Arbitron is making some important enhancements in the measurement and reporting of ethnic audiences with the Winter 2006 survey. These changes were announced over three years ago, and the technical work, methods testing and acquisition of data are complete.

This presentation will recap the changes that are being made and provide background on why Arbitron is making these changes. Additionally, we are going to share findings from a parallel “demonstration” survey that we fielded during the Summer 2005 survey period to help customers gain a better understanding of how these changes impact the survey and the tabulation of audience estimates.

The demonstration study results you will see today came from an off-line, separate survey we fielded in Los Angeles and Miami at the same time as the syndicated currency radio ratings surveys in those markets. The demonstration survey was processed three ways to show how the procedural enhancements impacted the composition of sample and the listening estimates.
Headlines

Arbitron is implementing two important enhancements for measuring ethnic audiences

- Personal Race/Ethnicity classification instead of household classification
- Language Usage Weighting in 21 Metros to Nielsen population estimates

Effective with the Winter 2006 Radio survey, Arbitron is implementing Personal Race/Ethnicity—we will ask individual diarykeepers to tell us their race and ethnicity via a question in the diary. This will replace the longstanding practice of classifying all members of a household by a single race, based on a question about race/ethnicity in the placement call.

Additionally, we will begin Language Usage Weighting for Hispanics in 21 Metros. Language Usage Weighting adds a sample-balancing control to ensure that the proportion of Spanish-primary and English-primary Hispanics is held constant from survey to survey in our weighted samples. The population estimates used for Language Usage Weighting will come from the Nielsen Media Research language enumeration survey.

Here’s why we are making these changes:

- We know that Spanish-primary Hispanics have different radio listening preferences than English-primary Hispanics. Fluctuation in the proportions of Spanish-primary and English-primary diaries can and does impact the stability of ratings for both Spanish-language and English-language radio. Weighting can reduce bounce caused by these fluctuations. Weighting essentially compares the proportions of a characteristic, in this case language usage between the population and the in-tab diary sample, and adjusts diary weights up or down accordingly so the weighted sample proportions are equivalent to the population. Weighting Hispanics by language usage also requires that we be as precise as possible in determining which of our diarykeepers are Hispanic.

- Historically, Arbitron has classified all members of a household as Hispanic or Black or Other based on a household-level question. This meant that in some instances, non-Hispanics living in Hispanic households were counted as Hispanic by our survey. Beginning in Winter 2006 we ask each individual diarykeeper to tell us their race or ethnicity. Not only will this provide a more accurate classification of the diarykeeper’s race or ethnicity, it will give us much more reliable estimates of the Spanish-primary versus English-primary composition of our sample.

These changes have the potential to impact all radio stations in ethnically controlled markets to some degree. The impact will vary depending on the percent of mixed-race or -ethnicity households in the market and the difference between the language composition of our sample and the language composition of the Hispanic population as reported to us by Nielsen Media Research.
Personal Race/Ethnicity

- Race and ethnicity are characteristics of people, not households
- Personal classification provides more appropriate weighting and reporting

Race and ethnicity are characteristics of individuals. Individuals can and do live in mixed-race or ethnicity households. A non-Hispanic may be married to a Hispanic, but that does not mean they are Hispanic, nor should they be counted that way in our survey.

Classification of diarykeepers at a personal level provides for more appropriate weighting and reporting of our survey samples.

Let’s illustrate…
Collecting Race and Ethnicity

Old Way

New Way

Historically, Arbitron classified all members of a household to a single race or ethnicity—Black, Hispanic or Other—based on the answer we received to the household-level question about race or ethnicity that is a part of our diary placement telephone interview.

Beginning with the Winter 2006 survey, we are asking each individual diarykeeper to tell us their race/ethnicity through questions in the back of the diary.
Old Way

- Household classification
- Everyone in the household the same race/ethnicity

In Arbitron’s old way of classifying race and ethnicity of diarykeepers, all members of a household had the same race or ethnicity based on the response we received to the household-level race/ethnicity classification. As a result, the Hispanic in-tab sample generally contained some non-Hispanics who live in households with Hispanics, and the Black in-tab sample contained some nonblacks who lived in households with blacks. This would result in lower diary weights for those people who would individually identify themselves as black or Hispanic. The inclusion of nonblacks or non-Hispanics in the ethnic sample could also provide misleading Black or Hispanic audience composition estimates for radio stations.
New Way

- Personal Race/Ethnicity
- Everyone in household identifies own race/ethnicity in diary

Reality = Mixed Race/Ethnicity = Personal Race/Ethnicity

Beginning in Winter 2006, we will ask each individual diarykeeper to tell us their race or ethnicity using questions in the diary.

This will allow for the reality of mixed-race and -ethnicity households. Though the percentage varies by market, in some markets, census data indicate that up to 10% of the black or Hispanic population may live in mixed-race households.

This new, improved procedure will provide for more appropriate weighting and more reliable ethnic audience composition estimates.
The Case for Language Usage Weighting of Hispanics

- Listening variations between English-Primary and Spanish-Primary Hispanics
- Bounce in estimates when Spanish- versus English-Primary diary return changes
- Differences in language usage by market and survey

The case for Language Usage Weighting of Hispanics is driven by the fact that as a group, Spanish-primary Hispanics have different radio listening patterns than English-primary Hispanics.

In the normal course of a random-sample survey such as Arbitron’s, variations in the amount or proportions of sample from different demographic or ethnic groups take place. This is normal—it occurs because of variations in consent and return from survey to survey.

These variations in sample among groups who listen differently to radio can contribute to bounce in the reported estimates if not controlled through weighting procedures.

WEIGHTING WILL REDUCE BOUNCE.
Let’s look first at the 21 markets where Arbitron is implementing Language Usage Weighting in Winter 2006.

We’ll start by looking at the Hispanic composition of our samples in these markets over the past year. There are significant variations in the Hispanic population and sample percentages of markets ranging from Chicago, where just under 20% of our historic sample returns are Hispanic, to McAllen-Brownsville, where close to 90% of the diary returns are Hispanic.
Next, we look at the language composition of that Hispanic sample, and we can see the diversity that exists within the Hispanic population as we travel from market to market.

You can see a stark contrast between Albuquerque, where a relatively small percent of the Hispanic population are Spanish-primary speakers, and Miami, where the majority of the Hispanic population are Spanish-primary speakers. Though Hispanics compose about the same proportion of the overall population in both Albuquerque and Miami, the Hispanic populations have very different language preference profiles.

So...

- In some markets, the proportion of Spanish primary to English primary is almost half and half.
- Some markets are overwhelmingly Spanish primary (Miami, Dallas, etc.).
- Some markets are overwhelmingly English primary (Albuquerque, San Antonio, etc.).
Now, let’s begin to look at some audience data.

First we want to remind people that Hispanics can make up a sizable proportion of the audience to English-language radio stations as well as Spanish-language radio. While it may be intuitive that audiences of Spanish-language radio stations will be primarily Hispanic, it is not always so obvious that Hispanics can compose a majority of audience to English-language radio stations.

Here we are looking at two examples from Los Angeles where you can see that Hispanics compose the largest percentage of the audience to the top two stations in the market (a Pop CHR and Rhythmic CHR).

So, because Hispanics can be English-primary as well as Spanish-primary speakers, the Hispanic population can be an important segment of the audience for English-language radio stations as well as Spanish-language stations.
Hispanics’ Format Preference Differs by Market’s Language Profile

Format of Top 5 Stations in Miami among...

<table>
<thead>
<tr>
<th>Spanish-Primary Hispanics 12+</th>
<th>English-Primary Hispanics 12+</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Spanish Classic Hits</td>
<td>• Rhythmic CHR</td>
</tr>
<tr>
<td>• Spanish Contemporary</td>
<td>• Pop CHR (2t)</td>
</tr>
<tr>
<td>• Spanish News/Talk</td>
<td>• Adult Contemporary (2t)</td>
</tr>
<tr>
<td>• Spanish Tropical</td>
<td>• Hot AC</td>
</tr>
<tr>
<td>• Spanish Contemporary</td>
<td>• Urban Contemporary</td>
</tr>
</tbody>
</table>

Five-book average AQH Share, M-SU 6AM-12Mid (FA04 – FA05)

The language usage profile of the Hispanic population in a market is a major factor in determining the top radio stations among all Hispanics in that market. Stated simply, the top radio stations in a market among Hispanics will vary depending on whether the market has more English-primary Hispanics or Spanish-primary Hispanics.

Listed here are the top stations in Miami among Spanish-primary and English-primary Hispanics.

Spanish-language stations are the highest-rated stations among Spanish-primary Hispanics while English-language formats are highest rated among English-primary Hispanics.
Hispanics’ Format Preference Differs by Market’s Language Profile

Format of Top 5 Stations in Miami among...

Spanish-Primary Market

- Spanish Classic Hits
- Spanish Contemporary
- Spanish News/Talk
- Spanish Tropical
- Spanish Contemporary

English-Primary Market

- Rhythmic CHR
- Pop CHR (2t)
- Adult Contemporary (2t)
- Hot AC
- Urban Contemporary

All Hispanics 12+

- Spanish Classic Hits
- Spanish Contemporary
- Spanish News/Talk
- Spanish Tropical
- Spanish Contemporary

Five-book average AQH Share, M-SU 6AM-12Mid (FA04 – FA05)

When we look at the top-rated stations for ALL HISPANICS in Miami, it is not surprising to see that these are the Spanish-language stations given that two-thirds of the Hispanics in Miami are Spanish primary.
Hispanics’ Format Preference Differs by Market’s Language Profile

Format of Top 5 Stations in San Antonio among...

<table>
<thead>
<tr>
<th>English-Primary Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic 12+</td>
</tr>
<tr>
<td>• Mexican Regional</td>
</tr>
<tr>
<td>• Mexican Regional</td>
</tr>
<tr>
<td>• Spanish Contemporary</td>
</tr>
<tr>
<td>• Mexican Regional</td>
</tr>
<tr>
<td>• Tejano</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spanish-Primary Hispanics 12+</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mexican Regional</td>
</tr>
<tr>
<td>• Mexican Regional</td>
</tr>
<tr>
<td>• Spanish Contemporary</td>
</tr>
<tr>
<td>• Mexican Regional</td>
</tr>
<tr>
<td>• Tejano</td>
</tr>
</tbody>
</table>

Five-book average AQH Share, M-SU 6AM-12Mid (FA04 – FA05)

On the other hand, in a market that is predominantly English-primary, like San Antonio, the top-rated stations among ALL HISPANICS 12+ are more reflective of the top formats for English-primary Hispanics. This is because the majority of Hispanics in San Antonio are English-primary speaking.
We pointed out that fluctuations in Spanish- and English-primary percentages of the survey sample can result in fluctuations in the Hispanic 12+ AQH Share of radio stations.

Here is an example in Miami, showing the correlation between the Spanish-primary percent of our sample (the line at the top of the chart) and the share of audience for WAMR, the top Spanish-language station in Miami in Summer 2005.
The same correlation existed for WAQI, another of the top Spanish-language stations in Miami.
English-language radio stations also see the effects of variations in in-tab among English-primary and Spanish-primary Hispanics.

Here is an example from San Antonio that demonstrates how fluctuations in English-primary in-tab (the top line in the graph) can correlate for the most part with fluctuations in ratings for English-language radio stations.
Language Usage Weighting Summary

Language Usage Weighting is needed because:
- Hispanic listeners can make up a large percentage of audience of both Spanish- and non-Spanish-language stations.
- Spanish- and English-Primary in-tabs tend to fluctuate from survey to survey.
- Fluctuation in the percentage of Spanish- or English-Primary can result in bounce in estimates.

Weighting reduces bounce.

Arbitron has been preparing to language-weight for the past four years. To language-weight, Arbitron needed:
- Universe estimates (no available Census data).
- Software changes (because the addition of a new weighting variable could not be handled as our systems had originally been built).
- Testing (lots of it).
- More accurate means of classifying race/ethnicity—that is, where Personal Race/Ethnicity comes into play.
Personal Race/Ethnicity and Language Procedures Effective WI06

- Arbitron asks if anyone in the household is black or Hispanic
- Individual diarykeepers provide race/ethnicity and language in the diary
- Weighting Hispanics by language using Nielsen language population estimates in 21 markets

So in summary, effective with the Winter 2006 survey, Arbitron has made these changes:

First - Rather than asking potential diarykeepers to describe their household based on a single race, Arbitron asks them if anyone in the household is black or Hispanic.
Second - Rather than weighting based on race/ethnicity and language information given during the initial contact (i.e., placement call), Arbitron has individual diarykeepers answer questions about race/ethnicity and language in the diary.
Finally - Arbitron weights Hispanics by language usage using Nielsen language usage population estimates in 21 Metros.
We just went through a lot of detail in a section promised for "background."

The changes we are making can be summarized very simply.

We are moving from Household to Personal Race/Ethnicity classification of diarykeepers, and we are implementing Language Usage Weighting for Hispanics in 21 of the markets with largest Hispanic populations.

We are not changing any other of the key aspects of our ethnic measurement procedures (next slide).
Ethnic Procedures That Have NOT Changed

- Differential Survey Treatments (higher cash incentives, more follow-up calls, etc.)
- Ask race/ethnicity in all markets at placement
- Bilingual diaries
- Bilingual interviewers
- Weight sex/age, geography and (where applicable) race/ethnicity using Claritas population estimates

It is just as important to note the things that are not changing:

We will continue to use Differential Survey Treatments for households with black or Hispanic residents.

We will ask race/ethnicity in all markets during our diary placement process.

We will continue to send bilingual diaries to households with Hispanic residents, and use bilingual interviewers in High-Density Hispanic Areas.

And finally, we will continue with the rigorous weighting schemes that are already in place for the key characteristics of sex/age, geography and (where applicable) race/ethnicity.
Ethnic Enhancement Summary

• Personal Race/Ethnicity better classifies the diarykeeper

• Language Usage Weighting will help:
  ▪ reduce bounce
  ▪ adjust samples to reflect language composition of markets

In summary:

Personal Race/Ethnicity will better classify the race/ethnicity of individual diarykeepers. This will not only result in more appropriately weighted samples, but will provide more reliable estimates of the ethnic composition of audience to individual radio stations.

Language Usage Weighting will help reduce bounce and adjust samples to reflect language composition of markets.
Arbitron fielded a demonstration survey in Summer 2005 to generate information that might help customers better understand the possible impacts of the ethnic measurement enhancements being implemented Winter 2006 and which we just reviewed.

The demonstration surveys were separate sample, off-line surveys to allow us to preview with customers the new procedures that are in place with Winter 2006.

Previously, in 2004 and 2005, Arbitron’s Methods Research group had completed rigorous methods research tests of the new procedures to ensure that they did not have an adverse impact on key sample quality metrics such as response rate and proportionality.
We conducted the demonstration surveys in two markets: Los Angeles and Miami.

The surveys ran parallel to the Summer 2005 syndicated currency ratings surveys in Los Angeles and Miami.

The design of the Los Angeles and Miami demonstration surveys was identical to the Summer 2005 syndicated study in that:

- They had the same target sample.
- They were conducted during the same 12 weeks.
- They used the same random sampling methodology.
- They had the same survey treatments (monetary incentives, number of follow-up calls, etc.).

The demonstration surveys in Los Angeles and Miami differed from the syndicated surveys in those markets only in:

- The wording of the race/ethnicity question used at placement (i.e., “Is anyone in your household black or Hispanic?” rather than “Would you describe your household as black or Hispanic?”); and
- The method used to collect race/ethnicity and language information. We implemented the new procedure of collecting this information in the diary from individual diarykeepers rather than assign race and language based on the response we received from a single individual who answers for everyone in the household in our placement call.

Response rate, proportionality indexes and aggregate-level ratings comparisons were made with the syndicated surveys. Comparable results were seen in all of these metrics between the two separate surveys.
We produced three separate data sets, or reports, for each of the two demonstration markets. The majority of the work that we did focused on the comparisons of ratings results between these three different data sets from the demonstration survey.

These data sets we produced from the demonstration survey were:

- Household weighted – Weighted with race at the household level to reflect Arbitron’s old survey procedure.
- Personal Race/Ethnicity weighted – Weighted for race at the individual/personal level.
- Language weighted – Weighted for race at the individual level and weighted for language usage.
Household Weighting Reflects Historical Weighting

The first reports we ran were with Household weighting.

Household weighting is the old way of classifying and weighting for race and ethnicity.

The purpose of weighting the diaries using race as classified on a household level is to show what we would have gotten with the approach we have historically used (our old approach).

These data show what happens when you take all the members of mixed-race households and make them all a single race (all HH members Black or all Hispanic).
Personal Race/Ethnicity Reflects New Procedure

\[ \text{Reality} = \frac{\text{Mixed Race/Ethnicity}}{\text{Personal Race/Ethnicity}} = \]

The second data set we produced was with Personal Race/Ethnicity weighting.

This is the new standard procedure in the 179 Arbitron Radio Metros that have ethnic controls.

With Personal Race/Ethnicity weighting, diarykeepers “self-report” their race or ethnicity using a question in the back of the diary.

Personal Race/Ethnicity recognizes the reality of mixed-race households.
The third set of data we produced is Personal Race/Ethnicity layered with Language Usage Weighting. In addition to allowing for Personal Race/Ethnicity, this data set takes the Hispanic sample and weights it by the language used by the individual diarykeeper.

This is the procedure that is in use in the 21 Hispanic controlled Metros that receive Language Usage Weighting of Hispanics beginning with the Winter 2006 quarterly reports.
Now we are going to look at how the change from Household-based Race/Ethnicity classification to Personal Race/Ethnicity impacted the composition of our sample.

First we will look at Los Angeles.

On the left-hand side of your screen is the distribution of demonstration survey in-tab based on the classification of diarykeepers using that household-level race question that was asked during our placement call.

Let's go through how the groups—Hispanic, Black and Other—actually classified themselves by race when given the chance to do so using the Personal Race/Ethnicity question that is now included in the diary.
Impact on Los Angeles Sample

Hispanic in-tab reclassified by Personal Race/Ethnicity:

The bar on the right side of the screen shows us what individual diarykeepers told us to be their actual race/ethnicity when they completed the questions in the back of the diary.

Of the 3,415 diarykeepers who would have been classified as Hispanic using household ethnicity classification, 3,021, or 89%, identified themselves as Hispanic using the question in their individual diary.

Ten percent identified themselves as Other.

One percent told us they were Black when they completed the race/ethnicity question in their individual diary.
Now we are going to rotate the pie chart and look at the diarykeepers that were classified as Black in our demonstration study using the household-level race question.

Of the 730 persons classified as Black using a household-level question, 628, or 86%, identified themselves as Black when they completed the race/ethnicity question in their individual diary.

Twelve percent self-identified as Other.

Two percent of the persons classified as Black using household ethnicity classification self-identified as Hispanic.
Finally, we examined the people that were originally classified as Other by our household-level question.

Of the 3,443 persons classified as Other using household ethnicity classification, 3,332, or 97%, self-identified as Other.

Three percent self-identified as Hispanic.

Less than 1% (a total of 13 out of the 3,443 original persons classified as Other using household ethnicity classification) self-identified as Black.
Now we'll look at the net change in in-tab for Black, Hispanic and Other when switching from a household classification to personal classification of race and ethnicity.

These two pie charts represent the distribution of the same 7,588 diarykeepers that made up the sample for our demonstration survey in Los Angeles.

The percent of diarykeepers classified as Hispanic went from 45% to 41%.

The percent of diarykeepers classified as Black went from 10% to 9%.

And the percent of diarykeepers classified as Other went from 45% to 50%.

Our finding is that these changes are in line with expectations based on estimates of mixed-race households in the market, and the fact that Arbitron has, in the past, classified all persons in mixed-race households as Hispanic (or Black) if the household indicates there is at least one Hispanic or Black resident.
Impact on Miami Sample

Hispanic in-tab reclassified by Personal Race/Ethnicity:

- Hispanic, 2,442, 49%
- Other, 1,529, 31%
- Black, 972, 20%

Household

(n=4,943)

Personal

(n=2,442)

Black, 2% (41 In-Tab)
Other, 6% (158 In-Tab)
Hispanic, 92% (2,243 In-Tab)

The next series of charts will go through the same sample assessment for Miami.

Of the 2,442 persons classified as Hispanic using household ethnicity classification, 2,243, or 92%, told us they were Hispanic when they completed their individual diaries.

Six percent identified themselves as Other.

Two percent of the persons classified as Hispanic using household ethnicity classification told us they were Black when they completed their individual diaries.
Of the 972 persons classified as Black using household ethnicity classification, 886, or 91%, identified themselves as Black using the questions that are now in the diary.

Eight percent self-identified as Other.

One percent of the persons classified as Black using household ethnicity classification self-identified as Hispanic.
Ethnic Measurement and Reporting Enhancements

Impact on Miami Sample

Other in-tab reclassified by Personal Race/Ethnicity:

Household

- Hispanic, 2,442, 49%
- Black, 972, 20%
- Other, 1,529, 31%

Personal

- Other, 96% (1,464 In-Tab)
- Hispanic, 3% (39 In-Tab)
- Black, 2% (29 In-Tab)

(n=4,943) (n=1,529)

This chart shows the reclassification of the Other sample in Miami going from Household race/ethnicity to Personal race/ethnicity.

Five percent of Other in the household-level data were reclassified as some other race: 3% as Hispanic, 2% as Black.
Impact on Miami Sample

Slightly more Others; slightly fewer Blacks and Hispanics:

Looking at this on a net basis, we see the same directional changes as in Los Angeles.

There was an increase in Other in Miami, but a smaller increase.

The percent of diarykeepers classified as Other went from 31% to 34% of the total in-tab.

The percent of diarykeepers classified as Hispanic went from 49% to 47% of in-tab.

The percent of diarykeepers classified as Black went from 20% to 19% of in-tab.
Impact on Audience Estimates

- The total number of Persons 12+ in-tab sample is the same for each level of processing
- Each comparison reflects only the impact of reclassification of race/ethnicity
- Changes in estimates resulted from:
  - New weights assigned to diaries
  - Changes in the race/ethnicity of some diaries

Now we will move to a review of how changes in race/ethnicity classification impacted audience estimates.

We are going to go through a series of comparisons, but before we get started, here are some important points to keep in mind.

The total number of Persons 12+ in-tab sample is the same for each level of processing.

Each comparison reflects only the impact of the new, more precise classifications of race/ethnicity. These are the reclassifications that occurred when people reported their individual race/ethnicity to us in their diaries.

Changes in estimates resulted from:
- New weights assigned to diaries. In the analysis we just reviewed, we saw lower percentages of Black and Hispanic diarykeepers in both Los Angeles and Miami. Because the percentage and count of diaries were lower, the weights assigned (the Persons-Per-Diary Values) were actually higher. And remember, only diaries from people who individually identify as Black or Hispanic receive Black or Hispanic weights. Others who live in households with Black or Hispanic persons now receive Other weights.
- Changes in the race/ethnicity of some diaries.
Los Angeles Summer 2005 Demonstration Results with Personal Race/Ethnicity
These bar charts compare format group AQH Share changes that occurred when diaries were weighted based on individual response to race/ethnicity questions instead of household questions.

Most changes were in the range of one- to two-tenths of share. Notable exceptions were Spanish Music (which went from a 24.2 aggregated share to a 25.4) and New/Talk/Sports (which went from an 18.0 to a 17.5 share).

We also looked at Cume and TSL and found that the changes, where they occurred, were primarily Cume driven.

The changes were consistent across dayparts.
P12+ Format AQH Rating
Changes in Los Angeles with Personal Race/Ethnicity

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
This bar chart compares format level Cume Persons estimates with Household versus Personal Race/Ethnicity. It shows that the lift in Spanish Music was partially due to a lift in Cume.

Likewise, the lower share level for News/Talk/Sports was partially driven by a drop in Cume.
This bar chart compares format TSL with Household versus Personal Race/Ethnicity. Spanish Music did not see a change in TSL with the move to Personal Race/Ethnicity, i.e., the change in AQH for Spanish Music was not driven by TSL.

Interestingly, News/Talk/Sports actually showed a slight gain in Time Spent Listening.
This chart compares format AQH Share levels for Persons 18-34 between household and personal weighting.

The patterns are very similar to P12+.
P18-34 Format AQH Rating Changes in Los Angeles with Personal Race/Ethnicity

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
This chart compares format AQH Share levels for Persons 25-54 between household and personal weighting.
P25-54 Format AQH Rating Changes in Los Angeles with Personal Race/Ethnicity

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
Let's look at the same set of comparisons for Miami.
This bar chart compares format-level AQH Share in Miami for P12+ when diarykeepers were weighted based on their actual race and ethnicity instead of a household-based race assignment.

We see once again that most changes are one- or two-tenths of a Share point, except for Spanish Music (which went from 23.3 to 24.4) and News/Talk/Sports (which, as in Los Angeles, saw a drop in combined Share of half a point).
This chart compares format Cume with Household versus Personal Race/Ethnicity weighting.

It shows that the changes for News/Talk/Sports and Spanish Music were driven by Cume.
Time Spent Listening was virtually flat across all formats.
Here are the format Share comparisons for P18-34.
P18-34 Format AQH Rating Changes in Miami with Personal Race/Ethnicity

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
Here are the format Share comparisons for P25-54.

Once again, the patterns here are very similar to what we see at the 12+ Share level.
P25-54 Format AQH Rating Changes in Miami with Personal Race/Ethnicity

<table>
<thead>
<tr>
<th>Format</th>
<th>Household Race/Ethnicity</th>
<th>Personal Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>3.7</td>
<td>1.7</td>
</tr>
<tr>
<td>CHR</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Country</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Jazz</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>News/Rock</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Spanish</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Religious</td>
<td>0.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Rock</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Spanish News</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Urban Contemporary</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
Let’s summarize the changes that we saw resulting from changing from Household-level weighting to Personal Race/Ethnicity weighting.

Most formats see little or no change. Exceptions are Spanish Music and News/Talk/Sports.

Changes that did occur make sense based on increased precision of race/ethnicity classification of diarykeepers.

Spanish-language format shares go up because the persons who remain classified as Hispanic based on individual response are likely to be more strongly identified with Hispanic culture—and they will get higher diary weights.

The general pattern of slight decreases for English-language formats makes sense because PPDVs for others will decline as in-tab from mixed-race households is reclassified as Other.
Impact of Language Usage Weighting

Now let’s move on to review the findings from Language Usage Weighting.
First let’s look at how weighting was applied in each of these markets.

Weighting is accomplished by comparing the percent of a characteristic, in this case language usage, between the population and the in-tab sample.

In Los Angeles, according to population estimates, Spanish-primary Hispanics compose 65% of the Hispanic population. However, only 58% of our in-tab sample for the demonstration study was from Spanish-primary Hispanics.

So, we have to weight up the Spanish-primary Hispanics to equal 65% of the weighted sample. English-primary Hispanics are weighted down in this process from 42% of the in-tab to 35% of the weighted sample.
In Miami, our sample was closer to the population estimates but contained 72% Spanish-primary Hispanics. Since, according to population estimates, Spanish-primary Hispanics are 70% of the Miami Hispanic population, we weighted down Spanish-primary persons, and accordingly weighted up English-primary Hispanics from 28% of the in-tab to 30% of the weighted sample.
Los Angeles Summer 2005 Demonstration Results with Language Usage Weighting

Now let’s take a look at the impact of this weighting on estimates.

In these comparisons, we compare the samples weighted only for race/ethnicity at the household level—essentially the weighting that has historically been in place—with samples where race weighting is taking place at the personal level, and Hispanics are weighted for language usage.

Essentially this compares the way estimates were historically processed with the methodology that is in effect beginning with the Winter 2006 quarterly reports in the 21 language-weighted markets.
In Los Angeles, where Spanish-primary Hispanics were weighted up and English-primary Hispanics were weighted down, Persons 12+ Share changes observed in the demonstration data performed as one might expect. The changes seen for Spanish-language stations with Personal Race/Ethnicity Weighting are amplified because of the additional weighting for Language Usage Weighting: Spanish Music was up from 24.2 to 26.8, and Spanish News/Talk rose from 1.4 to 1.7. The English-language News/Talk/Sports station shows a share decrease of 0.8 points (an additional 0.3 share points from what we saw with Personal Race/Ethnicity Weighting).

Other English-language format aggregated shares were generally down by two-tenths to three-tenths of a share point. Only Urban Contemporary remained unchanged.
P12+ Format AQH Rating
Changes in Los Angeles with
Language Usage Weighting

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
The Share differences were primarily Cume driven, as this chart demonstrates…
P12+ Format TSL Changes in Los Angeles with Language Usage Weighting

...while Time Spent Listening remained relatively flat across the formats.
This chart shows P18-34 Share changes with Language Usage Weighting and Personal Race/Ethnicity Weighting.
P18-34 Format AQH Rating Changes in Los Angeles with Language Usage Weighting

Language Usage Weighting

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
This chart shows P25-54 Share changes with Language Usage Weighting and Personal Race/Ethnicity Weighting. The patterns are very similar to those observed for P12+. 
P25-54 Format AQH Rating Changes in Los Angeles with Language Usage Weighting

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
Miami Summer 2005
Demonstration Results
with Language Usage Weighting
In Miami, where Spanish-primary Hispanics were weighted down and English-primary Hispanics were weighted up, we see changes that are less pronounced than they were in Los Angeles.

Though the expectation might be for language-weighted Spanish format shares to decline when compared to the household race-weighted data, we in fact see slight increases for Spanish Music and Spanish News/Talk, and zero to slight decreases for most English-language formats—the exception being Urban Contemporary, which had a slight increase.

The reason for this is that although language weighting adjusted weights downward for Spanish-primary Hispanics, the impact of Personal Race/Ethnicity Weighting is also at play in the sample. Language Usage Weighting negated some of the changes from Personal Race/Ethnicity Weighting in Miami, but not all.
Ethnic Measurement and Reporting Enhancements

P12+ Format AQH Rating
Changes in Miami with Language Usage Weighting

Language Usage Weighting

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
Once again, as we look at Cume estimates by format, we see most of the AQH Share changes are Cume driven.
There is almost no change when looking at Time Spent Listening by format.
This chart shows P18-34 Share changes with Language Usage Weighting and Personal Race/Ethnicity Weighting.
P18-34 Format AQH Rating Changes in Miami with Language Usage Weighting

Language Usage Weighting

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
This chart shows P25-54 Share changes with Language Usage Weighting and Personal Race/Ethnicity Weighting. As in Los Angeles, the Share changes for these target demos mirror the changes seen at the P12+ level.
P25-54 Format AQH Rating Changes in Miami with Language Usage Weighting

<table>
<thead>
<tr>
<th>Format</th>
<th>AQH Rating</th>
<th>Language Usage Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>1.7</td>
<td>4.8</td>
</tr>
<tr>
<td>Alternative</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>CHR</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Country</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Jazz</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>News/Analysis</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Oldies</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Religious</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Rock</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Spanish Music</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Spanish News/Talk</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Urban Contemporary</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Total Persons 12+ AQH Rating, M-SU 6AM-Mid
What Happens in My Market

Effective Winter 2006

- **Personal Race/Ethnicity** – all ethnically controlled Metros
  - Phase 1 Arbitrends℠ (Nov/Dec/Jan) – 1/3 Pers, 2/3 HH Race
  - Phase 2 Arbitends (Dec/Jan/Feb) – 2/3 Pers, 1/3 HH Race
  - Quarterly – All Personal Race/Ethnicity

- **Language Usage Weighting** in 21 Metros beginning with full quarterly report

Note: For a market to be ethnically controlled, the ethnic P12+ population must account for at least 10% of the total P12+ population or total at least 75,000 persons who are 5% of the P12+ population.

We have reviewed a great deal of information in this presentation.

A simple question is, "Which version of the data will apply to my market?"

**Household Weighting** is the historical Arbitron method for collecting and weighting for race/ethnicity. This has been discontinued effective with the Winter 2006 survey.

**Personal Race/Ethnicity Weighting** will be used in all Black- and Hispanic-controlled Metros beginning with the Winter 2006 survey. This becomes the method for collecting race/ethnicity from respondents, and the ethnic weighting of samples for all surveys going forward. Winter Phase 1 trends, when they release beginning at the end of February 2006, will include one-third of respondents classified by race at a personal level and the remainder (the sample from Fall 2005) classified by household.

**Language Usage Weighting** applies to the 21 language-weighted markets that we have listed in this presentation and that are also listed on our Web site.
Summary: What Can I Expect?

- Individual markets and surveys will vary
- Impact of Personal Race/Ethnicity more pronounced in markets with more mixed-race households
- Impact of Language Usage Weighting in 21 markets depends on:
  - Language usage proportionality of Hispanic diary returns
  - Impact of self-classification on percent of English-Primary Hispanics
- Marketplace changes (e.g., competition, changes in formats, programming, etc.)

So, the question that is on everyone’s mind is, “What can I expect in my market?”

The answer is—truthfully—“We can’t say for sure.” The demonstration data were for two markets in one survey and provide much insight.

There are caveats, however…
- Individual markets will show variance from what we saw in the demonstration data.
- Individual survey periods will show variance that overrides any effect of the changes in procedures.
- Impact of Personal Race/Ethnicity is more pronounced in markets with more mixed-race households. We saw that to a degree in Miami versus Los Angeles.
- Impact of Language Usage Weighting in 21 markets depends on:
  - Language usage proportionality of Hispanic diary returns.
  - Impact of self-classification on percent of English-primary Hispanics.

Language Usage Population estimates used for this demonstration study are the same that will be used on the Winter 2006 data when the full quarterly surveys for these markets are produced and released in April 2006.

Language usage estimates for the remaining 19 markets that are to receive Language Usage Weighting are available on our Web site.

Please remember, Personal Race/Ethnicity will have an impact on the proportions of Hispanic sample that are Spanish-primary and English-primary. Reclassification of Others and Blacks that might previously have been reported as Hispanic will most likely result in a lower proportion of English-primary Hispanics in our sample than we have historically reported. Consequently, we will probably also see a higher proportion of Spanish-primary persons in our samples as we go forward in individual markets.
Here are the Language Usage Population percents that will be used to weight our Hispanic samples for language usage across the 21 Language Usage Weighting markets beginning in Winter 2006.

If you compare these numbers to our historical in-tab percents by language usage category in these 21 markets to get an idea of the amount of weighting that might take place in an individual market, you must remember that language composition percent of sample going forward will be different from what we have seen historically. The change from household-level race/ethnicity to Personal Race/Ethnicity results is going to mean that non-Hispanics previously included in our Hispanic sample as English-primary Hispanics will no longer be considered Hispanic. Consequently, our percent of English-primary Hispanics will be lower than historical levels in each market, and levels of Spanish-primary are expected to be higher. We expect those differences to be, on average, a couple of percentage points.
Ethnic Enhancement Summary

• Personal Race/Ethnicity better classifies the diarykeeper

• Language Usage Weighting will help:
  ▪ reduce bounce
  ▪ adjust samples to reflect language composition of markets

• Impact will vary depending on market conditions

In summary, let us repeat the headlines:

Personal Race/Ethnicity will better classify the race/ethnicity of individual diarykeepers. This will not only result in more appropriately weighted samples, but will provide more reliable estimates of the ethnic composition of audience to individual radio stations.

Language Usage Weighting will help reduce bounce and adjust samples to reflect language composition of markets.

Some shifts in reported audience are possible, but magnitude and direction will vary depending on local market circumstances.
Questions?

Contacts:

Brad Feldhaus
Vice President
Product Management and Client Services
brad.feldhaus@arbitron.com
(410) 312-8390

Michelle Robinson
Senior Research Analyst
Product Management and Client Services
michelle.robinson@arbitron.com
(410) 312-8487