

America's Worst Intersections

by *Forbes.com*

The Cross Bronx Expressway, that fume-choked expanse of concrete and steel that slices through New York City's mainland borough, occupies a uniquely tragic place in the history of urban planning.

It displaced more than 60,000 middle-class residents during its construction between 1948 and 1963, and it cost \$250 million--more than any highway project before it. The apartment buildings that line its growling trench have been home to generations of asthmatic children who struggle to breathe in the acrid clouds of exhaust that fill the air. Its presence has so thoroughly eviscerated its surroundings that many blocks adjacent to it are occupied entirely by families living below the poverty level.

The so-called "Cross Bronx" can add another ignominious distinction to its long list: Exit 4B is home to America's worst intersection, according to traffic-tracking firm Inrix. In fact, three of America's four worst bottlenecks are interchanges on its seven-mile length. (Click [here](#) to see how bad it really is.)

In Depth: Bottlenecks In The 50 Largest U.S. Cities

Drivers who pass through this interchange between the Cross Bronx and the Bronx River Parkway encounter a stretch of road that is congested an average of 94 hours every week. That means that for more than half of the hours in a week, traffic moves at less than 50% of free-flow speed. The average speed through that interchange when it's congested: 11 miles per hour.

Many of the country's 100 worst intersections are on urban highways like the Cross Bronx. Chicago's Kennedy Expressway claims 13 spots in the top 100--the most of any roadway--and the Hollywood Freeway in Los Angeles has 11 interchanges in the top 100. In other parts of the country, roads are just as clogged: In Washington, D.C., it's the Henry Shirley Memorial Highway/Interstate 395 Northbound at George Washington Memorial Parkway that most slows drivers; in San Francisco, Interstate 580 Westbound at Bellam Boulevard causes backups. And in Atlanta, a notorious traffic hot spot, Interstate 75 Southbound at Interstate 675 (Exit 227), is the most congested.

"Those urban stretches of highway are always clogged," says Inrix Vice President Rick Schuman, who authored the study. "There's just no room to expand there."

The most prominent exception is the No. 2 intersection, where Interstate 580 meets U.S. Route 101 in Marin County, Calif. There, drivers are trapped in backups an average of 65 hours every week as some traffic from the Richmond-San Rafael Bridge is forced onto local roads on its way to U.S. 101, a major Bay Area thoroughfare. "That's just a geometry issue," says Schuman. "They need to come up with a ramp configuration that can handle that traffic."

Behind the Numbers

Inrix identifies traffic congestion by gathering location and speed data from 800,000 commercial vehicles equipped with GPS tracking devices, as well as from state departments of transportation. By comparing that information--which amounts to billions of data points over 47,000 miles of major highways in the country's 100 largest census-defined metropolitan statistical areas--to free-flow speeds, Inrix computes its travel time index. That index is a ratio of the average amount of time it takes to get through a congested area compared with the amount of time it takes to get through the same area when it's not congested.

[Click here](#) for a list of the country's 100 most congested intersections.

[Click here](#) for a look at America's most congested cities.

Glossary: 50 Largest MSAs

To compile this ranking, Inrix multiplied each highway segment's 2008 travel time index by that segment's length to create a measure of likely driver pain.

Inrix's customers, which include Mapquest and Clear Channel, as well as navigation device makers like Garmin and TomTom, use its data to route drivers around the kinds of bottlenecks included in this study. This

spring, new cars from Ford Motor will include an Inrix service called predictive routing that sends drivers around predicted traffic in addition to current traffic. For instance, a driver going from New York to Washington using the new service will get directions from Inrix that avoid actual traffic jams in New York as well as tie ups that Inrix predicts one hour ahead in Philadelphia, two hours ahead in Maryland and three hours ahead in Washington.

Silver Lining

Inrix's analysis reveals a striking trend: Traffic congestion has decreased profoundly across the country. A combination of high gas prices and a slowing economy caused a 3% dip in driving in 2008, according to federal data. Inrix says that drop led to a 30% decrease in congestion.

"That's really dramatic," says Inrix chief executive Bryan Mistele. "A fairly minor difference in the number of vehicles on the road had a disproportionate impact on congestion." It also underscores the importance of careful planning as the Department of Transportation plots out where to spend stimulus money that is marked for highway construction.

"We should continue to focus on traffic congestion and not assume that this drop is permanent," says Mistele. "Traffic congestion will return to normal levels, which are problematic. [Congestion] has a real cost on society in terms of gas, in terms of carbon emissions and in terms of productivity."

The only city in Inrix's study that didn't see a drop in traffic congestion was Baton Rouge, La., where hurricane recovery, the energy industry and road construction led congestion to grow 6% over 2007 levels.

Honolulu experienced the largest drop in congestion in the survey; travel times there decreased by 11%, though it still ranks second in the nation by that measure. Among more populous areas, California's Inland Empire (an area that includes Riverside and San Bernardino Counties) saw the most improvement, with congestion there falling by 60% due to the economic slowdown and real estate collapse.

Not only did cities change places in the survey; many intersections did, too. "The mobility, if you'll excuse the term, of the bottlenecks is surprising," says Schuman. A third of last year's worst 100 bottlenecks have been replaced by others on the list this year, and a quarter of the top 1,000 are new. That suggests that bottlenecks are closely related to road construction, he says.

Schuman points to Minneapolis, where the interchange between Interstates 35E and 694 was the 63rd worst in the country in 2007. After completion of Minnesota's "Unweave the Weave" highway project there, the interchange has dropped off of Inrix's list altogether. Now U.S. 169 Southbound at Interstate 494/Highway 5 delays drivers most.

In all, Inrix figures that the average driver spent about 13 fewer hours sitting in traffic in 2008 than they did in 2007. Although the reasons behind that--high gas prices and a bad economy--are negative, it's good news for the hapless drivers who have to fight their way through the Cross Bronx Expressway. The average congested speed of 11.2 miles per hour at its worst interchange is up from 9.7 miles per hour in 2007.

That saves the average rush-hour commuter about two hours per year of sitting at the most congested place in the country.

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