

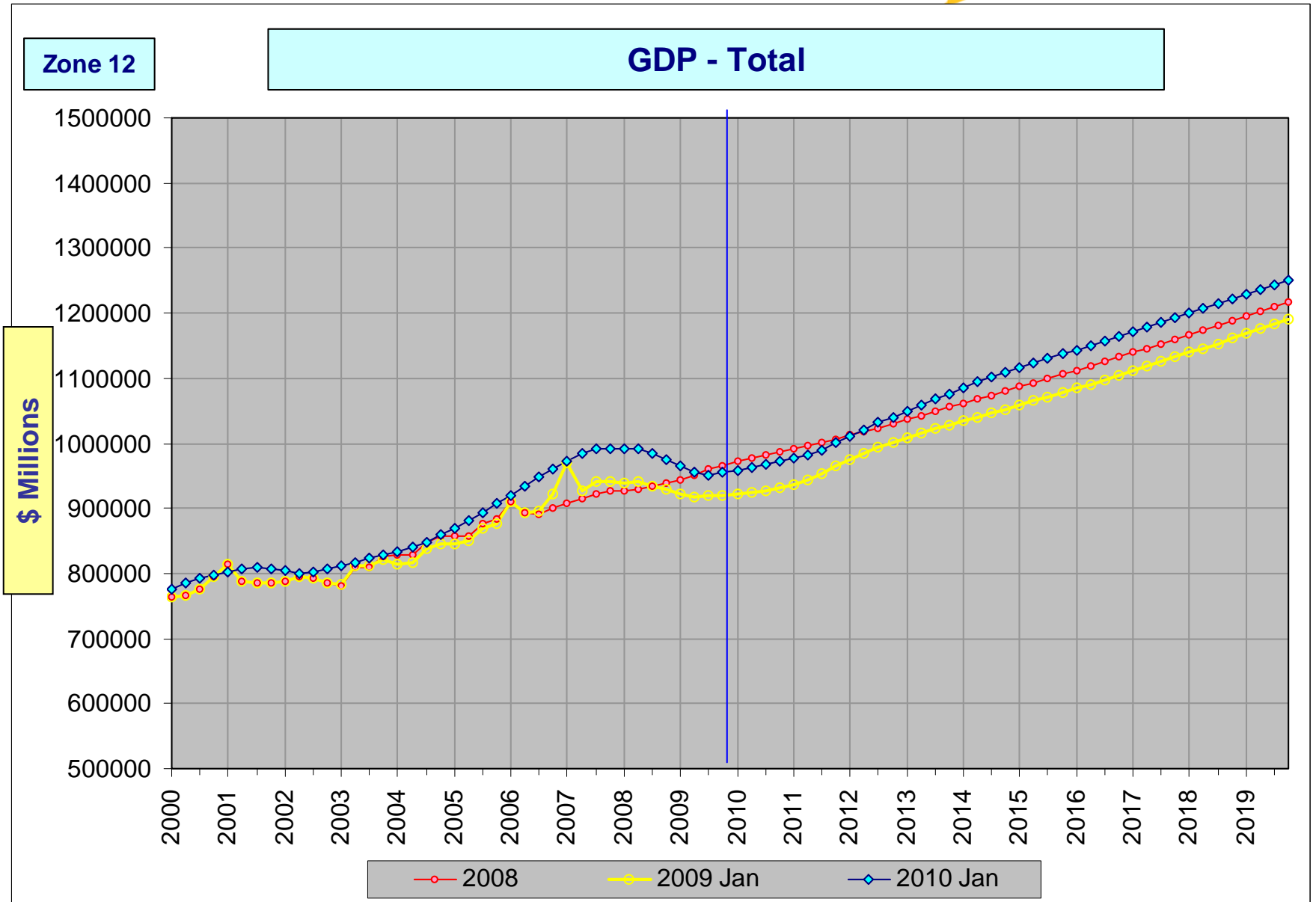
# 2010 'Gold Book' Forecast - Preliminary Assumptions

**ESPWG**  
**February 4, 2010**

**Arthur Maniaci**  
**New York Independent System Operator**

# Preliminary Assumptions - Economic & Demographic

- ◆ Economic Outlook – Update Since January 2009
  - *Gross State Output: Unchanged – modest growth through 2011*
  - *Employment: Reduced outlook – decline until 2011 Q1*
  - *Real Household Income: Unchanged - 2009 levels regained in 2012*
  - *Housing: Historical revision of series, but future trend unchanged*
  - *Lower incomes & home building will reduce purchases of all types of appliances, slowing energy growth & reducing participation in EE*
- ◆ Heating & Cooling Degree Day Trends
  - *No significant differences in means over a 35 year period*



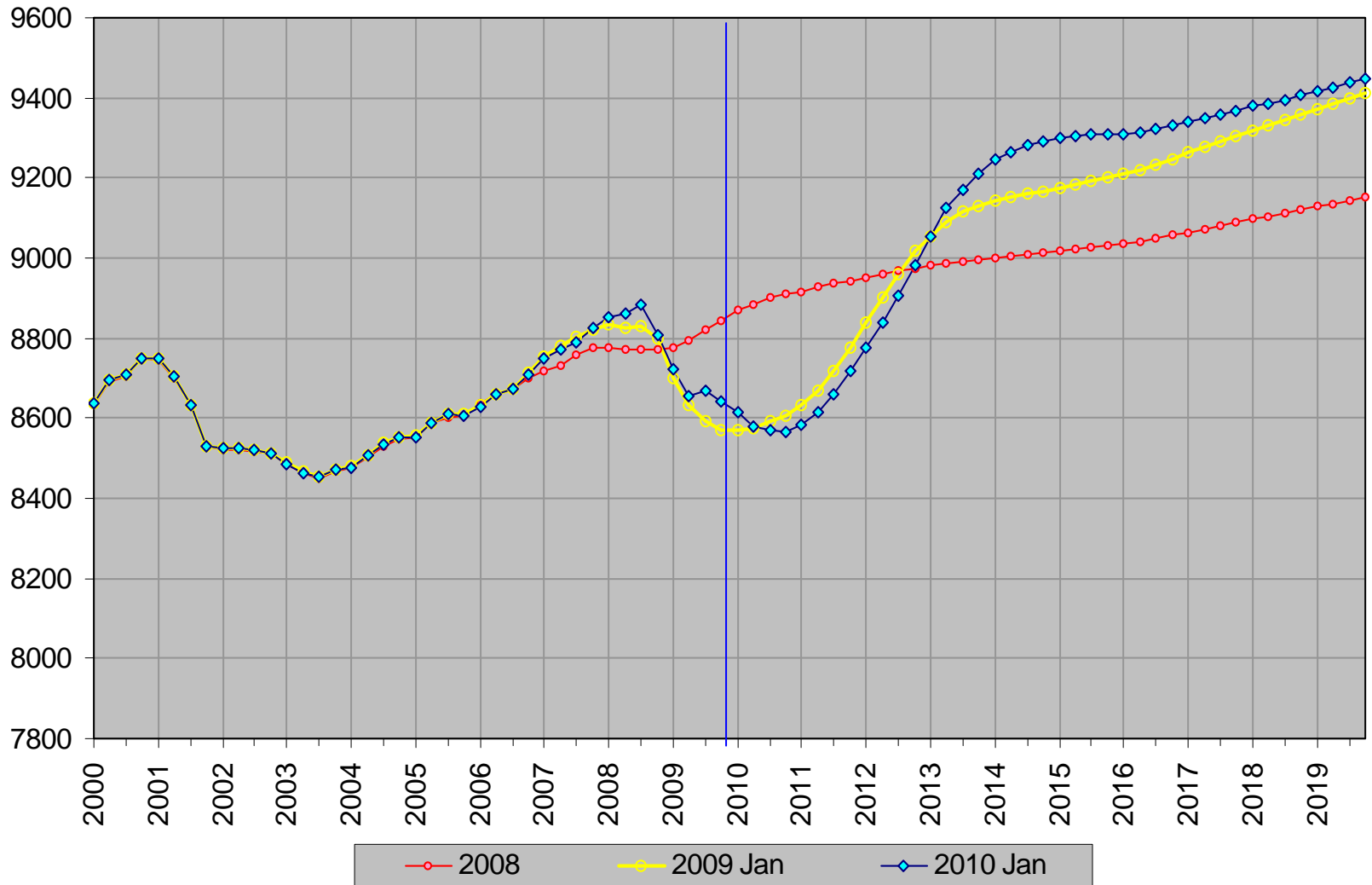
Data from *economy.com*

Draft – for discussion only

Zone 12

## Employment - Total

Thousands



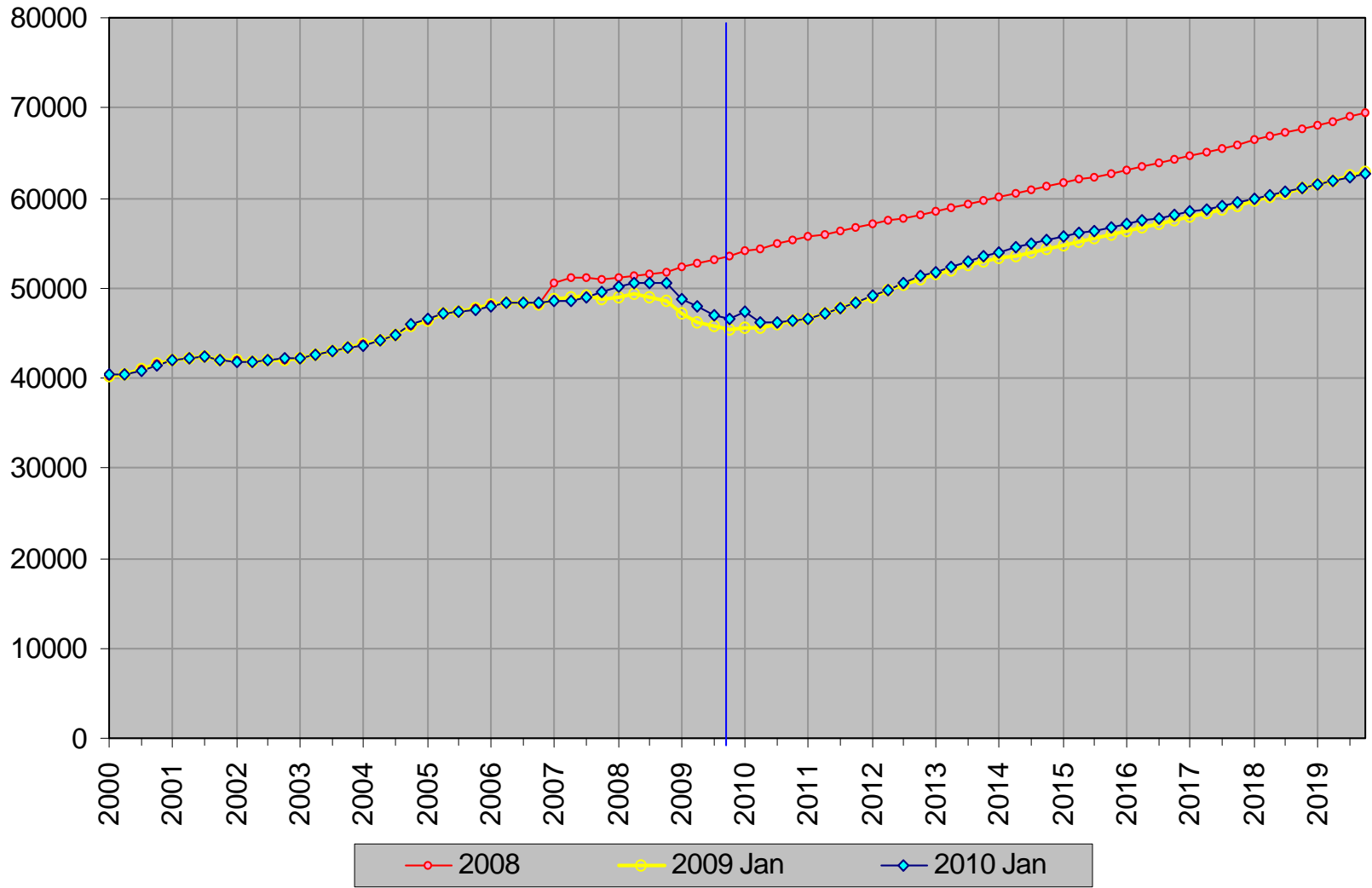
Data from economy.com

Draft – for discussion only

Zone 12

## Median Household Income

Real Dollars



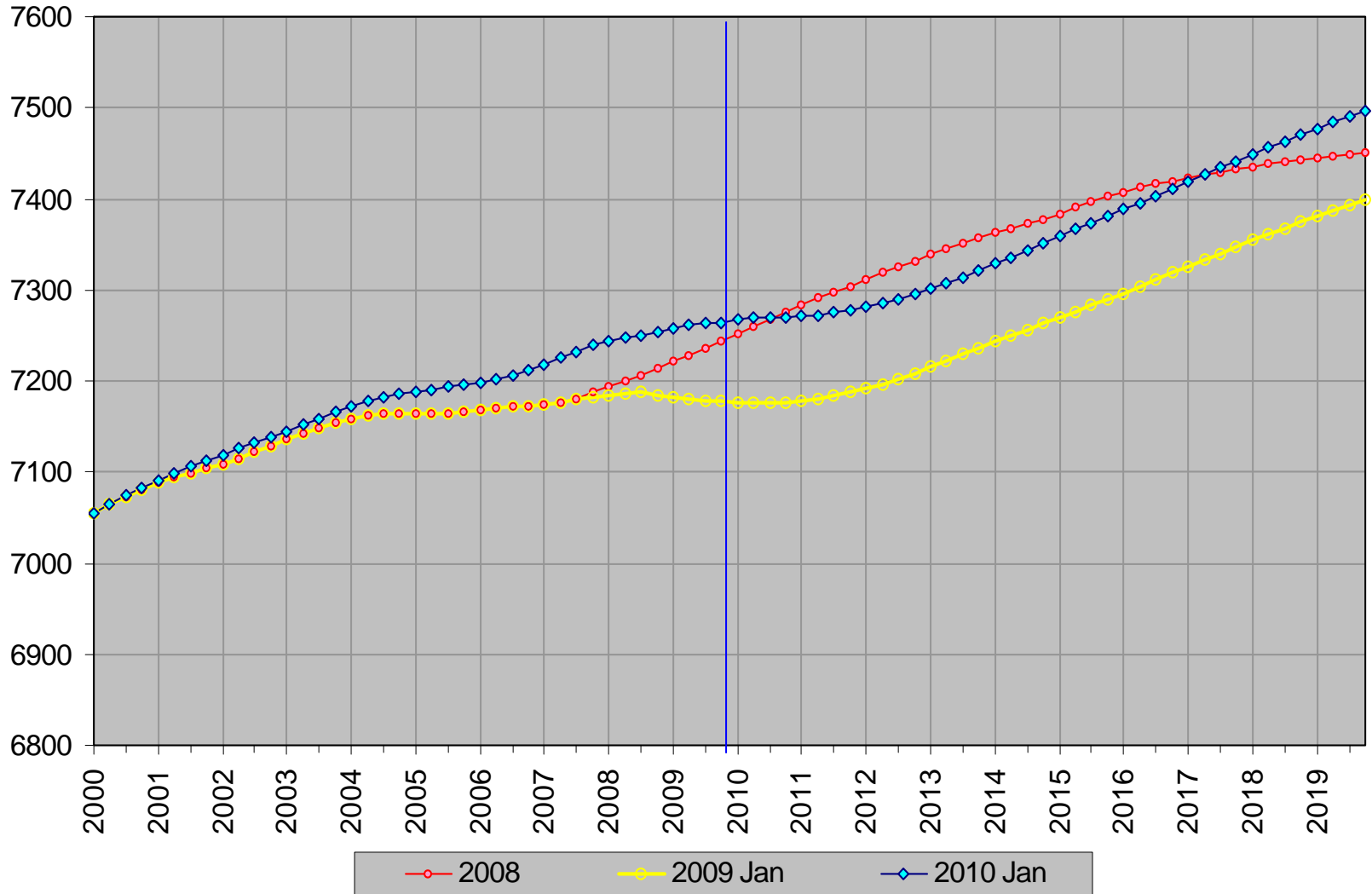
Data from economy.com

Draft – for discussion only

Zone 12

# Households

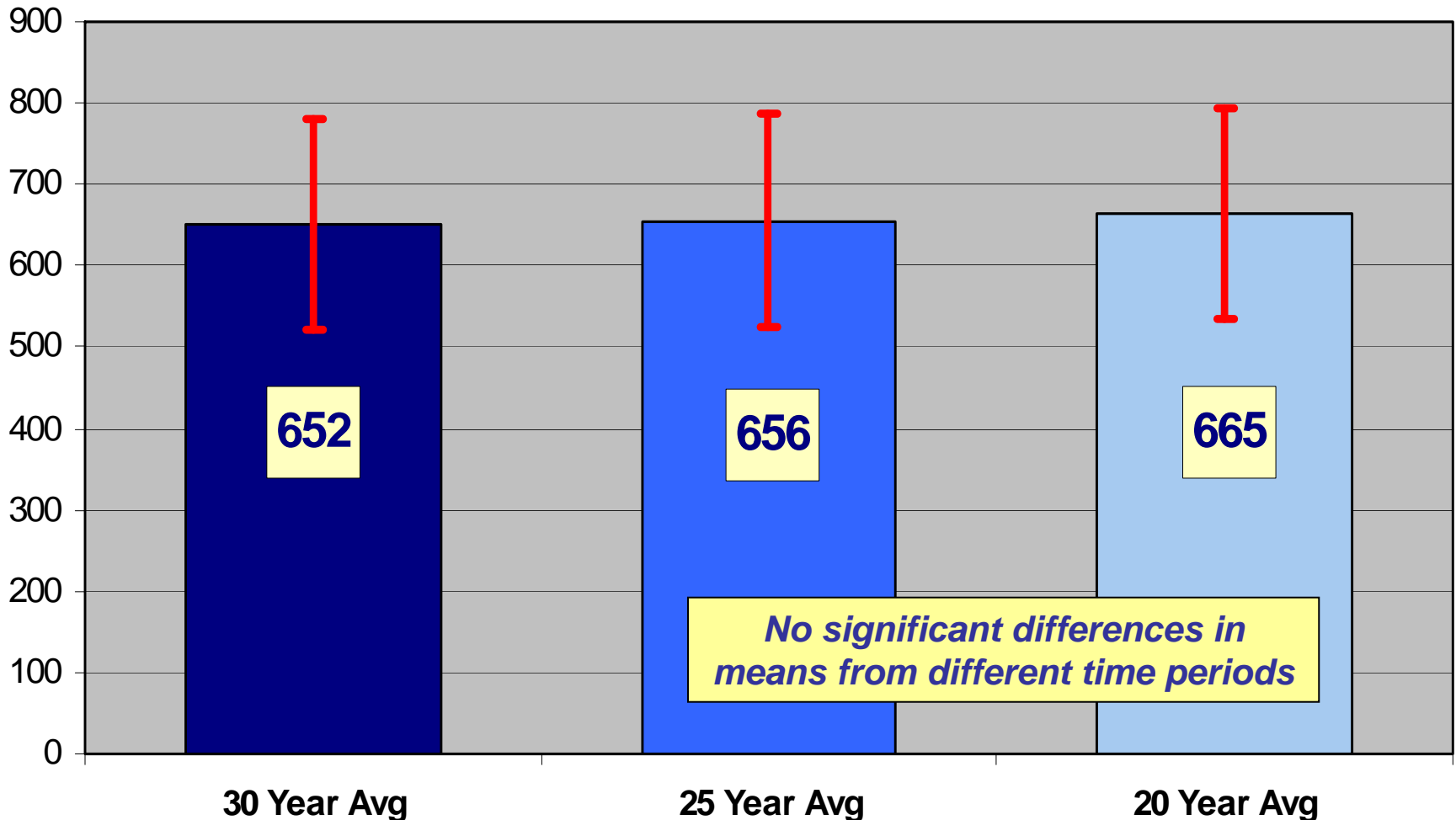
Thousands



Data from economy.com

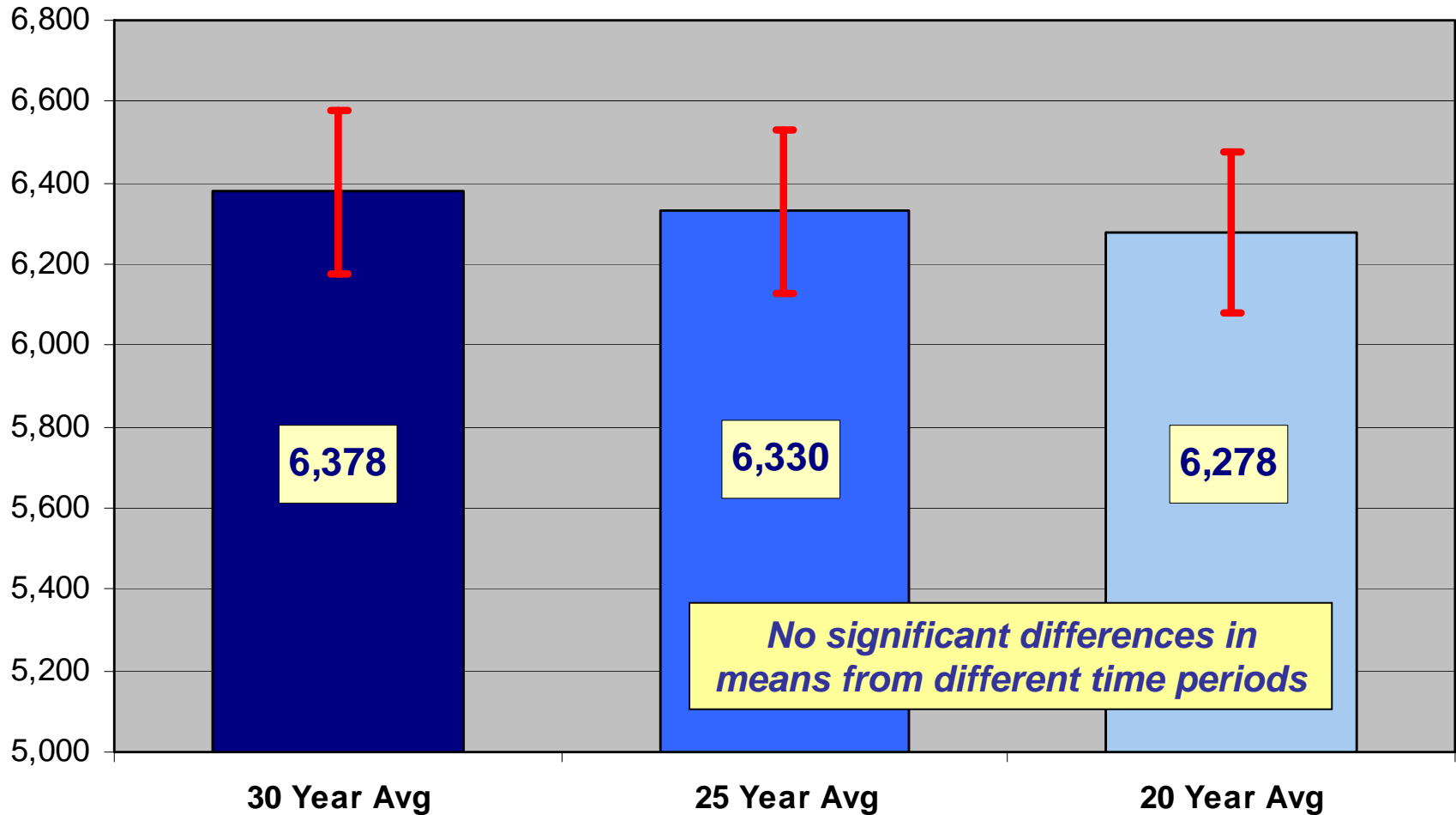
Draft – for discussion only

## Comparison of Average NY Cooling Degree Days With 95% Confidence Limits



Based on hourly weather data from 10 NY weather stations, 1975 to 2009.

## Comparison of Average NY Heating Degree Days With 95% Confidence Limits



Based on hourly weather data from 10 NY weather stations, 1975 to 2009.



# Preliminary Assumptions - EEPS

- ◆ EEPS Program Tracking
  - *Evaluation tracking reports are being filed with PSC*
  - *Fast Track implementation – some programs ahead of schedule, some are behind*
- ◆ Impact Evaluation
  - *Navigant Consulting report to DPS of Con-Ed Targeted DSM*
- ◆ EEPS Impacts
  - *NYSERDA SBC-3 – continue on course through 2015*
  - *EEPS Utility, NYSERDA, NYPA & LIPA – sufficient future spending to reach goal, if continued through 2015 & beyond*
  - *Building Codes and Appliance Standards – reduced outlook due to lower growth in spending & home building*
  - *Realization rates – lower due to slow startup, one year lag in impacts, and lower levels of participation in existing program*

# Current DPS Spending Projections – Nearly \$300,000 per year by 2011

## EEPS PROGRAMS APPROVED BY ADMINISTRATOR

as of December 2009

### ELECTRIC:

<u>Budget (\$000)</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total (\$000)</u>
NYSERDA	\$18,802	\$87,730	\$107,604	\$104,550	\$8,739	\$8,673	\$3,302	\$0	\$339,399
Central Hudson	-	4,009	7,516	7,874	-	-	-	-	\$19,399
Con Edison	-	25,797	84,934	91,779	-	-	-	-	\$202,510
NYSEG	-	-	11,720	15,687	940	-	-	-	\$28,347
Niagara Mohawk	-	19,288	55,930	58,616	-	-	-	-	\$133,834
O&R	-	2,838	5,484	5,484	-	-	-	-	\$13,806
RG&E	-	-	6,870	9,134	939	-	-	-	\$16,942
<b>Total</b>	<b>\$18,802</b>	<b>\$139,663</b>	<b>\$280,057</b>	<b>\$293,123</b>	<b>\$10,618</b>	<b>\$8,673</b>	<b>\$3,302</b>	<b>\$0</b>	<b>\$754,237</b>

### Savings (MWh)

NYSERDA	62,385	420,125	662,847	867,800	536,489	176,137	23,113	(149,772)	2,599,124
Central Hudson	-	12,917	22,162	23,248	-	-	-	-	58,327
Con Edison	-	81,761	196,340	218,294	-	-	-	-	496,395
NYSEG	-	-	36,088	49,342	2,594	-	-	-	88,024
Niagara Mohawk	-	69,367	239,539	249,751	-	-	-	-	558,657
O&R	-	9,596	19,718	19,718	-	-	-	-	49,032
RG&E	-	-	19,414	27,384	2,594	-	-	-	49,392
<b>Total</b>	<b>62,385</b>	<b>593,766</b>	<b>1,196,108</b>	<b>1,455,537</b>	<b>541,677</b>	<b>176,137</b>	<b>23,113</b>	<b>(149,772)</b>	<b>3,898,951</b>

*Average cost: \$193 per MWh*

**Source: NY DPS**

**Excludes NYPA, LIPA, NYSERDA SBC-3 and Codes & Standards**

# NYISO Projection After 2011 – Maintain Spending of \$300,000 per year

**EEPS PROGRAMS, Extended by NYISO Through 2015  
As of December 2009**

**ELECTRIC:**

<u>Budget (\$000)</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total (\$000)</u>	<u>Cost - \$/MWh</u>
NYSERDA	\$18,802	\$87,730	\$107,604	\$104,550	\$110,000	\$110,000	\$110,000	\$110,000	\$758,685	134
Central Hudson	-	4,009	7,516	7,874	8,000	8,000	8,000	8,000	\$51,399	336
Con Edison	-	25,797	84,934	91,779	90,000	90,000	90,000	90,000	\$562,510	416
NYSEG	-	-	11,720	15,687	16,000	16,000	16,000	16,000	\$91,407	319
Niagara Mohawk	-	19,288	55,930	58,616	60,000	60,000	60,000	60,000	\$373,834	236
O&R	-	2,838	5,484	5,484	6,000	6,000	6,000	6,000	\$37,806	279
RG&E	-	-	6,870	9,134	10,000	10,000	10,000	10,000	\$56,003	336
<b>Total</b>	<b>\$18,802</b>	<b>\$139,663</b>	<b>\$280,057</b>	<b>\$293,123</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$1,931,644</b>	<b>207</b>

<u>Savings (MWh)</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total MWh</u>
NYSERDA	62,385	420,125	662,847	867,800	913,040	913,040	913,040	913,040	5,665,317
Central Hudson	-	12,917	22,162	23,248	23,621	23,621	23,621	23,621	152,810
Con Edison	-	81,761	196,340	218,294	214,063	214,063	214,063	214,063	1,352,647
NYSEG	-	-	36,088	49,342	50,326	50,326	50,326	50,326	286,736
Niagara Mohawk	-	69,367	239,539	249,751	255,650	255,650	255,650	255,650	1,581,256
O&R	-	9,596	19,718	19,718	21,573	21,573	21,573	21,573	135,326
RG&E	-	-	19,414	27,384	29,981	29,981	29,981	29,981	166,724
<b>Total</b>	<b>62,385</b>	<b>593,766</b>	<b>1,196,108</b>	<b>1,455,537</b>	<b>1,508,255</b>	<b>1,508,255</b>	<b>1,508,255</b>	<b>1,508,255</b>	<b>9,340,815</b>

**Average cost: \$207 per MWh**

**Excludes NYPA, LIPA, NYSERDA SBC-3 and Codes & Standards**

# Comparison of EEPS Adjustment Factors - 2009 RNA and 2010 Gold Book Forecasts

	2009 RNA		2010 Gold Book	
	(a) Realization Rates	(b) Confidence, RNA Base Case	(a) Realization Rates	(b) Confidence, pre & post 2012
LIPA	80%	100%	100%	100%
NYPA	80%	100%	65%	100% / 80%
Other State Agencies	80%	0%	65%	0%
NYSERDA - SBC 3	33%	100%	30%	100% / 80%
Utilities, Non EEPS	80%	50%	65%	0%
New Codes & Standards	80%	0% / 80%	25%	0% / 80%
Utility T&D	50%	50%	65%	0%
Fast Track & NYSERDA	80%	100% / 50%	65%	100% / 80%

# NYISO 2010 Projection for All EEPS Components

<u>Budget Certainty</u>	100%	100%	100%	100%	80%	80%	80%	80%
-------------------------	------	------	------	------	-----	-----	-----	-----

<u>Funding Source</u>	<u>NYISO Savings Estimates (MWh)</u>	<u>Realization Rate (%)</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
A	NYSERDA	65%	0	40,550	273,081	430,851	451,256	474,781	474,781	474,781
A	Central Hudson	65%	0	0	8,396	14,405	12,089	12,283	12,283	12,283
A	Con Edison	65%	0	0	53,145	127,621	113,513	111,313	111,313	111,313
A	NYSEG	65%	0	0	0	23,457	25,658	26,170	26,170	26,170
A	Niagara Mohawk	65%	0	0	45,089	155,700	129,871	132,938	132,938	132,938
A	O&R	65%	0	0	6,237	12,817	10,253	11,218	11,218	11,218
A	RG&E	65%	0	0	0	12,619	14,240	15,590	15,590	15,590
A	NYSERDA SBC3 (1)	30%	114,000	114,000	114,000	114,000	91,200	91,200	91,200	91,200
B	LIPA (2)	100%	120,000	150,000	185,000	140,000	200,000	175,000	160,000	150,000
B	NYPA	65%	0	81,250	97,500	130,000	104,000	104,000	104,000	104,000
C	Codes & Standards	25%	0	0	0	0	87,500	87,500	87,500	87,500
<b>Total Annual GWh</b>			234	386	782	1,161	1,240	1,242	1,227	1,217
<b>Cumulative GWh</b>			234	620	1,402	2,564	3,803	5,045	6,272	7,489

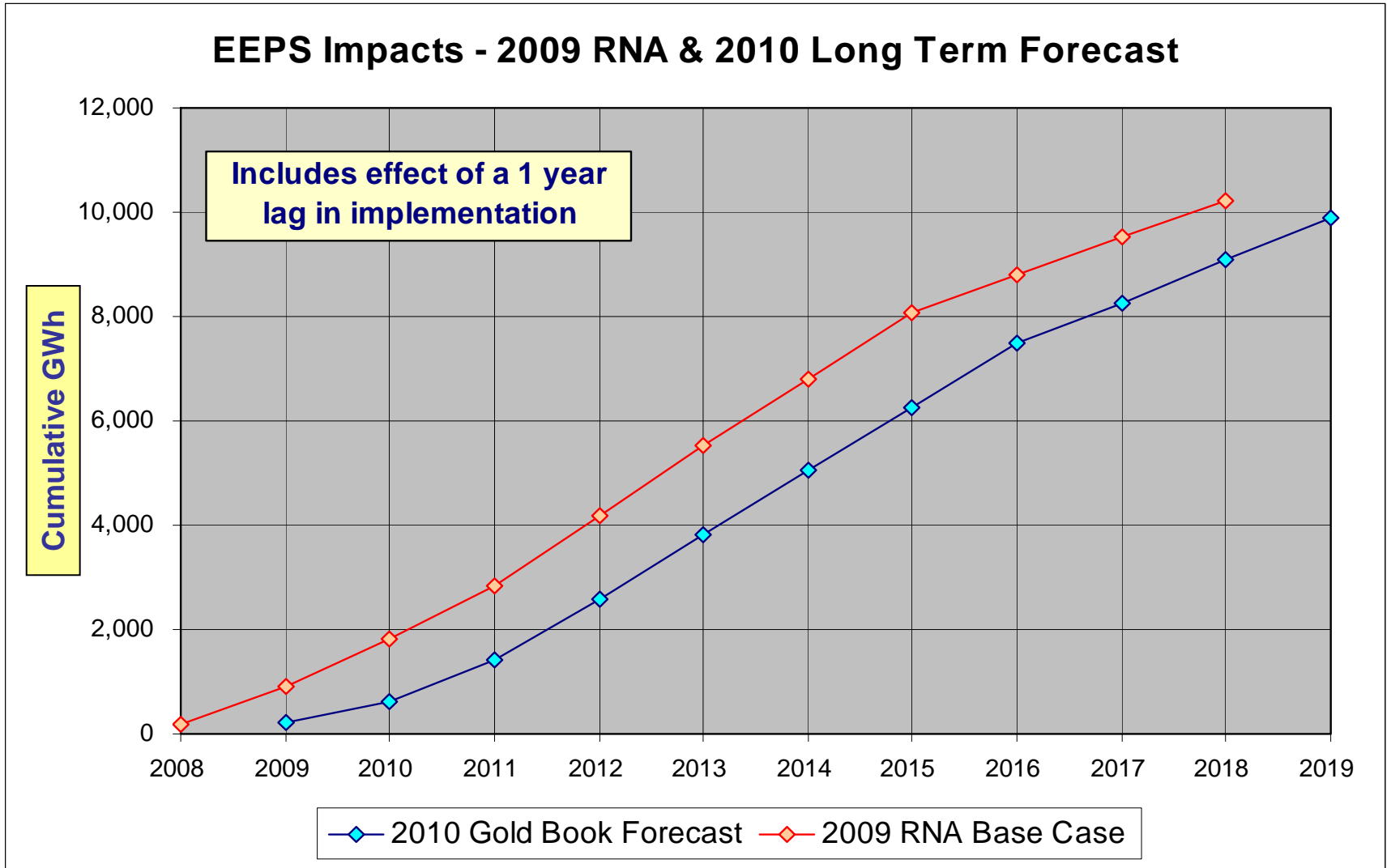
**Funding Sources: A - NY PSC; B – Other state agencies; C – Unfunded consumer-driven spending.**

**Notes:**

1. Significant impact of existing NYSERDA programs is implicit in historic data, dating back to 1998
2. Results received from LIPA already have realization & confidence included.

# NYISO's 2010 Preliminary EEPS Projection

## EEPS Impacts - 2009 RNA & 2010 Long Term Forecast



The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and provides comprehensive reliability planning for state's bulk electricity system.

---

***[www.nyiso.com](http://www.nyiso.com)***