**Title:** Use of 3D scanning technology to determine access for people using

powered mobility devices on buses.

**Background:** While public transport is designed to move people efficiently and affordably in their local region, many people using powered mobility devices have access difficulties, particularly when using buses. People using powered mobility aids, professionals prescribing these devices and public transport providers all require accurate information concerning which devices will and will not be able to access (enter, manoeuver and exit) buses.

**Aim:** To demonstrate how existing 3D technologies and software can be applied to enable people using mobility aids to determine the fit of powered mobility devices on buses, and to present the fit or misfit for a range of mobility devices.

**Methods:** The 3D scanning technologies and prototype software used will be described, and the simulation process that determined the compatibility of the mobility aids for access on buses will be presented.

**Findings:** This paper presents a novel approach to scanning buses and mobility aids in 3D. We have determined the dimensions of powered mobility devices that indicate if they will be able to fit a bus, and will share these. We have identified a range of current powered wheelchairs and scooters available in Australia and provide data on their 3D fit on on buses.

**Conclusion:** This paper demonstrates how gathering and using 3D data can assist people using mobility devices, professionals who prescribe them and transport operators to optimise transport network accessibility for all community members.