

# Fertility and the 2010 Census

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# Sources of Fertility Data

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- *NCHS*
  - *Provides number of births from birth certificates*
  - *Results can be combined with ACS (or CPS or pop estimates) to produce rates*
- *ACS*
  - *Provides info on #births in past year*
  - *Also provides a denominator to produce rates*
  - *ACS weights based upon annual population estimates*

# 2010 Census, Population Estimates, and Fertility

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- *New Census Data Requires Re-Benchmarking Pop Estimates*
- *Other Recent Changes in Population Estimates*
  - *Immigration Measure changed in 2007 and 2008*
  - *Immigrant Age Distribution changed in 2009*

# Revised ACS Weights

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- *Applies Census Methods to IPUMS*
- *Creates Estimates that Match Intercensal Population Estimates*

# Differences in 2009 Original vs. Revised ACS: Females 15-49

	<b>#ACS<sub>REV</sub> - #ACS<sub>ORIG</sub></b>	<b>%Diff</b>
<b>15-19</b>	270,000	2.6
<b>20-24</b>	40,000	0.4
<b>25-29</b>	-30,000	-0.3
<b>30-34</b>	26,006	0.3
<b>35-39</b>	0	0.0
<b>40-44</b>	-30,000	-0.3
<b>45-49</b>	40,000	0.3

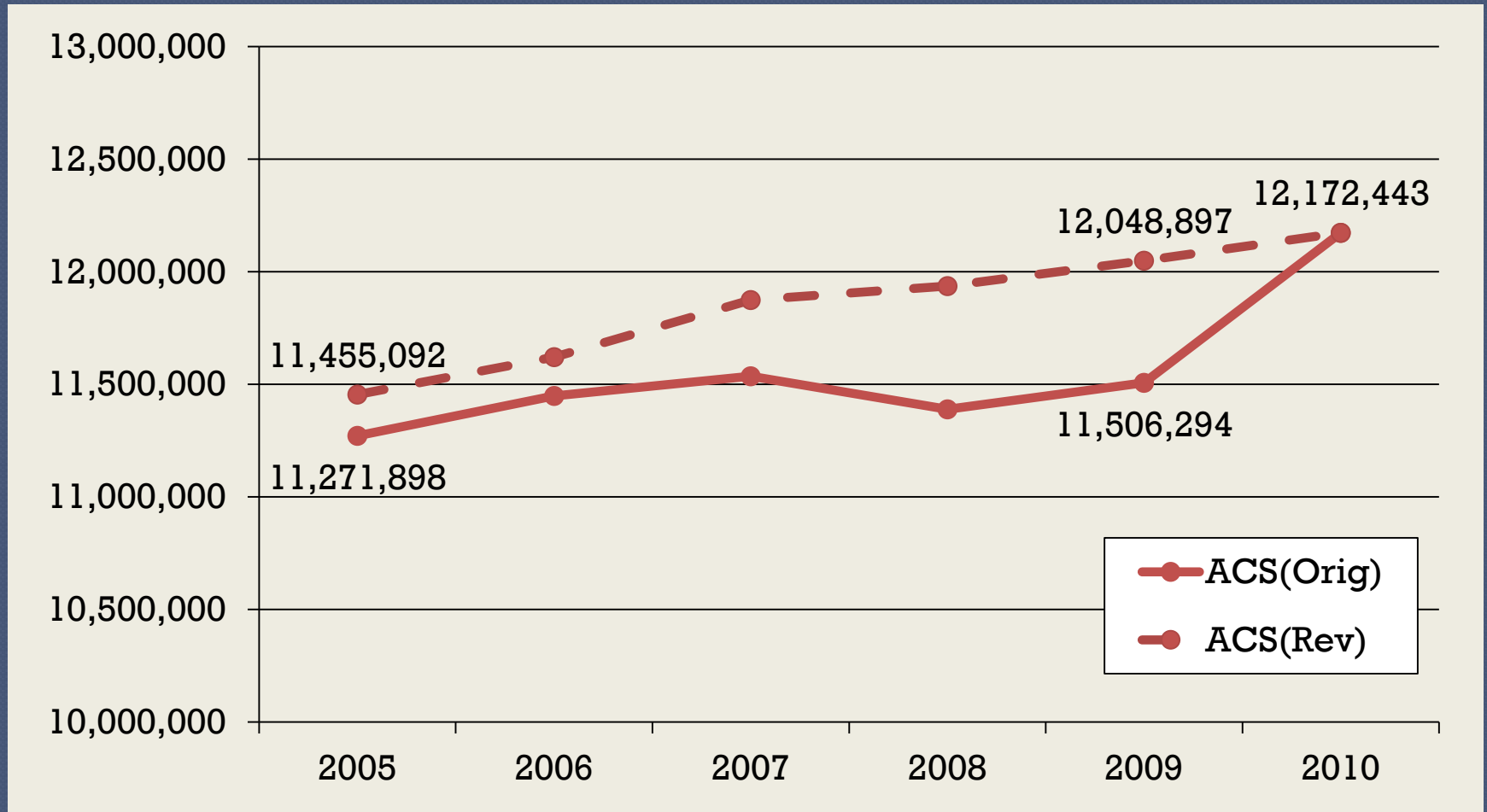
# Differences in 2009 Original vs. Revised ACS: Females by Nativity

	Native Born		Foreign Born	
	#ACS <sub>REV</sub> - #ACS <sub>ORIG</sub>	%Diff	#ACS <sub>REV</sub> - #ACS <sub>ORIG</sub>	%Diff
<b>15-19</b>	211,760	2.2	59,857	8.5
<b>20-24</b>	-69,631	-0.8	105,325	9.2
<b>25-29</b>	-160,625	-1.8	137,119	8.3
<b>30-34</b>	-56,348	-0.7	82,354	4.1
<b>35-39</b>	-56,447	-0.7	55,749	2.6
<b>40-44</b>	-70,980	-0.8	49,618	2.5
<b>45-49</b>	-12,753	-0.1	52,581	2.8

# Differences in 2009 Original vs. Revised ACS: Females by Race/Ethnicity

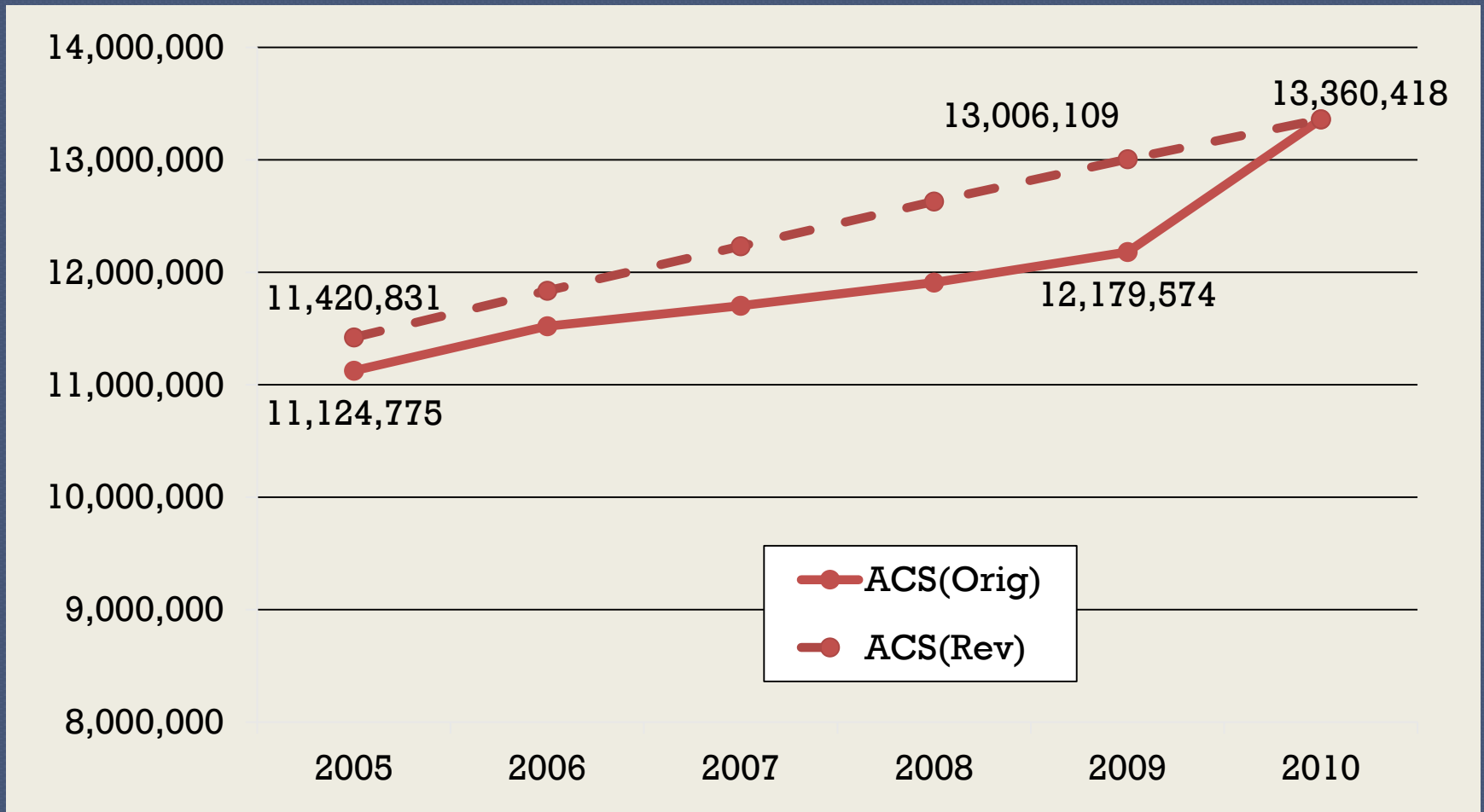
	#ACS <sub>REV</sub> - #ACS <sub>ORIG</sub>	%Diff		#ACS <sub>REV</sub> - #ACS <sub>ORIG</sub>	%Diff
<b><u>White</u></b>			<b><u>Hispanic</u></b>		
<b>15-19</b>	<b>-27,648</b>	<b>-0.4</b>	<b>15-19</b>	<b>185,710</b>	<b>9.5</b>
<b>20-24</b>	<b>-196,219</b>	<b>-3.1</b>	<b>20-24</b>	<b>136,859</b>	<b>7.5</b>
<b>25-29</b>	<b>-236,091</b>	<b>-3.7</b>	<b>25-29</b>	<b>157,872</b>	<b>8.5</b>
<b>30-34</b>	<b>-104,902</b>	<b>-1.8</b>	<b>30-34</b>	<b>119,938</b>	<b>6.6</b>
<b>35-39</b>	<b>-87,660</b>	<b>-1.4</b>	<b>35-39</b>	<b>87,398</b>	<b>5.0</b>
<b>40-44</b>	<b>-96,725</b>	<b>-1.4</b>	<b>40-44</b>	<b>78,332</b>	<b>4.9</b>
<b>45-49</b>	<b>-69,036</b>	<b>-0.9</b>	<b>45-49</b>	<b>60,426</b>	<b>4.3</b>
<b><u>Black</u></b>			<b><u>API</u></b>		
<b>15-19</b>	<b>53,086</b>	<b>3.3</b>	<b>15-19</b>	<b>60,610</b>	<b>14.7</b>
<b>20-24</b>	<b>-848</b>	<b>-0.1</b>	<b>20-24</b>	<b>103,791</b>	<b>22.9</b>
<b>25-29</b>	<b>-27,501</b>	<b>-1.9</b>	<b>25-29</b>	<b>85,816</b>	<b>14.8</b>
<b>30-34</b>	<b>-3,980</b>	<b>-0.3</b>	<b>30-34</b>	<b>21,083</b>	<b>3.3</b>
<b>35-39</b>	<b>-11,760</b>	<b>-0.9</b>	<b>35-39</b>	<b>10,180</b>	<b>1.5</b>
<b>40-44</b>	<b>-12,879</b>	<b>-0.9</b>	<b>40-44</b>	<b>8,638</b>	<b>1.5</b>
<b>45-49</b>	<b>19,912</b>	<b>1.4</b>	<b>45-49</b>	<b>21,035</b>	<b>3.8</b>

# ACS Estimates: Foreign-Born Females 15-49

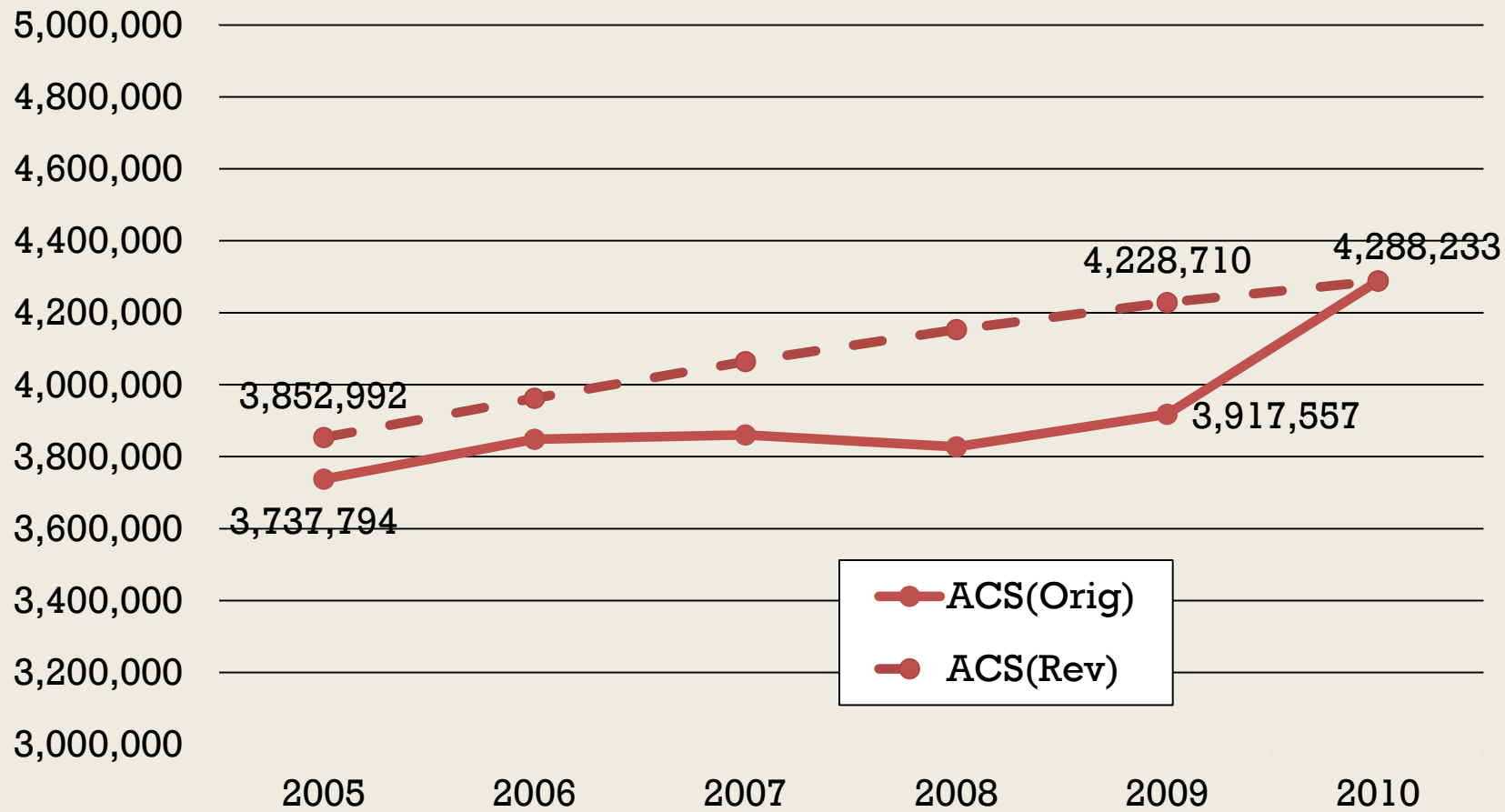




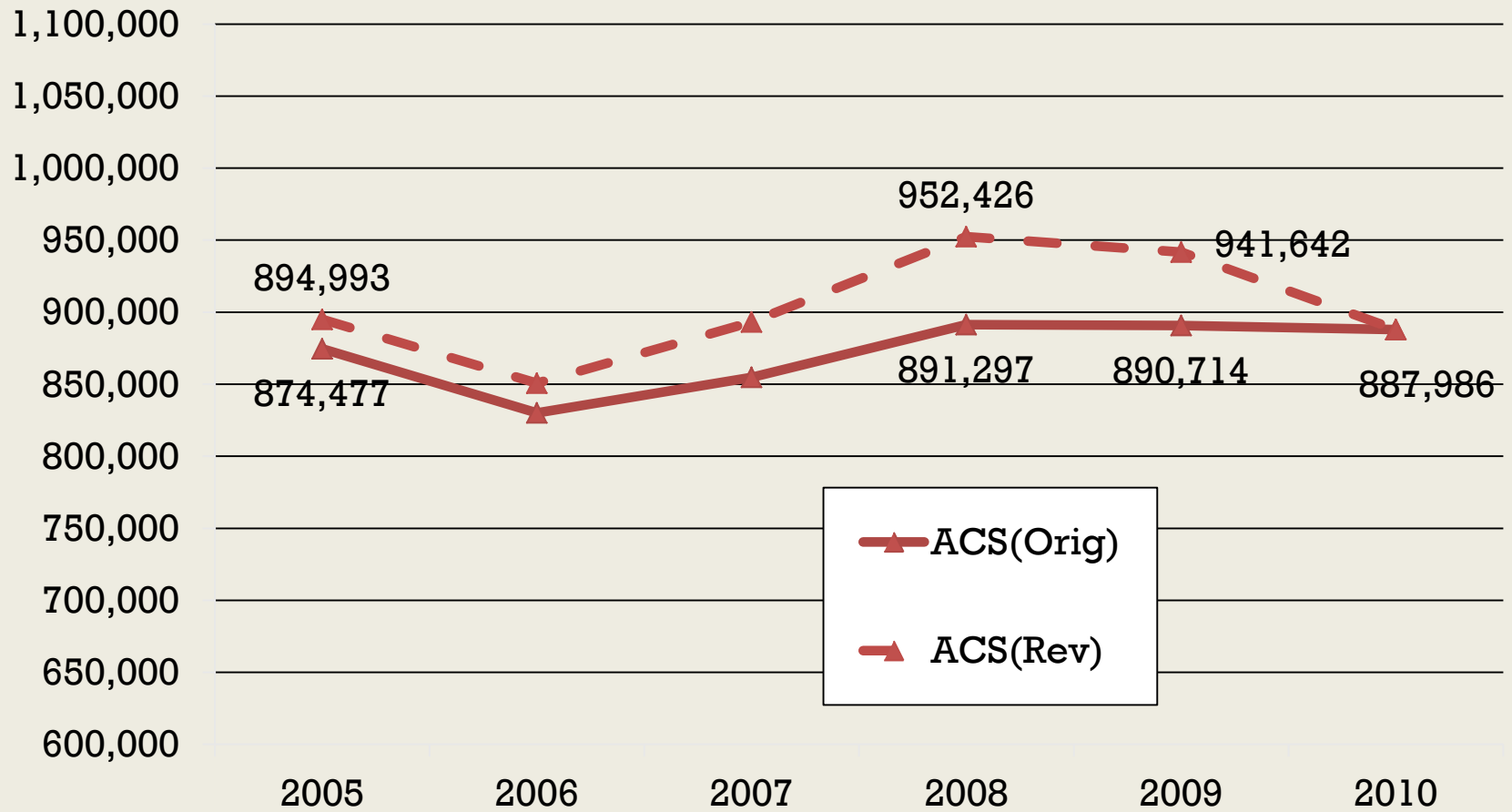
# ACS Estimates: Hispanic Females 15-49



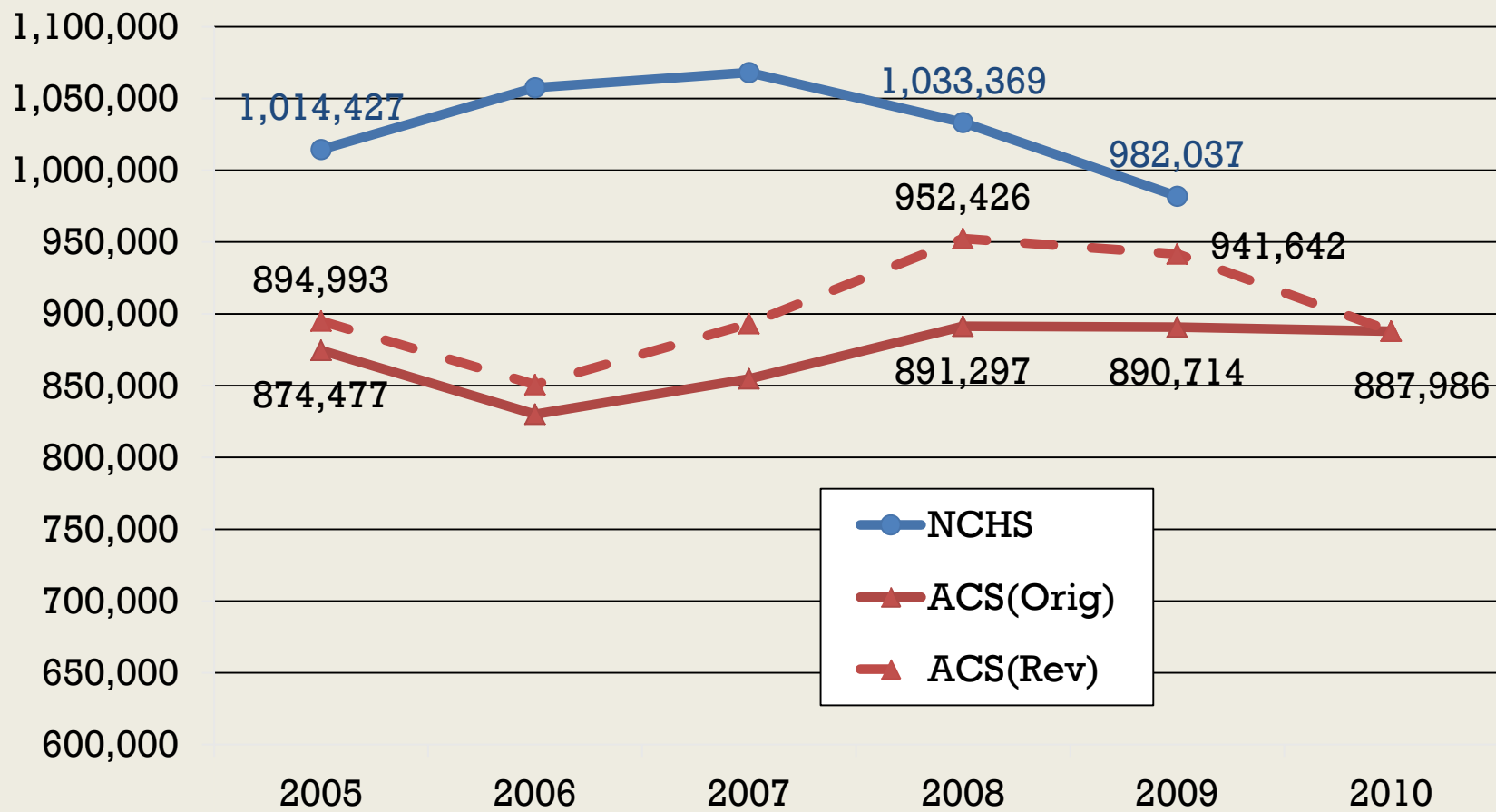
# ACS Estimates: API Females 15-49



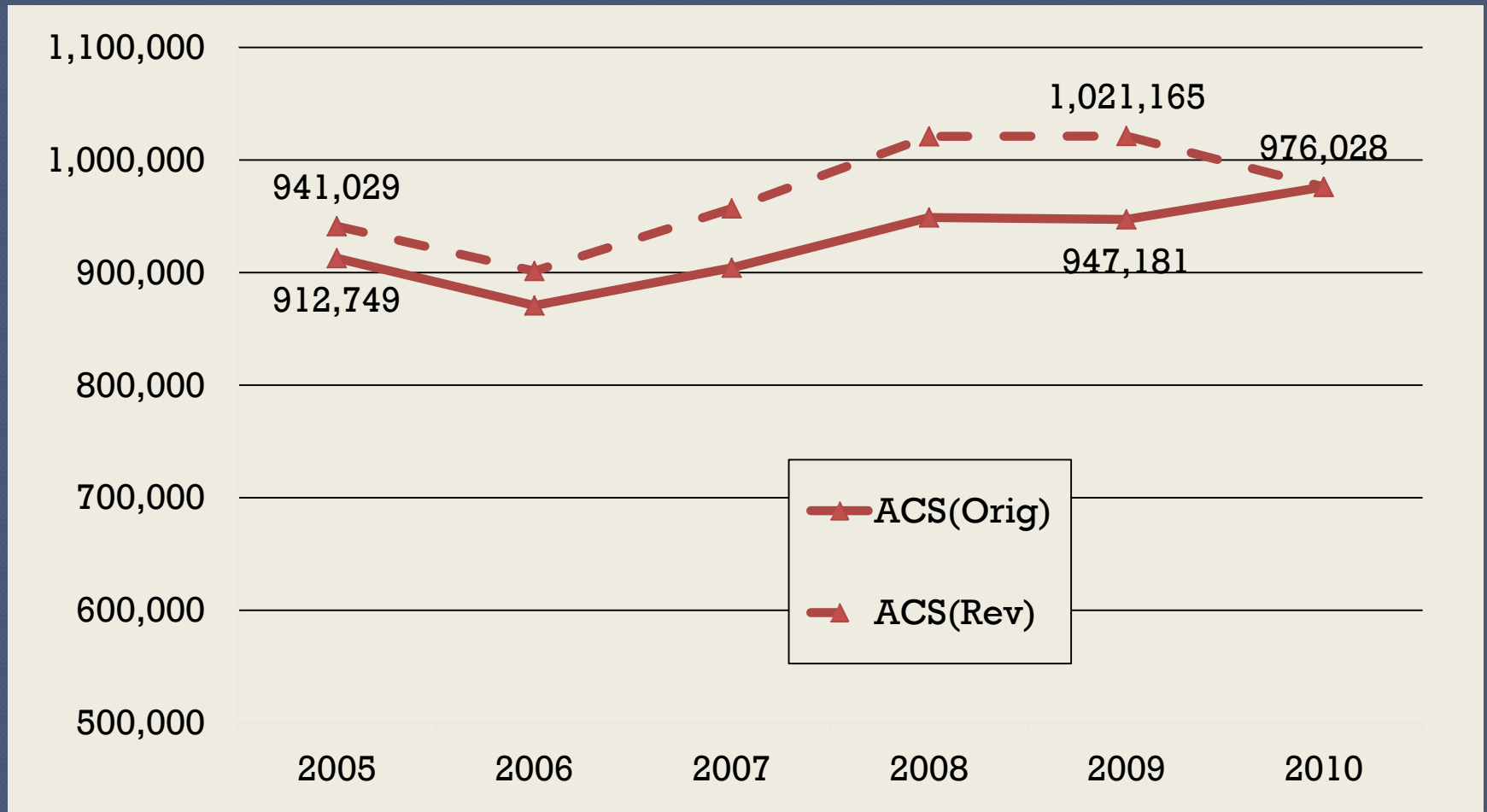
# Births: Foreign-Born Females 15-49



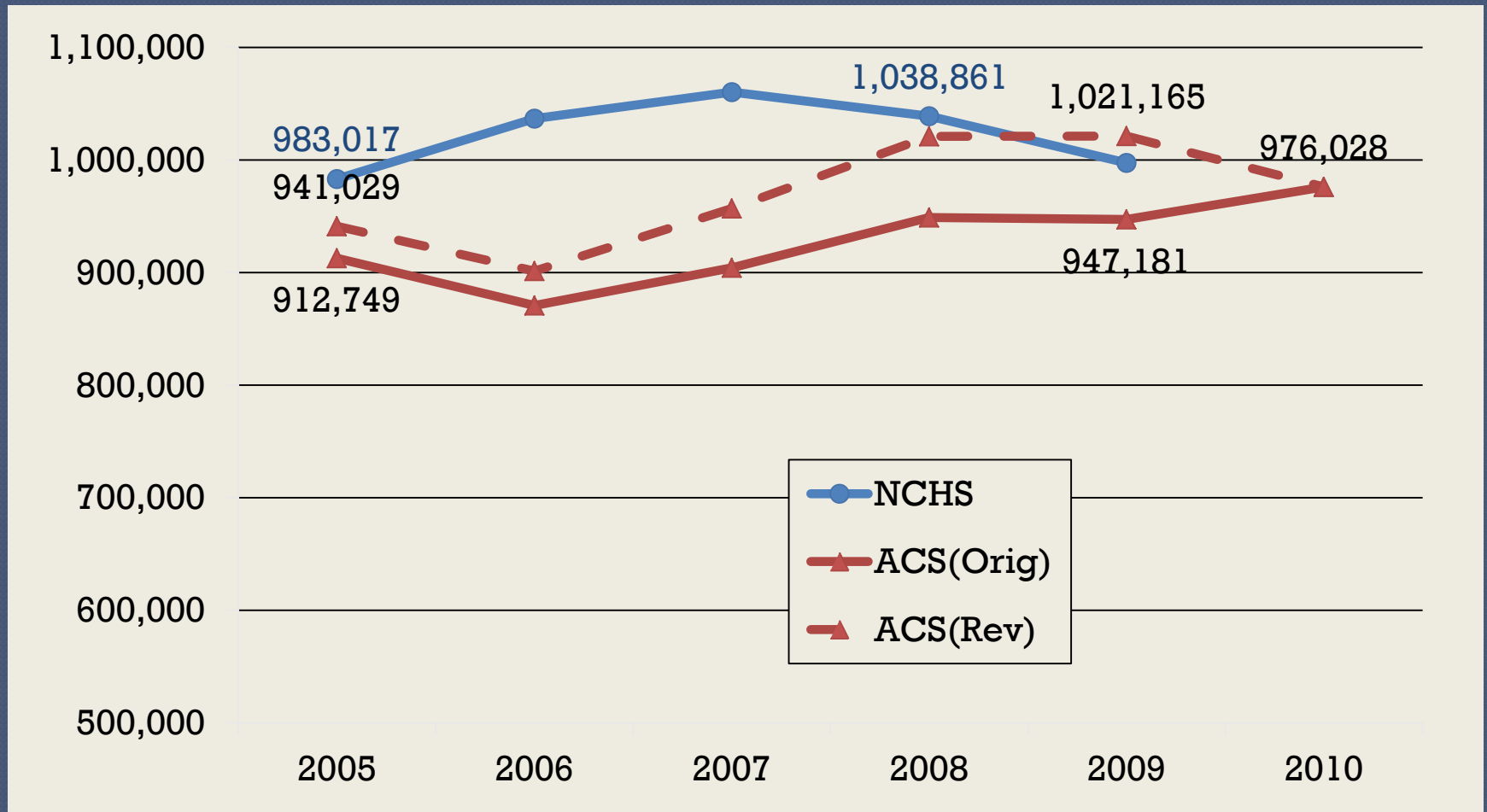
# Births: Foreign-Born Females 15-49



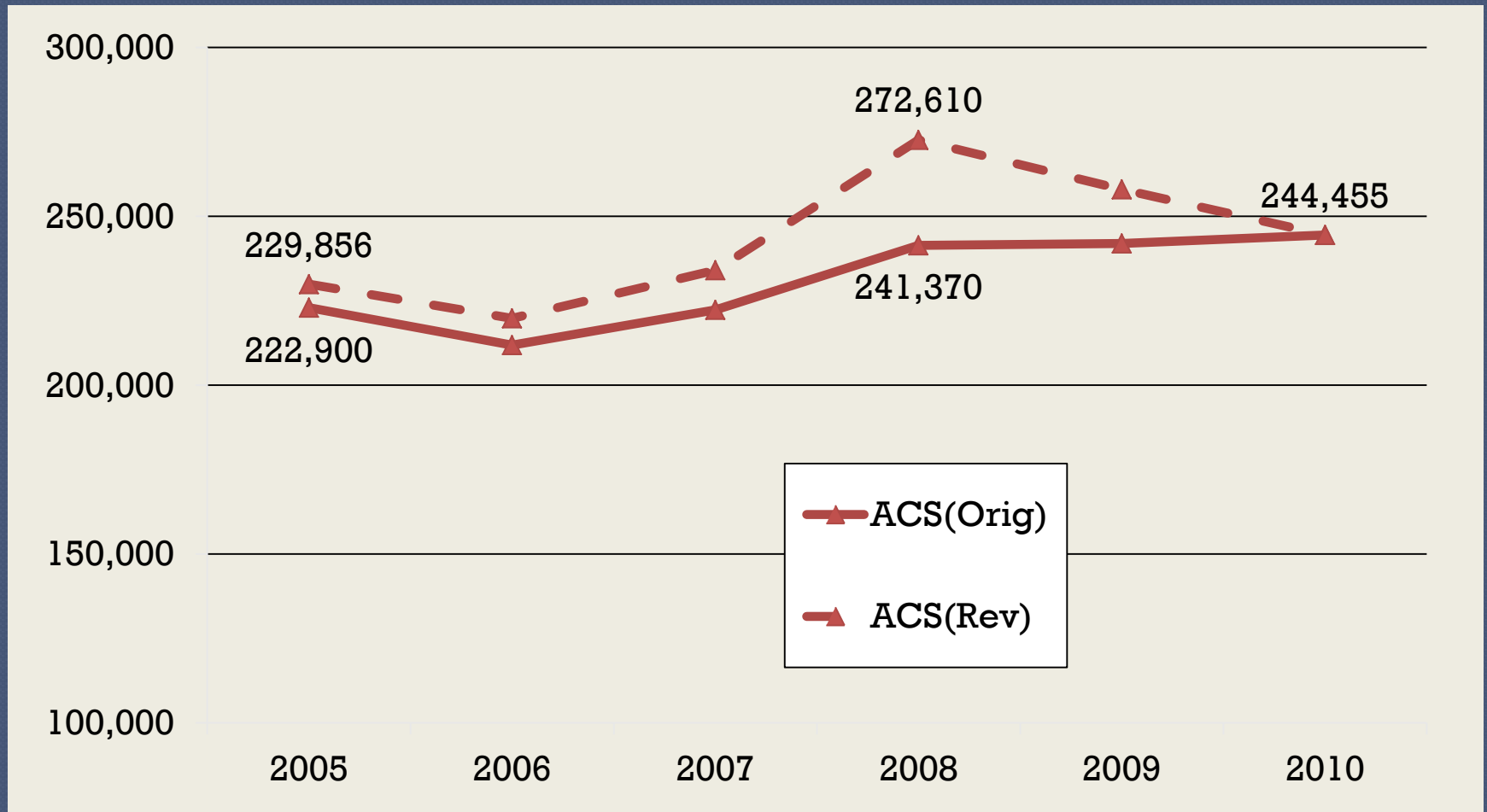
# Births: Hispanic Females 15-49



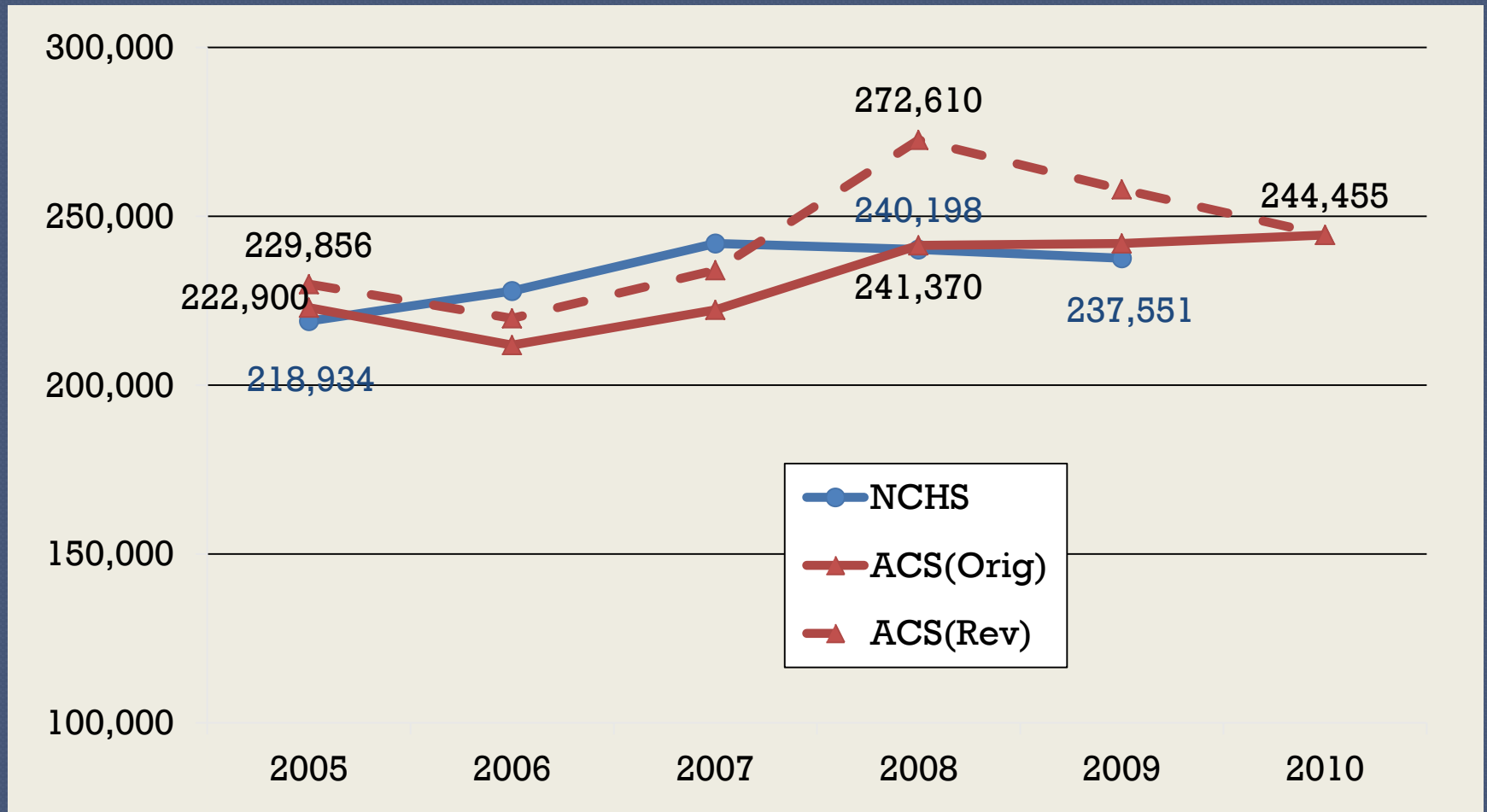
# Births: Hispanic Females 15-49



# Births: API Females 15-49

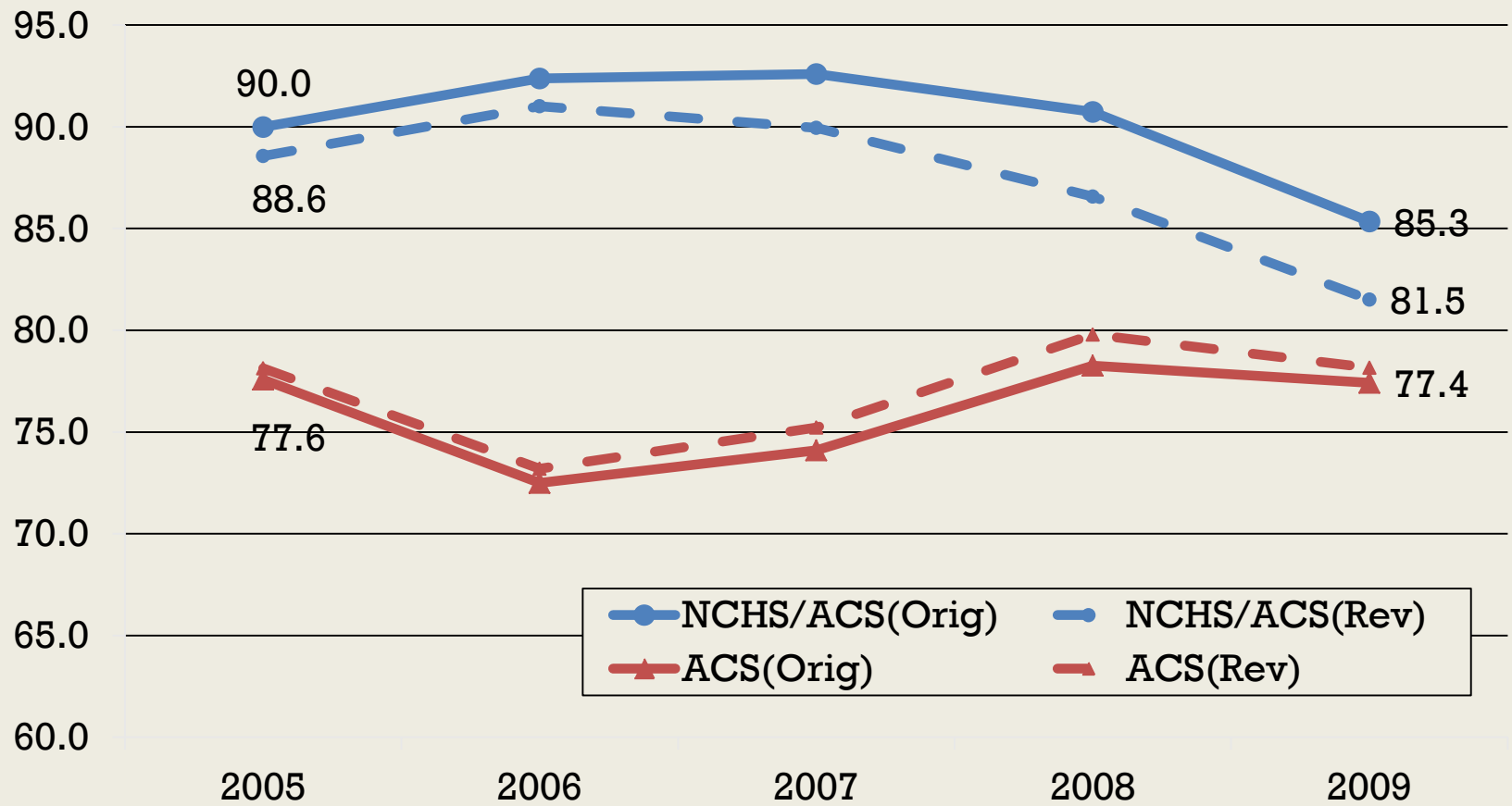


# Births: API Females 15-49

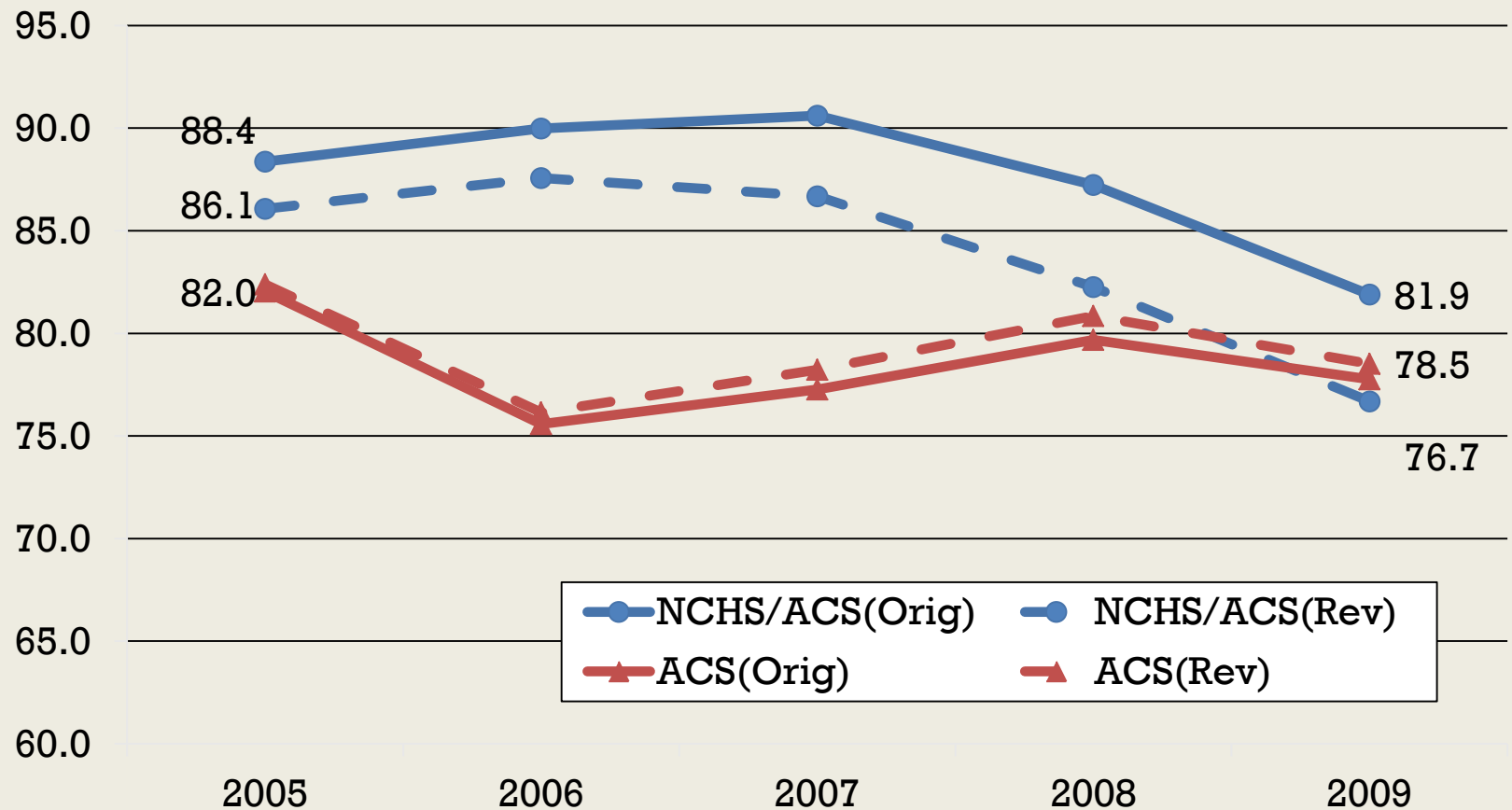




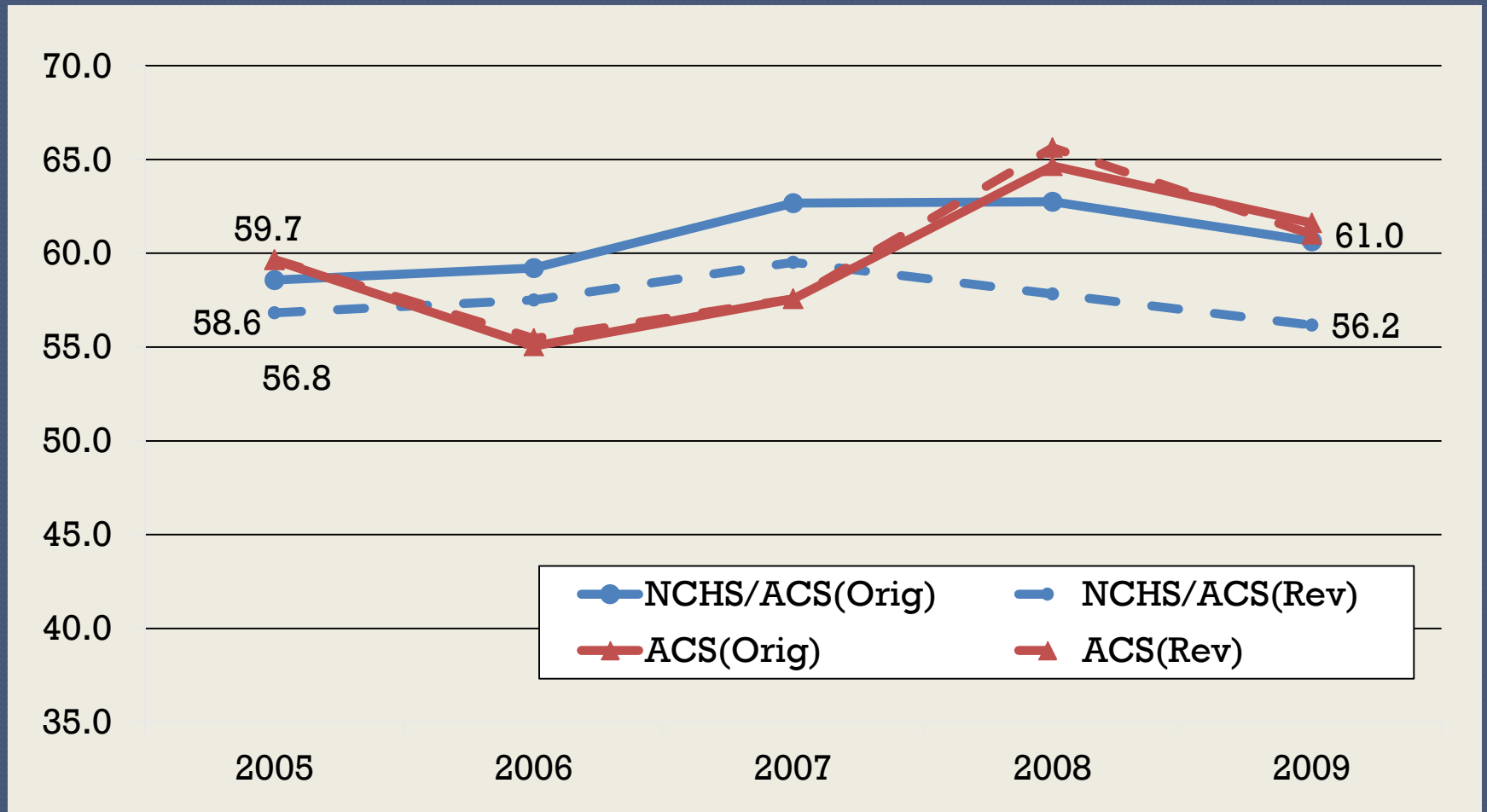
# GFR: Foreign-Born (15-49yrs)



# GFR: Hispanics (15-49yrs)



# GFR: Asian and Pacific Islanders (15-49yrs)



# Conclusions

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- *Effect of Revised Weights on Fertility Measures*
  - *More Foreign-Born, Hispanic & Asian Women*
  - *More Foreign-Born, Hispanic & Asian Births*
  - *Lower Rates when using NCHS/ACS formulation*
  - *Rates unchanged when using ACS to calculate numerator & denominator*
- *Pop Estimate Adjustments Affect ACS Comparison*
  - *Methodological changes 2007-2009*
  - *Affect year-to-year comparisons*
- *Revised Weights Essential*
  - *Change measures require consistency*
  - *Census NOT planning to reweight ACS*
  - *Multi-Year datasets also affected*

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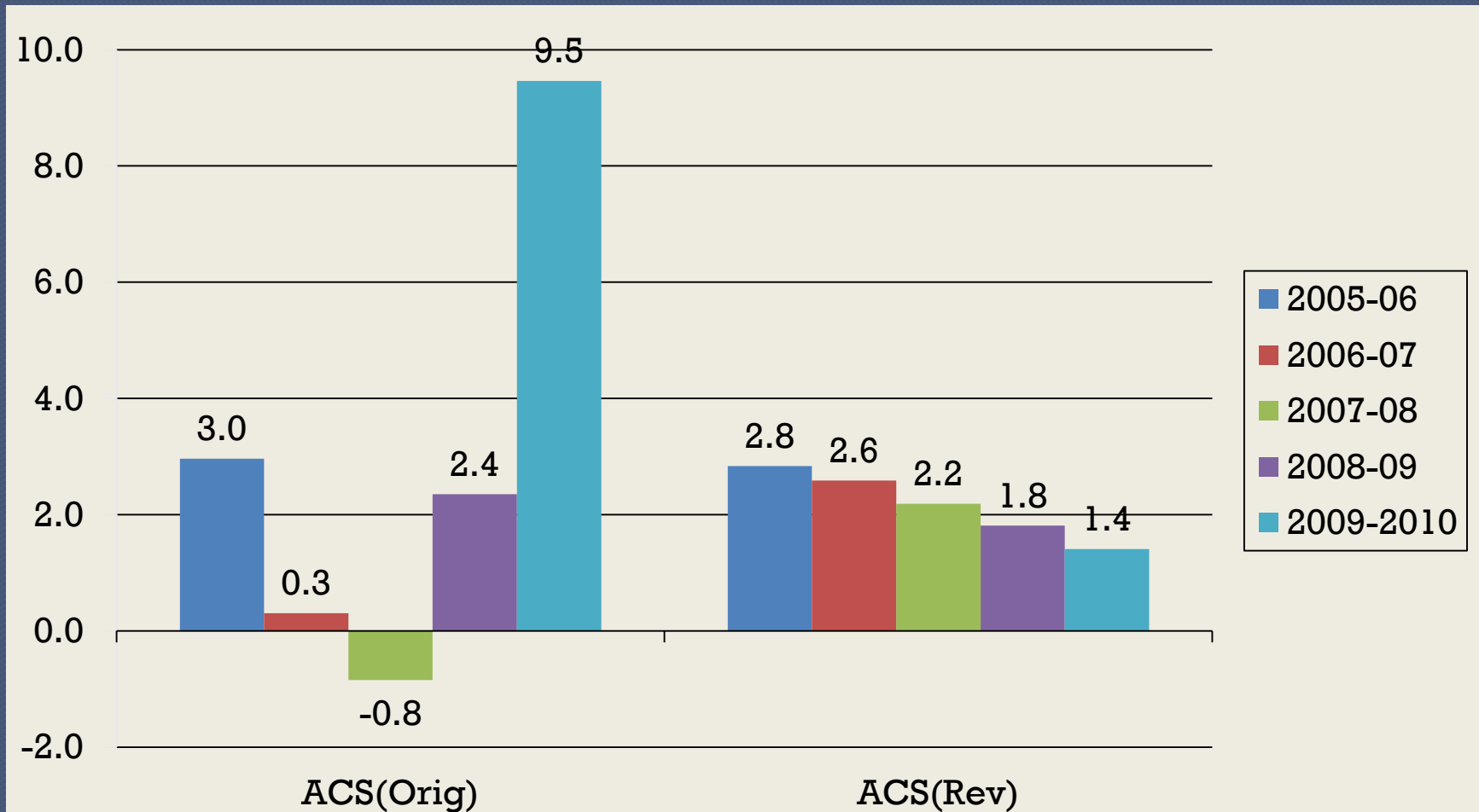
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# Annual % Change in API Females

## 15-49



# Adjustments to Pop Estimates

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- *Vintage 2007 (ACS 2007, CPS 2008)*
  - $\frac{1}{2}$  Immigration by Old Method (FB Difference)
  - $\frac{1}{2}$  Immigration by New Method (ROYA)
- *Vintage 2008 (ACS 2008, CPS 2009)*
  - All post-'00 Immigration by ROYA
- *Vintage 2009 (ACS 2009, CPS 2010)*
  - Changes in Age Structure of Immigration, not Level
- *Vintage 2010 (CPS 2011)*
  - More Changes in Age Structure not Level
- *Census 2010-based (ACS 2010, CPS 2012)*
  - Large Differences in Hispanic & Asian from 2009
  - Intercensals Provide Revised 2001-2009
  - No Planned Revisions to ACS Weights