

# **Public Input Process and Demand Forecast**

**2014 IRP Stakeholders**

**June 13, 2013**

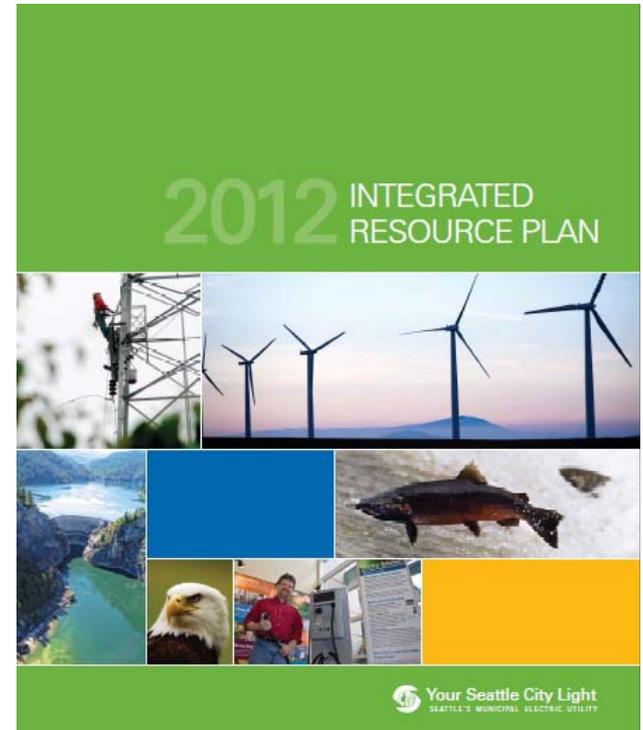
# Agenda

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- Introductions
- What is an “IRP Update?”
- Schedule and Topics
- Public Input Process
- Demand Forecast

# Integrated Resource Plan (IRP)

- An Integrated Resource Plan:
  - Identifies how much, when, and what kind of energy resources are needed
  - Treats conservation as equal to power generation
  - Includes public involvement
  - Is updated often (biennially)
  - Is required by state law



- City Light Measures Resource Plans By:
  - Cost, Risk, Reliability, and Environmental Performance

# What is an IRP “Update?”

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- “Updates” (Progress Reports) Completed by Utilities that Expect No Major Changes in Their Next IRP
  - The 2012 IRP had no other resource acquisitions than conservation before 2020
- An IRP is a Large Undertaking
  - Collecting many large data sets
  - Studies of hourly demand and supply
  - Evaluations of many external factors and conditions
  - Modeling the market values of resources
  - Stochastic modeling of resource adequacy
- An “Update” has Few Defined Requirements

# Defining an “Update”

## ■ Chapter 19.280.030

- (1) Utilities with more than twenty-five thousand customers that are not full requirements customers shall develop or update an integrated resource plan by September 1, 2008. At a minimum, progress reports reflecting changing conditions and the progress of the integrated resource plan must be produced every two years thereafter. An updated integrated resource plan must be developed at least every four years subsequent to the 2008 integrated resource plan

## ■ The Update Can be More Than a Progress Report

- Assess the 2012 IRP and review key assumptions



# 2014 IRP Stakeholders Schedule

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- June 13, 2013
  - IRP Process and Demand Outlook
- September 12, 2013
  - Power Resources
- January 16, 2014
  - Assessing Future Resource Needs
- April 10, 2014
  - The Environment and Scenarios

All meetings on ...?

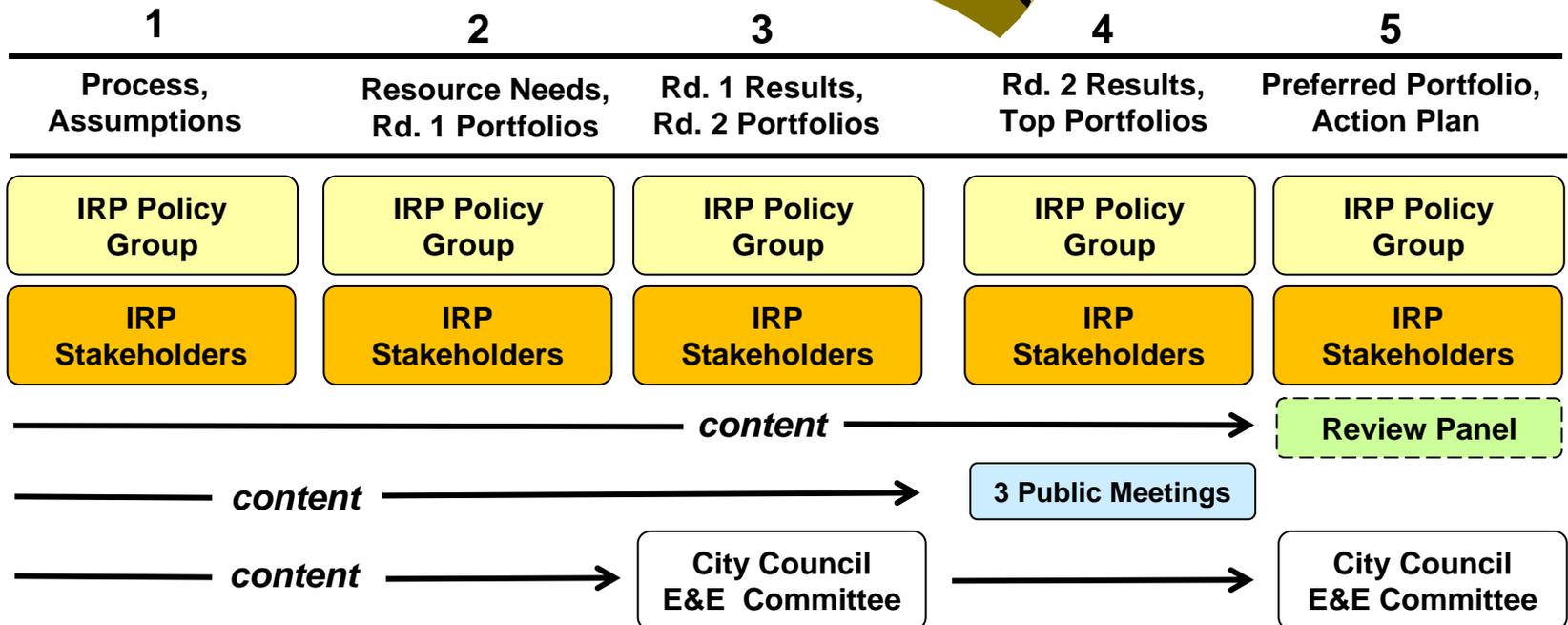
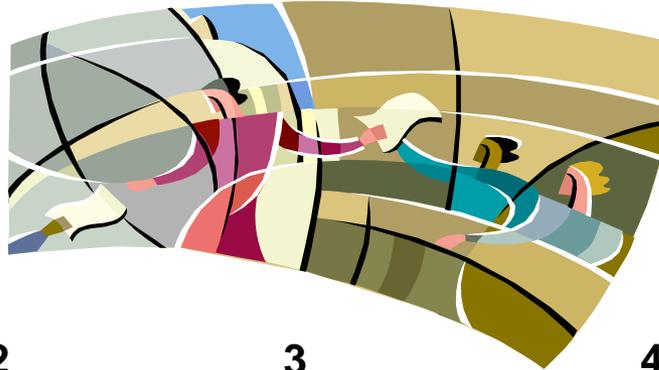
# Public Input Process

*Is the public input process inadequate, about right, or overdone?*

# Many Public Objectives for SCL's Resource Planning



# Seattle City Light's 2012 IRP Input Process

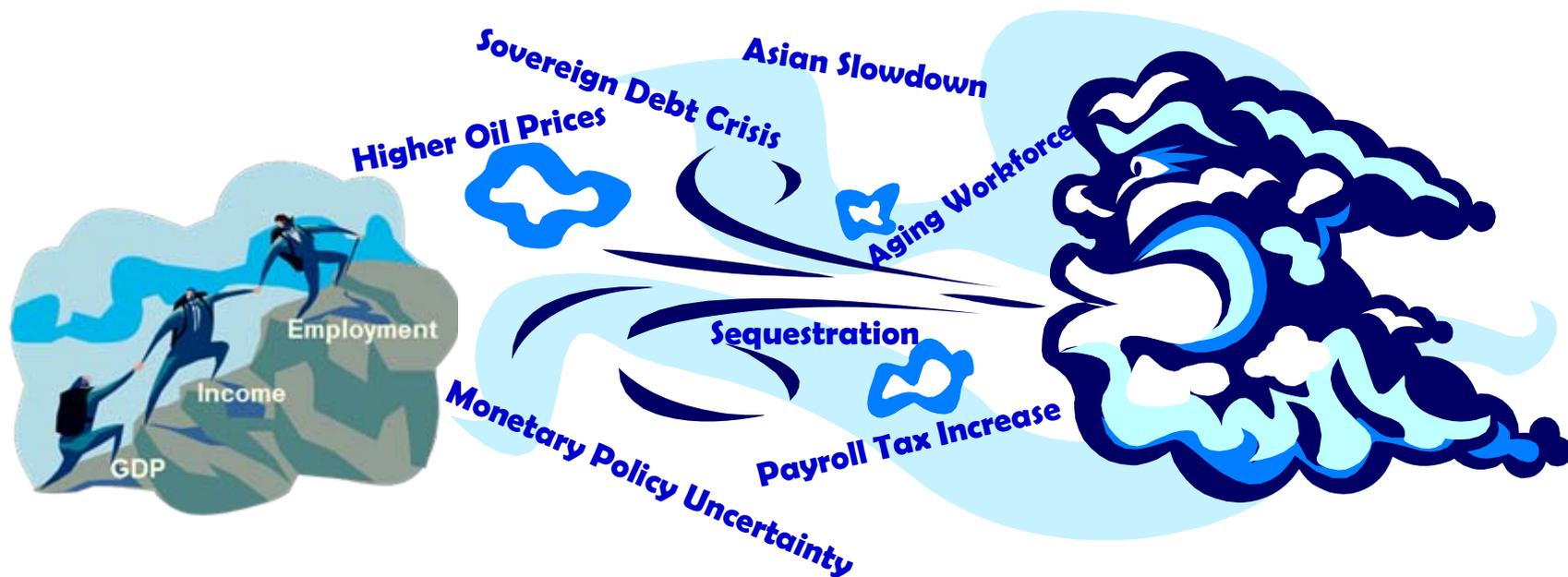


# Electricity Demand Forecast

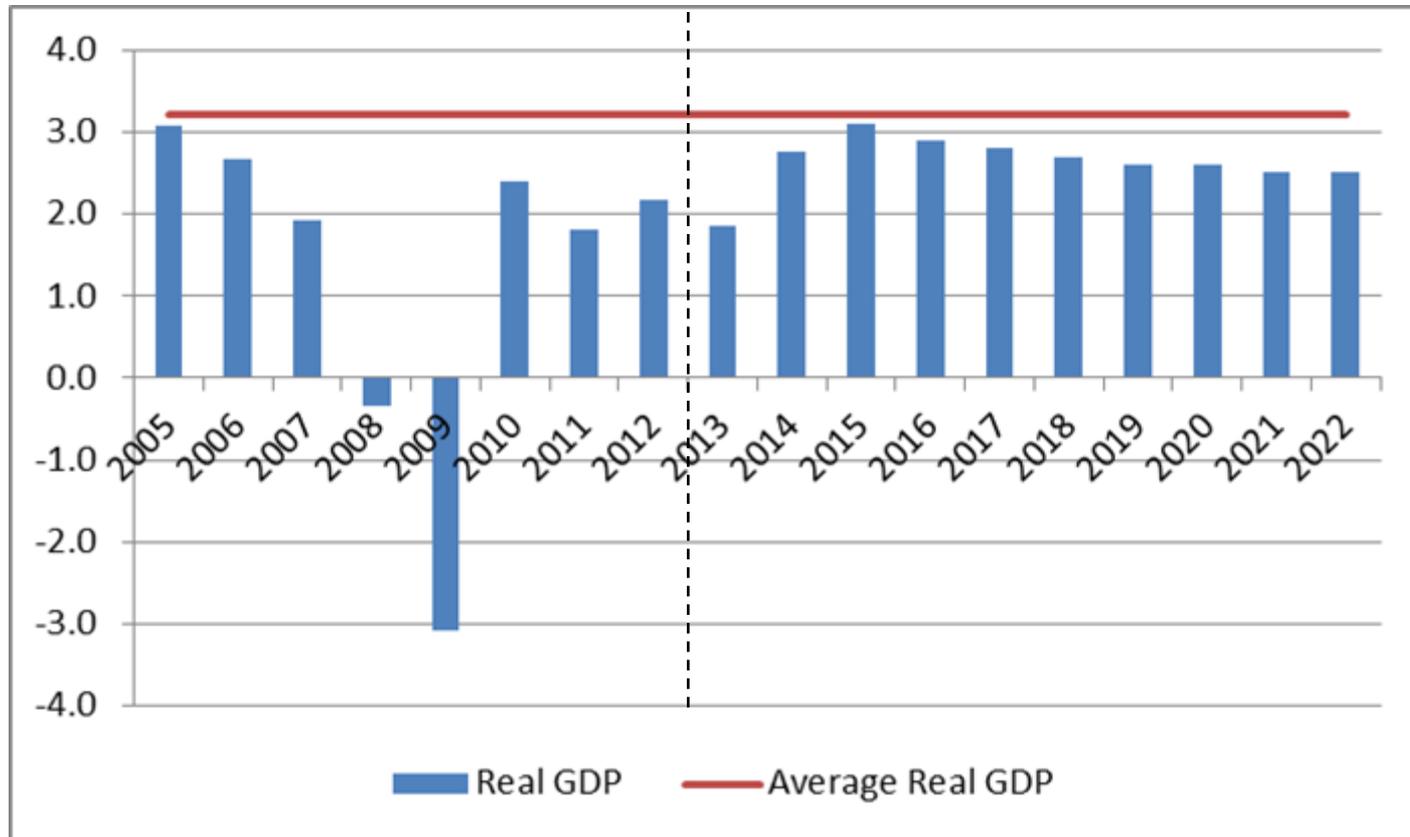
- *Seattle area electricity demand growth has been slowing – is this the “new normal?”*
- *Replacing aging utility infrastructure is increasing utility costs and affecting rates – how will customers react?*
- *What are the implications of continued low demand growth?*

# A Faster Recovery Was Expected: US Economy Facing Strong Headwinds

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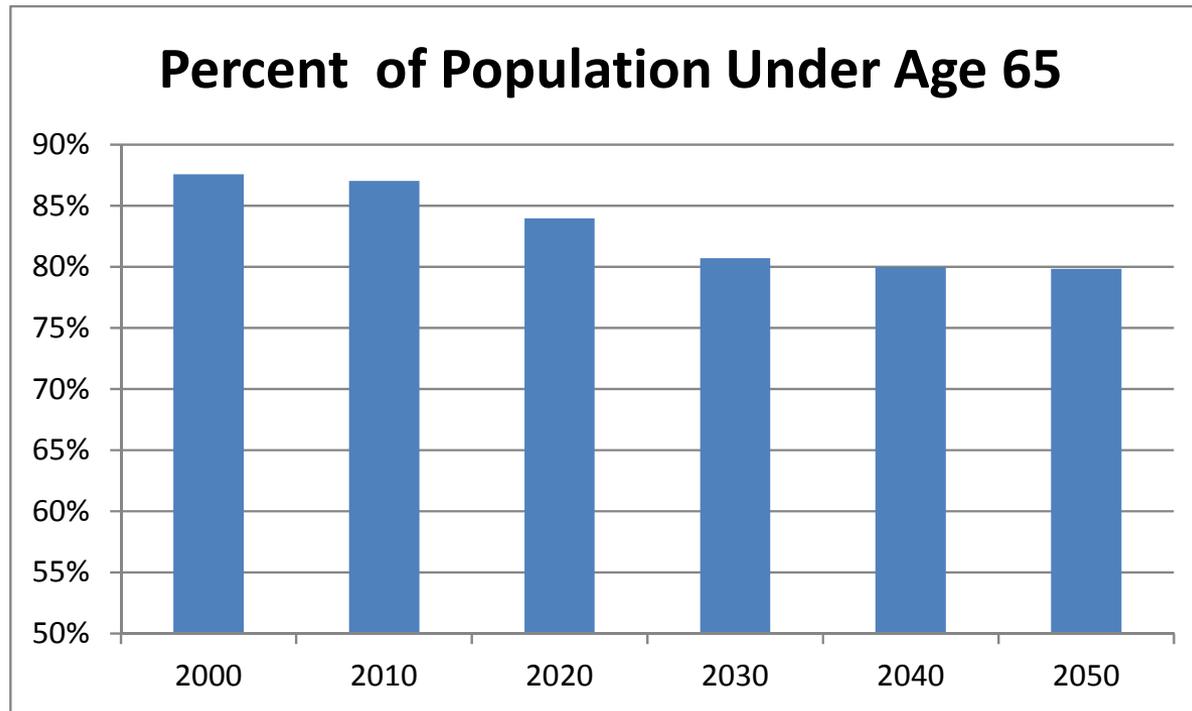


# Real GDP Outlook Below Average: Lower than 2012



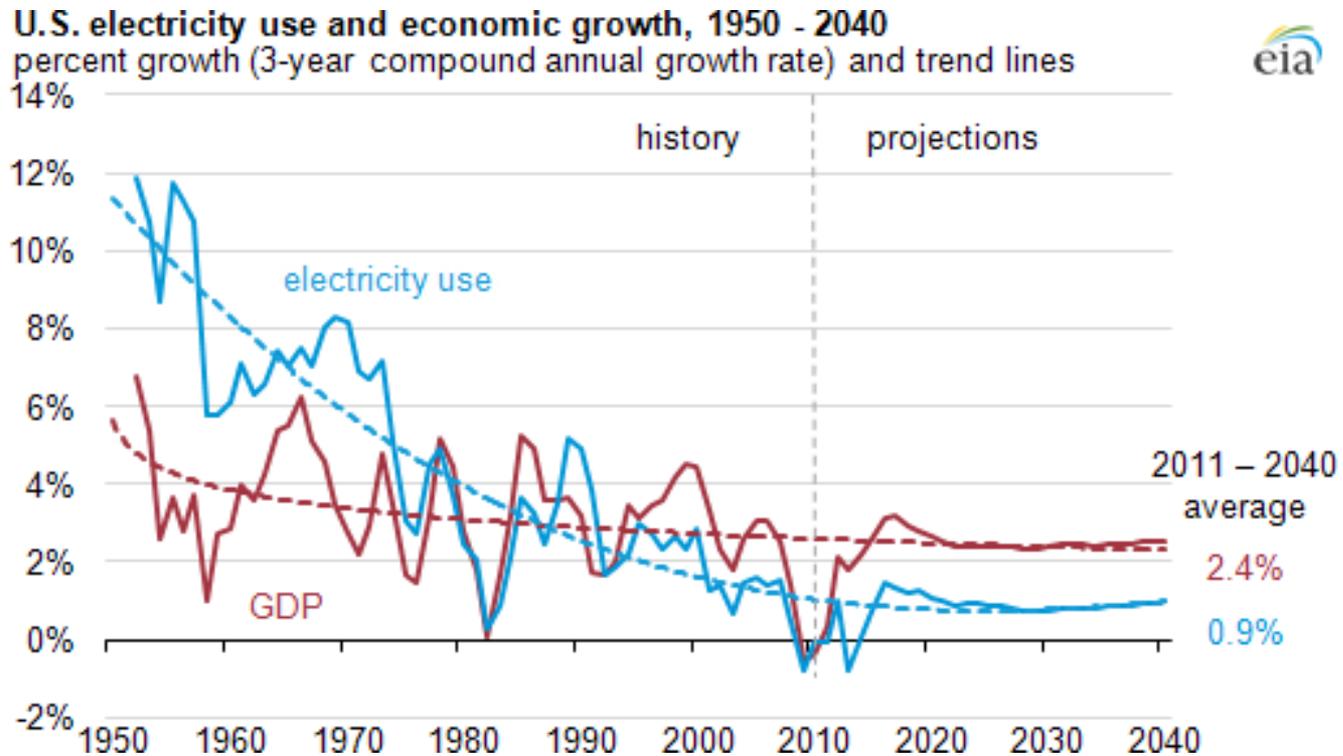
# Aging Workforce Slows Long-Run Economic Growth Potential

“In the 21st Century, real GDP growth in the United States is likely to be permanently slower than it was in earlier eras because of a slowdown in labor force growth initially due to the retirement of the post-World War II baby boom generation, and later due to a decline in the growth of the working age population.” – *2013 White House Budget*



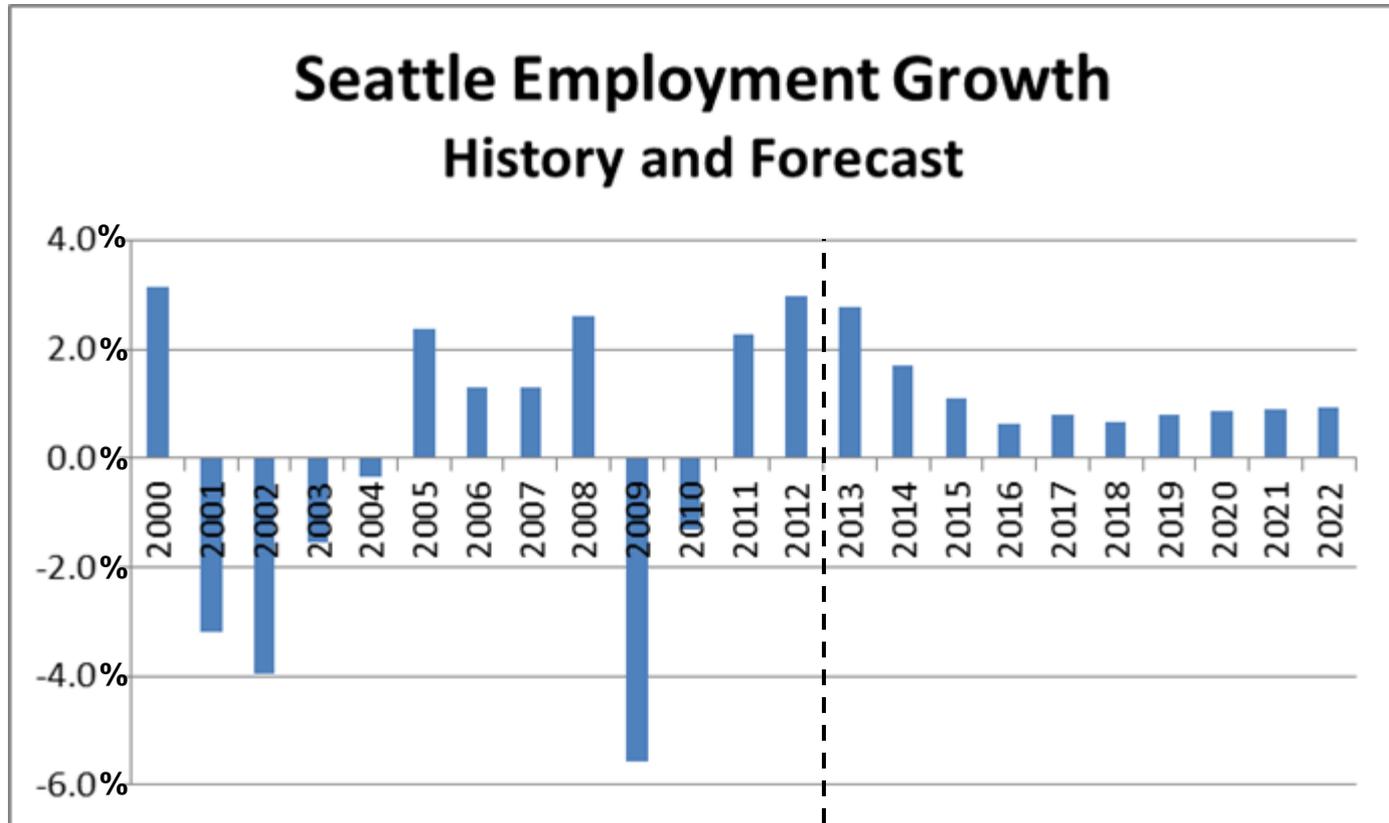
Source: US Administration on Aging, US Census

# Electricity Demand Growth Declining



Slower Economic Growth, Manufacturing Going Offshore, Tighter Building Codes, Lighting Efficiencies, Appliance Efficiencies, Heating & Cooling Efficiencies, Motor Efficiencies, and Real Rate Increases are Slowing Electricity Demand Growth

# Seattle Employment Growth Likely to Have Peaked in 2012



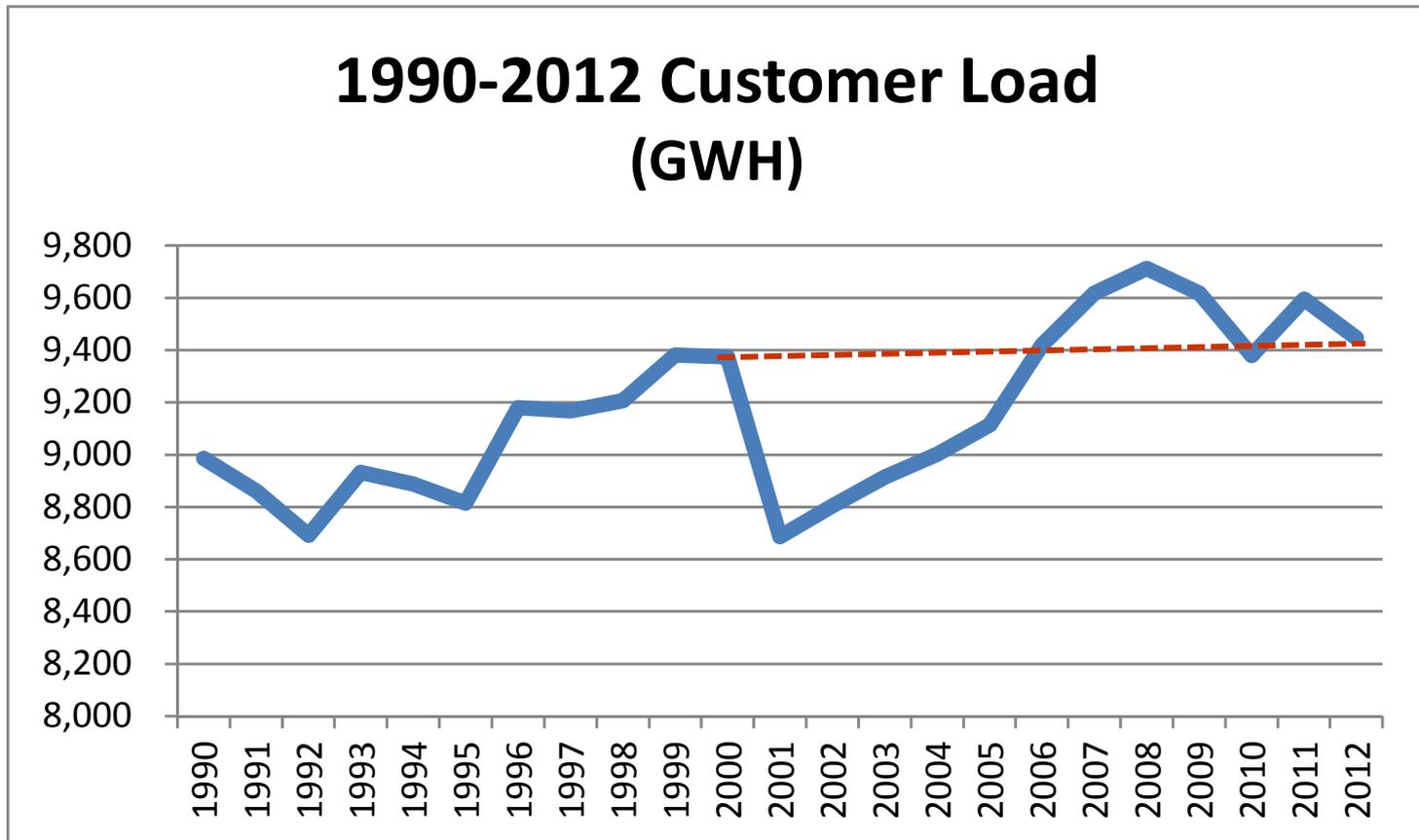
# Price Elasticity of Demand is Low, But Still Important

	<b>EPRI Estimates of U.S. Price Elasticity</b>	<b>City Light Estimates of Price Elasticity</b>
<b>Residential</b>	-0.09	-0.08
<b>Commercial</b>	-0.11	-0.14
<b>Industrial</b>	-0.12	-0.21**
<b>Average Total</b>	na	-0.11

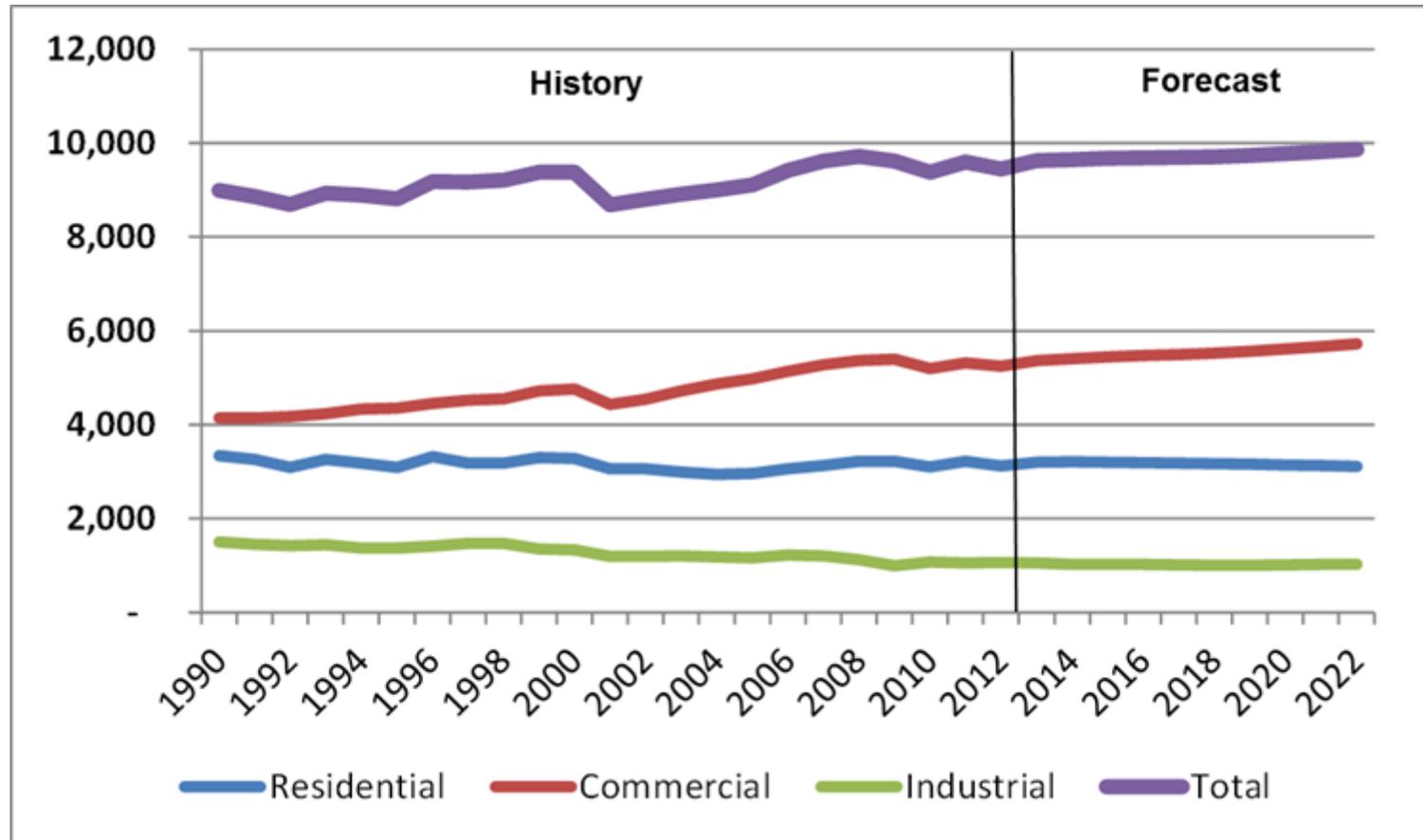
\*Forecast has 2.55% Average Annual Change in Seattle Consumer Price Index: 2013-2018

\*\*A higher than usual proportion of SCL industrial load is in metals and building materials, which are more sensitive to electricity prices and economic cycles

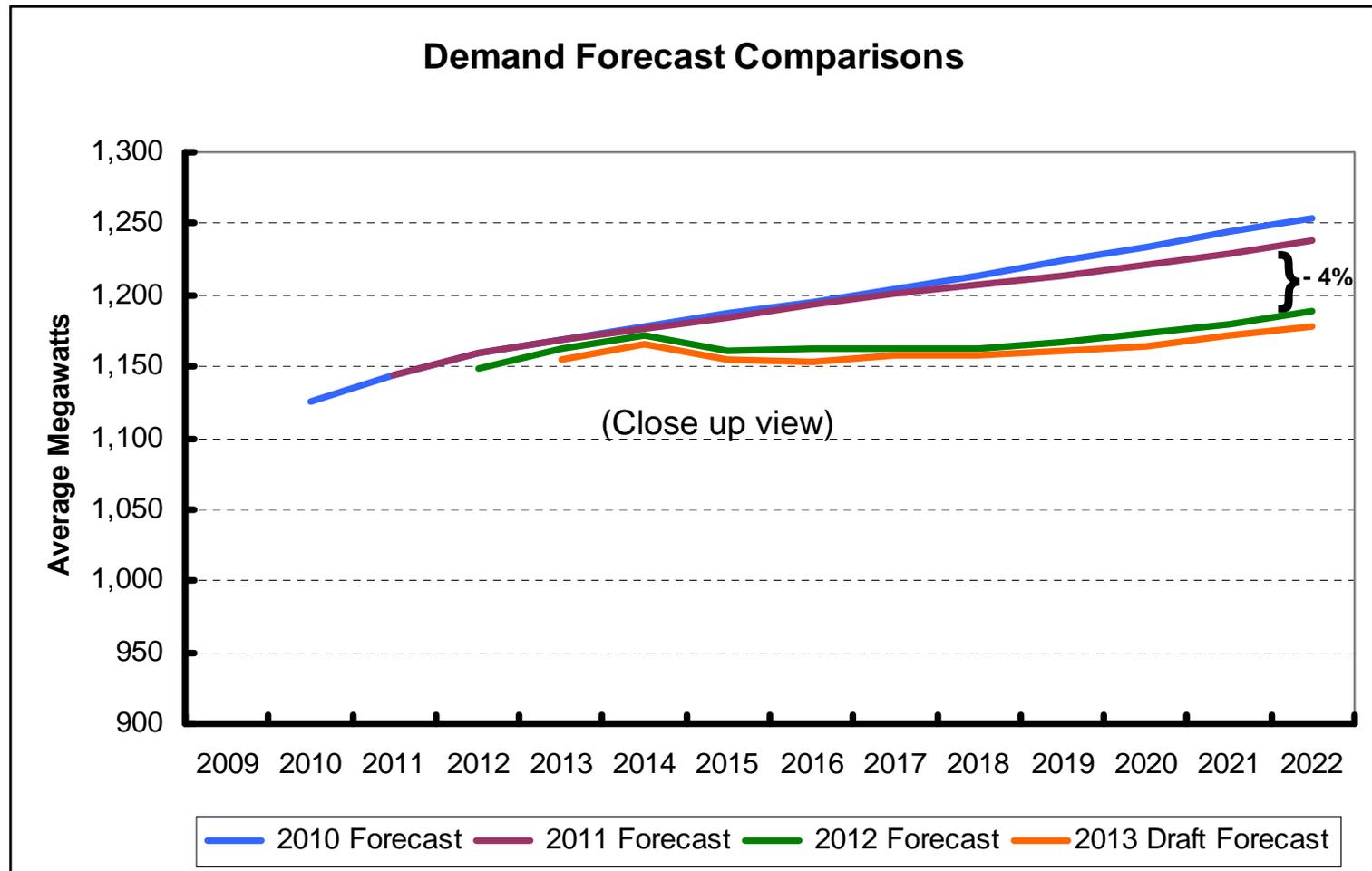
# 2012 SCL Customer Demand was 0.8% Higher Than in 2000



# Customer Demand: History & Draft Forecast (GWh)



# Comparison With Past Demand Forecasts



# Questions or Comments?

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## **IRP Website Address:**

<http://www.seattle.gov/light/news/issues/irp/>

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