

# Nielsen Media Research Research Paper

## Local People Meters Los Angeles

**Local People Meters versus the  
Current Meter/Diary  
Methodology:  
A Macro Level Examination and  
Analysis of the Los Angeles  
Local People Meter**

**EXECUTIVE SUMMARY**

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Nielsen Media Research has announced the introduction of an improved methodology to measure television audiences in the top ten U.S. markets. This method uses electronic People Meters for the collection of demographic ratings, replacing the paper diary as the source of this information. On August 5, 2004, Nielsen launched its People Meter service in Los Angeles as the exclusive local audience measurement service in the market.

The attached research paper provides an overview of the new methodology, a detailed review of the quality metrics of the Los Angeles People Meter sample along with the audience levels reported by the system, and a discussion of some of the key reasons for the differences in audience levels reported by the two systems during the parallel reporting period.

### Executive Summary

In Los Angeles, on July 8, 2004, Nielsen Media Research introduced a People Meter system for collecting and reporting television audience data. At the same time, Nielsen maintained the current meter / diary system. These two services were run parallel to one another for a period of 28 days, at which time the set meter and diary system ceased operations, leaving the People Meter as the new source for audience measurement in Los Angeles as of August 5, 2004.

### The Benefits of Local People Meters

The Local People Meter (LPM) system provides a more accurate measurement of television audience than the system it replaced. The People Meter has numerous features that address many of the known limitations of the current set meter / paper diary methodology.

- The People Meter panel size is larger by 48% (800 vs. 540 sample households), providing more stable data and significant reductions in sampling error.
- Response rates are 25% higher, providing more accurate and projectable data.
- The demographic composition of the People Meter sample is more representative of the Los Angeles marketplace, when compared to the current system, and provides more representative data.
- The People Meter panel more accurately matches the ethnic and racial composition of the Los Angeles marketplace.
- The People Meter provides an electronic, minute-by-minute record of **who** is watching **what** on television without having to rely on the memory of a diary keeper.

- Paper diaries are sometimes filled out in advance, or after programs are viewed, or by a parent for a child who is viewing television.
- The diary overstates the duration of a viewing session since people tend to fill in whole programs, rather than portions watched.
- The People Meter better captures infrequent viewing to cable, pay cable, and smaller broadcast channels compared to the paper diary.
- For the above reasons, the People Meter is recognized and used worldwide as the current state-of-the-art television audience measurement system. It is the same methodology that Nielsen has used in its National Television Measurement service since 1987, in its National Hispanic and Los Angeles Hispanic services since 1992, and in its Local People Meter sample in Boston since 2002.

### The Differences

The more accurate Local People Meter measurement delivers audience levels that are in some cases different from those collected with the current set meter / diary methodology. As such, Local People Meters show:

- Somewhat lower household tuning levels (a 2-point HUT difference in total day, or 22 fewer minutes per day of tuning in the LPM sample).
- Somewhat higher persons viewing levels.
- A shift in persons viewing, for all audiences, registering more viewing to a wider and more diverse array of program sources, and, in turn, somewhat lesser viewing to stronger, more traditional programs and program sources.

### The Reasons for the Differences

Several factors were studied to determine what could lead to the lower household viewing levels and shifts in viewing patterns that we see when we compare the two methodologies.

The most salient reasons for the differences can be attributed to the following factors:

- **“Tuning Without Viewing”** can account for approximately 14 of the 22-minute difference seen in household tuning levels. Tuning without viewing occurs when the television set is on and no one is watching. However, we believe that the prompting (flashing lights) of a People Meter sometimes encourages panelists to turn off the television, having been sensitized to the fact that it had been on but with no one watching. In a set meter household, where there is no mechanism to measure persons,

there is no prompting and, therefore, no stimulus to turn the set off. For that reason, we believe that audience levels recorded by the set meter will contain more tuning (the set is on) with no one watching than the People Meter. This causes the household ratings to be higher with the meter diary methodology. This will not, however, affect persons ratings, which are, in fact, higher with the People Meter.

- **The Sample Composition** of the African American sub-sample differs substantially between the LPM and the set meter on larger homes and child homes. Independent universe estimates show the LPM properly representing these characteristics, while the set meter is considerably high on both. When appropriate adjustments are made to the set meter panel to estimate the impact of this difference, the set meter African American HUTs decline by almost three points on a total day basis. This imbalance in the set meter demographic distribution can explain a significant proportion of the lower HUTs for African American households, and can account for approximately four minutes of the 22-minute overall HUT difference.
- **Limitations of the Diary** can account for many of the differences in the persons viewing patterns that are evident between the two samples. Despite an ongoing program to improve diary methodology, our research indicates that the diary is sometimes filled out at times other than when the panelist is actually watching, and that can lead to systematic differences in the audiences. A People Meter, on the other hand, electronically measures viewing in real time. As such, the diary may:
  - Understate viewing to infrequently-watched programs and program sources
  - Overstate viewing to popular and stripped programs
  - Overstate the duration of viewing to specific programs
- **Sampling Error** can contribute randomly to differences in viewing patterns between the two panels. Two samples of 540 and 800 households each will differ somewhat (even if they had identical methodologies) due to the variation inherent in sampling. The expected size of the difference is calculable and represents part of the differences that we observe. This may be especially true for targeted media that tend to draw most of their audience from certain subgroups, which, in and of themselves, are subject to even more sampling variation than the total sample. Higher response rates in the People Meter panel will make it more representative of the marketplace because the panel contains a larger proportion of Basics (pre-designated households) and, as such, will lead to better representation of viewing patterns. However, this effect is

almost impossible to calculate, since one cannot know the behavior of those who refuse to participate. Nonetheless, little difference was seen in the viewing behaviors of basic homes when compared to the alternate homes that were chosen to replace refusing basics.

Several other factors were investigated and ruled out as significant contributors to the differences. They include:

- **Cutback Homes** – The LPM sample is composed of existing National People Meter homes (“cutback homes”) and newly-installed Local People Meter homes. In Los Angeles, there is very little difference between HUT levels in the cutback sample and the LPM-only sample.
- **Fault Rates** – Fault rate is a measure of the number of homes that are not in tabulation for a given day due to their not passing quality edits as a result of one or more of a number of reasons, such as power failures, the addition of new equipment in the household, or persons not complying with button-pushing requirements. Faulting patterns were investigated to determine whether the levels of faulting, or the differential nature of faulting, were different for the LPM versus set meter panels. Overall, in-tab rates were consistently higher in the LPM sample. Differential fault rates were similar. Faulting was higher in both panels for heavy-viewing households, and the LPM had lower (better) fault rates for households with children, large households, and Hispanic households. Differential faulting is an important issue and ongoing concern for Nielsen, and internal and external committees continue to study ways to improve fault rates. However, the results of analyses comparing fault rates of the LPM to those of the set meter conclude that the fault rates in these two samples do not significantly differ from one another and do not play a role in the reported audience differences.
- **Button Pushing Compliance** – Four years ago, Nielsen conducted studies to determine if there was evidence that panelists might experience fatigue in pressing their buttons over time. As a result of that analysis, we restructured the schedule according to which we dispersed incentive bonuses. This spring, we released a report on a follow-up study which suggested that there was little change in button pushing over time. We concluded that the schedules that we had instituted in 2000/2001 were effective.

In summary, for the May 2004 NSI measurement, the Local People Meter and set meter samples reported a total-day HUT difference of 2.0 points (42.4 versus 40.2) with the LPM lower. This difference translates to 22 fewer tuning minutes per day being reported in the LPM in the average home. We believe that this difference is the result of:

- Up to 14 minutes of the 22-minute difference may be accounted for by an under-reporting of tuning without viewing in the LPM
- Four minutes can be accounted for by the African American sub-group in the set meter sample, which over-represented the higher tuning levels of larger African American households (5+) and African American households with any children <18.
- The remaining four minutes are likely to be due to the impact of sampling error and the overall higher quality associated with the LPM sample.

Nielsen Media Research has devoted a great deal of effort to deliver an audience measurement panel in Los Angeles with the highest possible quality. We have made numerous quality improvements to our Local and National People Meter Methodology over the past few years, and, while we believe that the methods used are the best currently available, we will continue to work with the marketplace – both our clients and interested groups – to further improve these methods over the coming months and years.