

Barber County Strategic Business Plan for Oil & Gas Development



October 29, 2012

Barber County Strategic Business Plan for Oil & Gas Development

Introduction & Background

- Don Brandes, RLA, Vice President
Matrix Design Group

Oil Industry Activity & Impacts

- David Schwartz, Senior Associate
Economic & Planning Systems

The Trayvon Martin Case

Joe Klein How both parties have failed on gun laws

Plus The twisted history of 'Stand your ground'

BOOKS

Meet the nice lady whose naughty novel is a huge hit

TIME

THE TRUTH ABOUT OIL

New breakthroughs are actually increasing U.S. supplies. But homegrown oil isn't going to lower prices at the pump

By Bryan Walsh

The New Oil and Gas Boom

The U.S. will soon be a net exporter of energy. That could change everything

THE DRILLING FIELDS



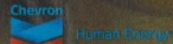
OIL COMPANIES SHOULD THINK MORE

TECH CO

Chevron Human Energy

Our future depends on innovation to operate cleaner, safer, and smarter. Each year, we spend billions on technologies to develop and use more intelligently, using new forms of energy to market, with bright ideas for the future. We're not just thinking like a technology company. We're one.

Learn more at chevron.com/weagree



Every day, Chevron relies on small businesses around the world. Electricians. Mechanics. Manufacturers. We spent billions on local goods and services last year. And helped thousands of entrepreneurs get ahead with microloans. We're helping small businesses thrive. Because we need them. Just as much as they need us. Learn more at chevron.com/weagree

BIG OIL

SHOULD SUPPORT

SMALL BUSINESS.

WE AGREE.

Steve Tomkovicz
 Steve Tomkovicz
 President
 S&S Supplies and Solutions

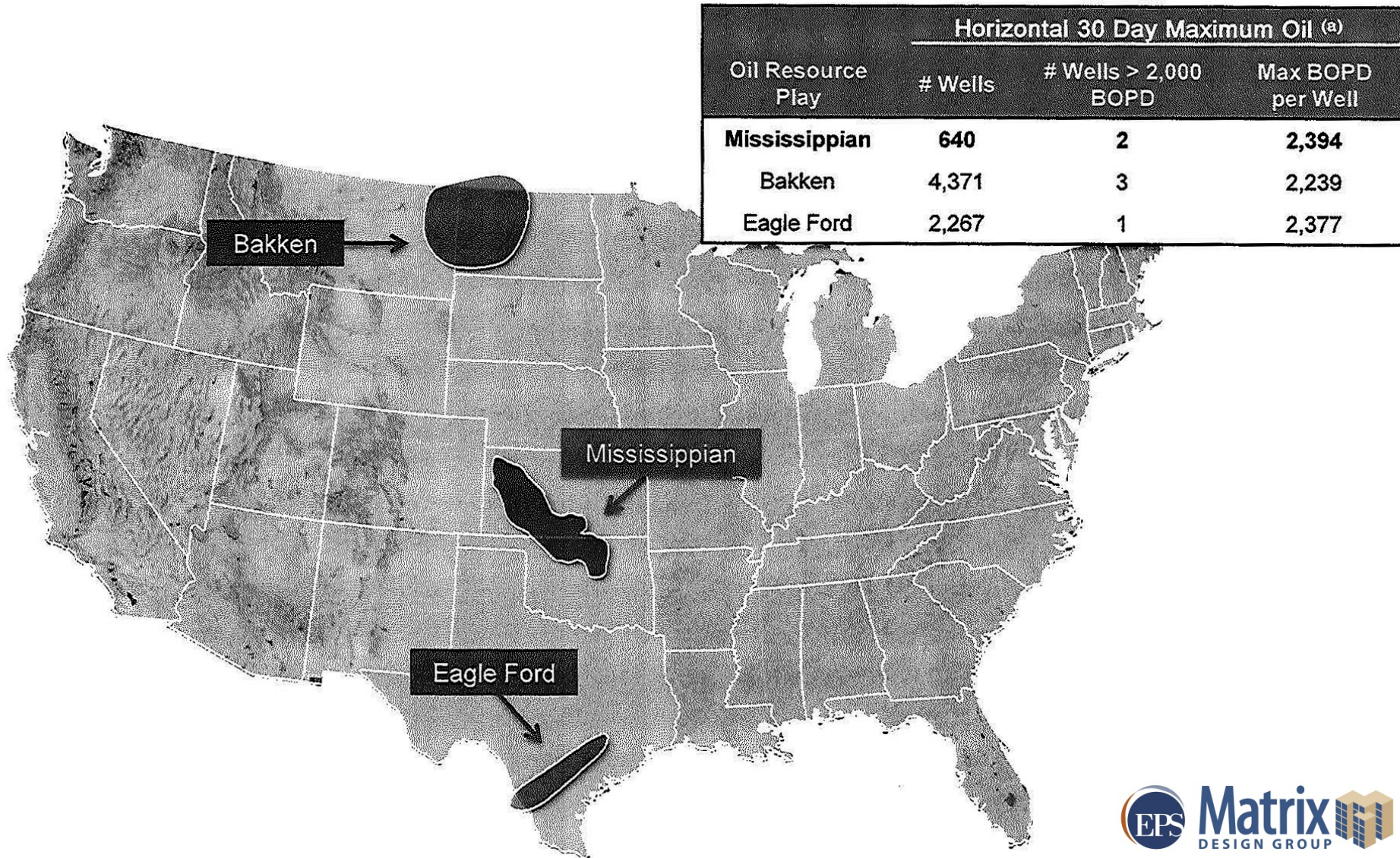
Leo Lonergan
 Leo Lonergan
 Chief Procurement Officer
 Chevron

OIL COMPANIES NEED TO GET REAL.

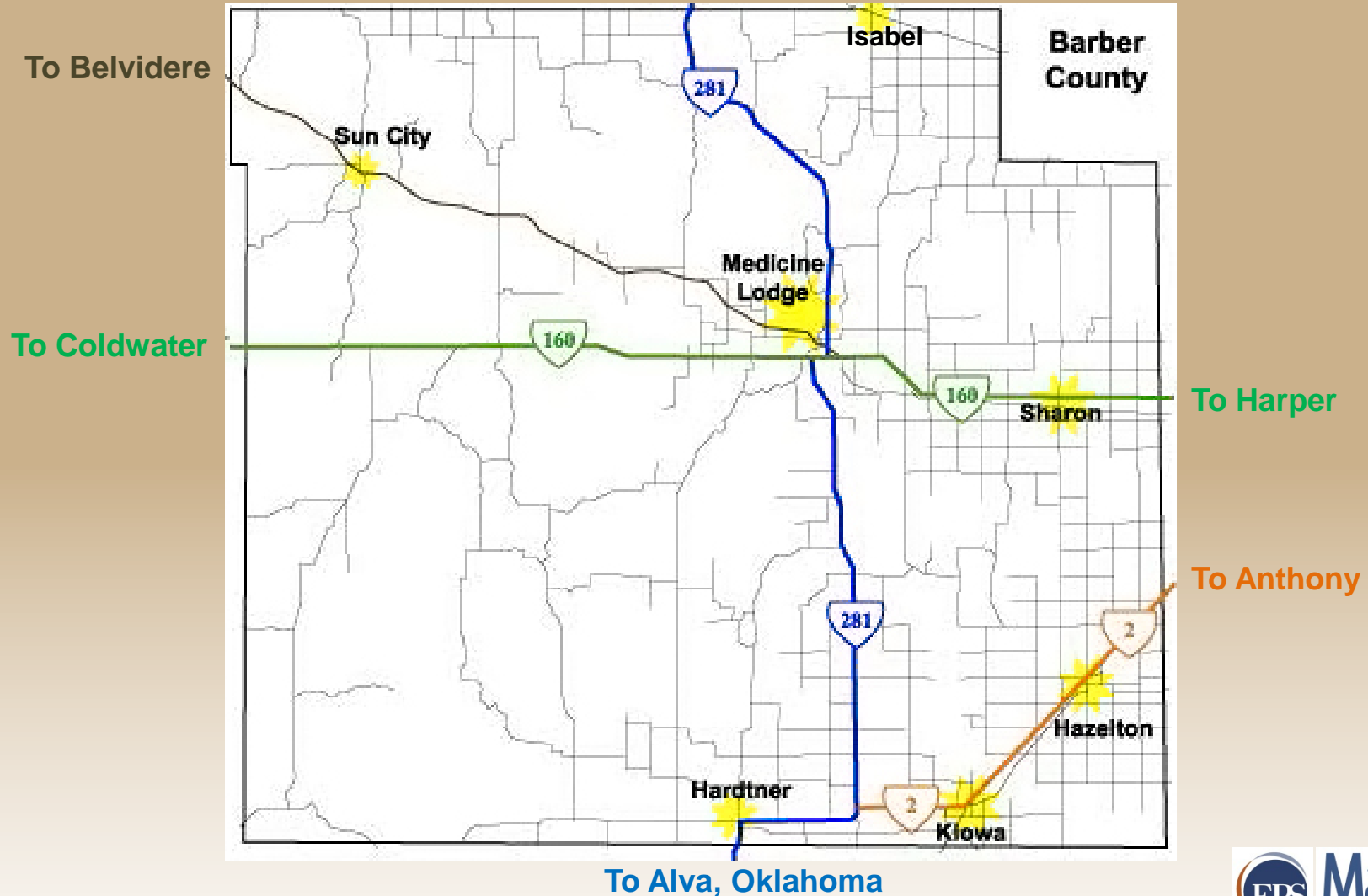
WE AGREE.

Paul Siegele
 Paul Siegele
 Vice President, Strategic Planning
 Chevron

Mississippian Oil Resource



Barber County, Kansas



How do we plan for our future?

How does Barber County better plan for its future growth and development in recognition of the on-going oil and gas industry?

Traditional Approach

- *Rules & Regulations:*
 - State*
 - County*
 - City*
- *Impact Fees-Exactions*
- *Government Costs & Administrative Time*

Traditional Approach

**Oil Companies Concerned
About Proposed Buffer
Zones in Colorado**

Denver Business Journal

**Colorado Counties Consider
Drilling's Impacts to Roads**

Planning Magazine

**Longmont is
ground zero in war
over fracking**

The Denver Post

**State ramps up rules for
fracking wells**

The Durango Herald

Traditional Approach

The Wichita Eagle
Kansas  com

Posted on Tue, Aug. 23, 2011

Kansas oil, gas producers rail against regulation

BY DAN VOORHIS
The Wichita Eagle

Energy, Oil and Gas Quarterly
Oil and Gas Taxes Keep Cost of Business
Higher for Producers in Kansas

Energy, Oil, and Gas Quarterly
Wichita Business Journal

Non-Traditional Approach

- **Collaborative:**
Create partnerships between companies and government.
- **Business Minded:**
Create partnerships between government and private developers
- **Strategic:**
Understand industry needs and how to accommodate along with public/private needs

Non-Traditional Approach

Cities Benefitting from Industry Growth:

- Midland, Texas
- Amarillo, Texas
- Williston, North Dakota
- Strasburg, Ohio



Goal

“Through a collaborative planning effort of working closely with the oil and gas industry, establish a strategic business plan that benefits government, the oil and gas industry and private enterprise.”

Government

*Energy
Companies*

*A Successful
Collaboration*

*Private
Investment*

Process

1. Establish an Authority
2. Outline the Organization
3. Engage Technical Assistance

Authority

RESOLUTION NO. 2012-01

A RESOLUTION AUTHORIZING THE FORMATION OF A WORKING COMMITTEE AND THE EXECUTION OF A MEMORANDUM OF UNDERSTANDING BY AND BETWEEN THE CITY, BARBER COUNTY, AND THE CITY OF KIOWA AS IT RELATES TO OIL, GAS, AND ENERGY DEVELOPMENT AND ECONOMIC DEVELOPMENT.

WHEREAS, the City of Medicine Lodge, Kansas, (the "City") is a duly incorporated city of the third class organized under the laws of the state of Kansas (the "State"); and

WHEREAS, the City Council (the "Governing Body") has heretofore determined it to be in the best interest of its citizens to prepare for the impact of a potential oil boom; and

WHEREAS, the Governing Body recognizes that Economic Development is the highest priority for the City and community; and

WHEREAS, the Governing Body believes that working in cooperation and coordination with the County and its sister city of Kiowa best positions the community at large for long-term, sustainable success; and

WHEREAS, the Governing Body hopes to use this opportunity to advance a long-term, viable economic development function.

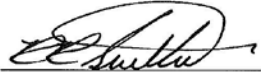
BE IT RESOLVED BY THE GOVERNING BODY OF MEDICINE LODGE, KANSAS, AS FOLLOWS:

Section 1. Memorandum of Understanding. The Mayor is hereby authorized to execute the Memorandum of Understanding By and Between Barber County, Kansas; the City of Kiowa, Kansas; and the City of Medicine Lodge, Kansas; in substantially the form presented to the Governing Body this date.

Section 2. Further Proceedings. The Mayor and City Administrator are hereby authorized and directed to take such other action as may be necessary to execute the purpose of the working committee subject to the provisions of established City Code, Ordinance, and Policy.

Section 3. Further Authority. This Resolution shall be in full force and effect from and after its adoption.

Adopted by the Governing Body of the City of Medicine Lodge, Kansas on April 16, 2012.


Major Robert R. Stutler, Mayor

ATTEST:


Kandi Simmons, City Clerk

Memorandum of Understanding

By and Between

Barber County, Kansas; the City of Kiowa, Kansas; and the City of Medicine Lodge, Kansas

The Board of Commissioners of Barber County, Kansas; and the Governing Body of the City of Kiowa, Kansas; and the Governing Body of the City of Medicine Lodge, Kansas, agree to establish a working committee for the purpose of working with oil, gas, and energy companies to prepare for in a mutually beneficial manner the potential rapid increase of people, commerce, traffic, and all of the related needs for services.

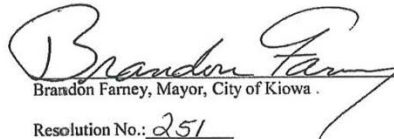
The working committee shall be comprised of the Mayors of Kiowa and Medicine Lodge, one County Commissioner, the City Administrators of Kiowa and Medicine Lodge, the Chair of the Board Barber County Development, Inc., and the Executive Director of Barber County Development, Inc.

The jurisdictions agree to fund this activity to the extent possible to include retaining professional assistance. The jurisdictions agree to use this short-term planning activity to formulate a long-term, viable economic development function to serve the people, businesses, entities, and communities of Barber County.



Steve Garten, Chair of Barber County Commissioners

Resolution No.: 2012-03



Brandon Farney, Mayor, City of Kiowa

Resolution No.: 251



Major Robert R. Stutler, Mayor, Medicine Lodge

Resolution No.: 2012-01

Organization

Working Committee:

- Major Robert Stutler, Mayor, Medicine Lodge
- Austin Gilley, City Administrator, Medicine Lodge
- Brandon Farney, Mayor, Kiowa
- Nathan Law, City Administrator, Kiowa
- Paul Harbaugh, Barber County Commissioner
- Tina Davis, Barber County Development
- Miranda Allen, Barber County Development

Technical Assistance

Matrix Design Group, Inc.

- Planning
- Engineering

Economic & Planning Systems

- Economic Impacts & Analysis
- Business Plan

Architectural Innovations

- Local Coordinator

Matrix Design Group

- Planning, Engineering and Environmental Services
- 160 Professionals – 8 offices
- Don Brandes, Vice President
- Mark Nemger, Senior Associate



Matrix Design Group

SERVICES:

Program Management
Infrastructure Master Planning
Compatibility Planning
Environmental Engineering & Remediation
Project Cost & Financial Modeling
Land Development
Landscape Architecture & Urban Design
Water Resources Planning & Design
Utility Planning & Design
Traffic Engineering & Operational Analysis
Multimodal Transportation Planning
Roadway & Bridge Design
Construction Management
Geographic Information Services
Survey

Many Dimensions – One Goal: Problem Solved

Matrix Design Group, Inc. is an award-winning interdisciplinary firm providing professional engineering, consulting, environmental, planning and program management for both the public and private sectors. Matrix brings specialized expertise with major asset redevelopment planning and property transfers. Matrix is recognized for its proactive and creative approach to planning and development based on our in-depth understanding of the critical real estate, financial and technical issues that are often the keys to a successful project.

A Formalized Partnership with DSW for a Seamless Solution



Wichita Business Journal

“Towns Team Up to Manage Mississippian Oil Boom Growing Pains”

Daniel McCoy- Reporter Wichita Business Journal, June 15, 2012

“It’s hard to find a room in Barber County.

Restaurants are full at meal times, and truck traffic is increasing on the roads. Towns are creating new RV parks and talking about other ways to handle an influx of population that may just be beginning.

It’s all the result of the early stages of a potential oil and gas boom in Kansas — one that carries with it the promise of economic growth...”

Meetings-Conferences-Presentations

- **Working Committee Meeting** in Kiowa
(April 10, 2012)
- **Conference**: “State & Municipal Regulation of Oil & Gas Development, University of Denver (April 12, 2012)
- **Working Committee Conference Call**
(May 9, 2012)
- **USDA Meeting** in Newton (May 21, 2012)

Meetings-Conferences-Presentations

- Schlumberger Meeting in Oklahoma City (May 21, 2012)
- Woolsey Operating Company Meeting in Wichita (May 22, 2012)
- Working Committee Meeting in Medicine Lodge (May 22, 2012)

Meetings-Conferences-Presentations

- Kansas Corporation Commission Meeting in Wichita (May 23, 2012)
- Wichita Business Journal Interview (June 6, 2012)
- Working Committee Meeting in Medicine Lodge (July 17, 2012)
- Shell Oil Presentation in Houston (August 30, 2012)

Meetings-Conferences-Presentations



Shell Open House

September 26, 2012
6:30 – 8:30 p.m.

Kiowa Community Center

119 S. 5th St.
Kiowa, KS 67070



Come and meet Shell representatives and learn more about the company's exploration plans for Barber County.

Outreach-Energy Companies

- Chesapeake, Dan Sparks
- Eagle Energy, Greg Street
- Slumberger, Jeff McGraw
- Halliburton, Todd Bessler
- SandRidge, Jared Brush
- Weatherford, Justin Scheffe
- Shell, Teresa Hetrick

Mapping- GIS Data Base

NEED database of county and individual cities to identify:

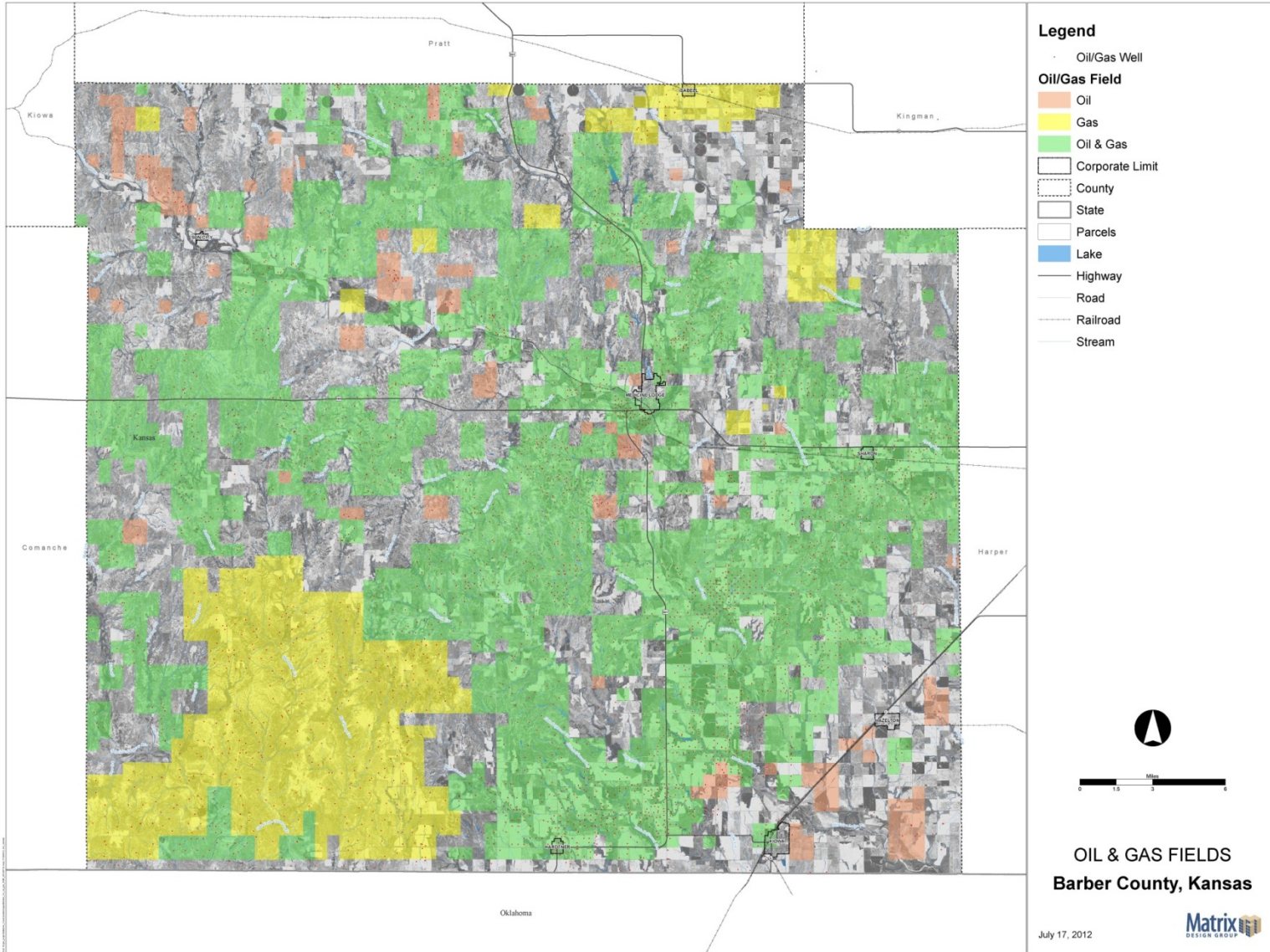
- Existing Land Uses
- Existing Zoning
- Existing Infrastructure
- Development Opportunity Areas
- Development Constraint Areas

Mapping- GIS Data Base

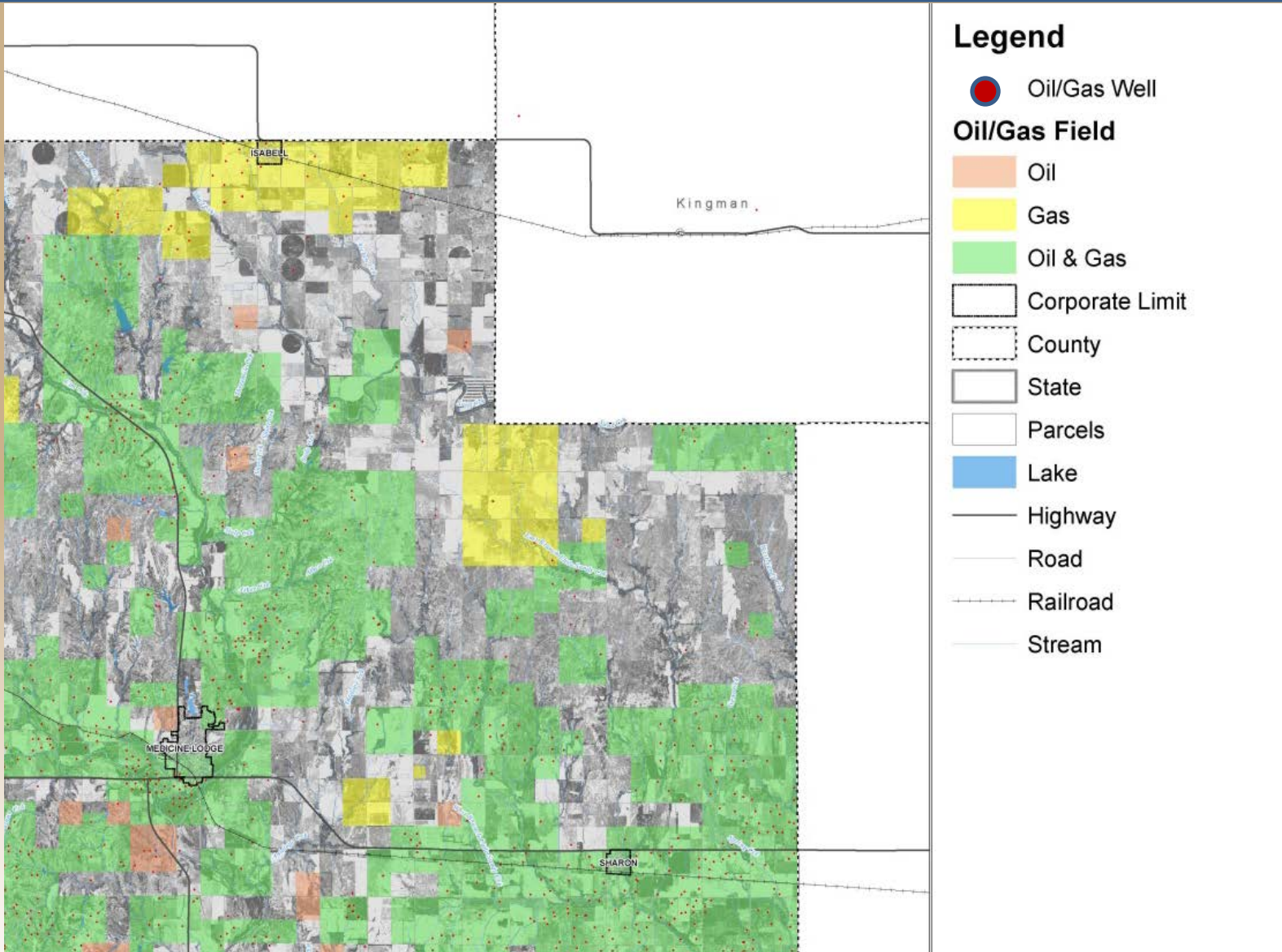
Tasks Completed:

- **Collected** all existing and available mapping data for Barber County, Medicine Lodge, and Kiowa
- **Created** selection of **Barber County** Maps:
 - Base Map-aerial, transportation, incorporated areas
 - Oil and Gas Field Map
- **Created** selection of **Medicine Lodge** Maps:
 - Existing Zoning
 - Future Land Use Concept
- **Created** selection of **Kiowa** Maps:
 - Existing Zoning Map
 - Future Land Use Concept

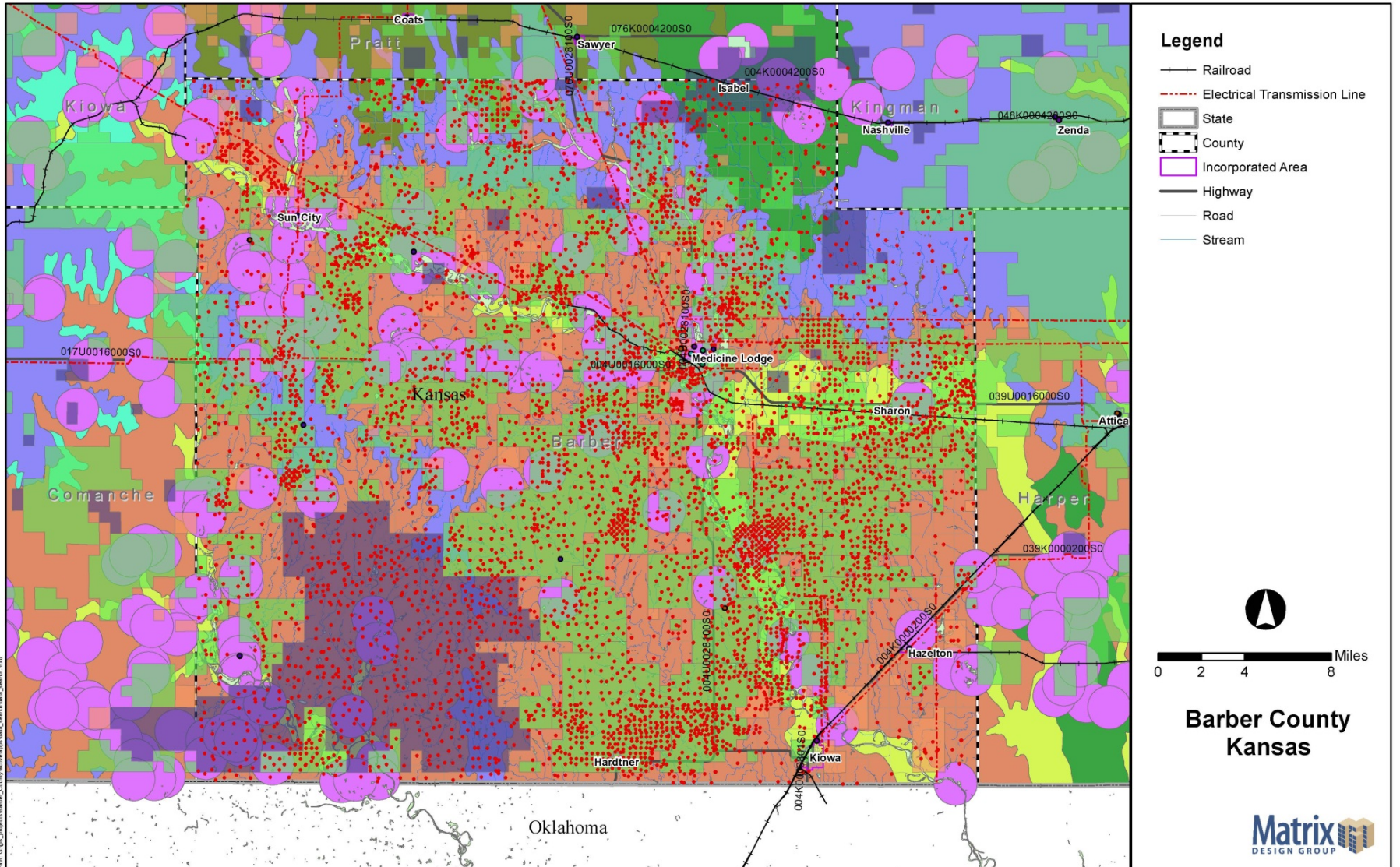
County Data Base



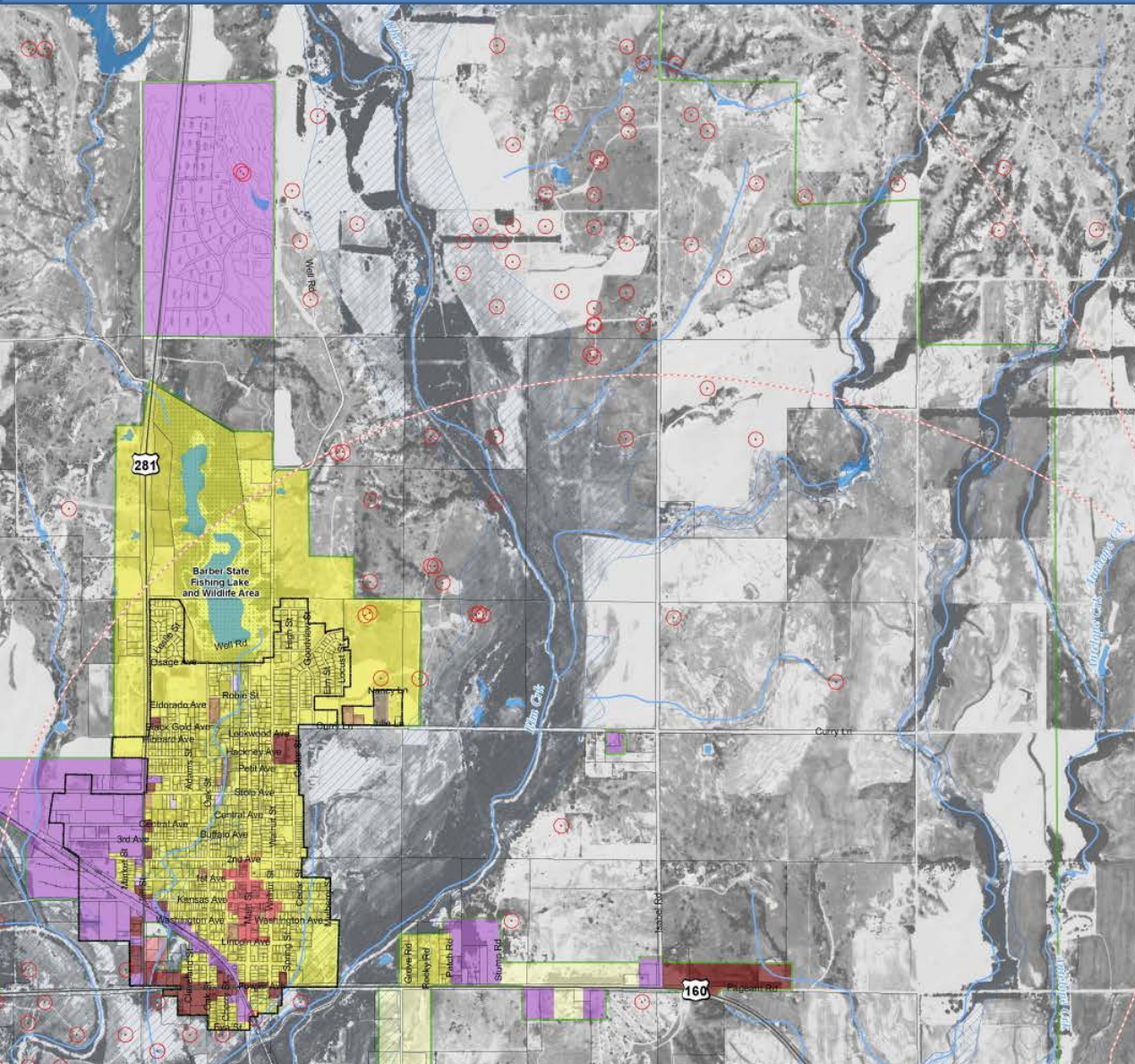
County Data Base



Interactive Mapping Data



Medicine Lodge Planning Maps



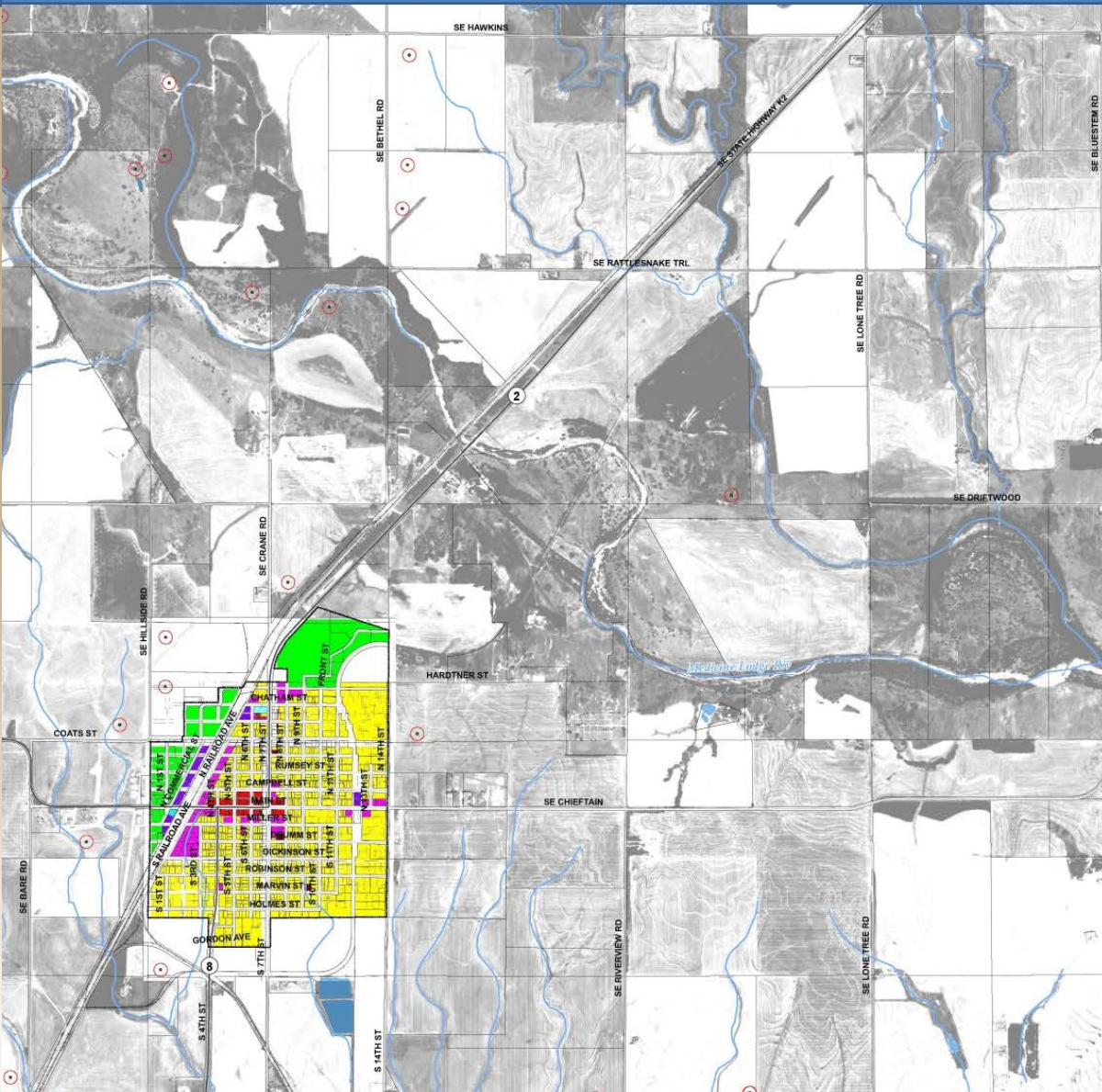
Legend

- Oil/Gas Well
- Oil/Gas Well 150 ft. Buffer
- Barber State Fishing Lake And Wildlife Area
- Floodplain Overlay
- Airport Height Control









Zoning

- A-L
- C-1: Central Business
- C-2: General Commercial
- C-S: Highway Service
- I-1: Light Industrial
- I-2: Heavy Industrial
- M-P: Manufactured Home Park
- R-1: Single-Family Dwelling
- R-2: Two-Family Dwelling
- R-3: Multiple-Family Dwelling
- R-S: Residential Suburban
- Corporate Limit
- Parcels
- Lake
- Highway
- Railroad
- Stream

Kiowa Planning Maps



Legend

-  Oil/Gas Well
-  Oil/Gas Well 150 ft. Buffer
-  Corporate Limit
-  Parcel
-  Lake
-  Highway
-  Railroad
-  Stream

	R-1A – SINGLE FAMILY RESIDENTIAL
	R-1B – SINGLE FAMILY RESIDENTIAL
	RP-2 – PLANNED MEDIUM DENSITY RESIDENTIAL
	CP-1 – PLANNED GENERAL COMMERCIAL
	CP-2 – PLANNED CENTRAL BUSINESS
	CP-3 – PLANNED HIGHWAY SERVICE GROUND
	IP-1 – PLANNED LIGHT INDUSTRIAL
	IP-2 – PLANNED MEDIUM INDUSTRIAL

Government

*Energy
Companies*

*A Successful
Collaboration*

*Private
Investment*

Barber County Strategic Business Plan for Oil & Gas Development

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Oil Industry Activity & Impacts

- David Schwartz, Senior Associate
Economic & Planning Systems

Economic & Planning Systems, Inc.

- Full service urban economics consulting firm
- Offices: Denver, Berkeley, Los Angeles, Sacramento
- Expertise:
 - Economic and Fiscal Impact Analysis
 - Real Estate Economics
 - Comprehensive Planning
 - Market Research
 - Land Use Policy
- Focus:
 - Integration of data analysis with public policy
 - Understand goals and objectives of public and private sectors



Oil Industry Impacts in Barber County, Kansas

The Economics of Land Use



presented by

David Schwartz, Senior Associate
Economic & Planning Systems, Inc.

Berkeley
Denver
Los Angeles
Sacramento

July 17, 2012

Strategic Business Plan

- A short term action strategy for the development, sales, and marketing of a product or service
- Typically includes:
 - Overall vision
 - Market analysis
 - Competitive analysis
 - Business proposition
 - Implementation plan
- Modified for the development of a partnership between Barber County and the energy companies:
 - To promote oil drilling and exploration for its economic development benefits
 - To work with the energy companies to address both community and industry needs

Business Plan Outline

- Existing Conditions
 - Historical drilling and exploration
 - New horizontal drilling activity
 - Employment and business locations and activity
- Market Analysis
 - Mississippian Basin drilling forecasts
 - Barber County competitive position
 - Employment demand forecasts
 - Energy industry facility and housing needs

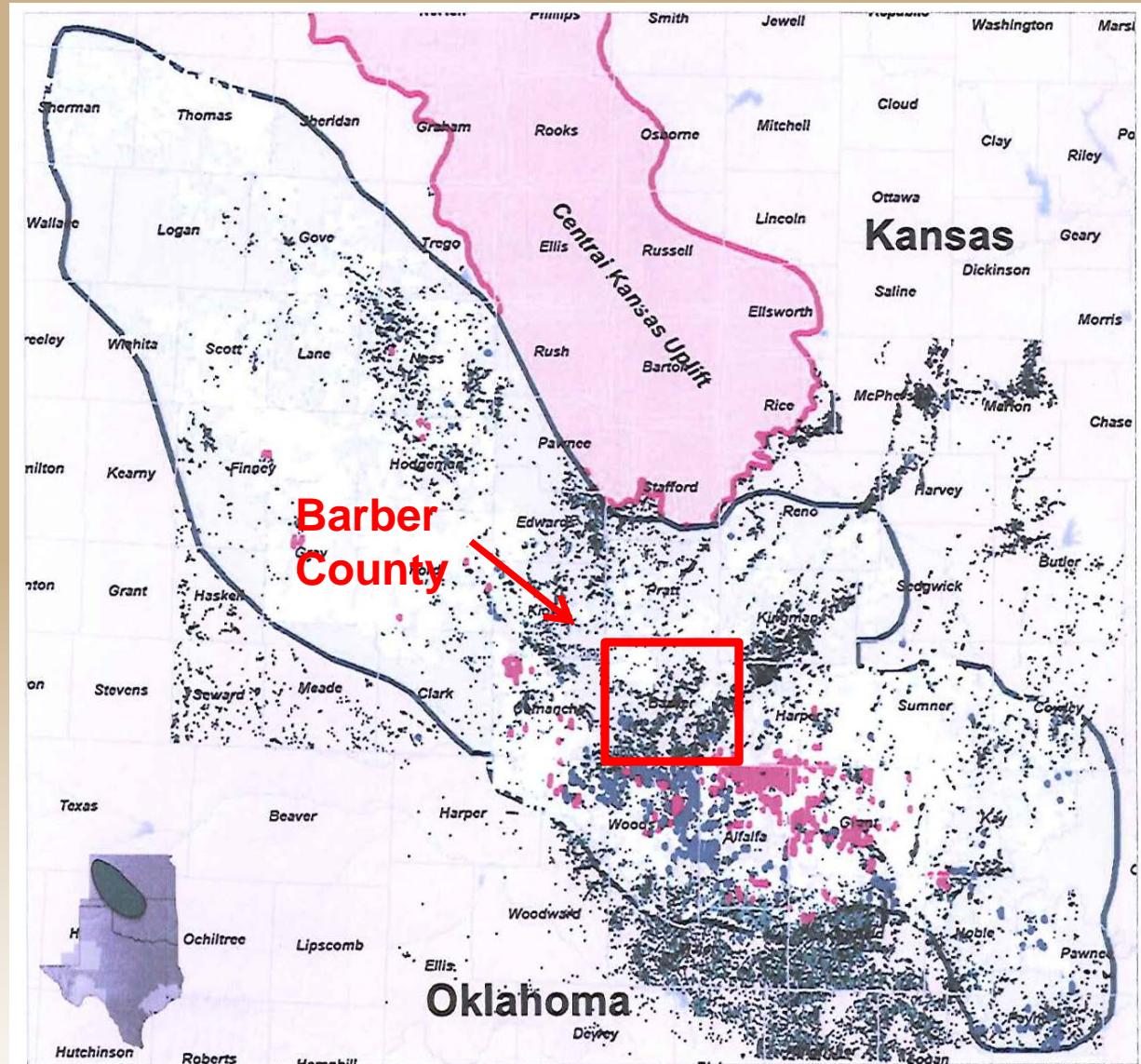
Business Plan Outline

- Business Proposition
 - Proactively engage energy companies in the planning process
 - Expand Working Group to be a public private partnership
 - Identify business and industrial space and housing needs
- Implementation Strategy
 - Plan for needed infrastructure and utilities
 - Identify funding and financing approaches
 - Create government and real estate partnerships

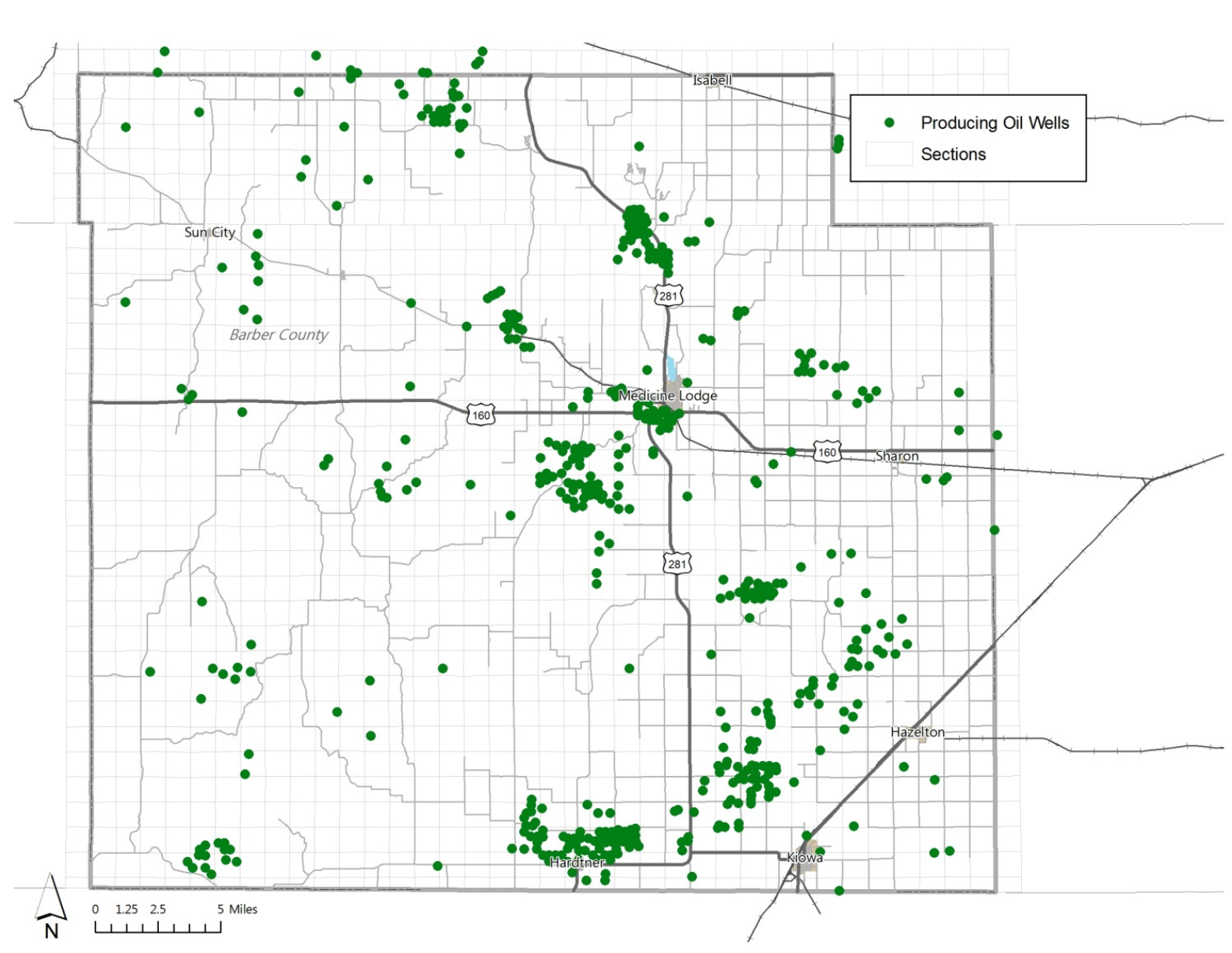
Preliminary Market Analysis

- Oil drilling activity and history
- Current drilling and exploration activity
- Barber County competitive position
- Preliminary development forecasts

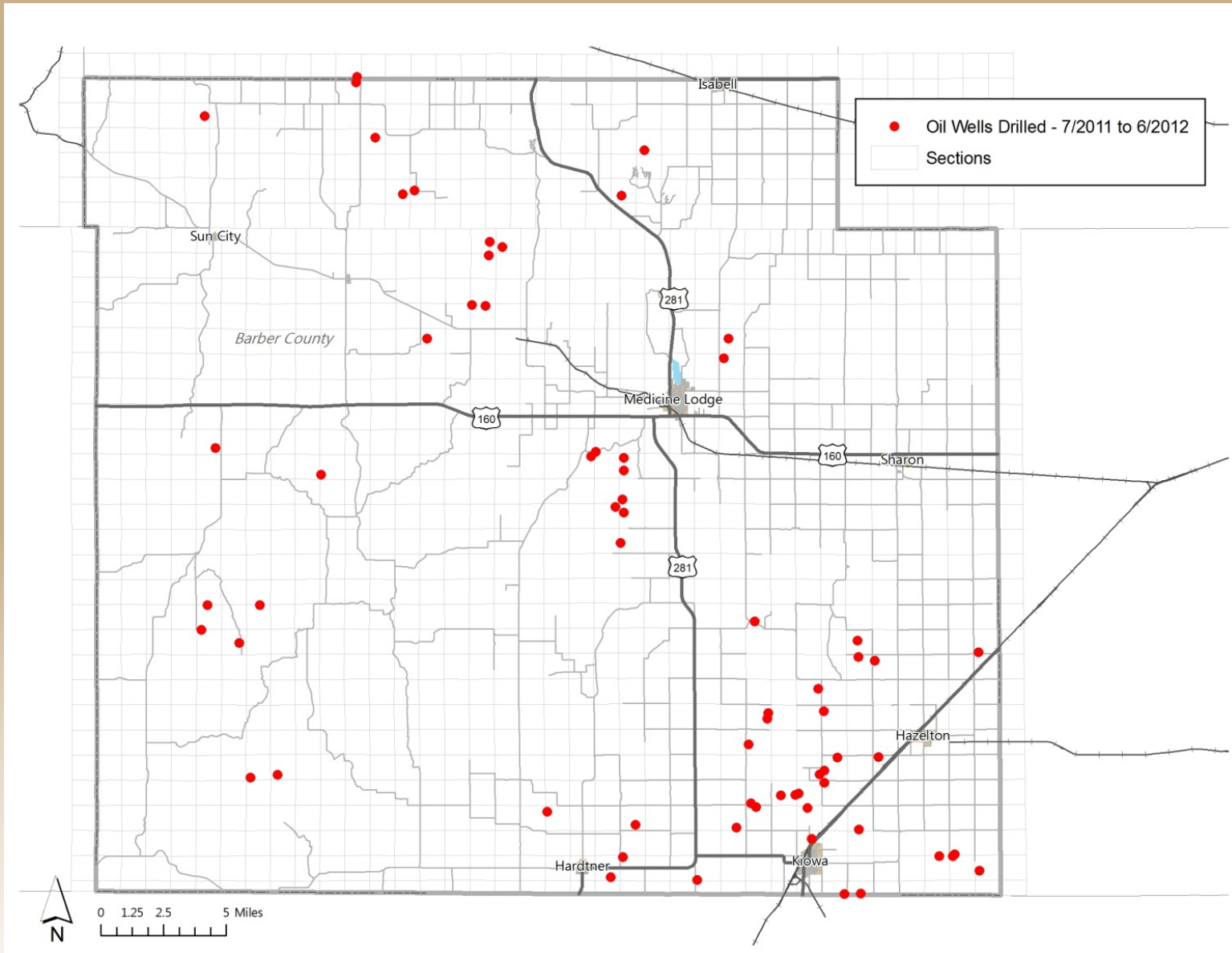
Mississippian Formation



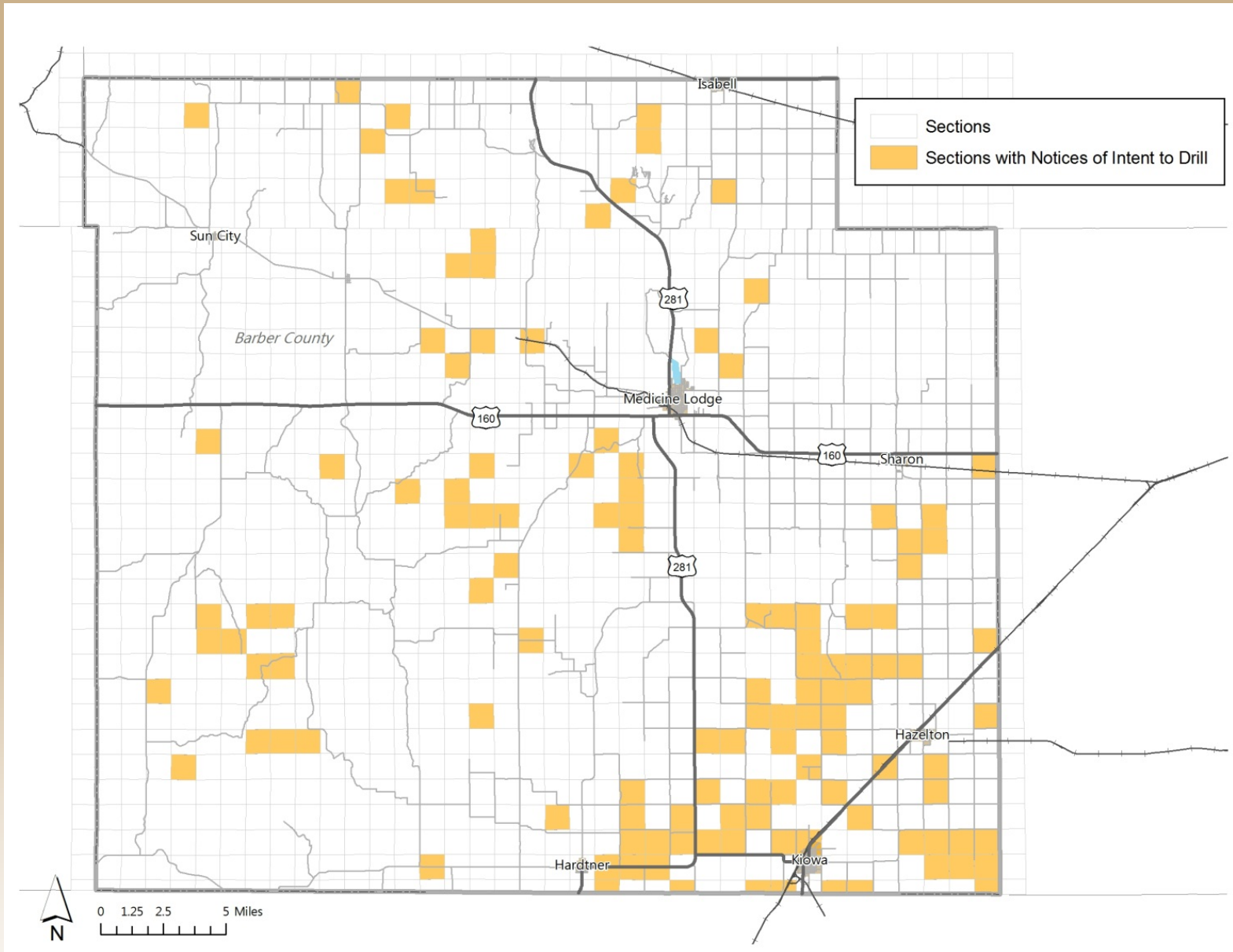
Oil-Producing Wells, Barber County (2012)



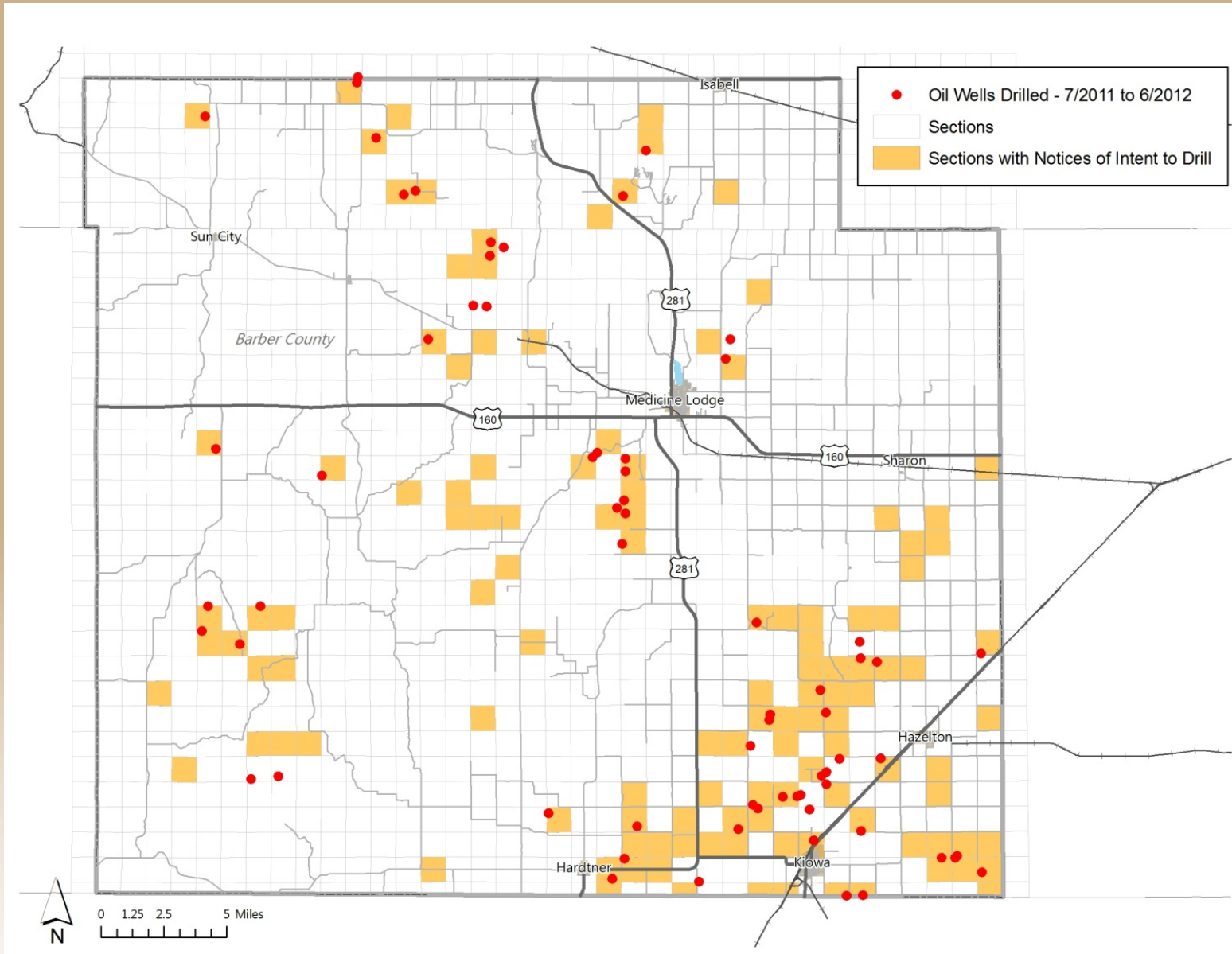
Oil Wells Drilled – 7/2011 to 6/2012



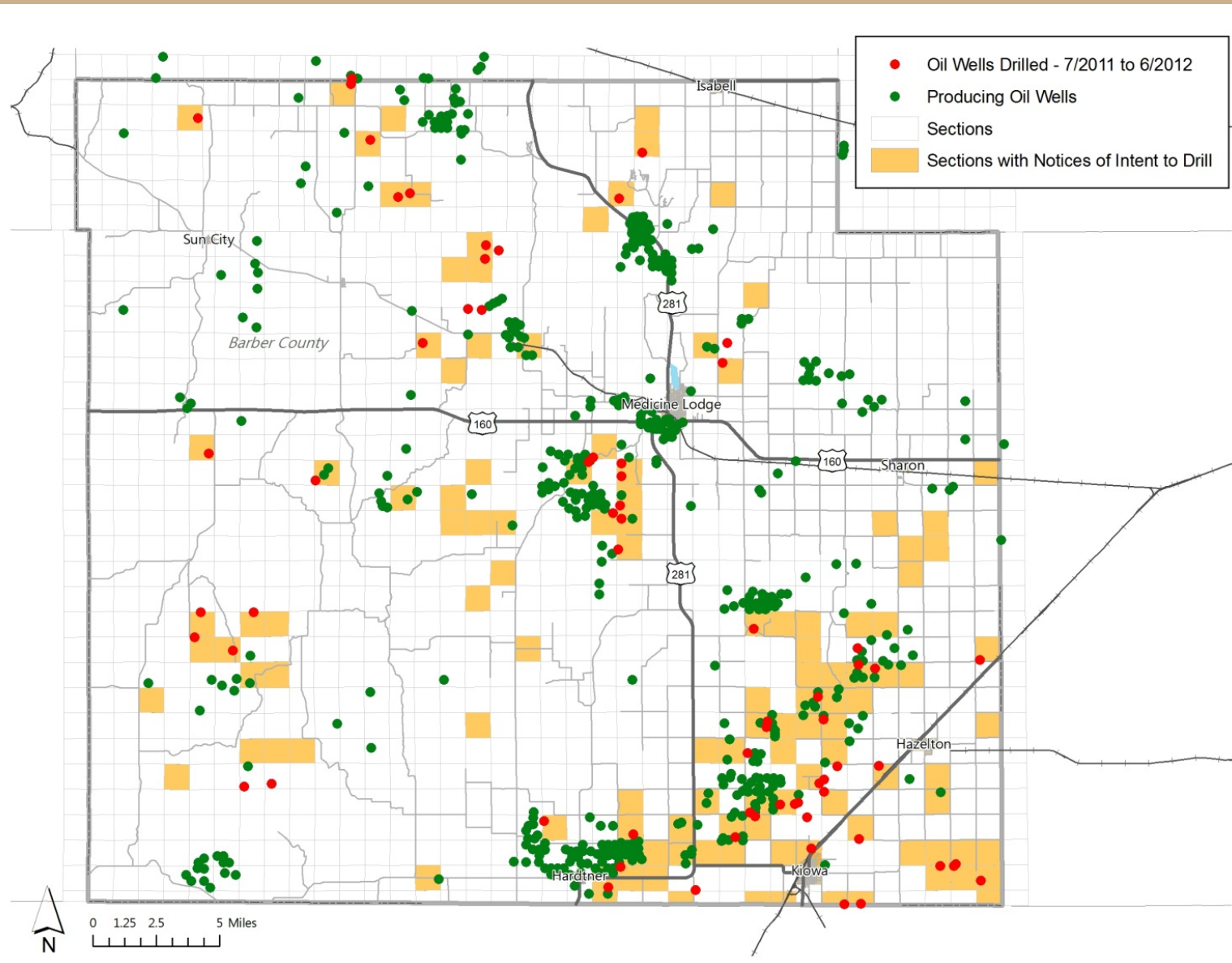
Notices of Intent to Drill – 7/2012 to 6/2012



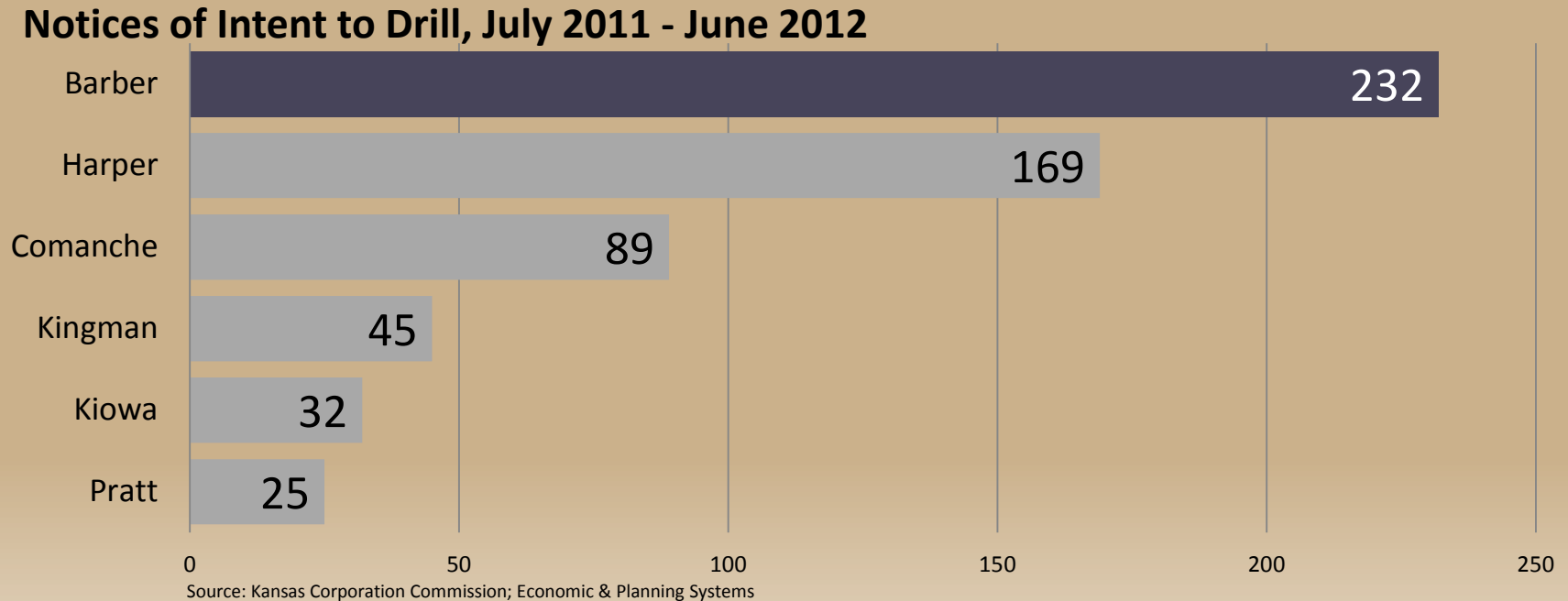
Current Drilling & Notices of Intent to Drill



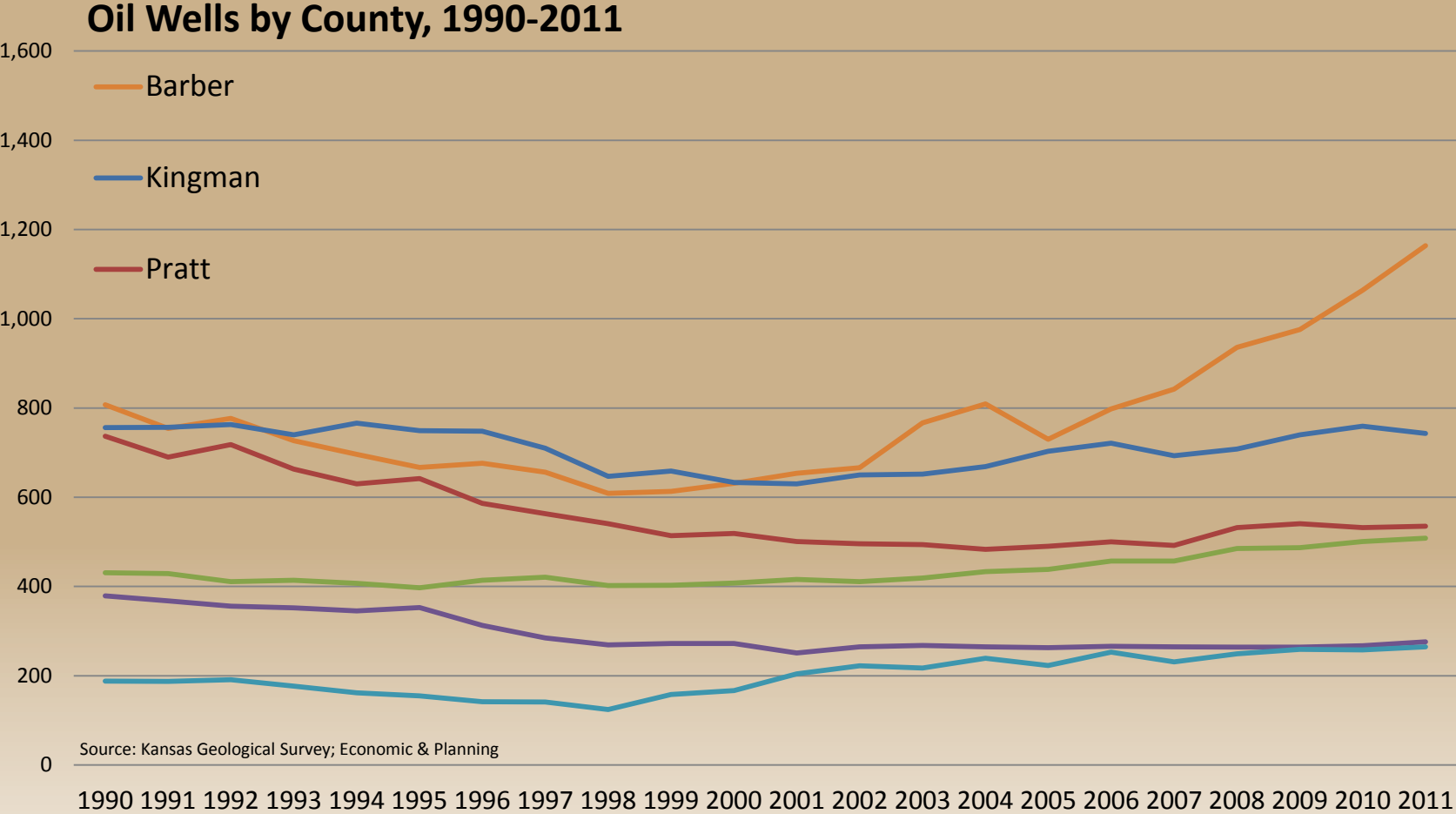
Map of Current Oil Activity



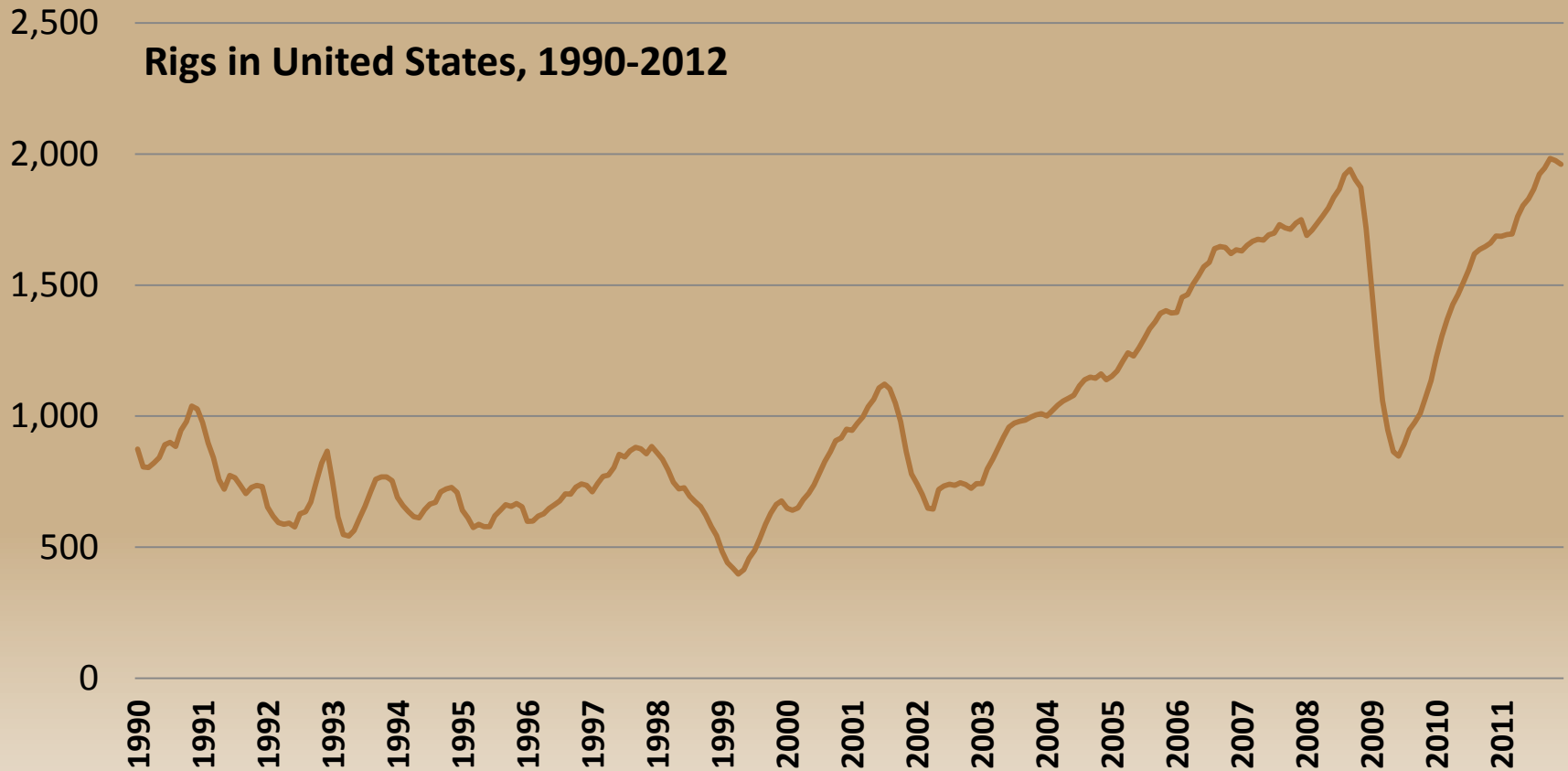
Notices of Intent to Drill – 7/2011 to 6/2012



Oil-Producing Wells by County, 1990-2011



Rigs in the U.S., 1990-2012



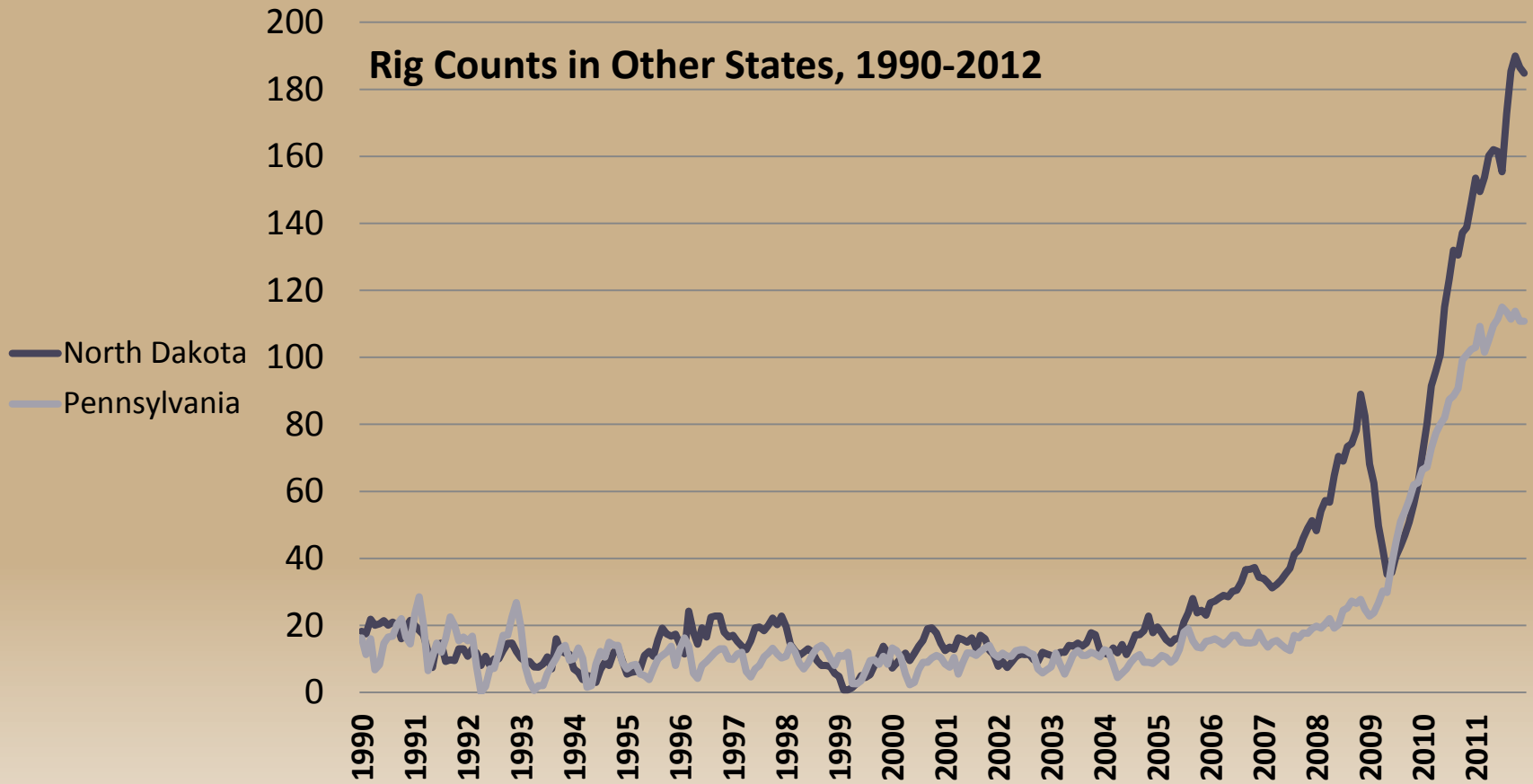
Source: Baker Hughes; Economic & Planning Systems

Rigs in Kansas, 1990-2011



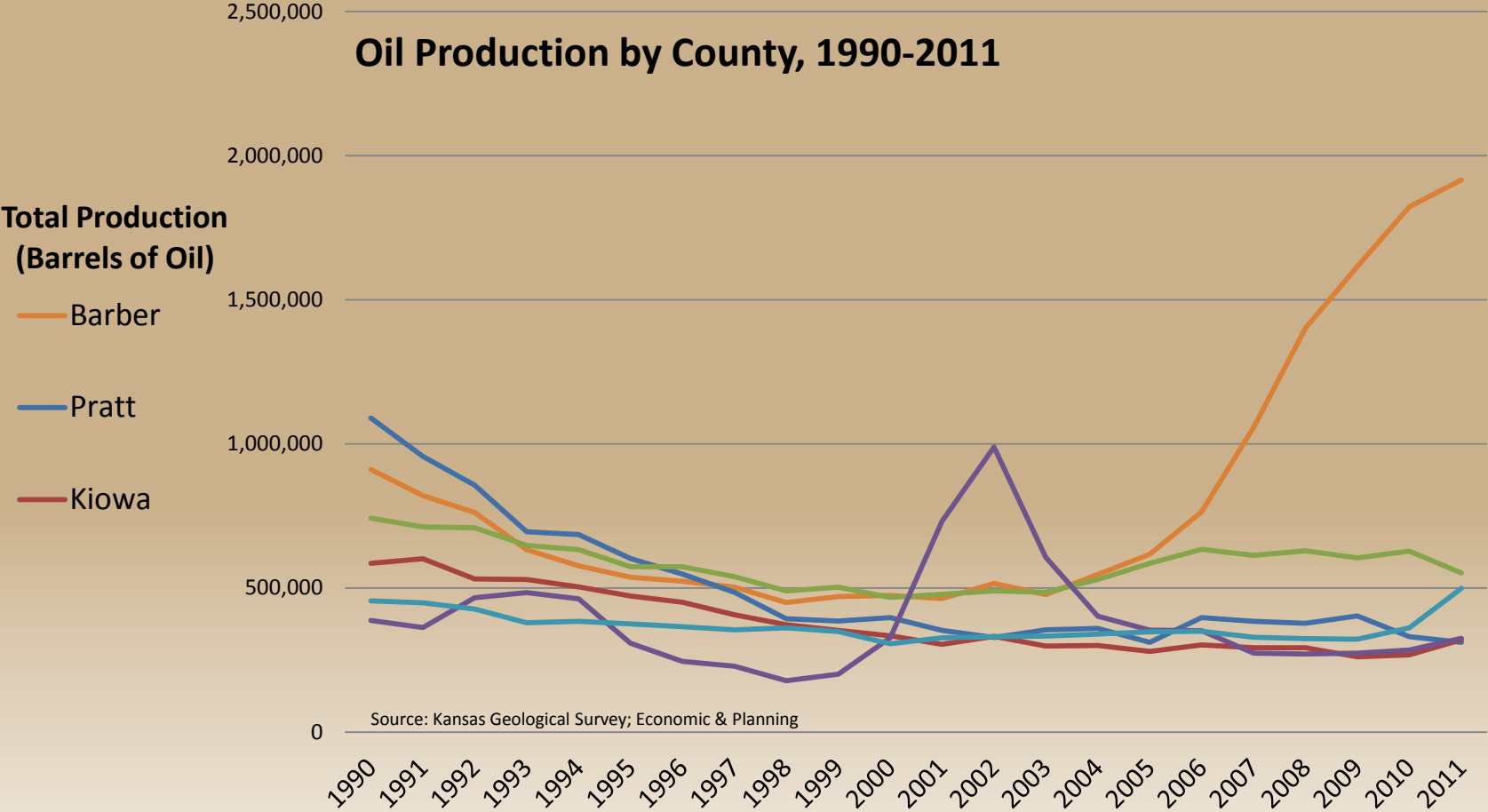
Source: Baker Hughes; Economic & Planning Systems

Rigs in Other States, 1990-2012



Source: Baker Hughes; Economic & Planning Systems

Oil Production by County, 1990-2012



Impacts of Industry Phases

Planning

- Land Lease (Duration 3 to 5 Years)
- Notice of Intent to Drill (Expires in 1 Year from approval)
- Land Men: 200 per approximate 1,500 sq. miles

Drilling

- 1 rig per 9 wells per year
- 2 Construction jobs per rig worker (Approximately 50 jobs per 9 wells)
- Duration: Approximately 2 months

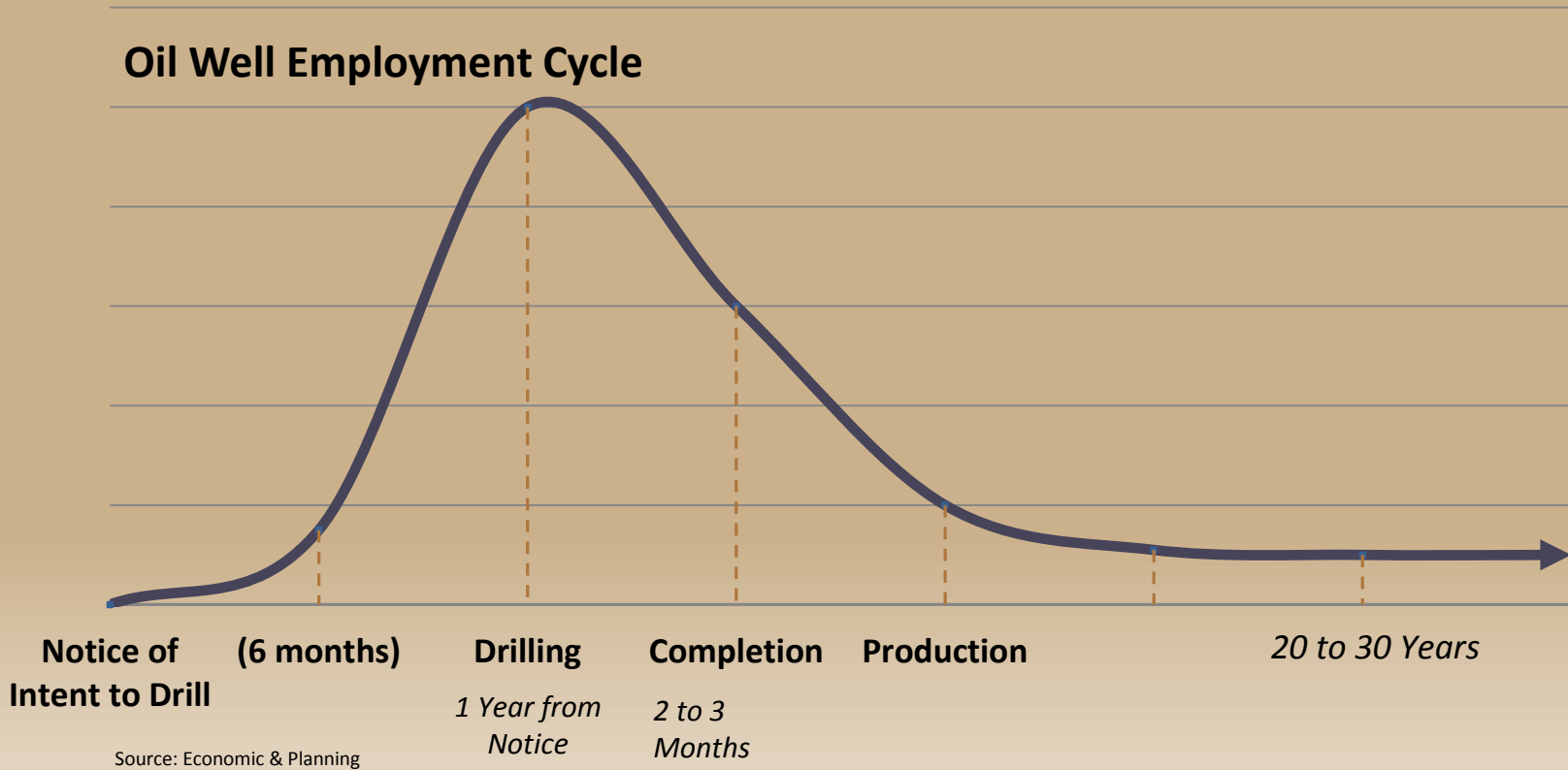
Completion

- 15 to 30 workers per rig crew
- Duration: 2 to 3 months
- Not all wells drilled are productive; hit rates range from 10 to 50 percent

Production

- 100 jobs per 10,000 barrels of oil equivalent per day (boe/d)
- Typical productive life of a well: 20 to 30 years
- Lifetime production: 450,000 barrels (approx. 40 boe/d for 30 years)

Employment Cycle per Rig



Historical Information

- Barber County Oil Activity
 - 200 wells drilled during past 12 months;
 - Increasing percent of wells drilled are horizontal:
 - Mississippian: 6 percent;
 - Kansas: <10 percent;
 - South central 6 counties of KS: >20 percent in recent past and growing (>40 percent most recently)
 - 232 notices of intent to drill filed in past 12 months;
 - Wells in production from 2006 to 2011:
 - Average 70 productive wells per year (min. 40 / max. 100)
 - Lifetime Production:
 - Well production can range from 400,000 to 450,000 barrels;
 - Some can be more productive, in excess of 500,000 barrels;
 - 20 to 30 years

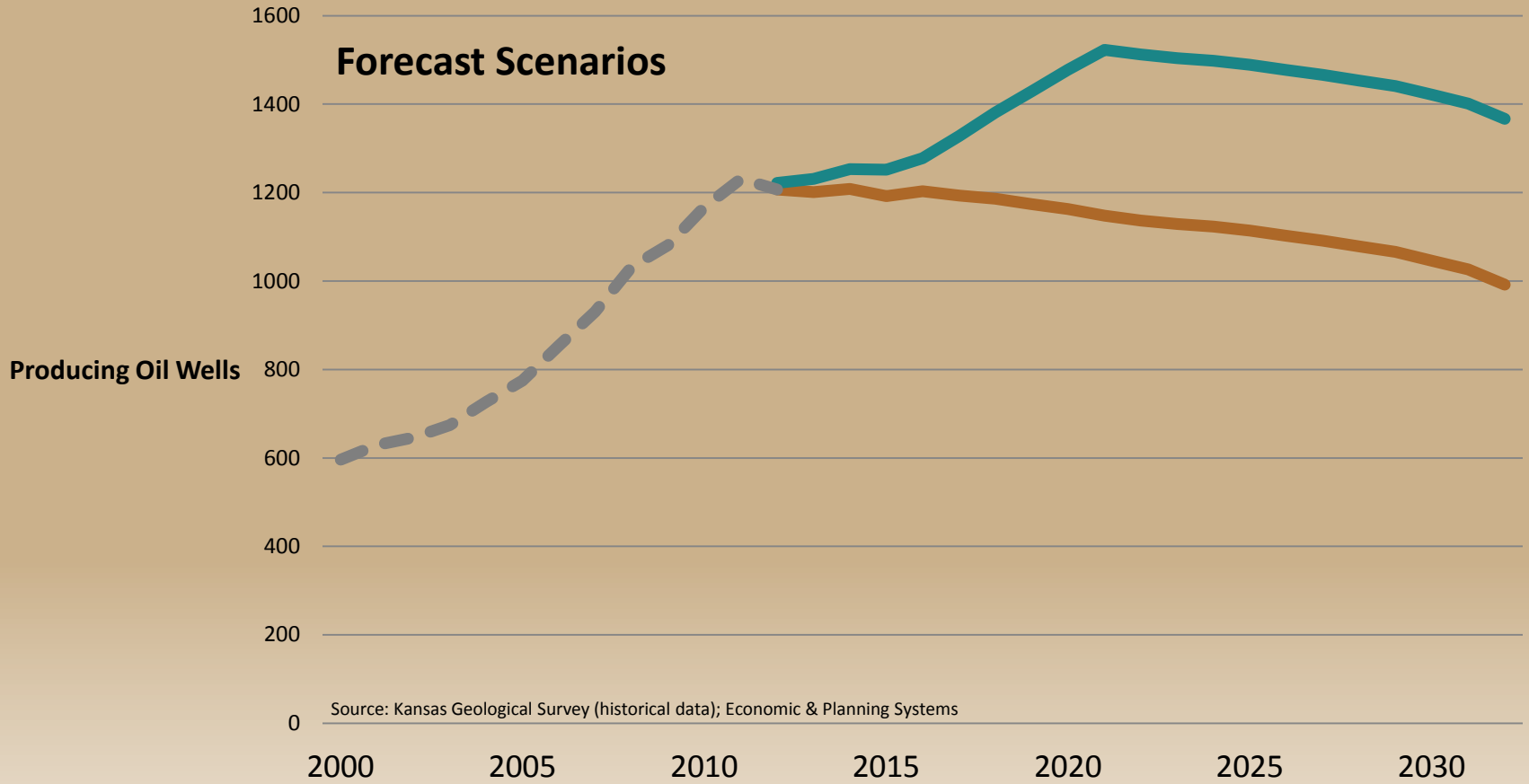
Impact Forecast

- Projection Assumptions
 - Lifetime average well production: 450,000 barrels of oil;
 - Lifespan of well: 30 years;
 - Short term production: between 50 and 1,500 boe/d;
 - Long-term production (lifetime): approximately 40 boe/d;
 - Hit rate: approximately 30 percent of wells drilled become productive;
 - Drilling: 150 to 200 wells drilled per year into mid-term future (10 years or less); and
 - In production: estimated 45 to 60 productive wells per year

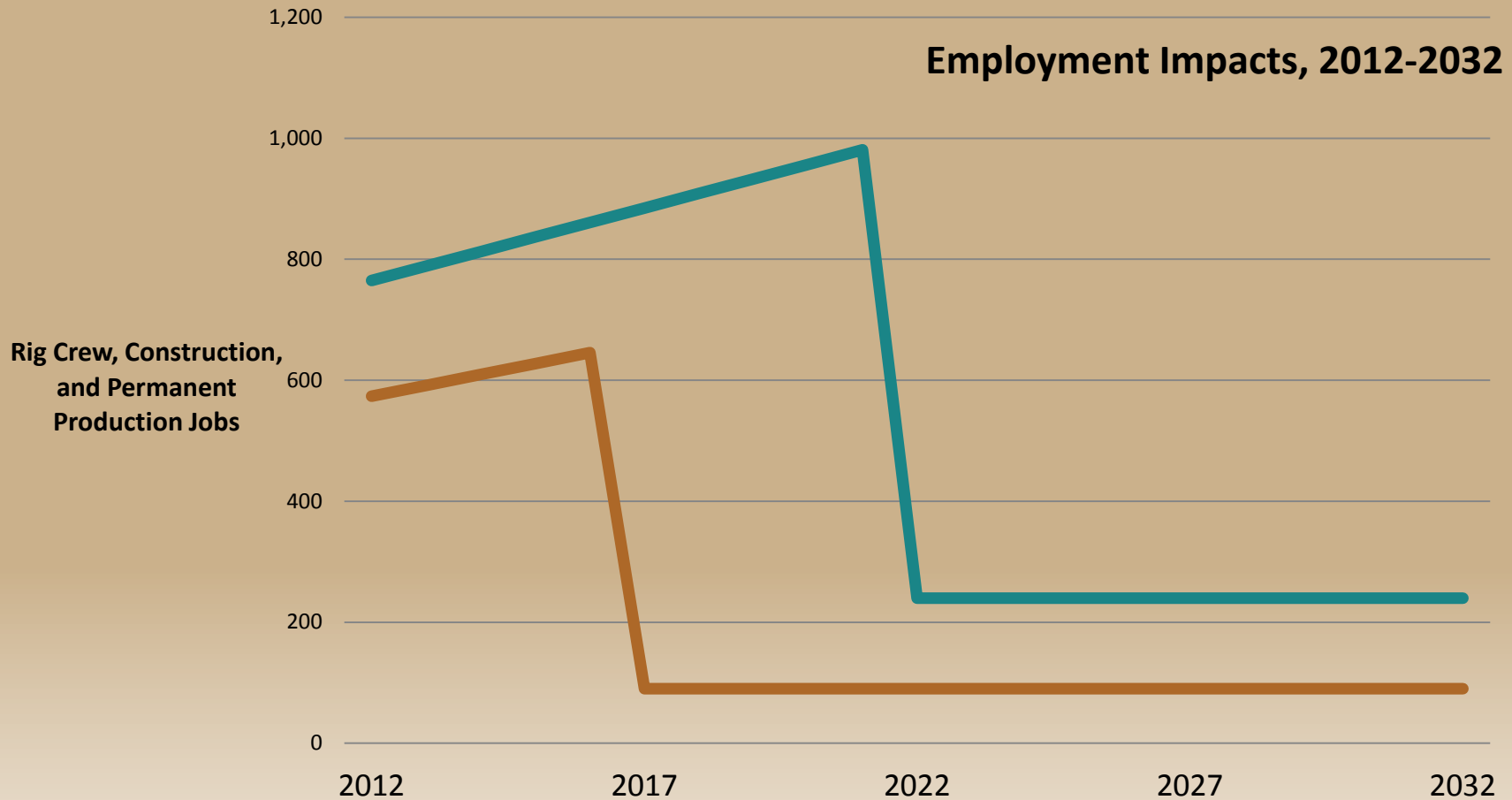
Forecast Scenario Assumptions

- Low
 - 5-year exploration period;
 - 10 rigs in Barber County (out of approximately 30 in KS);
 - 30 percent of wells drilled become productive;
 - 150 wells drilled per year; and
 - 45 productive wells at 40 boe/d
- High
 - 10-year exploration period;
 - 15 rigs in Barber County (out of estimated 60 in KS);
 - 30 percent of wells drilled become productive;
 - 200 wells drilled per year; and
 - 60 productive wells at 40 boe/d

Forecast of Oil-Producing Wells, 2012-2032



Industry Employment Impact, 2012-2032



Source: Kansas Geological Survey (historical data); Economic & Planning Systems

Barber County Employment Impacts

- 600 to 800 Jobs during exploration cycle
- Construction cycle lasting for 5 to 10 years
- 900 to 1,200 total jobs (1.5 multiplier)
- What portion of jobs can be captured locally?
 - Some will operate out regional centers
 - Primarily OKC or Wichita
- Challenge is capturing enough jobs to support locally-based development
 - Housing
 - Business and industrial parks
- Generating revenues to pay for needed infrastructure improvements

Barber County Housing Impacts

- Temporary housing
- RV parks
- Company built work camps
- Close to site of drilling
- Inefficient and impactful
- Demolish/move when no longer needed



Barber County Housing Options

- Apartment complexes
- Extended stay hotels
- Built in town
- Minimize environmental impacts
- Pre-leased to energy companies
- Can be convert to senior housing after boom



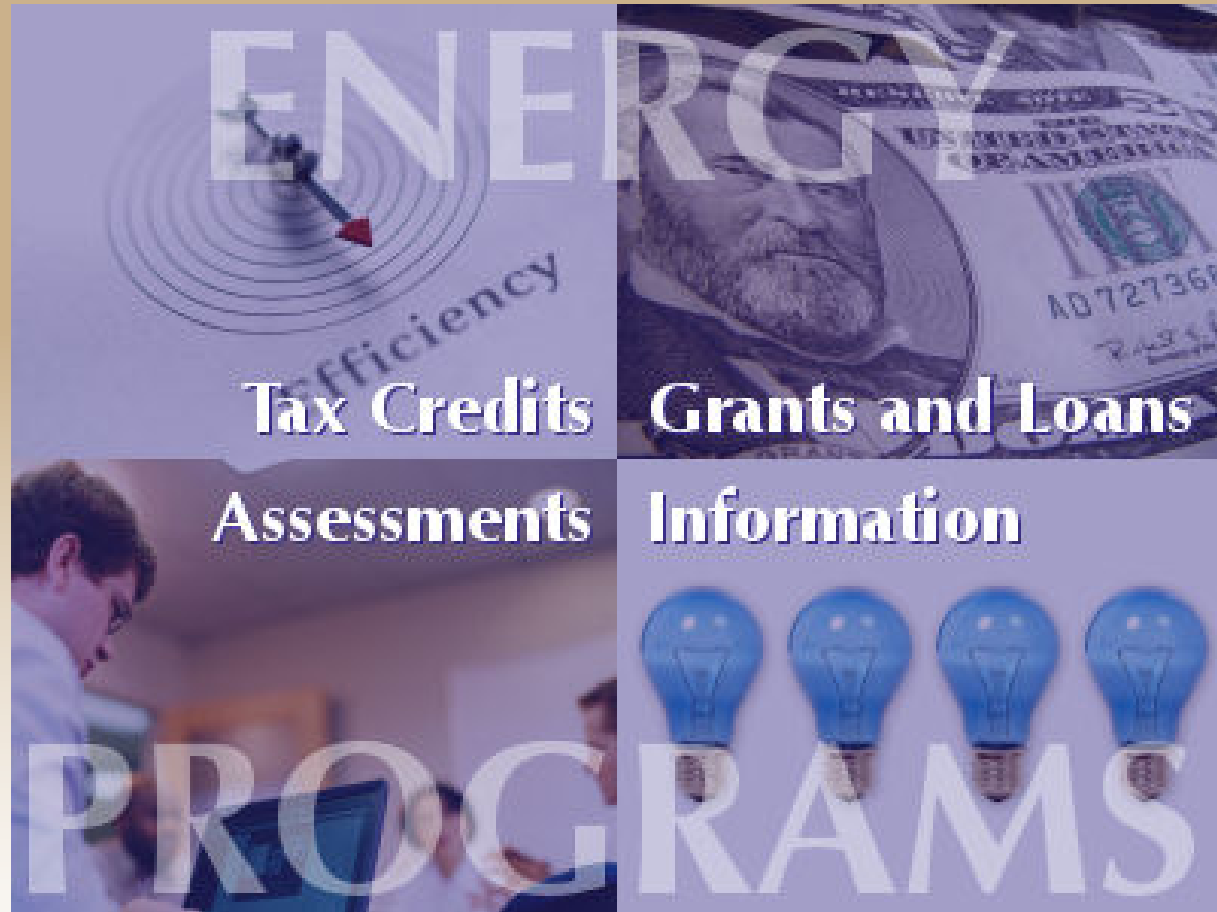
Business and Industrial Parks

- Industrial park demand
 - Energy companies
 - Drill rigs
 - Service providers
- Industrial park requirements
 - Rail accessible
 - Close highway access
 - Land intensive
 - Avg. floor area ratios-.10 FAR
 - Outdoor storage



Implementation Strategies

- Partner with the energy companies
- Work together to build the needed housing and industrial space
- Public side
 - Barber County
 - Medicine Lodge
 - Kiowa
- Private side
 - Shell
 - Chesapeake
 - SandRidge



Barber County Strategic Business Plan for Oil & Gas Development



Thank You

