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## Assessing the Impact of WC19 Wheelchairs on the Transportation Safety of Wheelchair Seated Students

School bus transportation is known to be extremely safe for the typical student.

However, there is little specific data regarding the experience of children with intellectual and physical disabilities who travel to and from school in a school bus while seated in a wheelchair. FMVSS 222, the regulation for wheelchair securement occupant restraint within school has been in place for 13 years. In, 2001 ANSI/RESNA released a new safety standard that applies to the wheelchair called ANSI/RESNA WC19. This standard describes the design, manufacture, testing and labeling of a stronger, crash tested wheelchair frame with 4 labeled, easy-to-reach securement points that make it easy to attach the S hooks on the wheelchair securement straps To the wheelchair. A WC 19 wheelchair also includes a wheelchair anchored public safety belt. Wheelchairs that meet the standard can withstand the impact forces of a 30 mph/20 g change in velocity.

A research project funded by the rehab engineering research Center on wheelchair transportation safety will be conducted in partnership with the National Congress Student Transportation. Fifty State Directors of Pupil Transportation will be surveyed regarding the number of reported bus incidents involving wheelchair seated students along with their statewide policies and procedures for securing students riding in wheelchairs on school buses. A second phase of the study will survey local school bus drivers across the United States regarding their experience of securing wheelchairs that comply with WC19. We expect that in addition to easier and more efficient securement, drivers will report fewer incidents involving students who ride seated in WC19-compliant wheelchairs. This project will begin in 2008 with funding from the National Institute for Disability and Rehabilitation Research in the Department of Education. For more complete information see research at: <http://www.rercwts.org/>