

Rates, Bills, Costs & Consumption: The “Conservation Conundrum”

AMWA Conference Presentation

October 21, 2014

by

Ray Hoffman, Director
Seattle Public Utilities

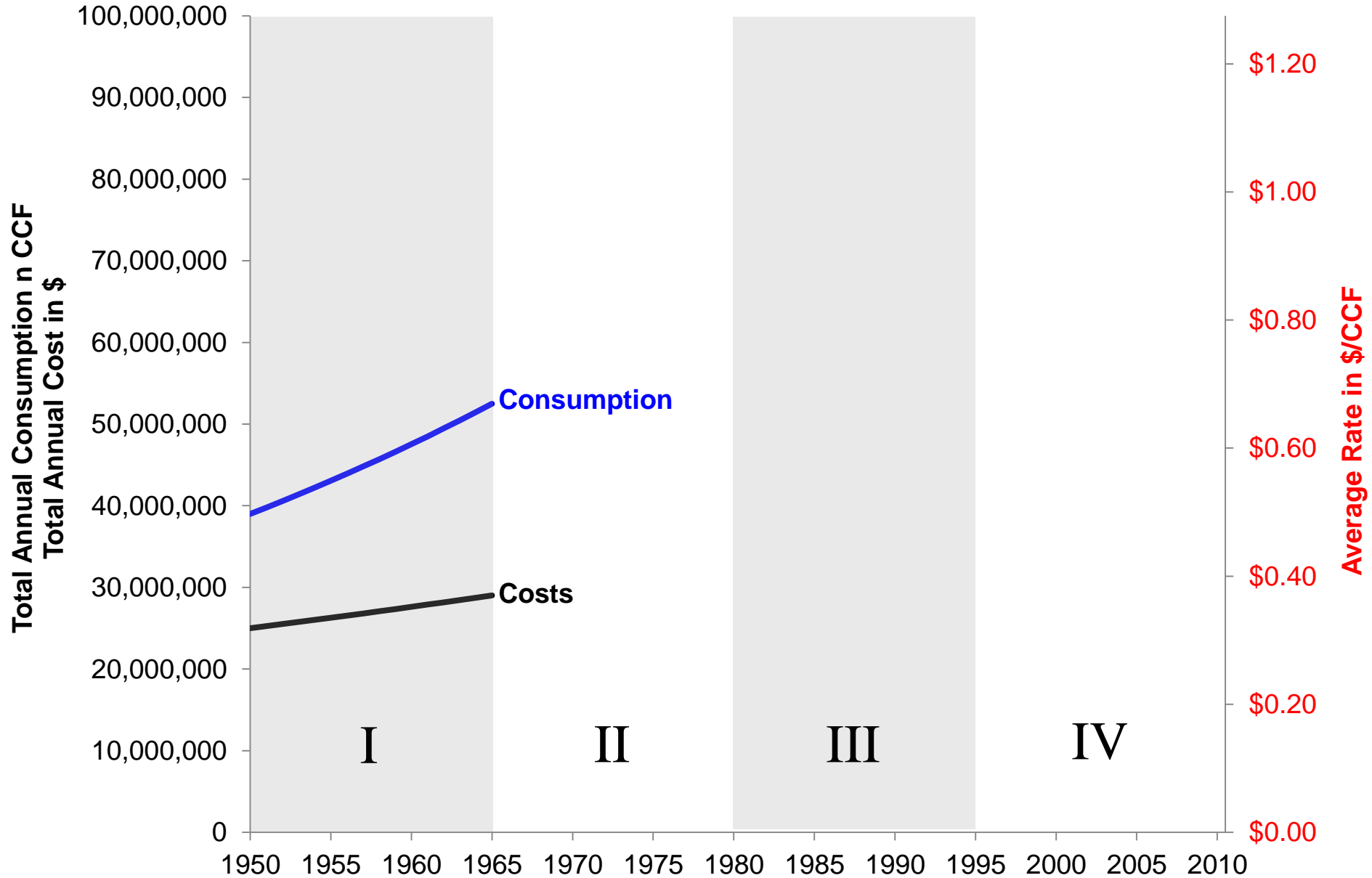
Seattle
 Public
Utilities

Structure of Presentation

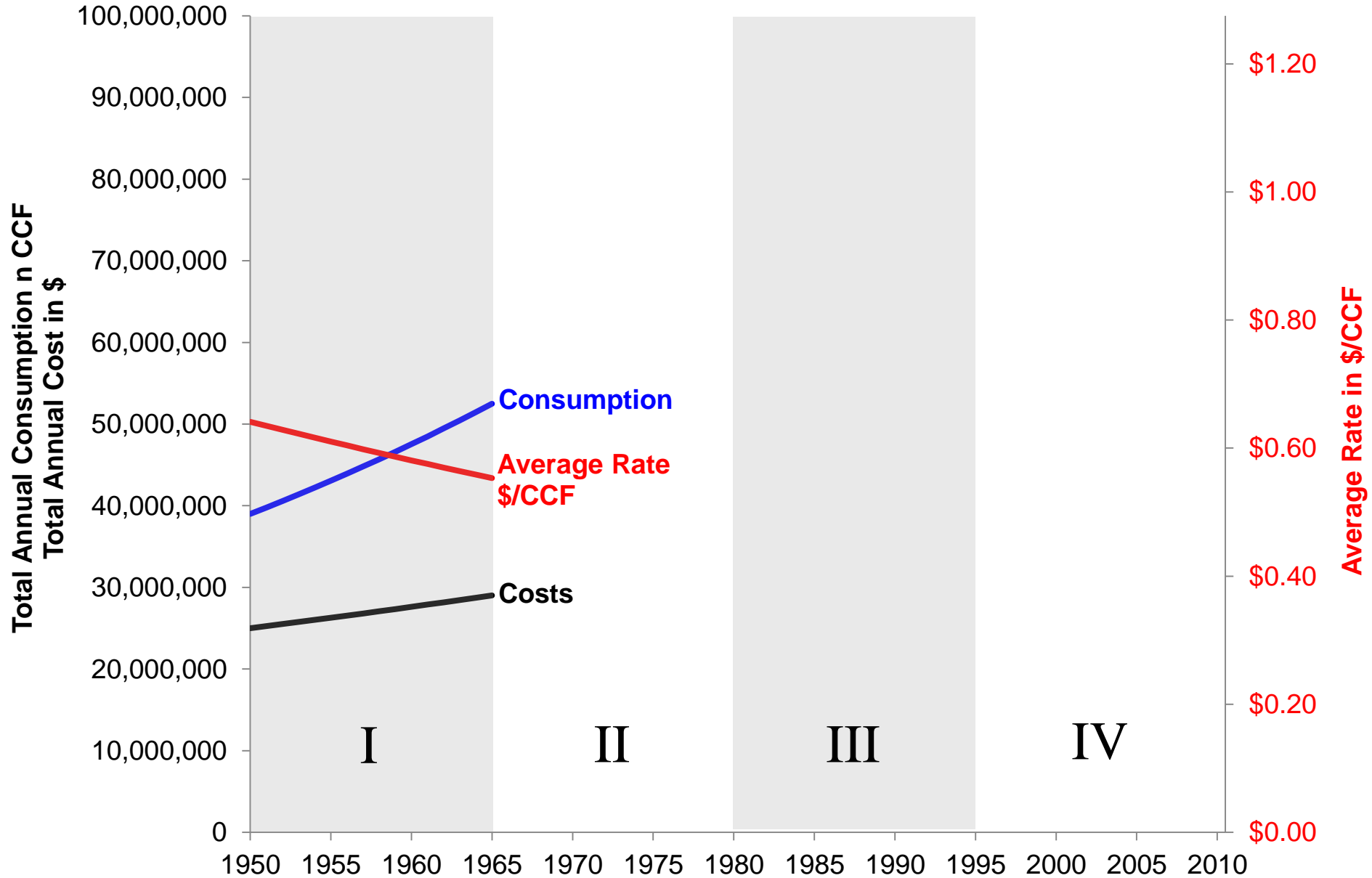
- Review impact on rates of cost changes and consumption changes -- hypothetical examples
- Look at the Seattle experience over the last several decades:
 - ✓ Consumption, costs, rates
 - ✓ Rates versus customer bills
- Look again at conservation: is it a good idea?

$$\text{Rate} = \frac{\text{Cost (\$)}}{\text{Consumption (ccf)}}$$

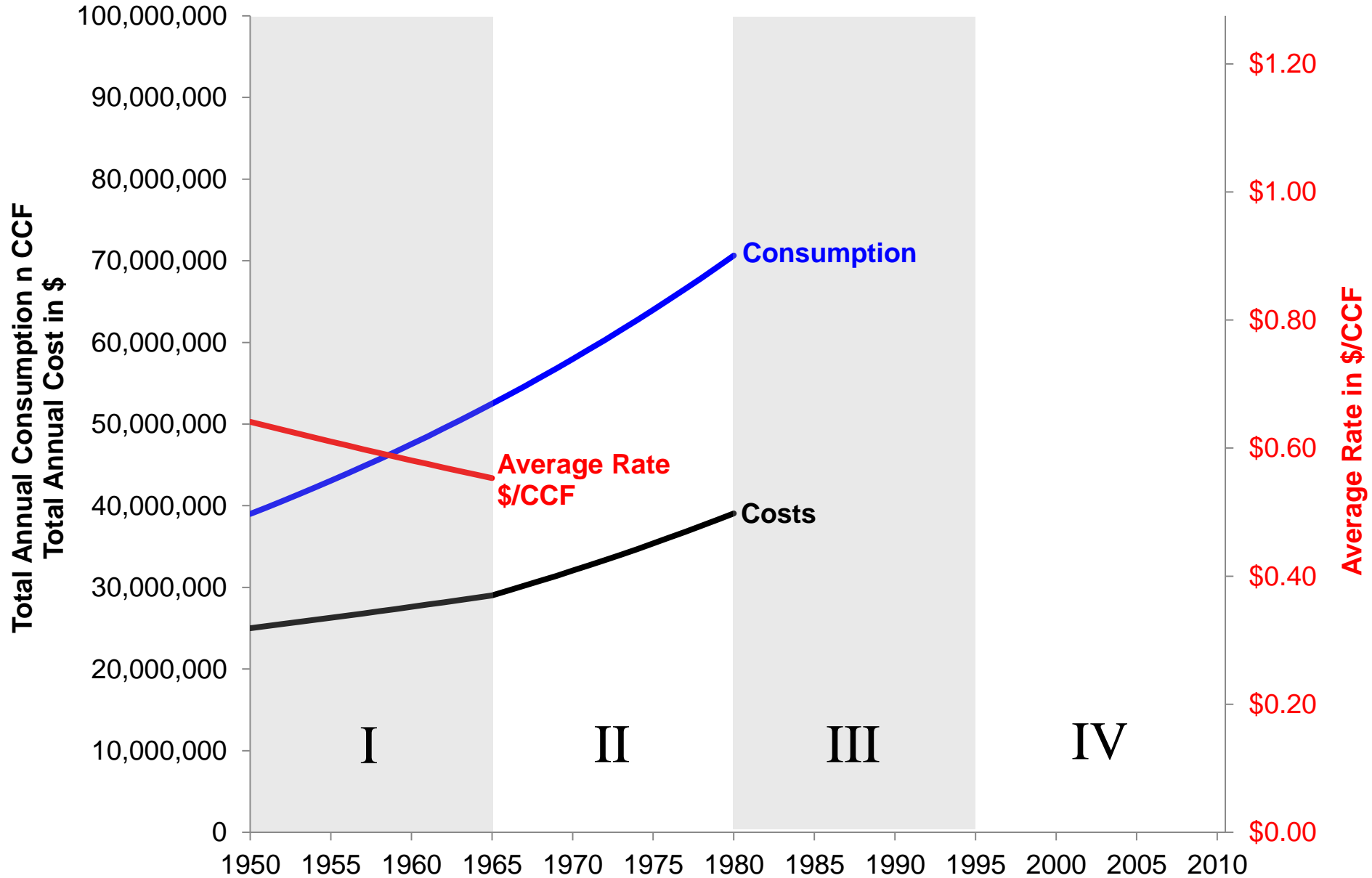
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



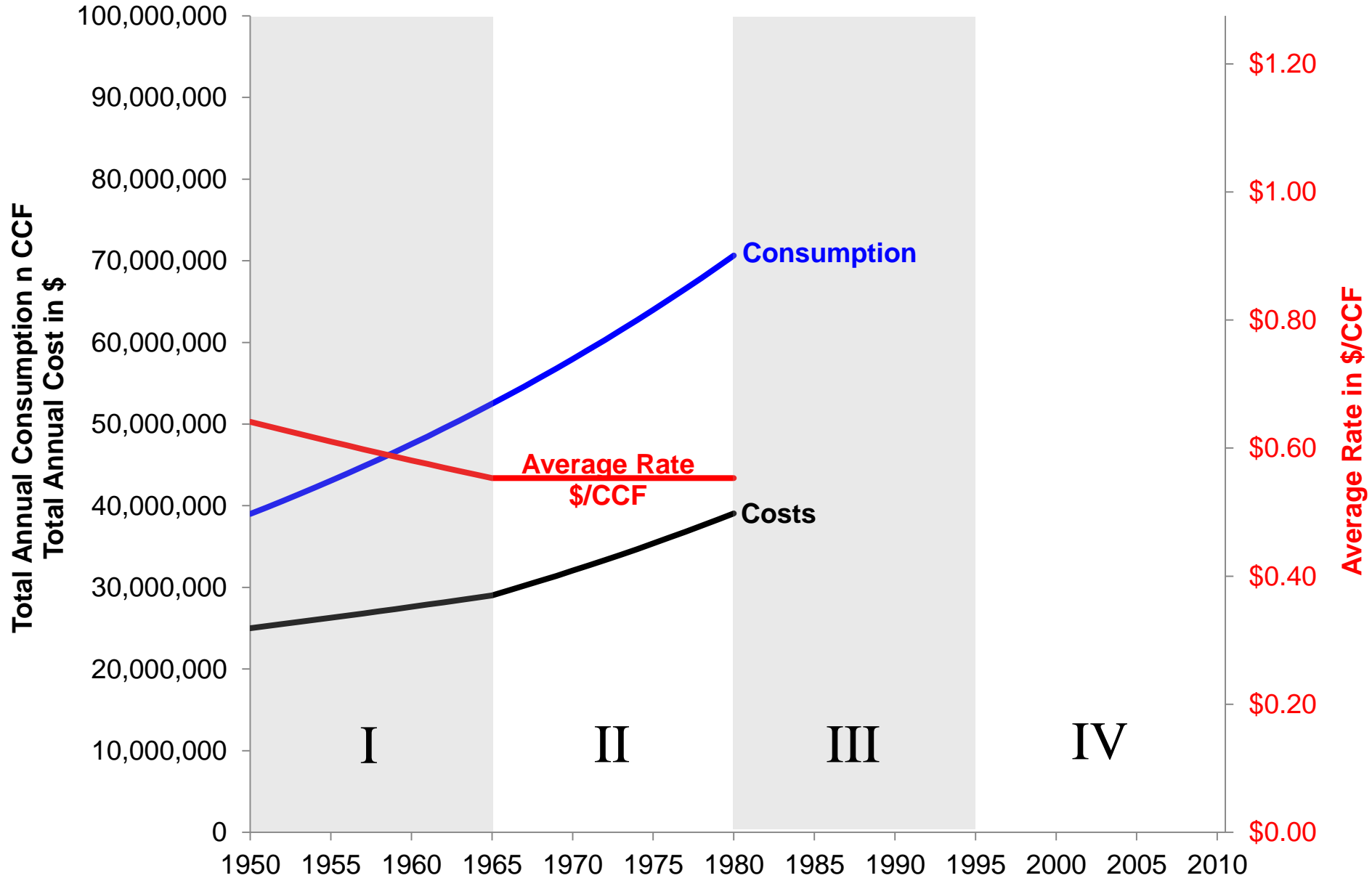
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



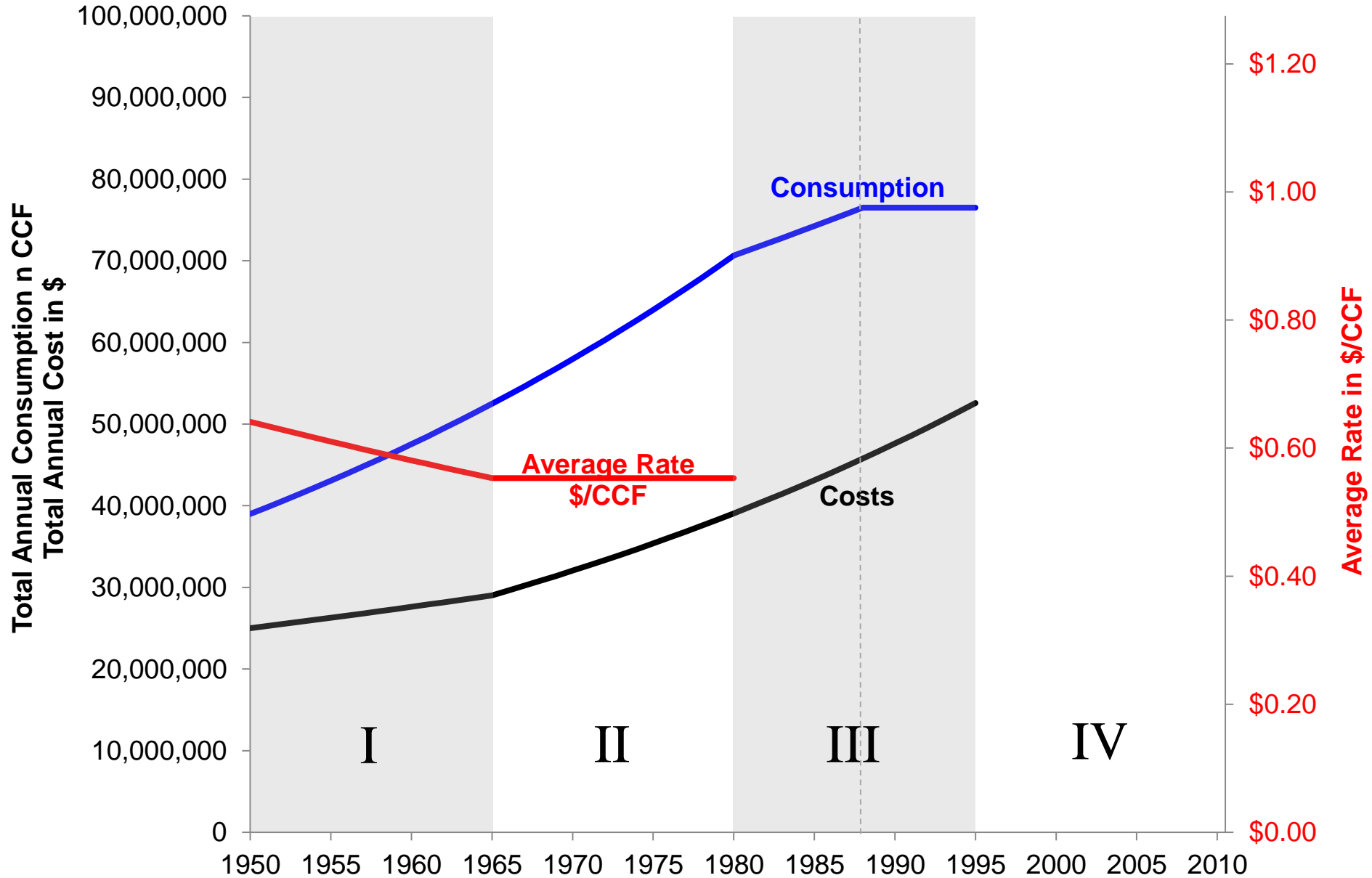
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



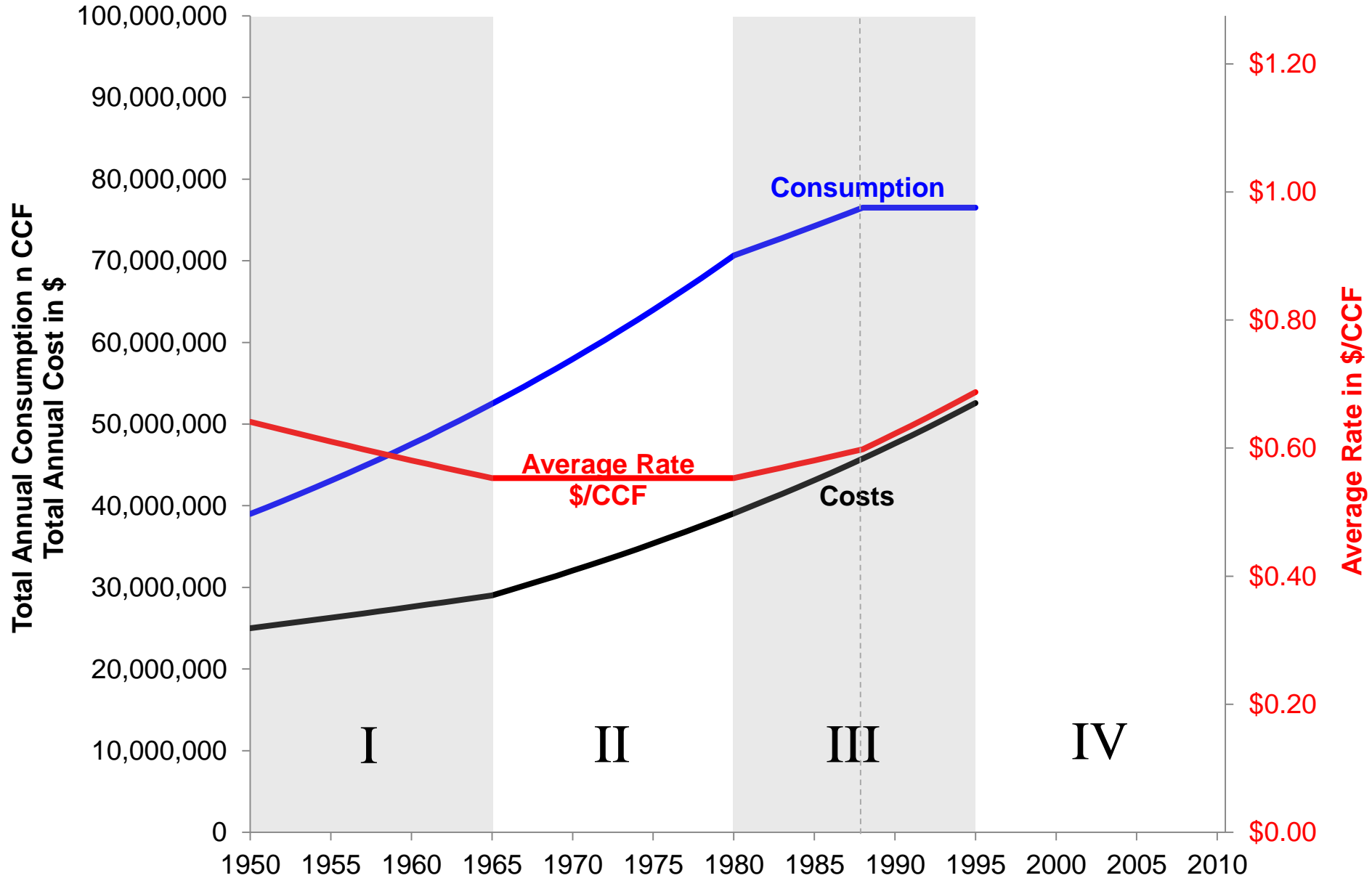
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



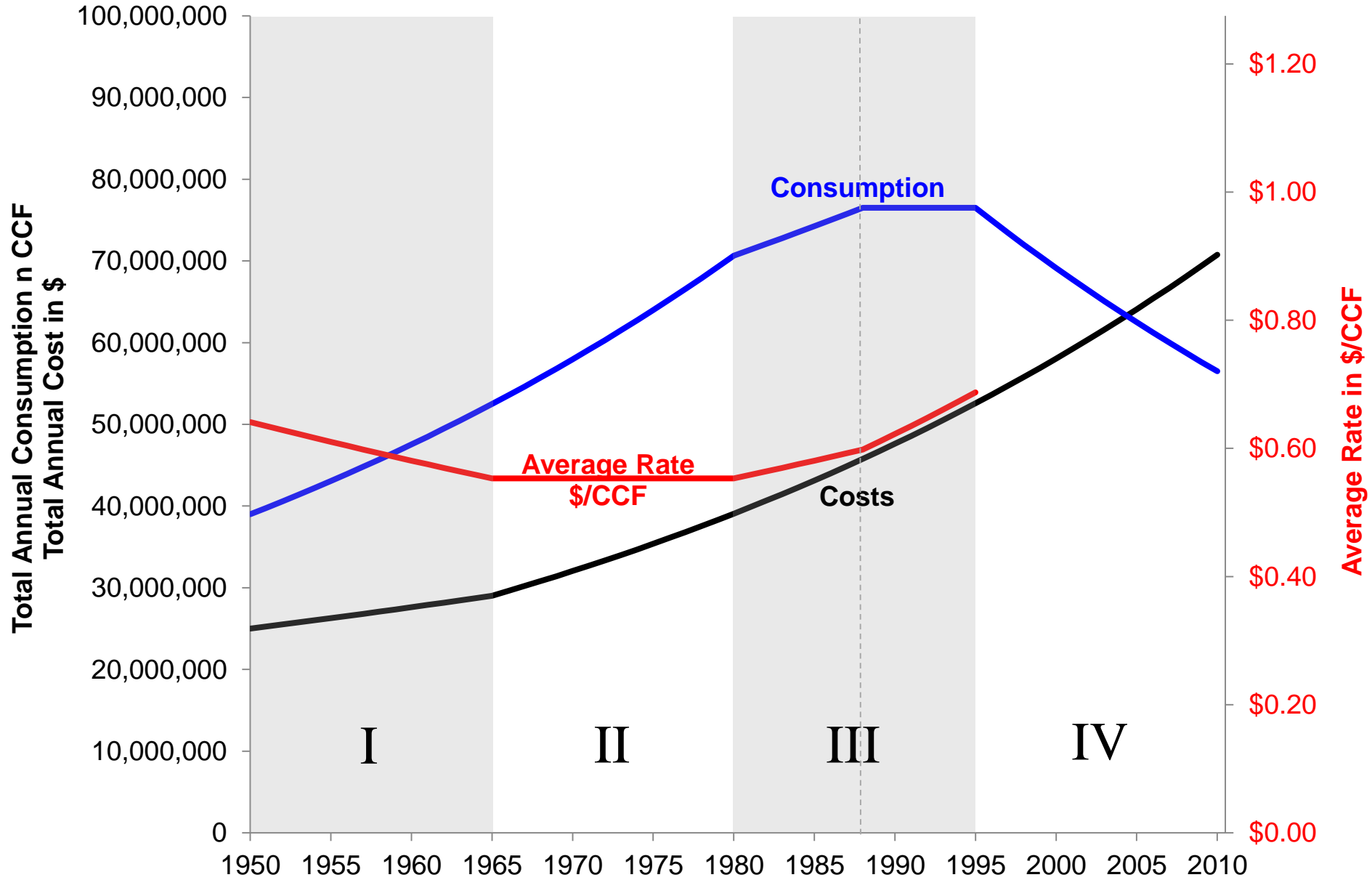
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



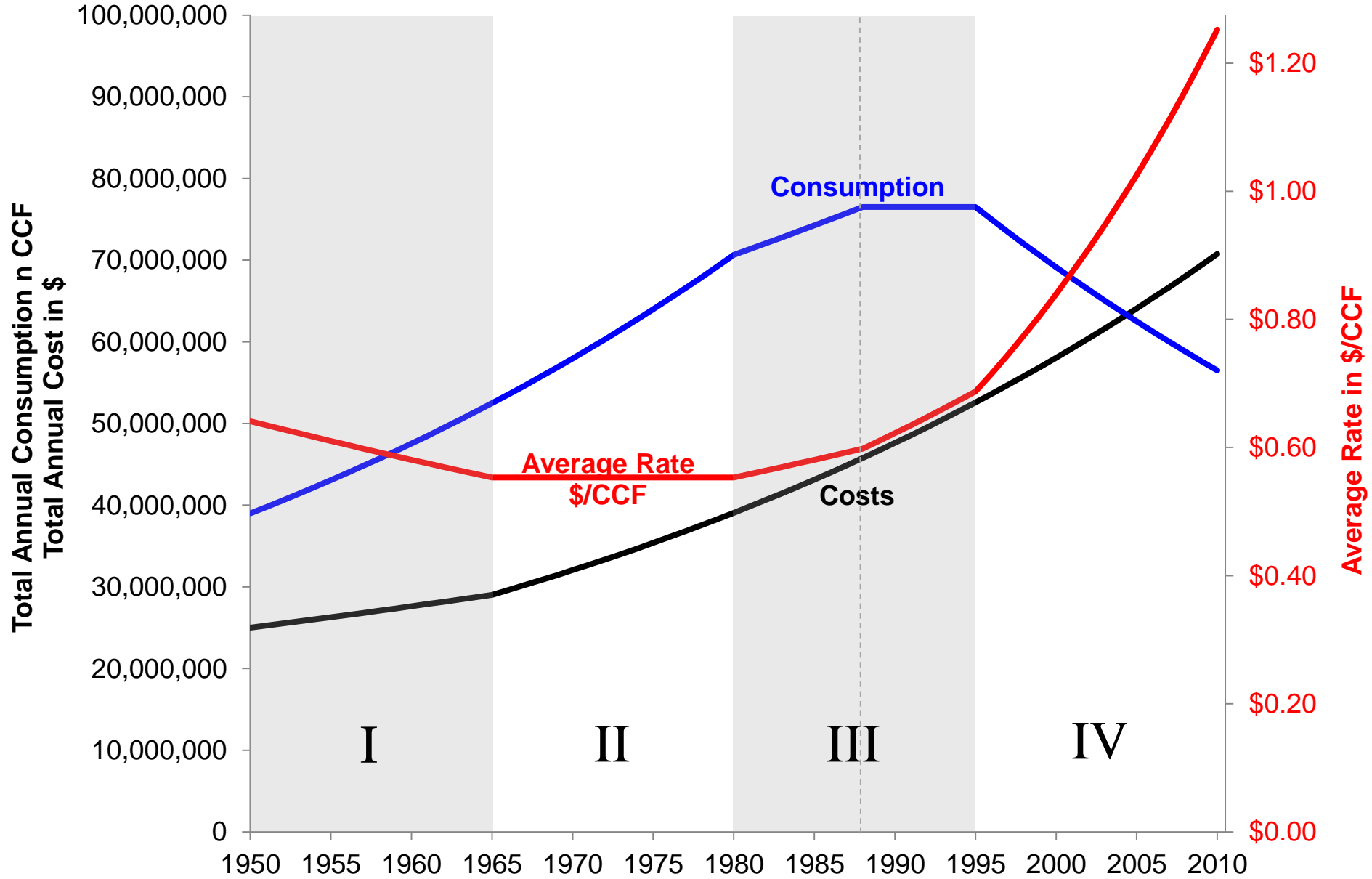
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



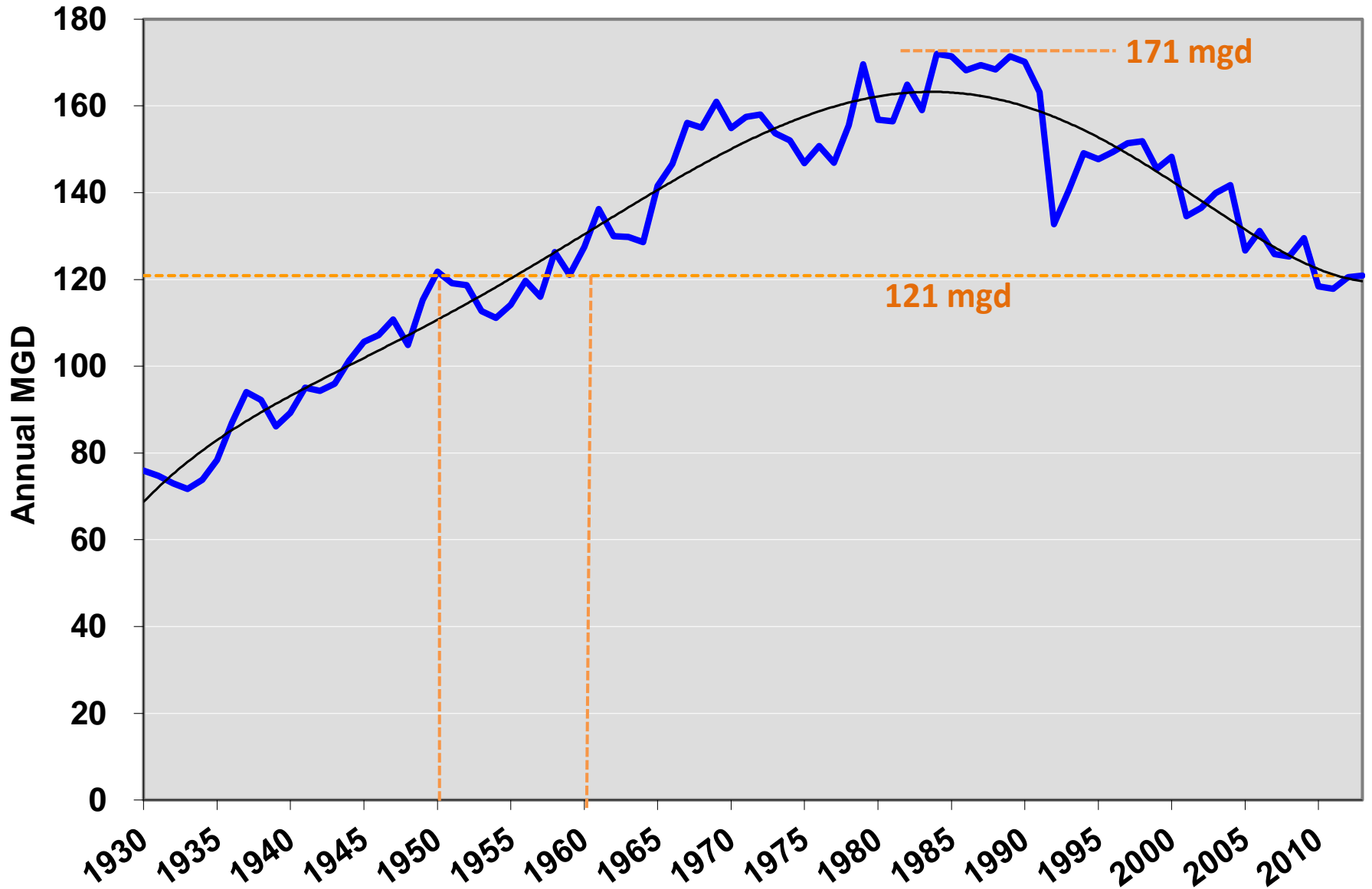
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



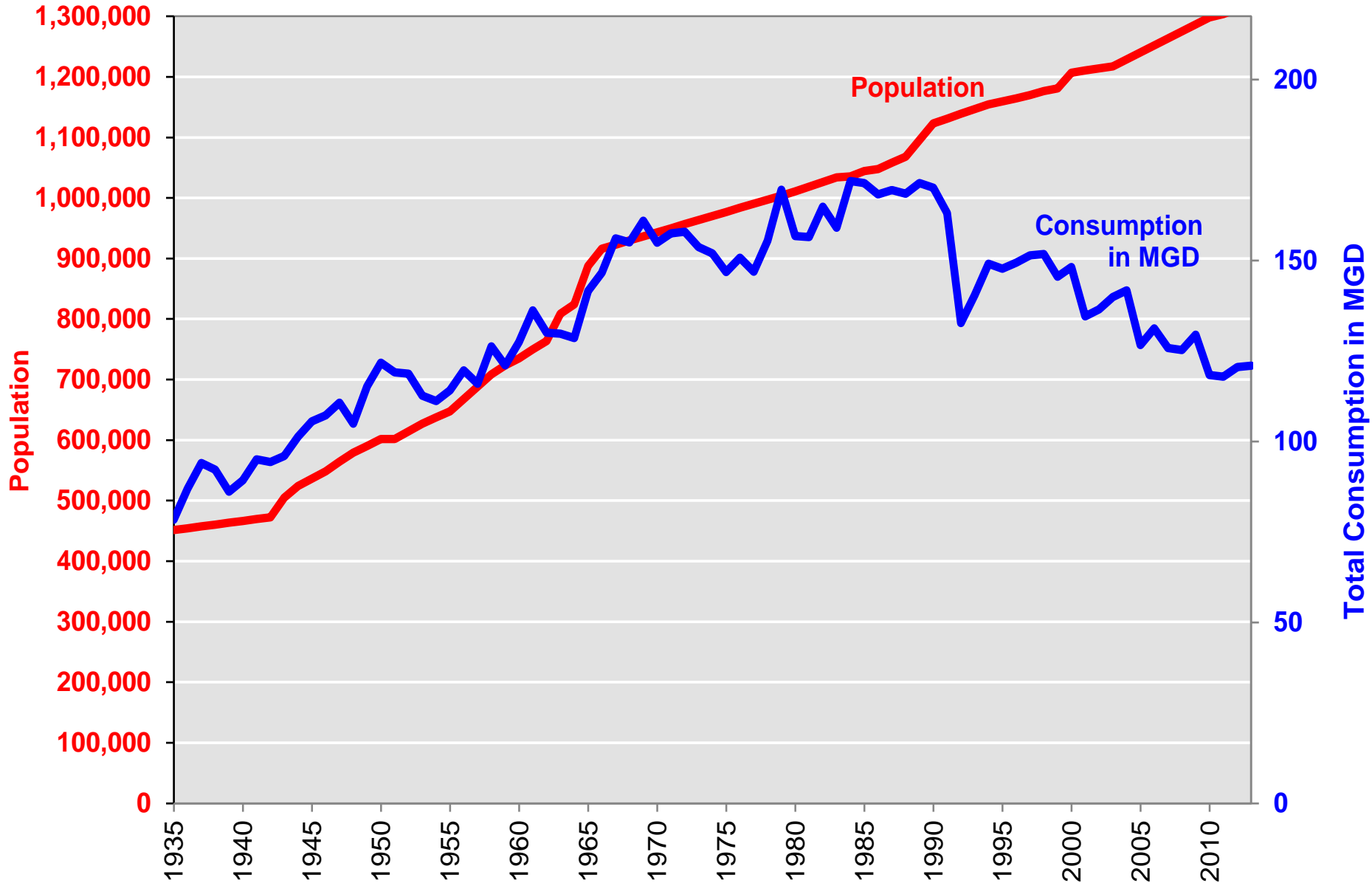
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



Total Seattle Regional Water System Annual Demand in Millions of Gallons per Day: 1930-2013



Growth in **Population** and **Water Consumption** Seattle Regional Water System: 1935- 2013



A Multiple Choice Question

Which of the following statements are true for Seattle over the past 30 years?

- A. Real (inflation adjusted) **rates** per ccf have increased 5.7% per year on average
- B. Real **costs** have increased 4.5% per year on average
- C. Real **customer bills** have increased 3.6% per year on average

Answer: They're All True!

- A. Real (inflation adjusted) *rates* per ccf have increased 5.7% per year on average
- B. Real *costs* have increased 4.5% per year on average
- C. Real *customer bills* have increased 3.6% per year on average

It's a Question of Focus

Often, the headline is all about rate increases

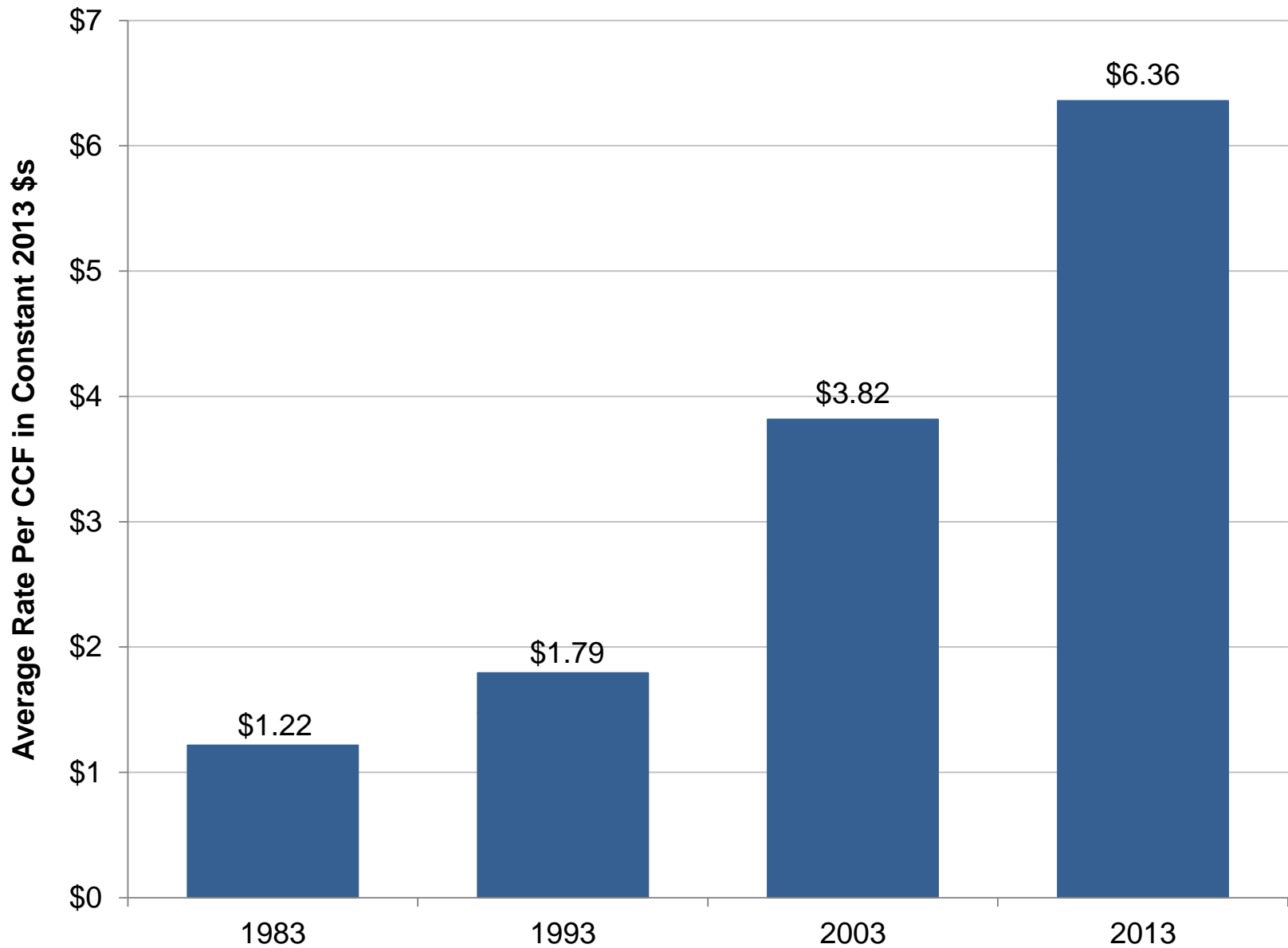
Better to focus on managing costs, and keeping customer bills affordable

rates increase = 5.7%

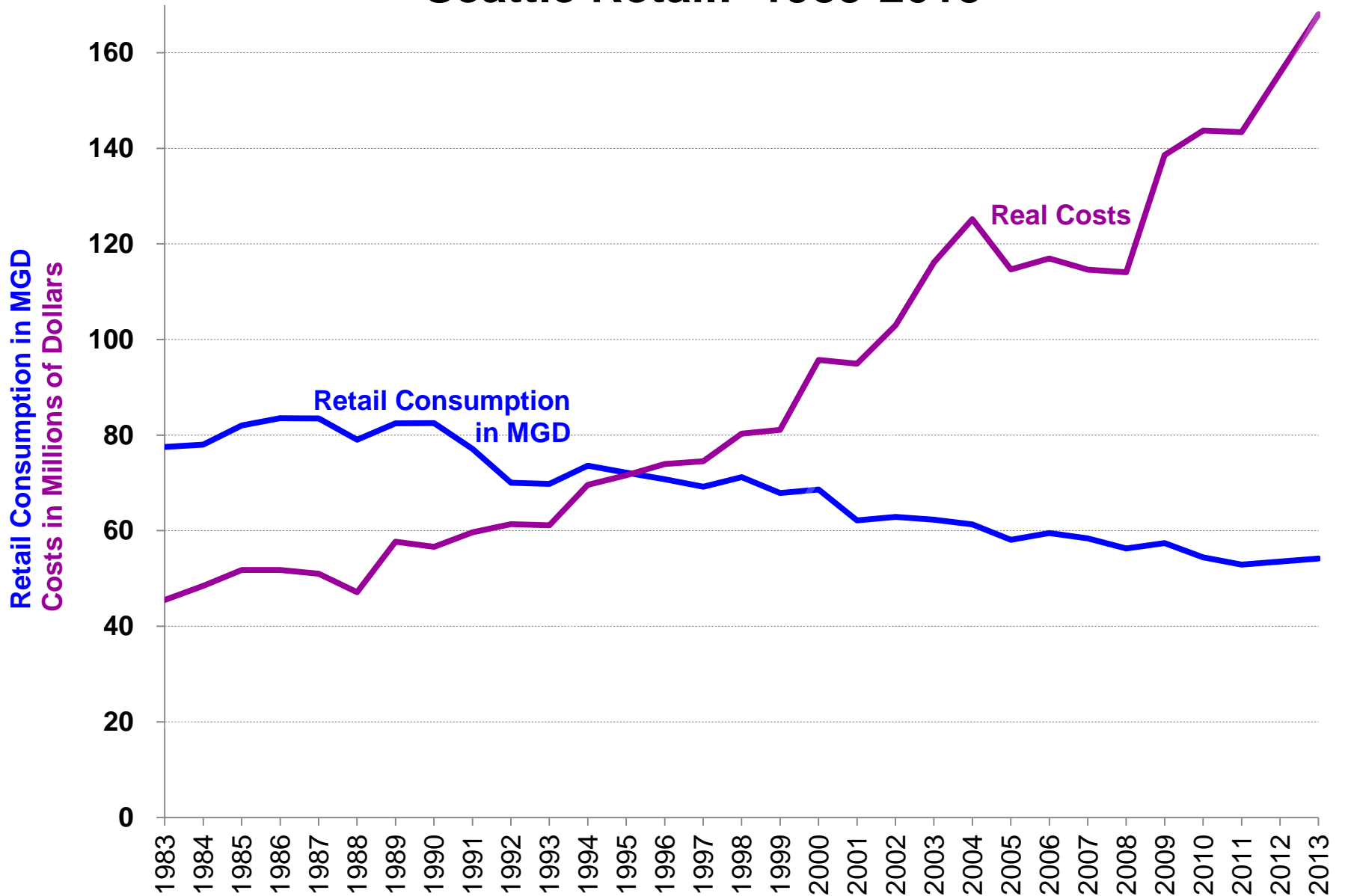
costs increase = 4.5%

customer bills increase = 3.6%

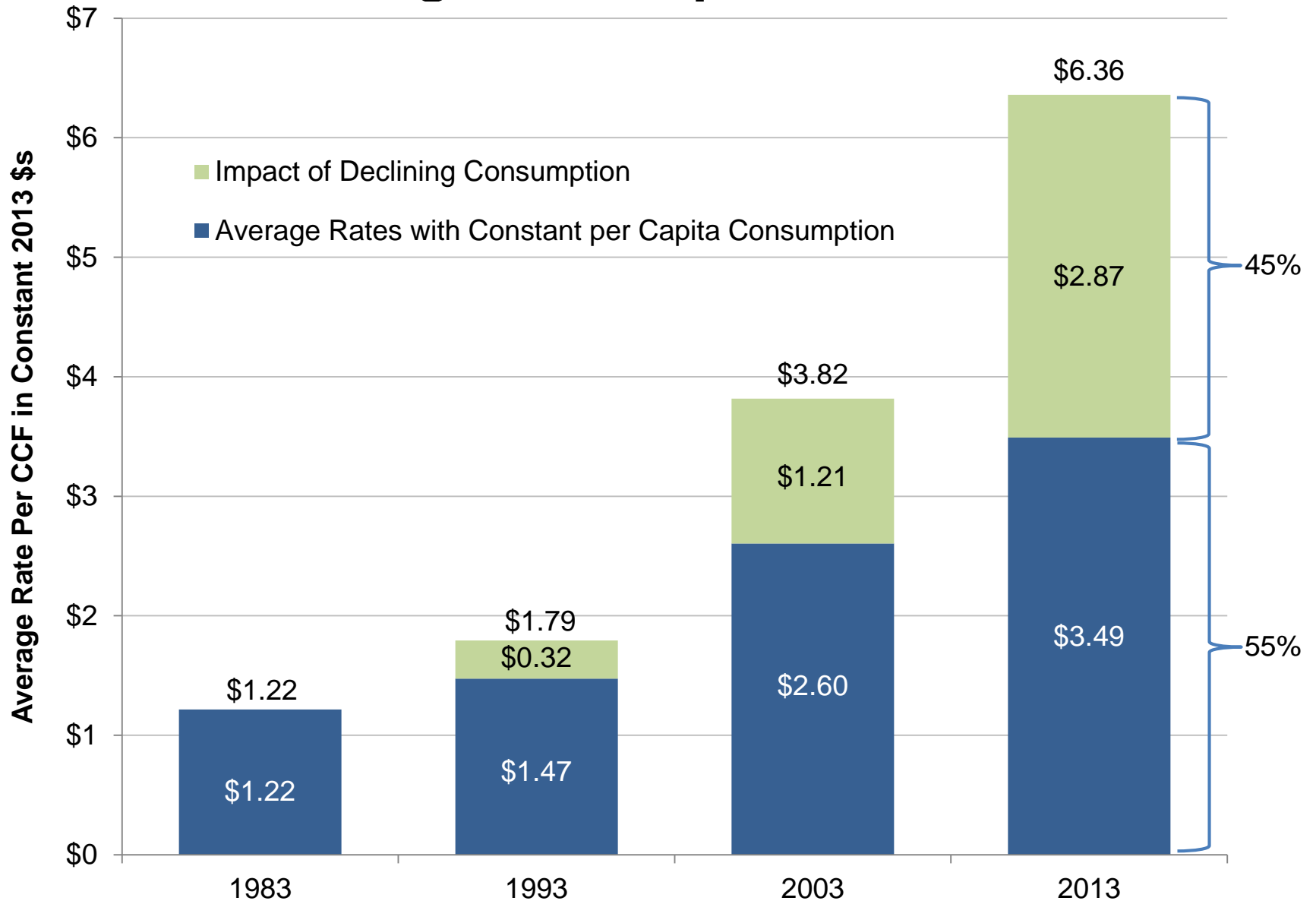
Increase in Average Rates per CCF: 1983-2013



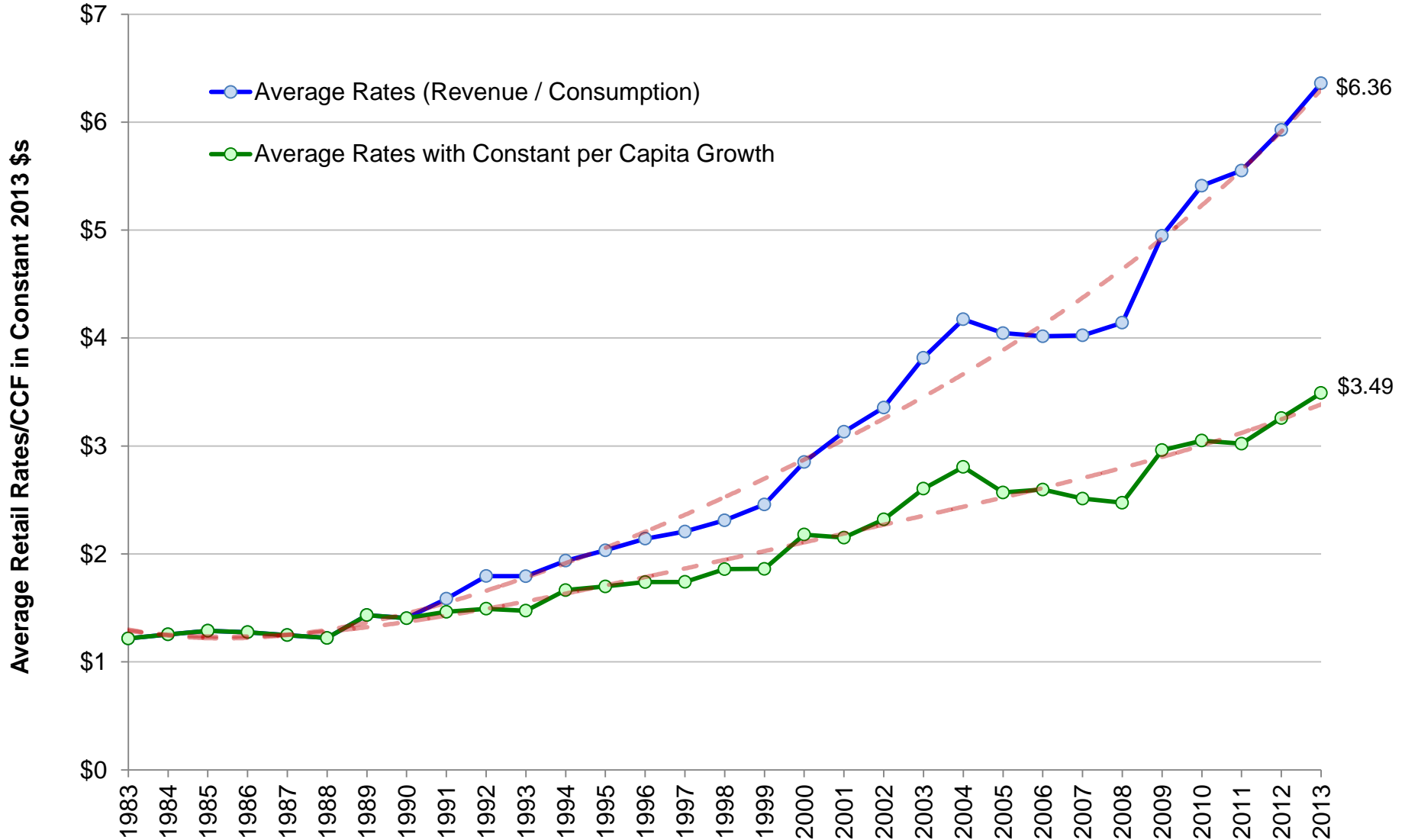
Growth in **Water Consumption** & **Costs** Seattle Retail: 1983-2013



Portion of Rate Increases Due to Declining Consumption: 1983-2013



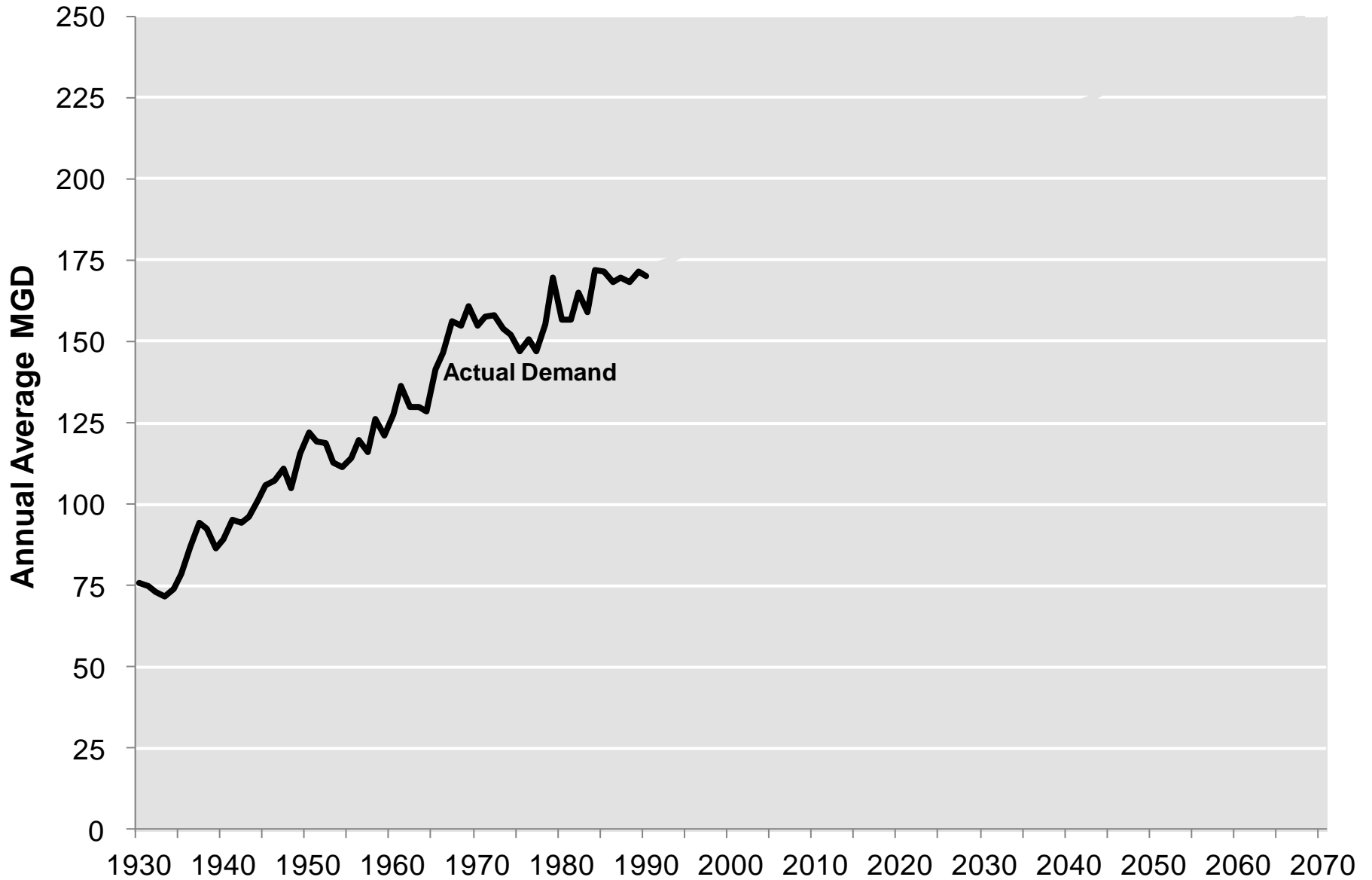
Rates per CCF and “Bills” in Constant 2013 \$s: 1983-2013



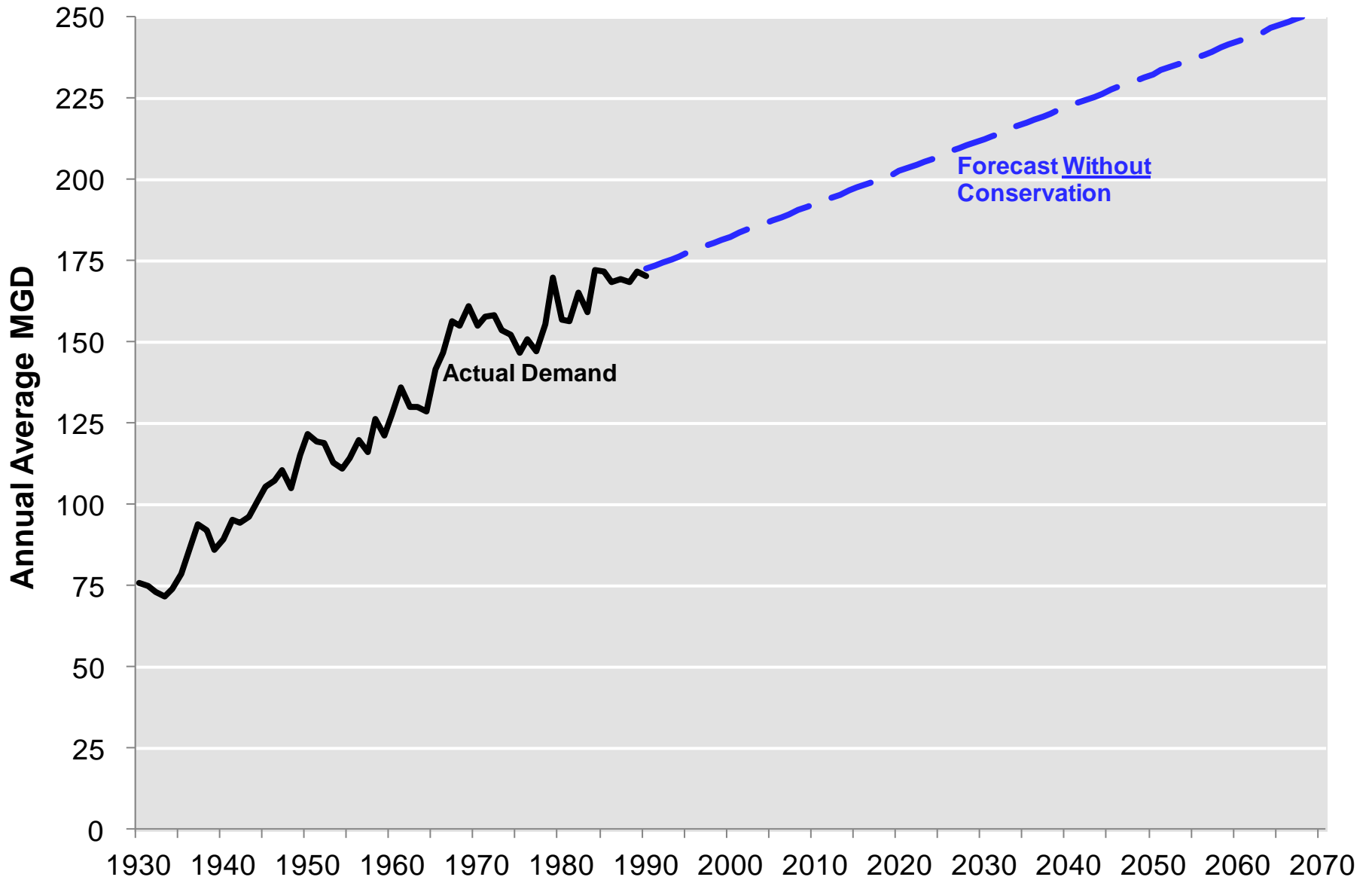
Conservation

Why did we do that, again?

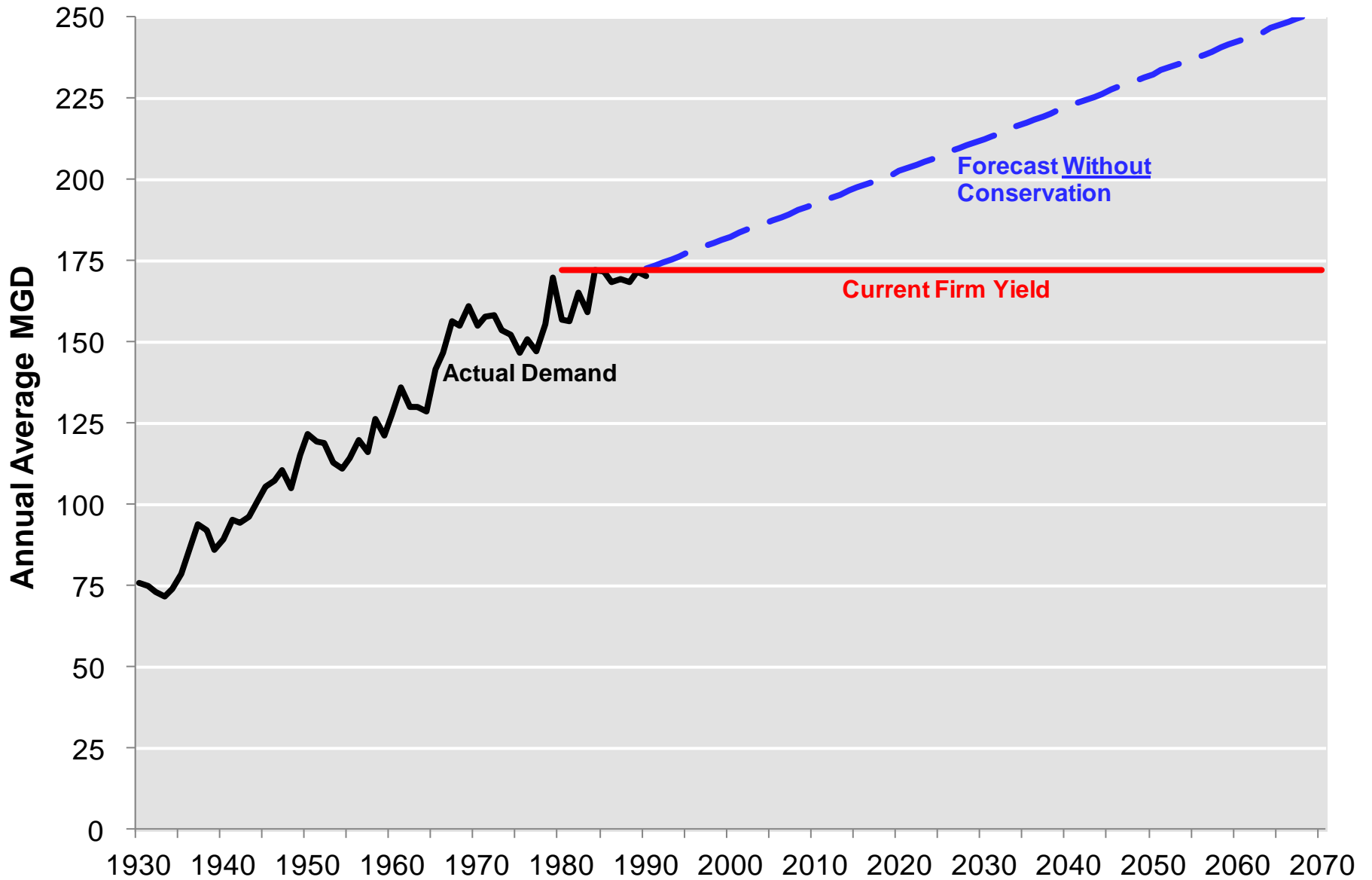
Conservation Vs. New Supply



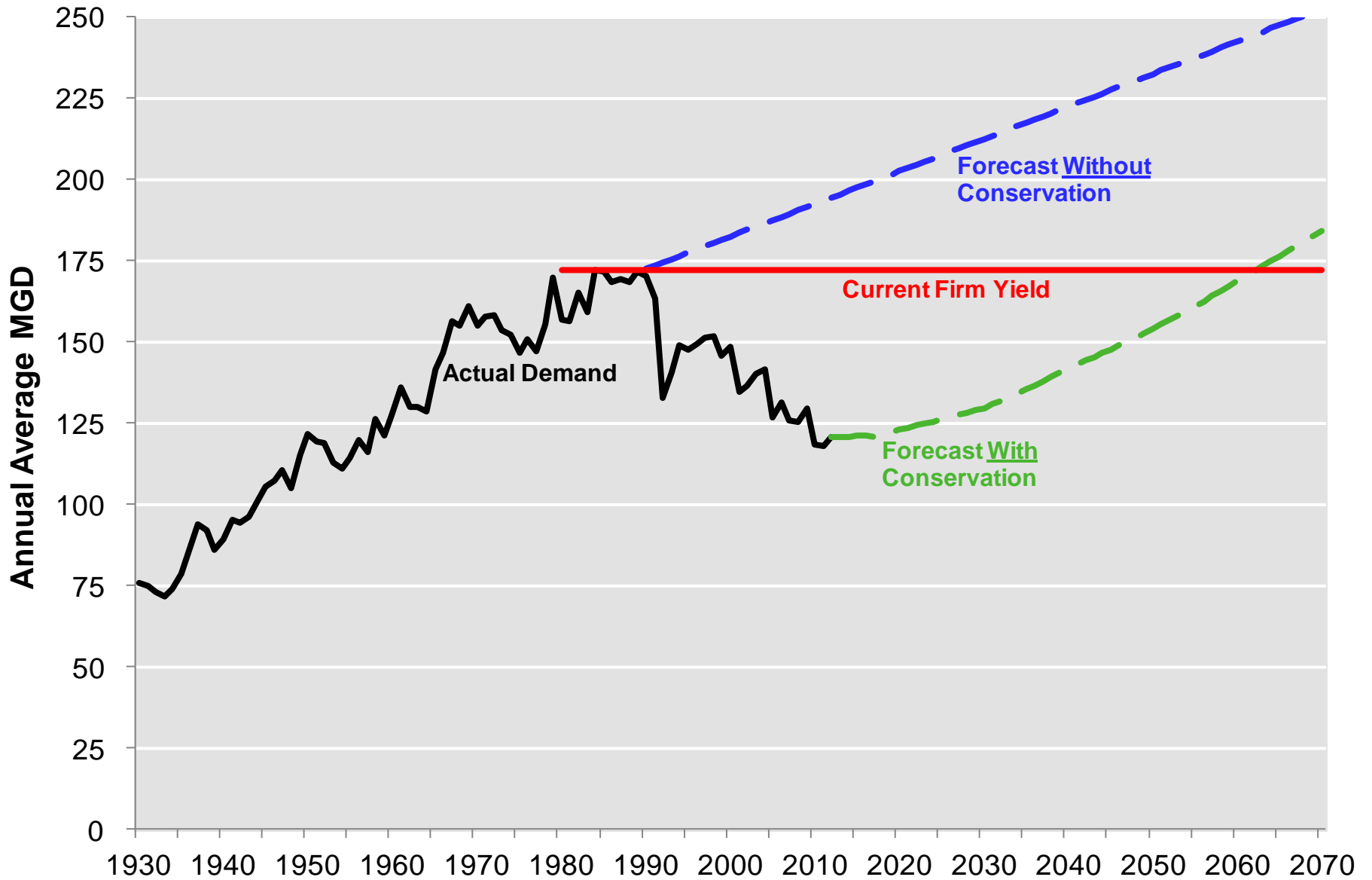
Conservation Vs. New Supply



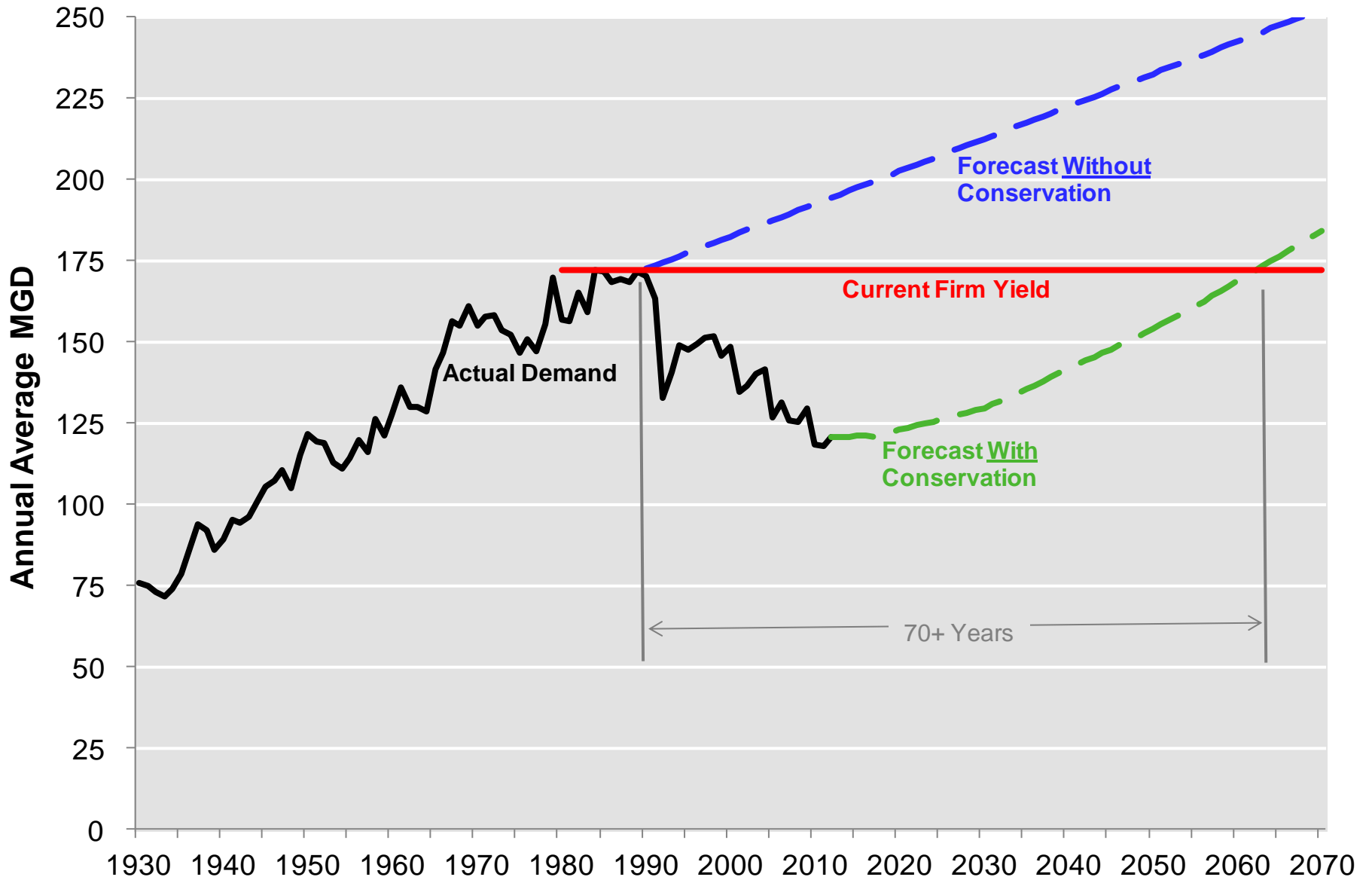
Conservation Vs. New Supply



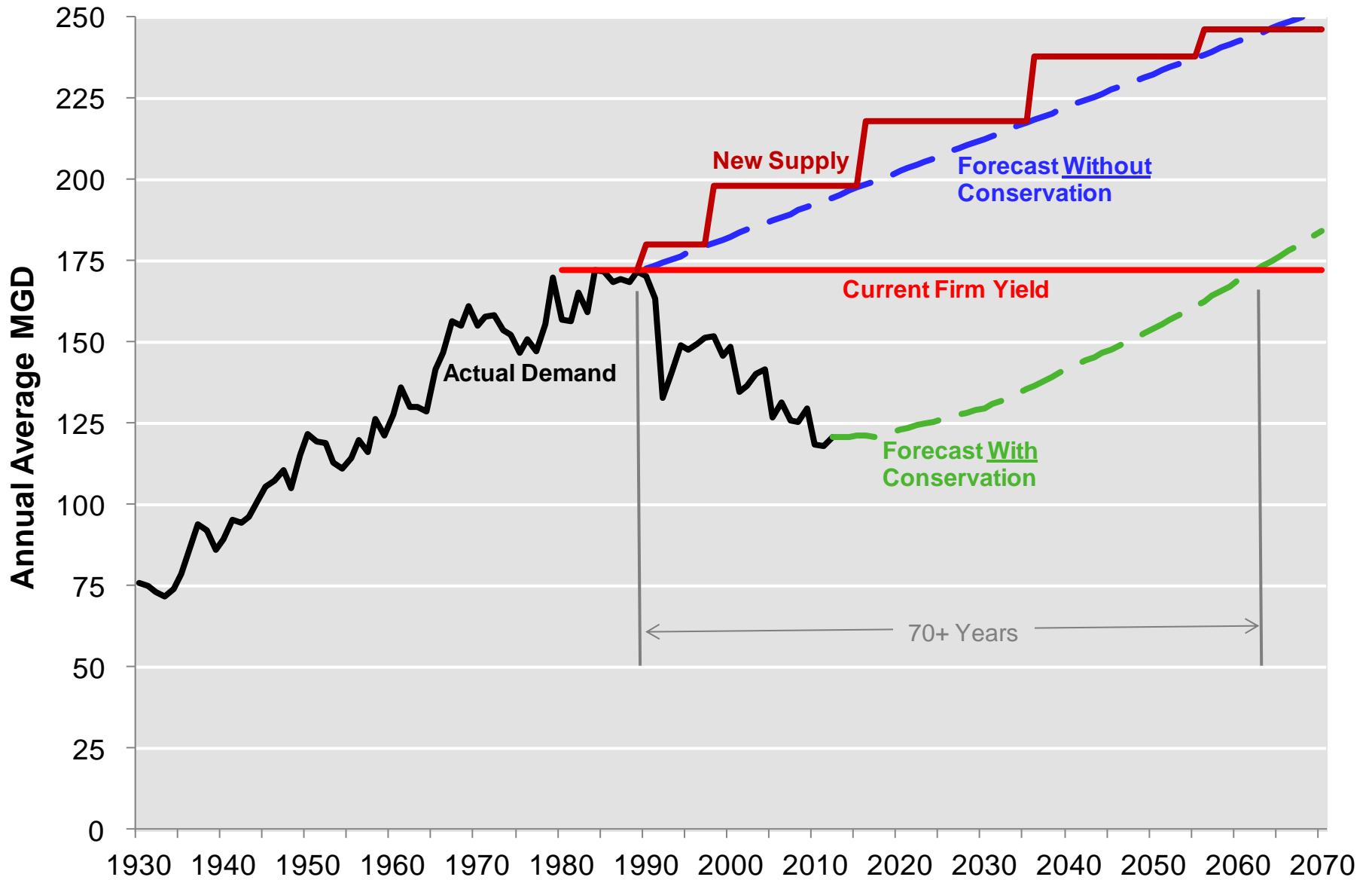
Conservation Vs. New Supply



Conservation Vs. New Supply



Conservation Vs. New Supply



\$\$\$\$\$\$\$\$\$\$\$\$

Cost of New Supply: \$000s of Millions

Cost of Conservation: \$50 Million

(past and future programmatic)

Bottom Line: Big Savings

\$\$\$\$\$\$\$\$\$\$

RATES ↑

BILLS ↓



Seattle
Public
Utilities