

## The Nation

# In the end, people just need more room

Americans' expanding backsides are behind a trend toward wider, more comfortable seating in public areas

By Rick Hampton  
USA TODAY

**T**he economy isn't all that's expanding; suburbs aren't all that's sprawling. So are our backsides, and the seats that must contain them.

► New York City subway officials have bowed to rider demand and ordered new cars without the "bucket"-style bench seats that, at 17.5 inches across, weren't big enough for Big Apple bottoms.

► General Cinema theaters installed "love seats" with retractable middle armrests so couples could cuddle, but the 46-inch-wide seats proved equally popular with "larger" patrons. So now ushers subtly steer people with love handles to love seats.

► The smallest seats at the new Conseco Fieldhouse in Indianapolis, home of the NBA's Indiana Pacers, are 21 inches wide, 3 inches more than the smallest in the team's old home, Market Square Arena.

► The famed Central City (Colo.) Opera House ripped out century-old wooden chairs with 17-inch seats and replaced them with chairs 20 to 22 inches wide. So hated were the old chairs and so eagerly anticipated were the new ones that an open house was held just to let people try them out. "The old ones were like Army food," says Fritz Trask, an opera subscriber in the old mining town west of Denver. "People got tired of complaining about them."

They were so tight, says Hilton Martin, a 6-foot-2, 225-pound opera board member, that "the third act always felt like the fifth act." And intermission felt like heaven.

Without any official vote, resolution or regulation, a venerable standard of American design — the 18-inch spectator seat — is slowly becoming obsolete.

For most of American history, 18 inches was enough. We made do with that or less in the pews at Old North Church in Boston, in the orchestra section of the old Metropolitan Opera House in New York, in the stands at Chicago's Wrigley Field, in the rafters at Boston Garden.

The 18-inch figure still is officially recognized in some building codes. It's listed as an acceptable minimum standard for auditorium and theater seating in *Architectural Graphic Standards*, a definitive volume of design guidelines edited by the American Institute of Architects.

Times have changed, however. "We make 18-inch seats," says Tim Hussey of



1996 photo by Andre Lambertson, AP

**Kicking the buckets:** 17 1/2-inch-wide 'bucket' seats on Japanese-made New York subway trains are too narrow for many riders.



By John Zich for USA TODAY

**Love those seats:** At General Cinema Premium Cinema in Lombard, Ill., waiter Fred Thompson serves Gwen McBeth and John Udig in a double seat with retractable armrest.

the Hussey Seating Co. "But no one's buying 'em."

Whatever lingering validity the "18-inch rule" enjoys is about to be dealt a scientific coup de grace.

The CAESAR project — for Civilian American and European Surface Anthropometric Resource — is using special scanning technology to measure the body contours of about 4,000 volunteer subjects in the USA and Canada. The project is

sponsored by the Air Force and about 30 big manufacturers, who need the information for product design.

CAESAR is the first study of its kind in 50 years, the first ever of civilians, and the first to measure people in several positions, including seated.

Kathleen Robinette, the anthropologist who directs the project, thinks the 18-inch rule is doomed: "A whole bunch of people I'm measuring complain that they need

wider seats."

Cramped seating, she says, explains why there was no trouble getting volunteers. "People are tired of seats that don't accommodate them," she says. "It's a large problem."

A large problem. She hears herself and chuckles.

Although many chair designers are reticent about saying so, Americans are getting fatter. The percentage of obese Ameri-

cans has increased 50% in the last two decades; since 1985, the average adult weight has increased 10 pounds; more than half of adults are overweight.

Thus, we demand more seating room when we go to the theater, movies, stadium or arena. The Puget Sound ferry, the Hollywood Bowl and the Kennedy Center in Washington, D.C., all have reduced seating capacity to increase sitting room.

As a result, the more expensive seats are wider at many newer facilities, including HSBC Arena in Buffalo and Coors Field in Denver. Coors' wider seats are more expensive, although their views aren't as good as some narrower ones.

The most conspicuous exception to the trend toward wider seats is found at 30,000 feet. Airline first-class seats spill more than 20 inches across, but those in coach are between 17 and 18 inches, with no serious talk of expansion.

But how much room is enough? Middle-aged adults need more than college students, who haven't filled out yet; Northerners need more than Southerners, who don't wear as much winter clothing; opera-goers need more than sports fans, who are always jumping up and spend less time in the seat. People subconsciously expect to be a little cramped in an old theater, but expect a larger seat in a modern one.

Whatever the definition of sufficient seating room, over time Americans have needed more of it. The amount of space the New York subway system allocates per fanny marks the broadening of our beam. Paul Matus, a transit historian, says the allotment rose from 16.5 inches in 1907 to 17.25 inches in 1927 and to 17.6 inches in 1971.

But in 1984, new cars made by Kawasaki of Japan enforced the 17.5-inch allotment by using ridges to mark each seat on the bench, creating a series of buckets. New Yorkers were incensed. "Japanese seats for Japanese bottoms," they called them. Ample-bottomed riders sagged over the little plastic ridges, taking up 1 1/2 seats and defeating the purpose of the bucket.

City Councilwoman Carol Greitzer — an otherwise sober-minded legislator — responded to constituents' complaints by measuring the bottoms of 23 subway riders.

Her conclusion: They needed 23-inch seats — not the 17.5-inch buckets they were being forced to squeeze into.

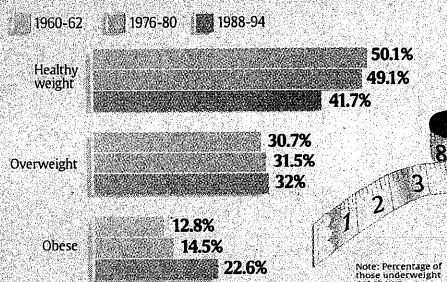
Increasingly, 17 or 18 inches seems barbaric. And the entry in *Architectural Graphic Standards*, written two decades ago, might be in for a rewrite.

"It's time to visit this again," admits the editor, John Ray Hoke Jr. "Eighteen inches has been around for a long time. That's a tight seat."

He speaks from experience. "I'm 6-4 and 240 pounds," he says. "When I sit down in the school auditorium, I can barely get up."

## Majority are overweight

An increasing percentage of Americans ages 20-74 are overweight, even obese:



WEDNESDAY

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FRIDAY

SATURDAY