



NYPIRG **Straphangers Campaign**

A project of the New York Public Interest Research Group Fund

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NEWS RELEASE

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Subway Car Cleanliness Declined Between 2009 and 2010, “Shmutz” Survey Finds

Cars on R Line the Dirtiest; 7 Line is the Cleanest

Wide Disparities Among All 20 Lines

(New York, New York) – The number of clean subway cars declined since 2009, according to the twelfth annual “subway shmutz” survey released today by the Straphangers Campaign.

Campaign surveyors rated 47% of subway cars as “clean” in a survey conducted in the fall of 2010, which was a statistical decline from 51% of cars rated clean in a survey conducted in the fall of 2009. This continues a trend of a decrease in the number of clean subway cars, which dropped from 56% in 2008 to 51% in 2009.¹

The worst performing line in our survey was the R, with the smallest number of clean cars at 27% in this survey, down from 39% back in 2009. The best performing line in our survey was the 7 with 68% of its cars rated clean, up from 63% in 2009. (See Tables One and Two.)

Five of the 20 subway lines grew worse, while one improved and fourteen stayed largely the same.

The 2010 budget contained cuts in cleaning staff, with car cleaners going down from 1,138 with 146 supervisors in 2009 to 1,030 cleaners and 123 supervisors in 2010.

“Last year, we predicted ‘more cuts to come means more dirt for subway riders.’ And sadly that’s turned out to be true,” said Gene Russianoff, campaign attorney for the Straphangers Campaign.

–more, more, more–

¹ These percentages reflect the system average without the V and W lines, which were terminated in June 2010. The systemwide decreases in cleanliness from 2008 to 2009, and again from 2009 to 2010, are statistically significant.

The car cleanliness survey is based on 2,000 observations of subway cars by the Straphangers Campaign between September 14 and November 20, 2010. The 2009 survey covered a nearly identical period.

Cars were rated on 20 lines for cleanliness of floors and seats, following MTA New York City Transit's official standards for measuring car cleanliness. Cars were rated as clean if they were "basically dirt free" or had "light dirt" ("occasional 'ground-in' spots but generally clean").

Cars were rated not clean if they were "moderately" dirty ("dingy floor, one or two sticky dry spots") or heavily dirty ("Heavy dirt; any opened or spilled food, hazardous (e.g. rolling bottles), or malodorous conditions, sticky wet spots, any seats unusable due to unclean conditions").

The survey did not rate litter. Since 1997, the campaign has conducted eleven largely similar studies for similar periods. (See attached methodology.)

Other key findings of the survey included:

- The five subway lines that experienced statistically significant deterioration were the 6, B, E, L and R.
- The most improved line in our survey was the M, going from 32% clean cars in 2009 to 61% in 2010. It was the one subway line that showed statistically significant improvement. The M was dramatically restructured in June of 2010, combining with the V line and losing 24 stations between downtown Manhattan and southern Brooklyn.
- Fourteen lines remained statistically unchanged: (1, 2, 3, 4, 5, 7, A, C, D, F, G, J, N and Q.)
- The most deteriorated line in our survey was the B, which fell from 61% in 2009 to 37% in 2010.
- The survey found major disparities in cleanliness among the lines, ranging from a low of 27% clean cars on the R line to a high of 68% on the 7.

"Will subway cleanliness continue to suffer as budgets grow tighter? We will do another survey next year, compare and find out," said Cate Contino, the coordinator for the Straphangers Campaign, who directed the survey.

MTA New York City Transit conducts its own semi-annual subway car cleanliness survey.

Transit’s survey showed that the number of clean car floors and seats (those with no or light dirt) “in service” declined slightly from 95% in the second half of 2009 to 94% in the second half of 2010, a statistically insignificant change.

The average percentage of clean cars in the Campaign’s 2010 survey was 47% compared to New York City Transit’s 94% for clean cars in service in the second half of 2010.

The Campaign acknowledged the different findings, but said that it was not able to point to factors that come to these results.

The car cleanliness surveys by Transit and the Straphangers Campaign’s surveys use similar although not-identical methodology. For example, we rate throughout the day and night and on weekends. New York City Transit rates on weekdays between 8 a.m. and 10 p.m.

The Campaign credited New York City Transit for recently providing the public with results broken down on a line-by-line basis. (See MTA New York City Transit Committee Agenda, February 2011 Passenger Environment Survey, page 8.11. The document can be found at www.mta.info by clicking on “Board Materials” on the lower right hand side of the screen.)

The Campaign urged transit officials to:

- **Closely monitor the impact of reductions in resources to cleaning subway cars, as well as to station and track cleaning.**
- **Expand the use of ‘hand-held’ computers in their own survey to provide more timely information.** New York City Transit has been piloting the use of hand held computers and plans to expand in the next few years.

The survey findings can also be found on the Internet at www.straphangers.org.

TABLE ONE:
Percentage of Clean Cars by Line*

| Line | 2009 | 2010 | Significant Improvement? ** | Significant Deterioration? ** |
|-------------------|------|------|--------------------------------|----------------------------------|
| 1 | 48% | 53% | | |
| 2 | 47% | 53% | | |
| 3 | 51% | 59% | | |
| 4 | 48% | 48% | | |
| 5 | 55% | 50% | | |
| 6 | 65% | 44% | | X |
| 7 | 63% | 68% | | |
| A | 52% | 42% | | |
| B | 61% | 37% | | X |
| C | 65% | 62% | | |
| D | 38% | 37% | | |
| E | 52% | 36% | | X |
| F | 45% | 46% | | |
| G | 39% | 36% | | |
| J | 47% | 40% | | |
| L | 60% | 42% | | X |
| M | 32% | 61% | X | |
| N | 63% | 56% | | |
| Q | 52% | 50% | | |
| R | 39% | 27% | | X |
| System Average | 51% | 47% | | X |

*Surveys based on 2,000 observations of subway cars by NYPIRG Straphangers Campaign, September-November 2009 and 2010. A car was rated “clean” if surveyor found no more than 'light' interior dirt.

** .05 level used for tests of significance.

**TABLE TWO:
Best to Worst: Percentage of Clean Cars by Line***

| Line | Percent Clean Cars |
|-------------------|--------------------|
| 7 | 68% |
| C | 62% |
| M | 61% |
| 3 | 59% |
| N | 56% |
| 1 | 53% |
| 2 | 53% |
| 5 | 50% |
| Q | 50% |
| 4 | 48% |
| F | 46% |
| 6 | 44% |
| A | 42% |
| L | 42% |
| J | 40% |
| B | 37% |
| D | 37% |
| E | 36% |
| G | 36% |
| R | 27% |
| System Average | 47% |

*Surveys based on 2,000 observations of subway cars (100 per line) by NYPIRG Straphangers Campaign, September-November 2010. A car was rated “clean” if surveyor found no more than 'light' interior dirt.

Methodology:

“Shmutz” Subway Cleanliness Survey, 2010

Background

This report is intended as a follow-up to the April 1998, February 1999, January 2000, February 2001, March 2003, March 2004, April 2005, May 2006, March 2008, June 2009 and June 2010 NYPIRG Straphangers Campaign surveys, *Subway Shmutz: Cleanliness in New York City Subway Cars*. The methodology followed in this survey is identical to that used in the 2000-2010 reports. One adjustment to the methodology of the 1998 and 1999 surveys is noted below.

Preparation

In July 1997, August 1999 and again in September 2002, our project directors accompanied members of the New York City Transit Passenger Environment Survey (PES) staff on an in-field mock rating of some 15 cars on two subway lines. This session included clarification of New York City Transit’s own rating system. We also received the actual survey form used by PES staff. PES looks at several measurements of the subway car environment, including car and seat cleanliness. Our survey is an in-depth measurement of car floor and seat cleanliness only.

Rating System

PES surveyors evaluate the cleanliness of subway car floors and seats with a four-level rating system in which a score of 1 represents the highest cleanliness rating and a score of 4 represents the lowest. The following definitions are from the New York City Transit’s Passenger Environment Survey, 1st Quarter 1997 and are still in use:

| <u>Score</u> | <u>PES terminology</u> | <u>PES definition</u> |
|--------------|------------------------|--|
| 1 | None | Basically dirt free. |
| 2 | Light | Occasional “ground-in” spots but generally clean. |
| 3 | Moderate | Dingy floor, one or two sticky dry spots. |
| 4 | Heavy | Heavy dirt; <u>any</u> opened or spilled food, hazardous (e.g. rolling bottles), or malodorous conditions, sticky wet spots, any seats unusable due to unclean conditions. |

The PES notes that “the nature of the dirt (e.g. spilled food, malodorous floor/seat condition, etc.) is also considered in addition to just the volume.”¹

We believe our definitions more accurately reflect the meaning behind each score:

| <u>Score</u> | <u>PES terminology</u> | <u>Straphangers Campaign terminology</u> |
|--------------|------------------------|--|
| 1 | None | Extraordinarily Clean |
| 2 | Light | Clean |
| 3 | Moderate | Dirty |
| 4 | Heavy | Heavily Dirty |

In our study, we used a numerical system identical to the one listed above. However, we modified the terms to describe each rating.

¹ Passenger Environment Survey, New York City Transit, First Quarter 1997, p. 11.

Survey

Our project directors trained 44 surveyors. Between September 14 and November 20, 2010, surveyors rated exactly 100 subway cars on each of 20 lines.² We did not survey the Grand Central-Times Square, Rockaway and Franklin Avenue Shuttles because of the short length of these routes. Measurements were taken both on weekdays and weekends, during rush, evening and overnight hours.

Analysis of Survey Data

All survey data submitted was visually inspected for error and then coded for entry into a spreadsheet format. After entering the data, we calculated both by-line and systemwide totals. The percentage of cars rated “dirty” and “heavily dirty” were combined to give a measurement of the proportion of cars with an unacceptable level of interior dirt. Similarly, “extraordinarily clean” and “clean” rating totals were combined to reflect the proportion of subway cars with an acceptable level of dirt. Systemwide car cleanliness proportion is significant at the .05 confidence level within plus or minus 3%. By-line cleanliness levels are significant at the .05 confidence level within plus or minus 10-11%.

We note that car cleanliness deteriorated significantly systemwide in the period between the 2008 and 2009 surveys, and again in the period between the 2009 survey and this one. Data from the 2008 and 2009 survey was revisited to recalculate a system average for 20 lines not including the V and W lines. In the period between the 2009 survey and this one, by-line car conditions improved significantly on one line and deteriorated significantly on five lines.

Comparison with PES Survey Data

This survey’s findings stand in contrast to the data reported in MTA New York City Transit *Passenger Environment Surveys* (PES). The number of clean car floors and seats (those with no or light dirt) “measured throughout the day while in service” was recorded at 95% in the second half of 2009 and 94% in the second half of 2010, a statistically insignificant change. (The PES used to be issued on a quarterly basis, but now only comes out twice a year. Reduced PES were part of the 2005 budget’s “Program to Eliminate the Gap.”) In past surveys, New York City Transit has rated subway cars as considerably more clean than has those of the Campaign.

Credits

The NYPIRG Straphangers Campaign wishes to thank 44 volunteers and staff who assisted in the survey. They include: Zivia Ackerman, Megan Ahearn, Issac Alvarez, Abdul Amunikoro, Cody Bachu, Nadia Berry, Oscar Camacho, Yensy Carty, Chelsea Cawley, Sonya Chakraborty, Jason Chin-Fatt, Stephanie Chuah, Cate Contino, Christina Cross, Carol Cuello, Eboni Dunschee-Holloway, Mayeni Duran, Mark Esmak, Cassandra Fegert, Daniela Gonzalez, German Gonzalez, Sabrina Jailall, Denise Johnson, Nikolay Kabanov, Jeanny Kim, Chasity Martinez, Jemima Matiminu, Cynthia Melendez, Steed McIntosh, Ariel Moosue, Maycol Mueses, Sophie Muschel-Horton, Mable Ng, Gladys Paredes, Kevin Portundo, Jawaan Ramsay, Satwika Reddy, Diana Rivera, Lea Rivera, Anaydee Rosado, Chris Sayage, Soman Singh and Oleg Shvetsov.

² The sample size per line is identical to that used in the 2000-2009 surveys. In 2002, two new lines—the V and W—were included in our analysis. These were dropped from consideration when the lines were cut in the summer of 2010. In 1999 and 1998 Straphangers Campaign surveyors rated *approximately* 100 cars on each line surveyed.