While at the recent STN EXPO in Reno , I heard a cautionary tale. Not long ago, some districts in a coastal state reported finding seat belts that exhibited cracks in plastic components.

The seat-belt manufacturer investigated and eventually solved the mystery: the source of the problem was not a product defect but a side effect of improper maintenance by the school district. In this moist coastal environment, mold growth on the belt webbing was sometimes a problem that occurred when buses remained parked during the hot summer. To clean the mold, the districts had been spraying the belts with a common household cleaner. When the chemicals contacted the latch-plate mechanism, cracking eventually began to occur at stress points of the plastic portions.

The districts were, in fact, lucky that the problem buckles brought these well-meaning but inappropriate behaviors to the attention of the manufacturer. Less obvious, but equally dangerous, was the fact that the chemicals being used to clean the belt webbing were also damaging it. In reality, even the belt systems that appeared to have functional buckles may not have been strong enough to perform properly in a crash because the load-bearing fibers of the webbing had been deteriorated due to exposure to a cleaning agent that was much too strong.

The districts learned not only that the solution was to replace all the belt systems—both buckles and webbing—but also the proper maintenance of the new belts to prevent further expensive

repairs. This points up an important consideration for all types of child safety restraint systems (CSRS) on school buses: the materials that are used for these devices (webbing, plastic, metal, foam, etc.) must be in good condition to perform properly. Use (and even just the passage of time) will eventually take its toll, but the useful lifespan of these products can be maximized through a routine of scheduled maintenance that carefully follows the manufacturers’ advice.

For any district or Head Start program, seat belts and CSRS represent a major investment, so it’s important to take an organized and proactive approach to maintaining these assets. Routines should be established to check for recalls, damage, and mishandling as well as steps for proper cleaning and care. For guidance in developing or improving such a system for your organization, go to www.saferidenews.com to find school bus safety information that can help.

Denise Donaldson is a certified child passenger safety technician instructor and the editor of Safe Ride News,
an independent publication based in Edmonds, Wash. Donaldson presented "Maintaining Your CSRS Investment
" and “Maintaining Your CSRS Investment”
at the 19th Annual STN EXPO in Reno, Nev.