be counted, per zone, and extrapolated to form a full zone count. The total of the actual or extrapolated number of people for all zones is the total number of visitors, per photo, of the total area.

Observation

It is not always feasible to use aerial photographs – for technical reasons, or because the event area is too spread out. In such cases, observation is a good alternative. This involves observing how many people are in each, clearly-defined zone on the ground. This can be the actual number of people or a sample, for extrapolation. This method does not take every zone into account. It selects a sample of the zones, adds them up and extrapolates from this fraction of the area to the total area. The count is based on real-time observation of the number of visitors. These numbers are passed on to the central operator by telephone or digitally. Via simple addition, the operator thus obtains quasi-real-time information on the number of visitors present at each count, for instance every hour.

ADVANTAGES

+ Little prior knowledge required: this counting method can be implemented relatively easily after a short training or briefing.

DISADVANTAGES

- **Technical requirements:** zone-based counting with aerial photos requires appropriate equipment and permission.
- **Complex terrain measurement:** when counting people in zones on the basis of observation, it is important to have a clear and detailed surface map of the event site for a quasi-real-time measurement.
- **Double counting:** zone-based counting cannot filter out double counting, making it impossible to get figures on the number of unique visitors.

COST (EXCL. VAT)

Zone-based counting using aerial photo with deployment of a hired drone:

- from €125 x number of days.

Zone-based counting by observation:

- €12 personnel cost per hour x number of days x number of hours per day

POTENTIAL SUPPLIERS

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