

Methodology:

2008 Pokey and Schleppe Awards

I. Pokey Awards

This report is a follow-up to the NYPIRG Straphangers Campaign's six previous *Pokey Award* reports issued in 2002, 2003, 2004, 2005, 2006 and 2007. The methodology used by the Campaign in this report is nearly identical to the ones used in 2005 and 2006^{1,2}.

Selection of Routes

Routes included in our sample include 22 of those 23 surveyed in our 2005 and 2006 reports; they had been selected on the basis of slow performance as reported in 2004. Our 2008 sample includes nine of the ten slowest routes systemwide, plus the three slowest from each borough outside Manhattan.

Due to significant differences between route patterns of the Manhattan M14A and M14D, these routes were measured separately. In total then, our sample includes 22 local bus route designations.

Bus Speed Measurement

Surveys were conducted by three Straphangers Campaign staff members and three volunteers, between July 15 and October 24, 2008. Each route was measured with an actual trip in both directions³, beginning with the first bus departing from a terminus after 12:00 noon. The return trip was made from the second terminus back to the first on the next bus available.

During each trip, surveyors recorded to the second the amount of time taken from terminus to terminus in each direction. Timing began as each bus pulled out of the first stop and concluded immediately after stopping at the last. In our analysis, times were rounded down to the minute and converted to a fraction of an hour. Distances covered were measured to the nearest 1/100th mile using GIS software.

¹The 2005 Pokey awards methodology represented a significant departure from the one used in the 2002-2004 reports. In those earlier reports, Straphangers Campaign relied on MTA New York City Transit schedules to determine average local bus speeds. In the 2005 report, we decided to measure distances and times recorded from actual trips conducted by campaign staff.

² The 2006 and 2007 Pokey awards report included average speeds on Manhattan's M34 bus route. In September 2008, MTA New York City instituted its *Select Bus Service* program to increase bus speeds on this route. We decided to drop measurement of the M34 during the early phases of the program.

³ Due to its unusual route pattern, the Staten Island S60 was measured in one closed loop, departing from the terminus at Clove Road near Seneca Avenue, and returning to the same location.

Bus speeds were calculated by dividing the total number of miles per run by the fraction of the hour taken to cover the total distance. Below is an example of how this methodology was applied to a sample route, Manhattan's M86.

Sample Calculation—M86

Bus speeds on the M86 were measured on August 1, 2008. Surveyors boarded a westbound M86, which pulled out of its terminus at East 92nd Street and York Avenue at 12:07:57 p.m. The bus came to a stop at its western terminus—West 87th Street and West End Avenue—at 12:34:25 p.m. This trip represents a distance of 2.28 miles, which was covered in 26 minutes, 28 seconds—26 minutes when rounded down.

Immediately following their westbound measurement, surveyors boarded the next eastbound M86 at its western terminus at West 86th Street and Broadway. This trip began at 12:41:00 p.m. and concluded at 1:05:50 p.m. at the eastern terminus, East 92nd Street near First Avenue. The eastbound trip represents a distance of 2.34 miles, which was covered in 24 minutes, 50 seconds—24 minutes when rounded down.

In total then, the two M86 trips covered a distance of 4.62 miles in 50 minutes. This represents an average speed of 5.5 miles per hour.

The Straphangers Campaign wishes to thank staff and volunteers who assisted in the survey: Kristian Baily, Jason Chin-Fatt, Cate Contino, Emma Ewusi, Matthew Hynes and Jaylene Vega.

Human and Animal Speeds

In issuing the Pokey award, we compare slow bus speeds in New York City with those of walking speeds for human beings, as well as from several animals. Our sources for these speeds are as follows:

A human being has an average walking speed of three miles per hour.

<http://en.wikipedia.org/wiki/Walking>

<http://answers.yahoo.com/question/index?qid=1006041805425>

Stanford researchers have clocked walking elephants at 4.5 miles per hour.

<http://news-service.stanford.edu/news/2003/april9/elephants-49.html>

Several web sites estimate a running mouse at eight miles per hour and a running chicken at 9 miles per hour. These sites include:

<http://www.factmonster.com/ipka/A0004737.html>

http://en.wikipedia.org/wiki/Animal_land_speeds

<http://www.wildabouttheworld.com/forum/general-wildlife/17-animal-speeds.html>

II. Schleppe Award

This report is also a follow-up to the NYPIRG Straphangers Campaign's two previous *Schleppe Awards* issued in 2006 and 2007.

In awarding the Schleppe, the Campaign used official "wait assessment" data released in September 2008 by MTA New York City Transit for bus service during the first half of 2008, the most recent period available. The measure is reported for 42 high-volume routes.⁴

"Wait assessment" is defined as follows by New York City Transit officials:

"Wait Assessment is measured during the day (7:00 a.m. – 12:00 a.m.), when service is relatively frequent. It is defined as the percentage of observed service intervals that are no more than the scheduled interval plus 3 minutes during peak (7 a.m. – 9 a.m., 4 p.m. – 7 p.m.) and plus 5 during off-peak (9 a.m. – 4 p.m., 7 p.m. - 12 a.m.)"

The Campaign believes that this is the best measure made by transit officials to gauge how closely buses are sticking to their scheduled intervals. As such, it reflects the degree to which buses bunch together or arrive with big gaps.

To be eligible for a Schleppe Award, a route must have at least 20% of its buses arriving bunched or with big gaps in service. No route in Queens had 20% of its buses performing this poorly. As a result, no Queens route received a Schleppe Award.

Since our 2007 Schleppe Awards, transit officials significantly changed their measures of bus service reliability. In the past, the agency reported a separate measure for evening service. It used to compare the adherence of actual evening service to printed schedules. Now the agency reports only wait assessment data, covering only the hours from 7 a.m. to 12 a.m.

As such, we are unable to make comparisons between our current 2008 Schleppe Awards and the Schleppe Awards given in 2006 and 2007.

⁴The wait assessment data can be found at pages 204 through 207 of the September 2008 MTA New York City Transit Committee Agenda, Book Two.