

RIG PIGS

A LONGITUDINAL ANALYSIS OF CRIME AND ENERGY PRICES IN ALBERTA

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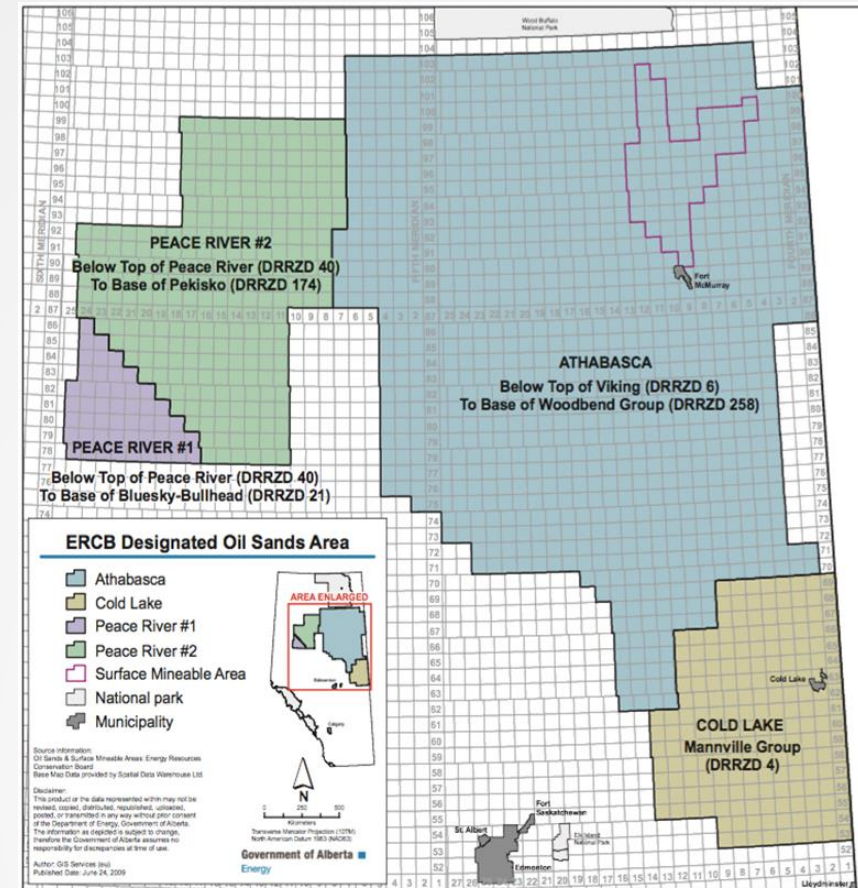
Western Society of Criminology, 2016

BOOMTOWNS & CRIME

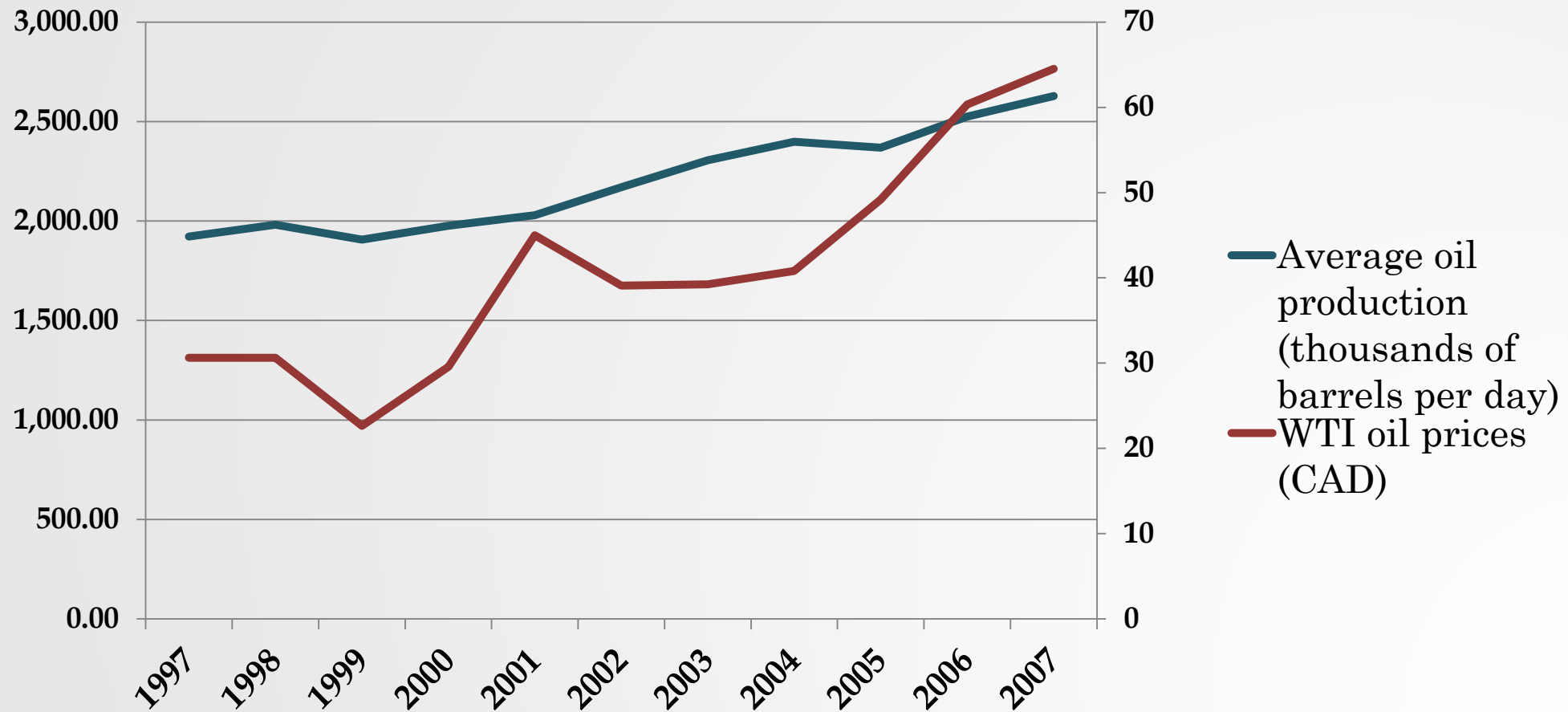
- Resource-based communities experiencing a population growth for a period of time
- Different boomtown, different experiences
- Lower quality of life
 - Inadequate services and resources
 - Policing in boomtowns
- Increase in alcohol consumption and drug usage

ENERGY IN ALBERTA

- Ample employment and income opportunities
- Population growth due to inter-provincial migration
- Youngest population in the country
- High education and skills levels



OIL PRODUCTION & OIL PRICES



DATA & METHODS

- Canadian Socio-Economic Information Management Systems (CANSIM)
 - 1998-2006 total violent and property crime, by police jurisdictions
 - 1996, 2001, 2006 Canadian census
- West Texas Intermediate (WTI) oil prices, CAD
- Natural gas prices, CAD
- Fixed effects linear regression model

VIOLENT CRIMES

Fixed effects linear regression testing the influence of current year oil prices and violent crime rates, 1998-2006

	Estimate
Male population, 15-24 years old (%)	2.09 ⁺
Single population (%)	-1.22**
Occupied dwellings – rented (%)	0.34*
Mobility status, 1 year ago (%)	-0.97***
Aboriginal population (%)	-0.35*
Unemployment (%)	-1.10**
Total population with post-secondary education (%)	-0.35**
Average income family, year 2000 constant dollars (thousands)	0.10 ⁺
WTI, current year prices (CAD)	0.08*

⁺p < 0.10, *p < 0.05, **p < 0.01

VIOLENT CRIMES

Fixed effects linear regression testing the influence of previous year natural gas prices and violent crime rates, 1998-2006

	Estimate
Male population, 15-24 years old (%)	2.08 ⁺
Single population (%)	-1.23**
Occupied dwellings – rented (%)	0.35*
Mobility status, 1 year ago (%)	-0.95**
Aboriginal population (%)	-0.37**
Unemployment (%)	-1.10**
Total population with post-secondary education (%)	-0.37**
Average income family, year 2000 constant dollars (thousands)	0.11**
Natural gas, <i>previous year prices</i> (CAD)	0.59*

⁺p < 0.10, *p < 0.05, **p < 0.01

PROPERTY CRIMES

Fixed effects linear regression testing the influence of energy prices and property crime rates, 1998-2006

	Estimate
Male population, 15-24 years old (%)	12.90*
Occupied dwellings – rented (%)	2.93**
Occupied dwellings – apartments (%)	-2.43 ⁺
Mobility status, 5 years ago (%)	-2.01*
Population employed in oil and gas industry (%)	2.85*

⁺p < 0.10, *p < 0.05, **p < 0.01

DISCUSSION

- High employment and crime
- Measuring the economy
- Significant negative relationship with Aboriginal population

FUTURE RESEARCH

- Shadow population
- Disaggregate crime types
- Recent 'oil crisis'

THANK YOU

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