Planning for wheel accessibility

Wheel accessibility planning is a combination of identifying impediments to smooth rolling and routing around them and gathering advance information to provide to people so they can assess the walk against their needs and capabilities and participate with confidence.

Communication:

Communicating the nature, duration and terrain of the walk is key to people feeling that access is possible.

To do this we need to be able to describe how long the walk will take, the speed at which we expect to move, the ground we will pass over and any other variables people may need to consider to decide if they can participate.

It is important to advertise basic access information in advance of the walk and provide a point of contact for access enquiries. Use descriptions and photographs of parts of the route that might be challenging to help people decide if they can participate.

Evaluating a path:

The three major considerations are path surface, gradient, and width and they inflect each other.

Surface:

A wheelchair user needs a firm surface that provides good traction.

Hard, not slippery surfaces are preferable. The more give a surface has, the harder it is to propel oneself along.

When planning and testing your walk consider the ground surface beneath your feet and how it gives and how well maintained it is.

In some cases the difficulty of the surface means the person must put in more physical effort, or be assisted. In other cases the surface means the person cannot take that route at all.

If you are unsure of a surface photograph and describe it so that people can assess the difficulty for themselves.

Uneven surfaces: ie large pavement cracks, displaced pavers - can cause tipping hazards, and increase the difficulty of the trip. A steep camber on a path or turn can also cause tipping issues.

Grass: can be traversed so long as the ground underneath it is firm, not spongy.

Muddy and soft ground is slippery and gives no wheel traction. If your walk will go across grass check how firm the surface is. The time of year will impact this as will the amount of rain leading up to the walk. Softness of ground has an even greater impact on users of heavy power wheelchairs. The chair weight increases the chances of getting bogged down.

Gravel: Very light small gravel over a hard surface can be rolled on. Deep or uneven rocky gravel is an obstacle.

Sand/beaches: Require special beach chairs or all-terrain and four wheel drive chairs. Not all wheelchair users have access to these.

Curbs and steps: Look for where the curb cut outs and ramps are on your route and try to use them.

Low curbs and very small single steps, 8 cm and below, can be navigated by both manual and power wheelchair users and many mobility scooters, but require more effort and should avoided where possible.

Gradient:

How easy or difficult a hill is will depend on the surface of the path.

A steep climb with a flat hard surface can be achieved with light motor assistance. A steep climb combined with a poor or soft surface is inaccessible.

For example slowly summiting Maungakiekie using the road was found to be feasible with a motor assisted wheelchair (similar to how an electric bike complements pedalling with a motor).

Note the hills and their grades (easy, medium, steep) and photograph hills so that people can assess their difficulty for themselves and decide what mechanical or human assistance they need.

Think about the number of hills and their gradient in relationship to the length of the walk so you can signal the fitness level and effort required. (This is a factor for all people).

Providing an assistance person to push can mitigate difficulty created by gradient and path surface. It is important that any assistance person only acts at the invitation of the person who is being assisted and follows their instructions.

Path width and bollard obstructions:

To work out if a narrow path or passageway is accessible measure it.

Work to the recommended doorway width for access - 82 cm.
If a sharp turn is required to navigate a gap then the gap needs to be bigger, at least 1.2 m, to allow for turning.

A sharp turn on a steep gradient is trickier than a sharp turn on the (almost) flat and may require assistance to be navigable. If the path is also on a distinct angle side to side it may not be safe.

Viewing points and barrier height:

If there is a point at which you want everyone to stop and look at something consider if there are any barriers to vision - a person using a wheelchair is at sitting height.

Toilets:

When identifying toilets along the route look to see if they are wheel accessible and if they are note this.

A walk is only accessible if the participants can actually get there

Arrival Point:

Can the people park close and will they have enough space to get their chair out?

Check if there is already marked accessible parking, if not look to see where temporary accessible parking can be set up. An accessible car park is wider than standard with space beside and behind the vehicle for mobility aids. The recommended measurement is 3.2m wide. Sign them so they are easy to locate.

Is the Public Transport route close and accessible. Ie. do the buses usually have wheelchair access, does the train station have a lift or ramp.

Returning to the beginning:

If your walk is one way and you plan to provide transport back to the beginning clearly signal this in the advance information. Provide a contact point for people to discuss their transport needs.

Scheduling:

Scheduling a walk to be access friendly means considering the time of day and weather.

Morning: routines can be complex and time consuming. Late morning onwards is easier (after 11 am)

Cold temperatures: can have a negative impact on access. The temperatures can be a result of the time of year and the time of day.

Rain: is a barrier for most people, however it can have a greater impact on wheelchair users, both because they are sitting and because umbrellas are not always feasible for manual wheelchair users. In addition rain reduces traction and prolonged periods of wet are not recommended for powered wheelchairs

Types of human assistance to consider to increase access

Access Assistance People:

Providing access assistance people can solve some terrain difficulties. Access assistance needs the consent of the person being assisted and should be directed by them. Assistance can include push assistance on hills or tricky surfaces, help negotiating tight turns, and standing on the side of a path if there is a drop off, as well as carrying and fetching. The access assistant should be introduced to the person before the walk begins. They should be good at listening and following instructions.

Finally, your state of mind impacts access:

Ry not to be anxious. When you're anxious about if you're doing it right and overly worried on behalf of a person then they have to do emotional labour to make you feel better about their access. It's better to do your best, be open about the process and have fun along the way so that everyone enjoys the experience.