

Fossil Fuel Extraction and Regional Economic Development

Obstacles to Sustainability and Possible Remedies

Oil and Gas Summit, 11/19/10

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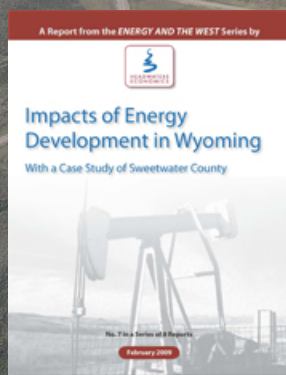
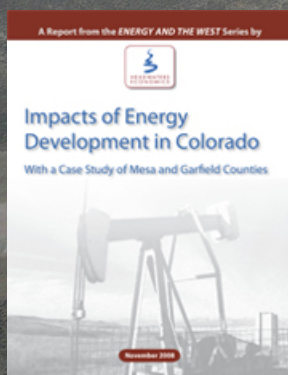
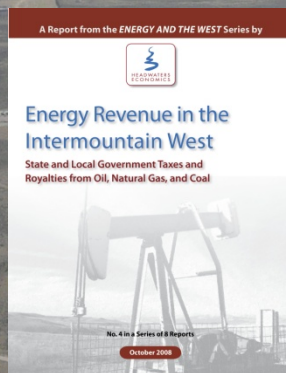
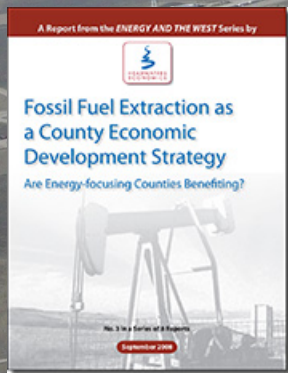
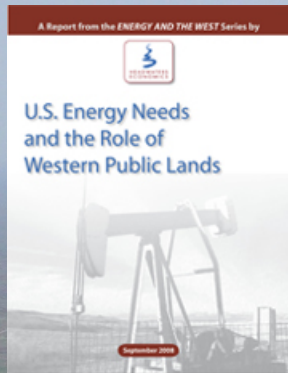
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Our mission is to improve community development and land management decisions in the West.

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Background

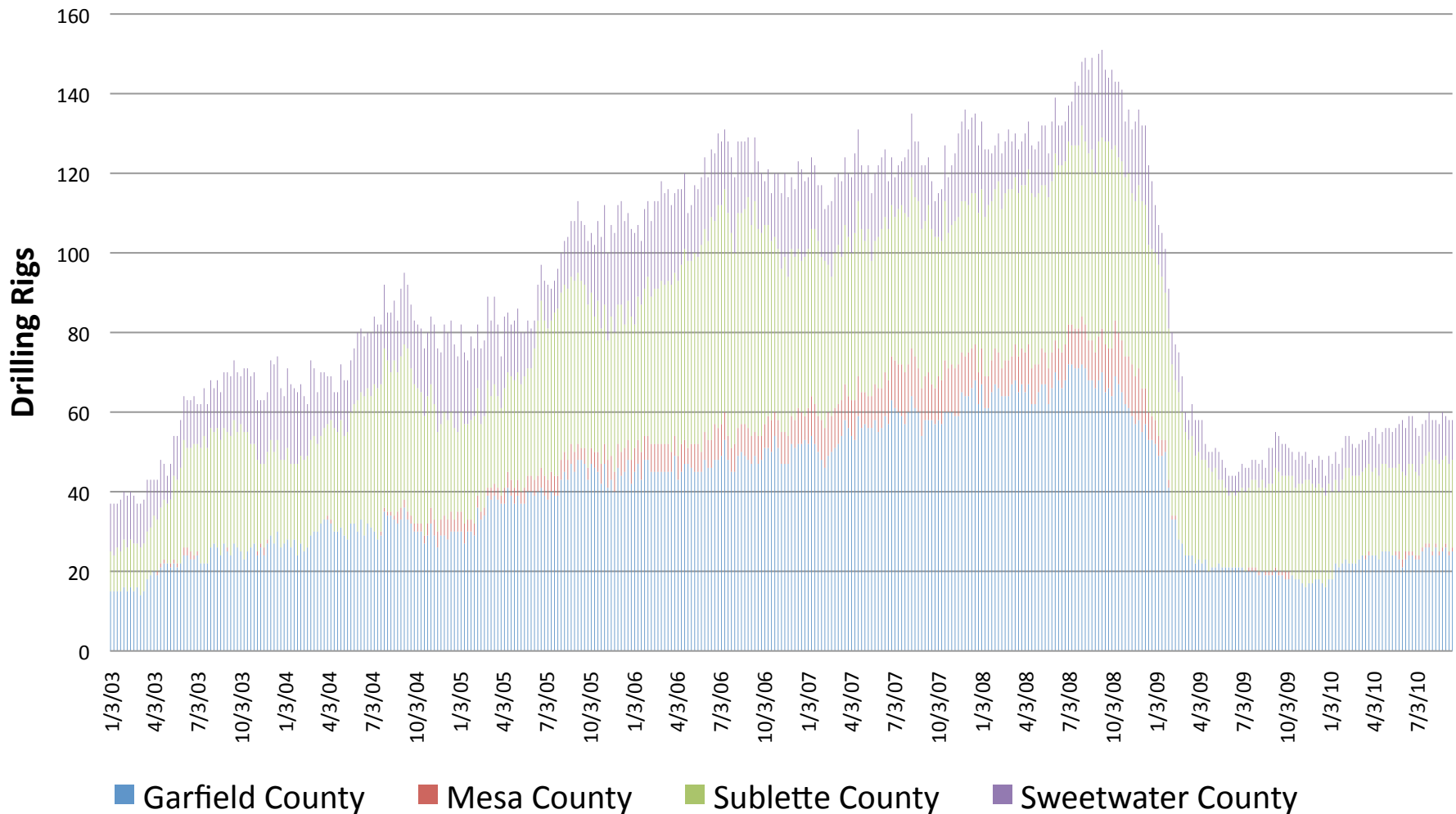
2008 *Energy in the West* Series

2010 Update



Rocky Mountain Surge and Slump

Drilling Rigs, Weekly, 2003 through Sept. 2010



Source: RigData

How Can Fossil Fuel Extraction Contribute to Sustainable Development?

Sustainable Energy Development ...

1. Pays its way: impacts are well analyzed and revenues are adequate in amount and timing
2. Creates opportunities for investment in long-term economic development and diversification

Framework

❖ Volatility

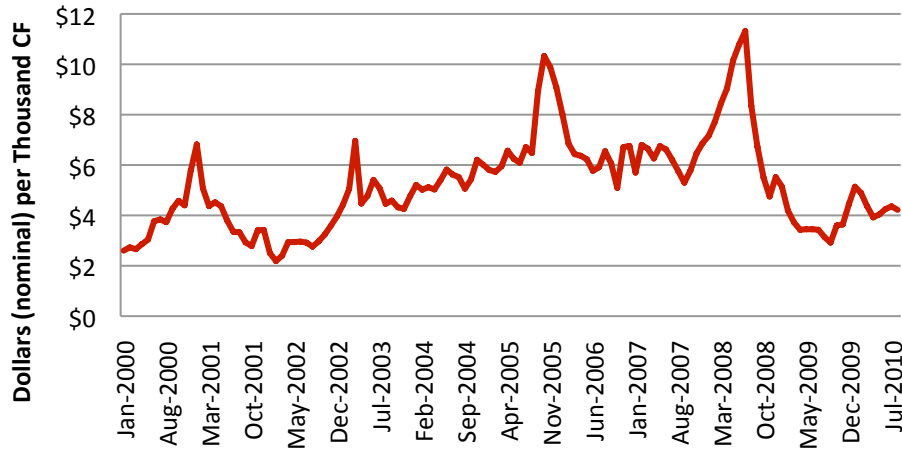
❖ Unevenness

❖ Timing

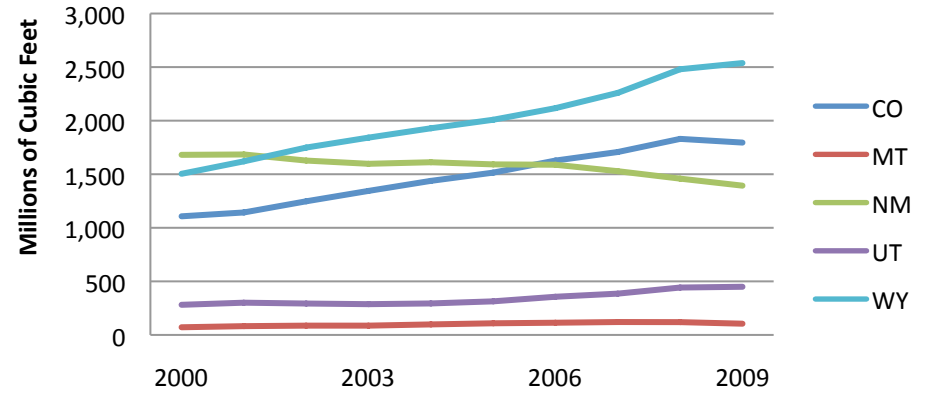
❖ What Can be Done?

Volatility

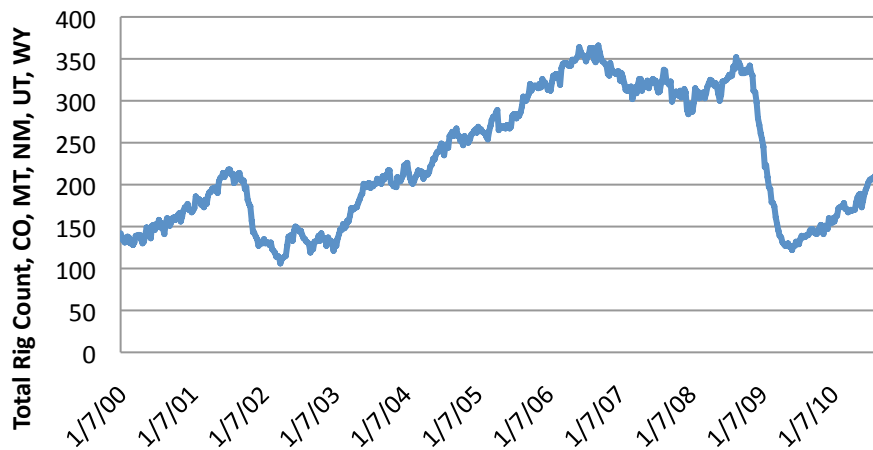
U.S. Natural Gas Wellhead Price



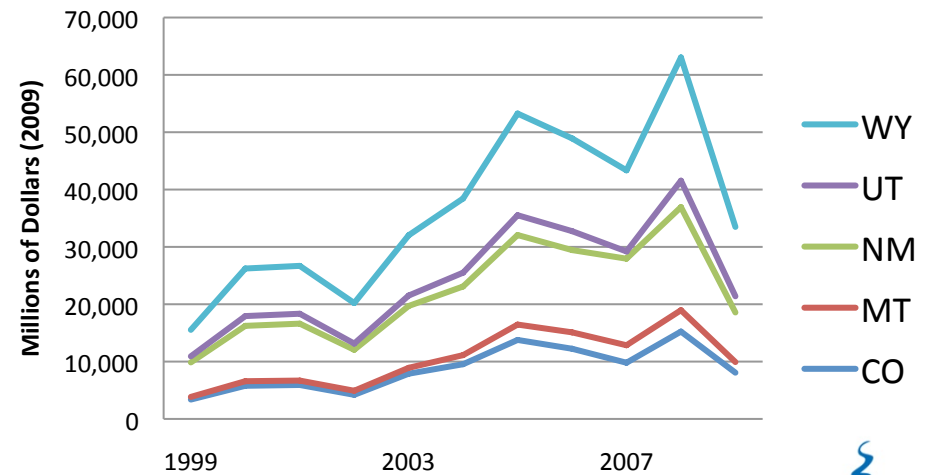
Natural Gas Gross Withdrawals, 2000-2009



Weekly Rig Count, 2000-2010



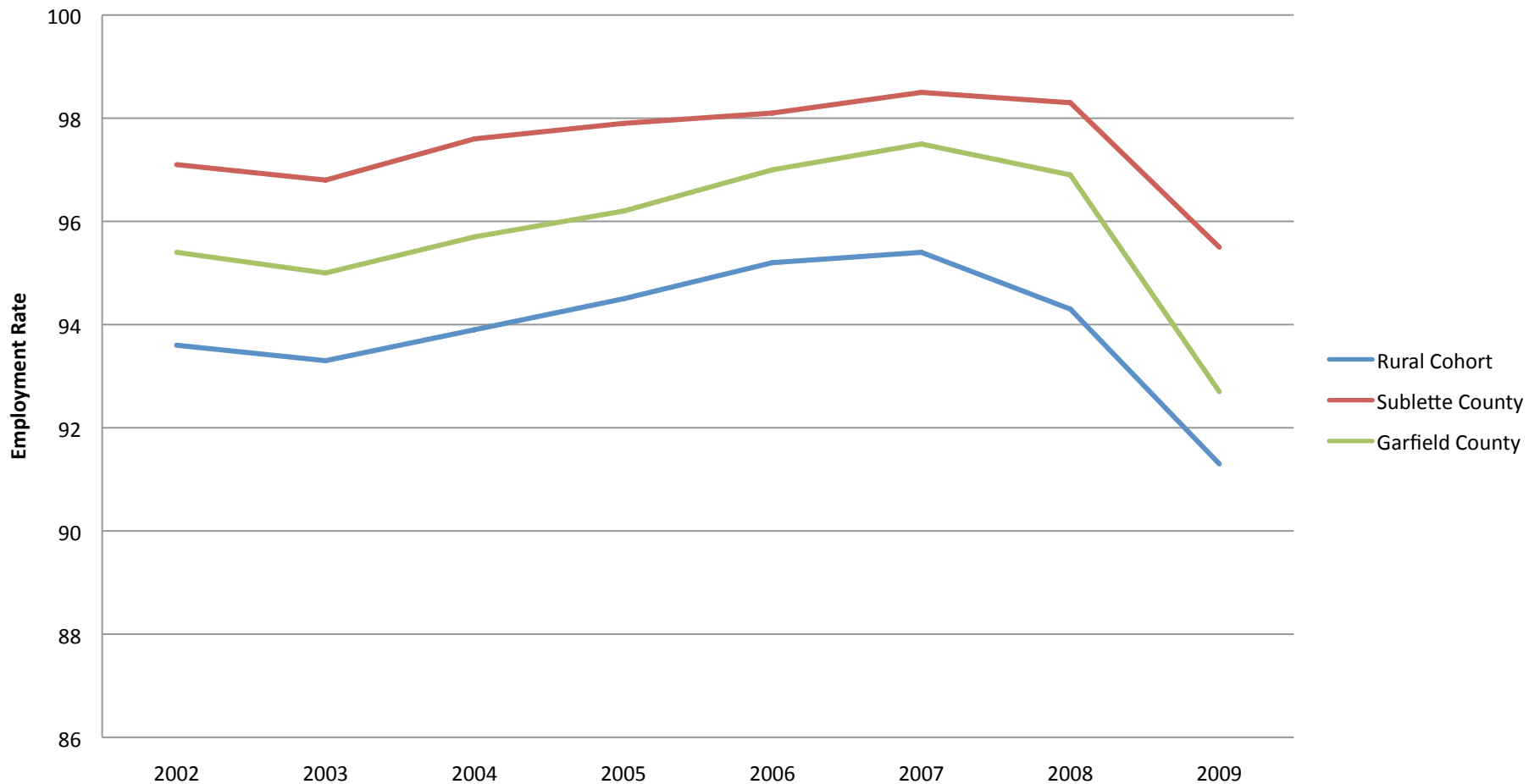
Production Value, Oil and Natural Gas, 1999-2009



Sources: EIA, RigData, state oil and gas commissions

Employment Impacts

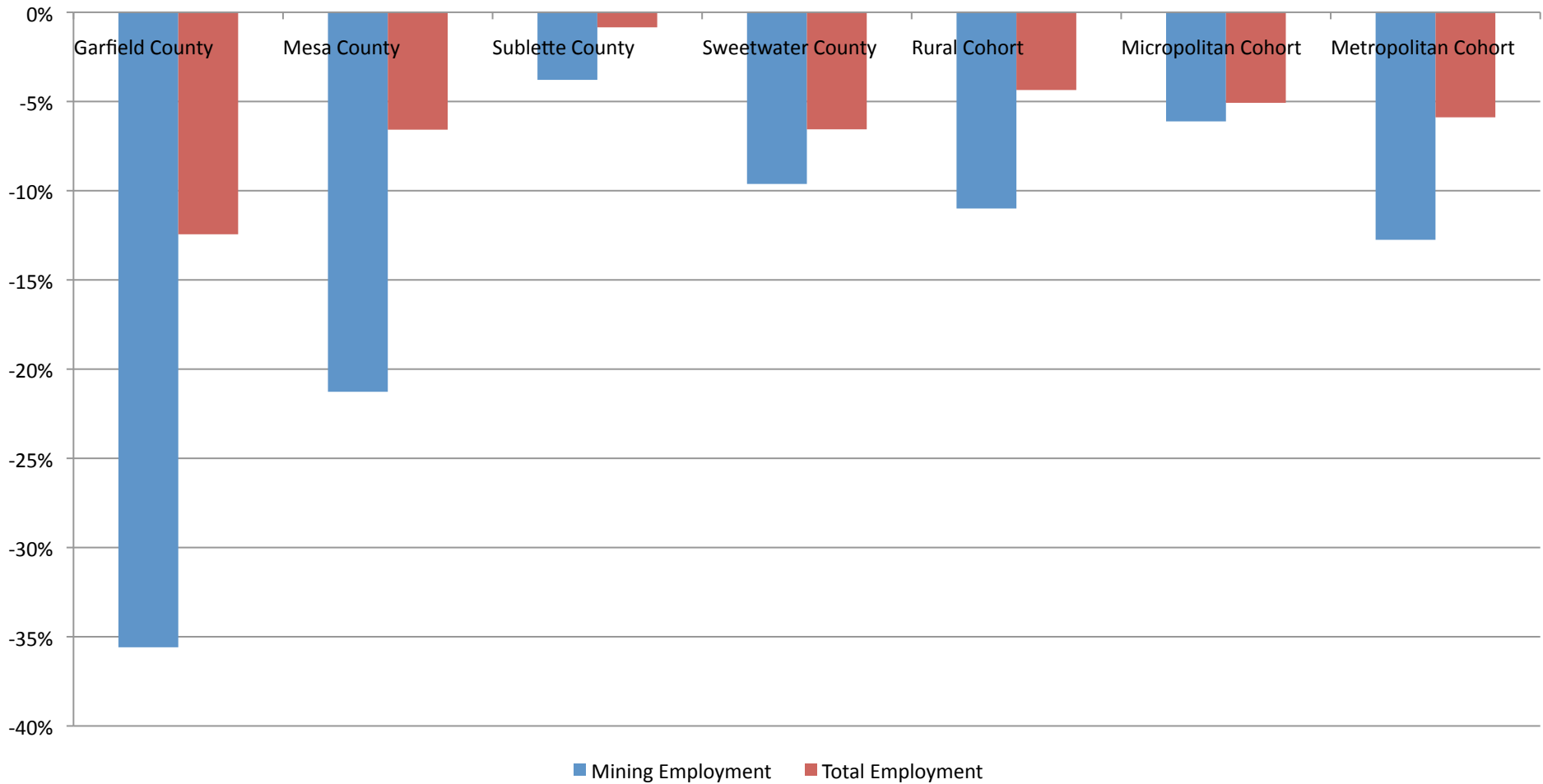
Annual Employment Rate, 2002-2009
Sublette and Garfield counties and Rural Cohort



Source: BLS, QCEW

Employment Impacts

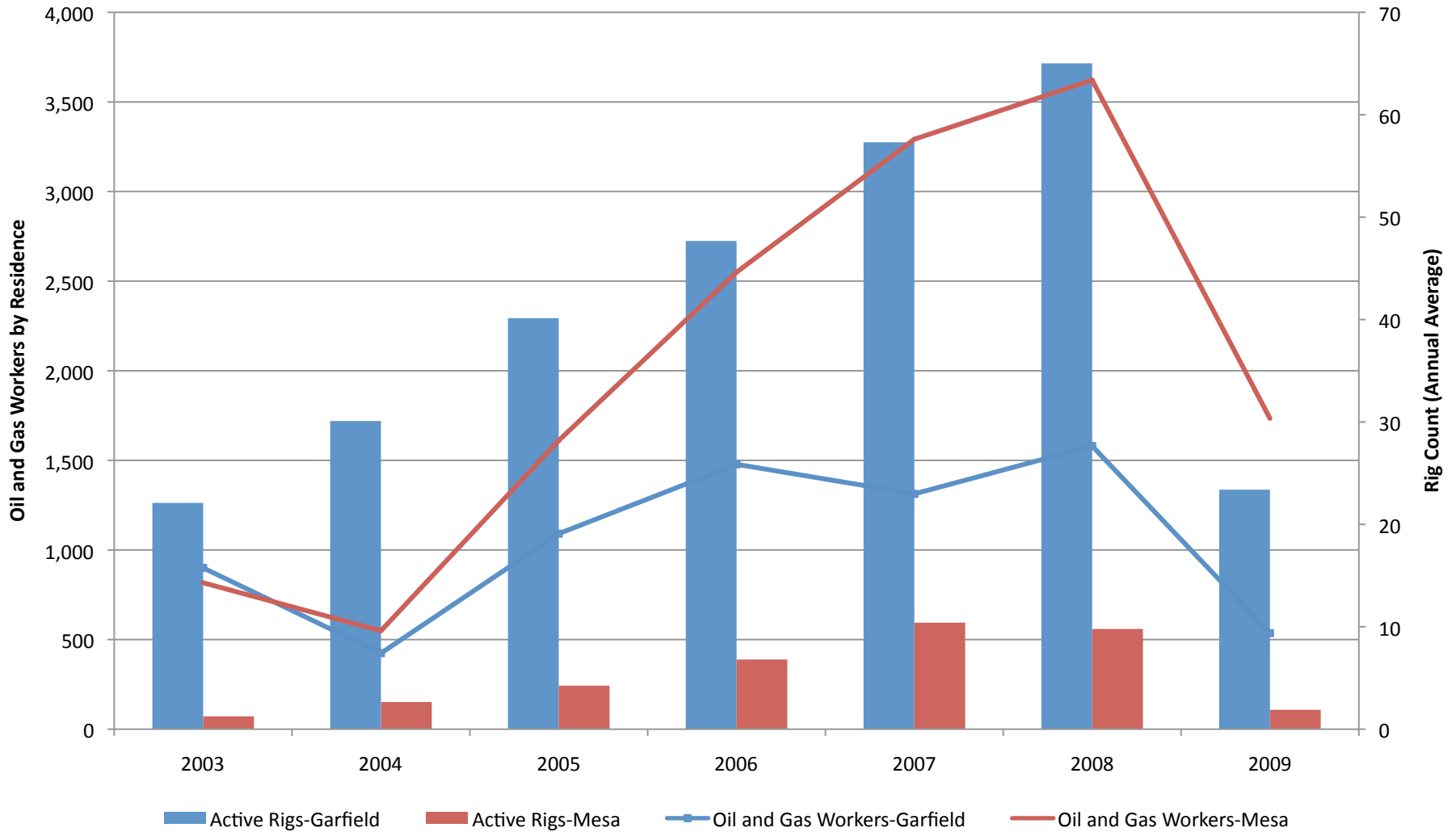
Job Loss in Mining v. Total Jobs, 2008-2009



Source: BLS, QCEW

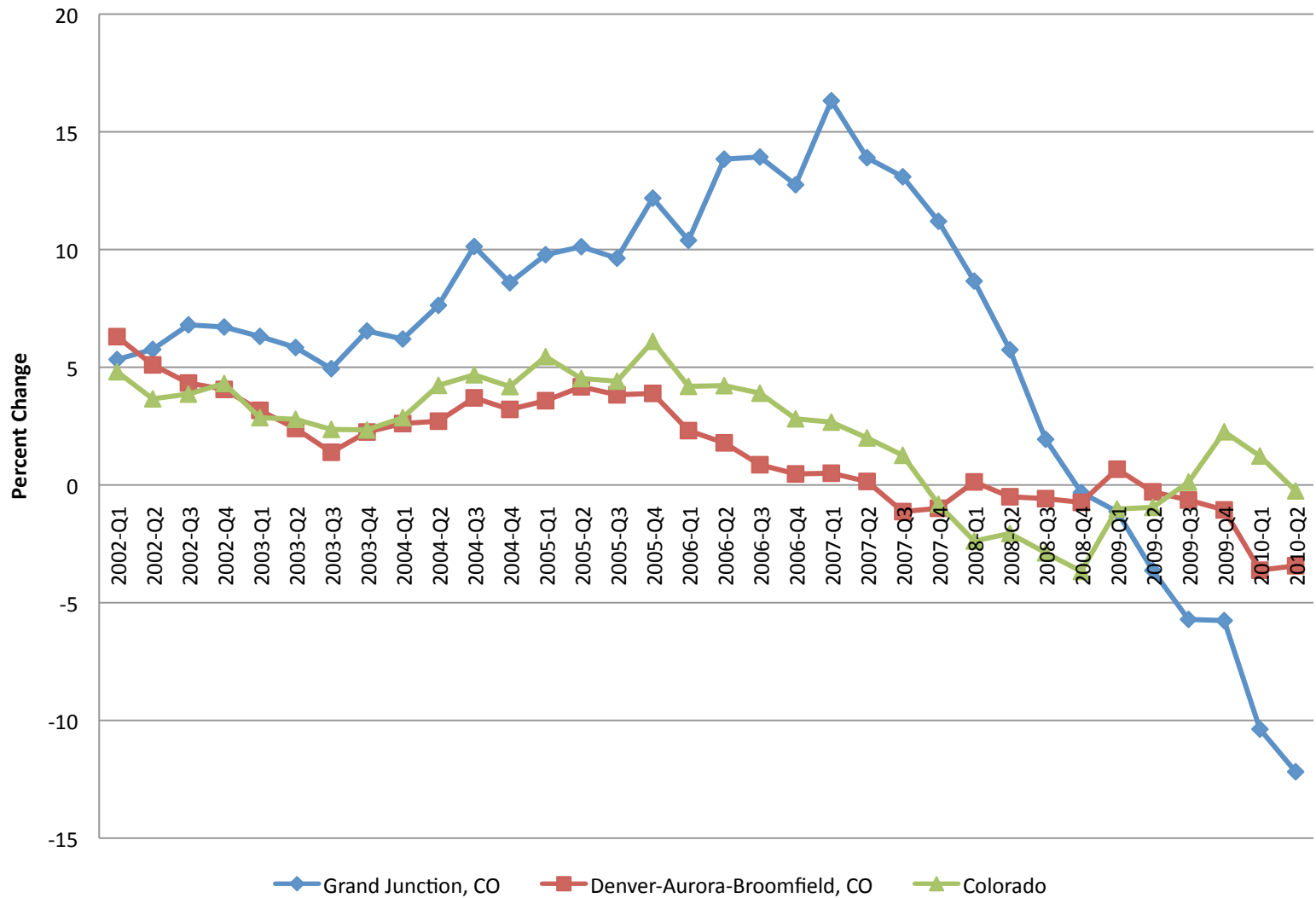
Housing Impacts

Worker Residency v. Location of Drilling



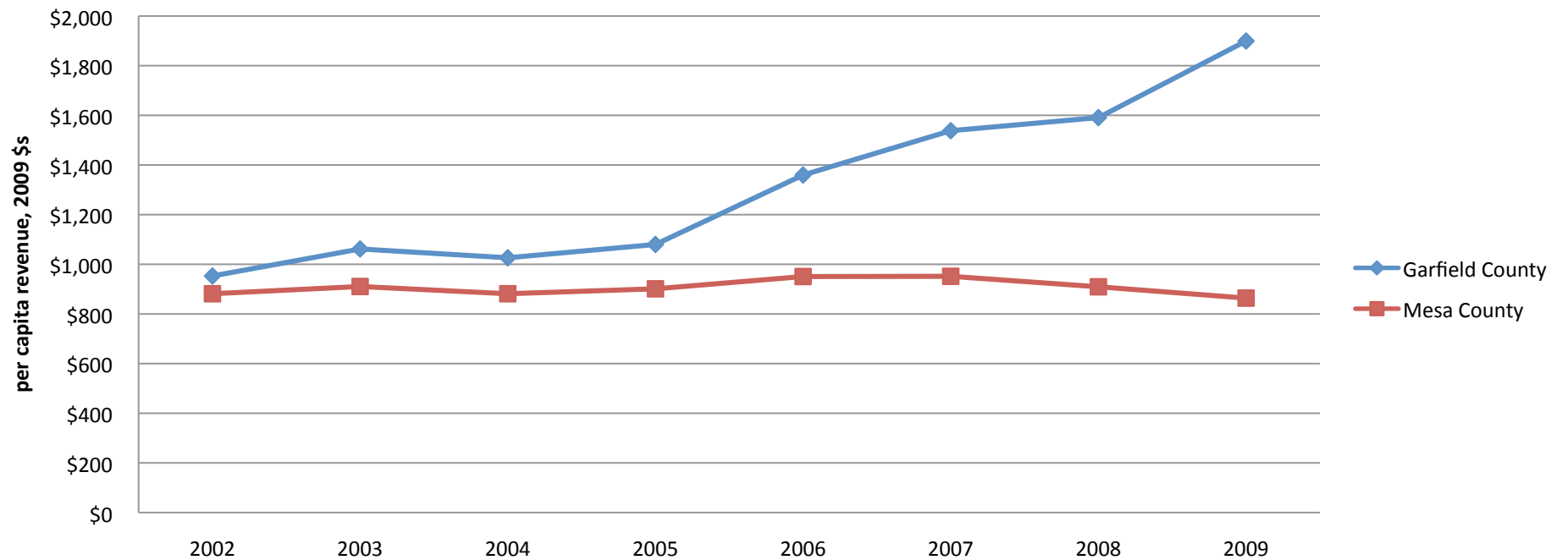
Housing Impacts

Four-Quarter Percent Change in FHFA House Price Indexes (All Transactions Index, through 2010Q2)



Fiscal Impacts

Total County Revenue per capita



Investments in Diversification



What Can be Done

Volatility, Unevenness, Timing:

What are realistic approaches to combat the negative aspects of these problems, and maximize potential benefits of energy development?

Policy Priorities

- Maximize state revenue generation
- Fine-tune distribution
- Maximize use planning and oversight tools
- Coordinate governance across resource boundaries
- Build in ongoing assessment, evaluation, and reform

In Practice...

- Staff and support local entities with a focus on continuity
- Encourage regional coordination to leverage human and institutional resources
- Demand state, federal, and industry support for ongoing evaluation and reform
- Ask industry lots of questions

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Study Area Profile

	2008 Population	OMB Classification	2008 Total Oil & Gas Employment	2008 Natural Gas Production (Total, MCF)
Garfield County, CO	54,838	Rural	3,389	548,853,373
Mesa County, CO	141,905	Metropolitan	4,048	40,806,415
Sublette County, WY	8,338	Rural	1,953*	1,145,006,892
Sweetwater County, WY	39,942	Micropolitan	4,414	241,222,806