

Spanish-Dominant Monthly In-tab Rates are Highest

Total New York Metro, April 2008

	<i>Total Persons</i>	<i>Black</i>	<i>Hispanic</i>	<i>Hispanic Spanish</i>	<i>Hispanic English</i>	<i>Other</i>
Total 6+	96.3	95.6	96.1	98.3	94.2	96.5
Males 6+	96.1	94.9	96.3	98.4	94.4	96.3
Males 6-11	93.9	97.1	92.7	100.0	91.5	93.4
Males 12-17	94.5	96.1	93.0	100.0	90.7	94.5
Males 18-34	93.7	92.8	97.4	98.8	95.7	92.3
Males 35-54	97.0	92.1	98.9	99.0	98.8	97.4
Males 55+	98.0	99.0	93.5	96.2	90.2	98.5
Females 6+	96.4	96.2	96.0	98.2	94.0	96.6
Females 6-11	95.8	90.0	95.1	100.0	93.6	97.7
Females 12-17	95.2	96.0	94.2	100.0	92.9	95.4
Females 18-34	93.1	94.6	92.2	93.1	91.5	93.2
Females 35-54	97.5	96.9	99.5	100.0	98.8	97.0
Females 55+	97.8	97.4	97.1	100.0	91.7	98.0

Hispanic Meters are Undocked about 16 Hours Per Day

Total New York Metro, In-tab Persons, April 2008

	<i>Total Persons</i>	<i>Black</i>	<i>Hispanic</i>	<i>Hispanic Spanish</i>	<i>Hispanic English</i>	<i>Other</i>
Total 6+	15:56	16:13	15:50	16:03	15:36	15:55
Males 6+	16:01	16:09	16:00	16:17	15:44	16:00
Males 6-11	14:25	14:55	14:34	14:42	14:30	14:13
Males 12-17	15:14	15:29	15:32	15:11	15:39	15:06
Males 18-34	15:53	16:06	15:53	16:06	15:38	15:50
Males 35-54	16:19	16:44	16:22	16:30	16:11	16:15
Males 55+	16:15	16:14	16:31	16:42	16:12	16:13
Females 6+	15:51	16:14	15:40	15:48	15:29	15:49
Females 6-11	14:12	14:16	14:16	15:04	14:03	14:09
Females 12-17	15:17	15:28	15:15	15:19	15:14	15:16
Females 18-34	15:36	15:47	15:28	15:26	15:31	15:37
Females 35-54	16:05	16:40	15:55	15:51	16:02	16:01
Females 55+	16:00	16:17	16:15	16:23	16:02	15:55

Hispanic Meters are in Motion About 15 Hours per Day

Total New York Metro, In-tab Persons, April 2008

	<i>Total Persons</i>	<i>Black</i>	<i>Hispanic</i>	<i>Hispanic Spanish</i>	<i>Hispanic English</i>	<i>Other</i>
<i>Total 6+</i>	15:04	15:13	14:52	15:13	14:26	15:06
<i>Males 6+</i>	15:13	15:13	15:06	15:28	14:39	15:14
Males 6-11	12:59	13:02	12:58	13:37	12:44	13:00
Males 12-17	13:39	14:01	14:12	13:52	14:22	13:23
Males 18-34	14:55	15:07	15:00	15:15	14:27	14:50
Males 35-54	15:34	15:55	15:32	15:49	15:14	15:31
Males 55+	15:43	15:35	15:48	16:04	15:32	15:43
<i>Females 6+</i>	14:56	15:13	14:39	15:01	14:15	14:57
Females 6-11	12:29	12:48	12:48	13:18	12:34	12:09
Females 12-17	12:54	12:24	13:52	14:22	13:40	12:38
Females 18-34	14:08	14:27	13:55	13:57	13:54	14:07
Females 35-54	15:18	15:47	15:09	15:12	15:04	15:14
Females 55+	15:29	15:37	15:41	15:45	15:35	15:25

Data Suggest Good Compliance Among “Blue Collar” Hispanic-Spanish M18-34

Total New York Metro, April 2008

		<i>Hispanic-Spanish Males 18-34 HS or Less Education & Employed FT</i>		
	<i>Total M18-34</i>	<i>Total</i>	<i>HH income <\$50,000</i>	<i>HH income \$50,000+</i>
<i>Avg. Daily Installed (N)</i>	533	37	29	8
<i>Unique Persons Installed (N)</i>	586	42	34	8
<i>Avg Daily In-tab Rate</i>	69.5%	77.3%	80.3%	66.5%
<i>Monthly In-tab Rate</i>	93.7%	100.0%	100.0%	100.0%
<i>Avg Daily Compliance Rate</i>	78.0%	84.2%	87.1%	73.8%
<i>Median Time Out-Of-Dock</i>	15:53	16:11	16:08	16:55
<i>Median Time In Motion</i>	14:55	15:19	15:25	14:44

Tell us about Arbitron's interaction with the first generation Spanish-Dominant Hispanics over the age of 25. How is Arbitron helping them overcome technological hurdles that may stand in the way of their compliance? Are we achieving our goals within this age cohort?

Findings for Spanish-Dominant P25+

A review of multiple indicators suggests good results with this Hispanic age/language group.

Spanish-dominant households with no adults under age 35 show high recruitment agree rates.

Those with Persons 25+ show no difference in the installation success rate.

Feedback from exit interviews suggest no more frequent problems/concerns than indicated for other sample types.

Recruitment Agree Rates Above Average for Spanish-Dominant Adults 35+

Total New York Metro Households
January 2008 – May 2008

	<i>Recruitment Agree Rate</i>
<i>Total Households</i>	<i>38%</i>
<i>Households with Hispanic Spanish-dominant householder and no P18-34</i>	<i>48%</i>
<i>Households with Hispanic Spanish-dominant and at least one P18-34</i>	<i>34%</i>
<i>Households with Hispanic English-dominant householder and no P18-34</i>	<i>37%</i>
<i>Households with Hispanic English-dominant and at least one P18-34</i>	<i>40%</i>
<i>Households with Black householder and no P18-34</i>	<i>51%</i>
<i>Households with Black householder and at least one P18-34</i>	<i>45%</i>
<i>Households with Other householder and no P18-34</i>	<i>34%</i>
<i>Households with Other householder and at least one P18-34</i>	<i>36%</i>

Installation Rates Average for Households with Spanish-Dominant P25+

Total New York Metro Households
February 2008 – May 2008

	<i>Install Success Rate</i>
<i>Total Households</i>	83%
<i>Households with any person older than 25</i>	83%
<i>Households with any Spanish-dominant person older than 25</i>	84%

How would you rate your overall experience in the Arbitron Ratings Panel? (P25+ Only)

	<i>Total Persons</i>	<i>Black</i>	<i>Hispanic</i>	<i>Hispanic Spanish</i>	<i>Hispanic English</i>	<i>Other</i>
<i>N</i>	783	126	130	71	59	527
<i>Very Positive</i>	49.7%	57.9%	53.8%	54.9%	52.5%	46.7%
<i>Somewhat Positive</i>	42.5%	36.5%	39.2%	38.0%	40.7%	44.8%
<i>Somewhat Negative</i>	4.5%	2.4%	2.3%	0.0%	5.1%	5.5%
<i>Very Negative</i>	1.5%	0.0%	0.8%	0.0%	1.7%	2.1%
<i>Don't Know</i>	1.8%	3.2%	3.8%	7.0%	0.0%	0.9%

Base: June 2007 through March 2008, Persons 25+ exiting PPM panels for all reasons

On days when you carried or wore your meter, did you usually wear it...? (P25+ Only)

	<i>Total Persons</i>	<i>Black</i>	<i>Hispanic</i>	<i>Hispanic Spanish</i>	<i>Hispanic English</i>	<i>Other</i>
<i>N</i>	783	126	130	71	59	527
<i>For All Your Waking Hours</i>	63.9%	71.4%	73.1%	78.9%	66.1%	59.8%
<i>Most of Your Waking Hours</i>	30.8%	25.4%	23.8%	18.3%	30.5%	33.8%
<i>About Half of Your Waking Hours</i>	4.2%	2.4%	3.1%	2.8%	3.4%	4.9%
<i>Fewer Than Half Your Waking Hours</i>	1.1%	0.8%	0.0%	0.0%	0.0%	1.5%

Base: June 2007 through March 2008, Persons 25+ exiting PPM panels for all reasons

What can Arbitron tell us about the representation of its panel by country of origin? How do we know we have the right proportion of Puerto Ricans, Central/South Americans, Mexicans, etc. in New York? Would collecting and weighting the ratings data by country of origin improve the reliability?

New York Country of Origin Analysis

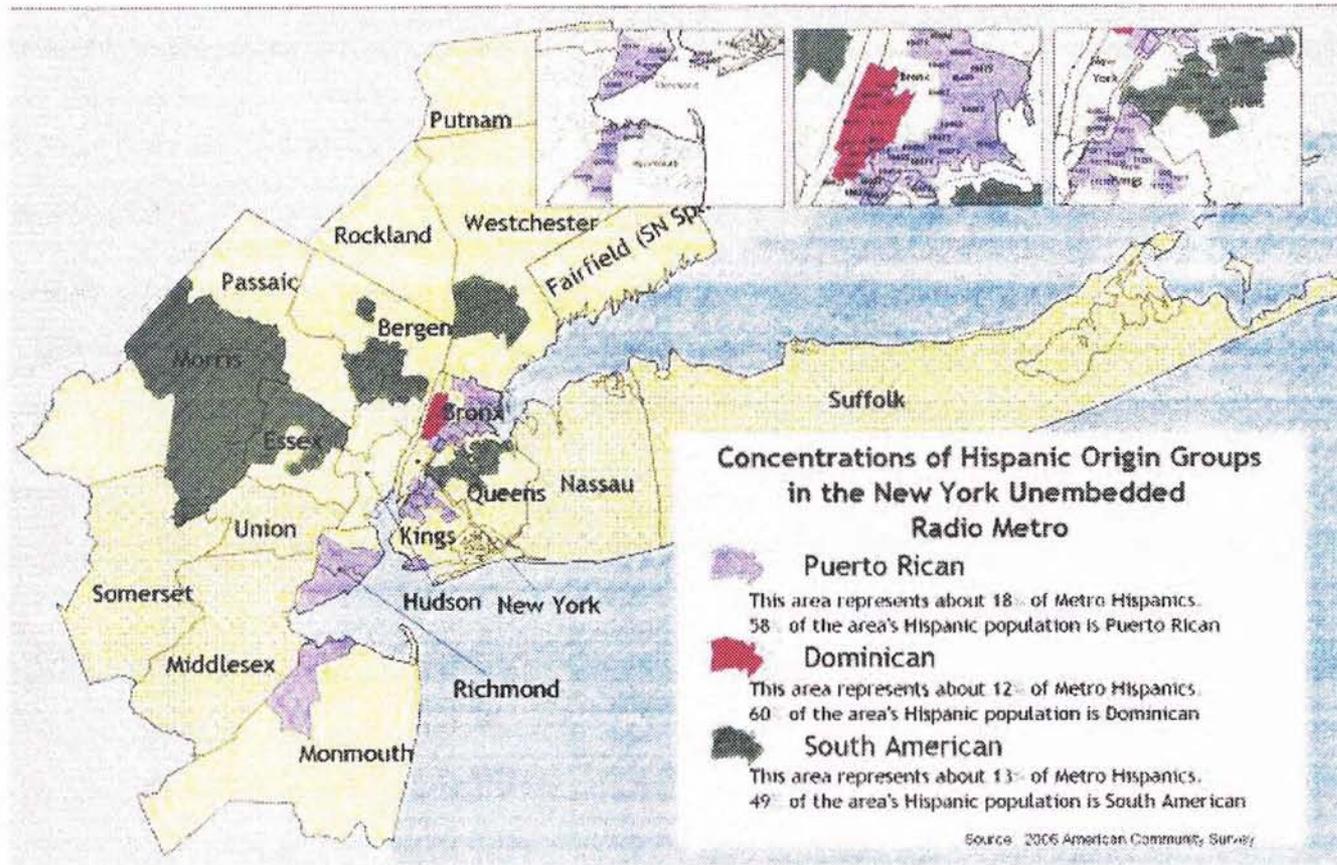
Identified “high density” Puerto Rican, Dominican and South American areas in New York.

ZIP Code definitions of large geo-units (150,000 persons minimum).

No indication of under-representation of these “high density country of origin areas” in the PPM panel.

PPM and Diary distributions by area are similar.

NY Geo Distribution by Country of Origin



“High Density Origin” Area Index

New York PPM Sample vs. Hispanic Pop. Percents in Same County of Origin Areas

<i>Area</i>	<i>% of Hispanic Sample</i>	<i>% of Hispanic Pop</i>	<i>Proportionality Index</i>
<i>3 Areas Combined</i>	49.2	42.3	116
<i>“Caribbean” Combined</i>	32.7	30.4	108
<i>Puerto Rican Area</i>	20.7	18.2	114
<i>Dominican Area</i>	12.0	12.2	98
<i>South American Area</i>	16.5	11.9	139
<i>Remaining Area</i>	50.8	57.7	88

Source: Claritas and American Community Survey

Country of Origin Weighting: Issues to Consider

How will the data be used?

What is the best question to use?

Are there any privacy concerns?

Should we add Country of Origin weighting on top of age/sex/ethnicity/geography/language?

Weighting smaller cells increases variance and “bounce.”

What is the best universe source? Are the estimates stable for local markets?

How Does Hispanic Country of Origin Break Out by Market?

<i>Country/Region Of Origin</i>	<i>New York</i>	<i>Miami</i>	<i>Chicago</i>	<i>San Francisco</i>	<i>Los Angeles</i>	<i>Dallas</i>	<i>Houston</i>
	%	%	%	%	%	%	%
<i>Mexico</i>	2.5	1.7	18.8	15.9	34.7	22.3	25.5
<i>Puerto Rico</i>	6.4	3.8	2.3	0.6	0.4	0.4	0.4
<i>Cuba</i>	0.7	20.2	0.2	0.2	0.4	0.1	0.2
<i>Dominican Rep.</i>	4.2	1.8	0.1	0.0	0.0	0.0	0.0
<i>Central America</i>	2.2	5.9	0.8	2.4	5.6	1.8	4.0
<i>South America</i>	4.1	9.1	0.8	0.9	1.0	0.6	1.1
<i>Other Hispanic</i>	1.3	2.5	0.9	1.6	1.9	1.4	1.6
<i>Non-Hispanic</i>	78.7	55.1	76.1	78.5	56.0	73.3	67.1

Source: American Community Survey

How does cell phone-only penetration impact the ability of Arbitron to represent Hispanics in the sample?

Hispanic CPO Representation

There are no known universe estimates for Cell-Phone-Only status broken out by race/ethnicity at the local market level.

National and regional estimates from the Federal National Health Interview Survey indicate that Hispanics are more likely to be CPO.

The NY PPM panel CPO portion over-indexes against the market universe for Hispanic persons, including Spanish-dominant Hispanics.

This suggests we are successfully contacting and recruiting the Hispanic CPO population.

Hispanic Share of CPO PPM Sample Exceeds Overall Hispanic Universe Percents

Installed Race/Ethnicity/Language Distribution by Phone Status
New York Non-embedded, Persons 6+, April 2008

	<i>UE % (N = 12,724,400)</i>	<i>Total Avg Daily Installed (n = 3,056)</i>		<i>Landline Avg Daily Installed (n = 2,776)</i>		<i>CPO Avg Daily Installed (n = 280)</i>	
		%	Index to UE	%	Index to UE	%	Index to UE
<i>Black 6+</i>	20.0	20.2	101	19.8	99	23.2	116
<i>Hispanic 6+</i>	23.7	27.9	118	25.7	108	50.7	214
<i>Hispanic-Spanish 6+</i>	13.3	13.9	105	12.4	93	28.6	215
<i>Hispanic-English 6+</i>	10.4	14.0	135	13.3	128	22.1	213
<i>Other 6+</i>	56.3	51.9	92	54.5	97	26.1	46

***How does PPM represent the undocumented
Hispanic population?***

Undocumented Persons

Arbitron does not request information from respondents about their legal status.

However we have examined several proxy sample indicators to look for possible problems in this area.

NY comparisons of recruitment agree rates, installation rates (landline and cell-phone-only) and in-tab rates across HDHA and language statuses do not point to a problem with undocumented persons.

We will watch these proxy indicators in other markets moving forward.

The population targeted by Spanish stations is Spanish speaking Hispanics with the majority of the ad revenue and focus on 18-34. Are the current sample targets large enough to reliably rate this small and distinct sub-set of Persons 6+?

Ratings Reliability

The the current PPM sample targets provide reliable ratings estimates for Spanish-dominant P18-34.

The monthly PPM panel ratings provide statistical reliability equivalent to quarterly Diary ratings.

The key metrics for ratings reliability are ESB (Effective Sample Base) and margin of error.

PPM ESBs are far larger than the raw in-tab sample sizes, both overall and for Persons 18-34.

PPM Panel Design Provides Large Effective Sample Base (ESB) for Reliable Monthly Ratings

	Houston		Philadelphia		New York	
	Avg. Daily In-tab	ESB	Avg. Daily In-tab	ESB	Avg. Daily In-tab	ESB
April 2008						
P18-34	366	5,828	290	4,692	731	8,109
M18-34	186	4,962	153	4,034	370	6,621
W18-34	180	3,511	137	2,811	361	5,097
Black 18-34	67	1,822	63	1,714	117	3,182
Hisp. 18-34	173	3,050	**	**	205	3,614
Other 18-34	127	1,996	202	3,175	409	6,428

Based on Monday-Sunday, 6A-Midnight

**Small sample

Why does Arbitron language weight at a 6+ Spanish Dominant/English Dominant level only? Would the data be more representative and reliable if we further controlled for language usage by age breaks and/or more discrete language breaks? Also, is the question we ask the best measure of language usage? Arbitron currently asks about “language used in the home” and is that indicative of radio format preference?