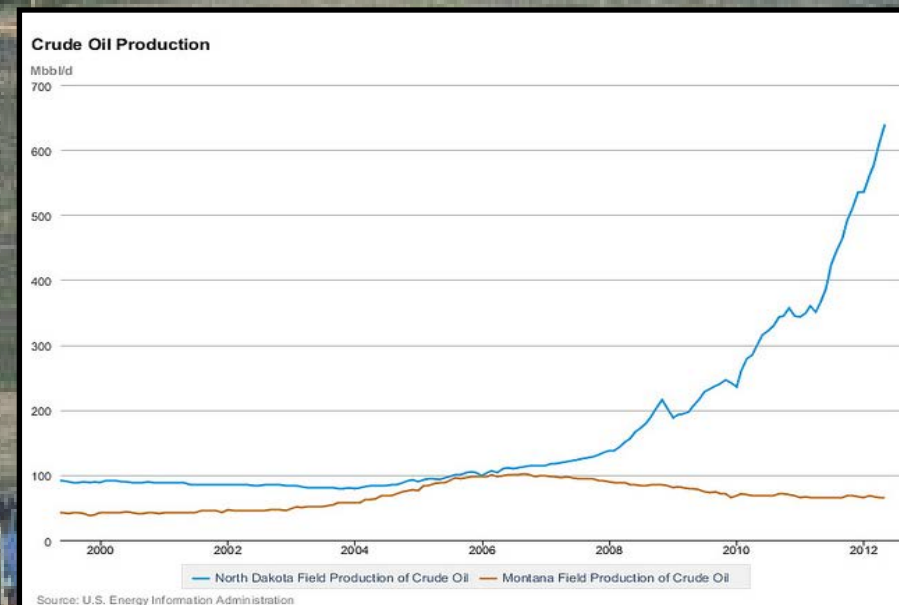
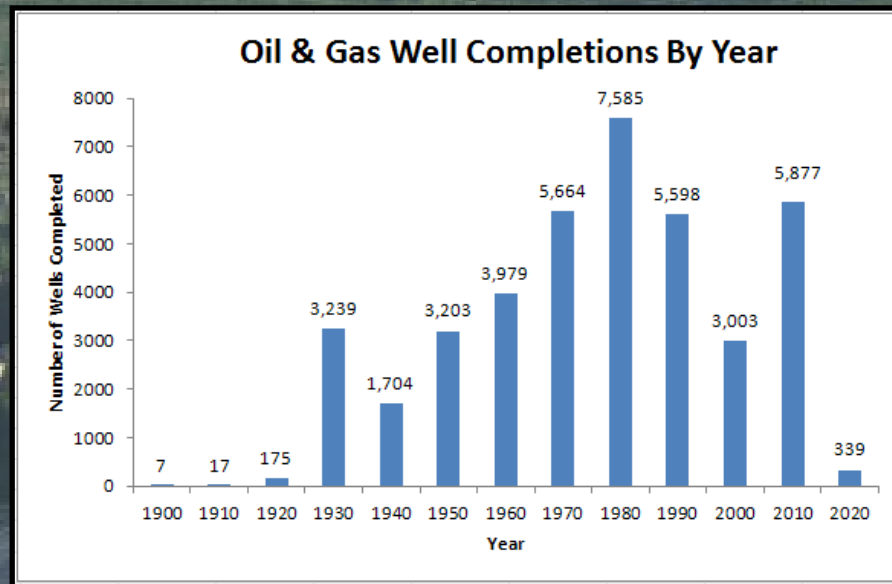


PLANNING FOR IMPACT

HOW RURAL COMMUNITIES ARE DEALING WITH THE
LONG TERM EFFECTS OF OIL & GAS DEVELOPMENT
IN THE BAKKEN

THE BAKKEN: A BRIEF HISTORY

- The last 40 years in the Bakken...
- Resource extraction as part of Montana's history:
 - Regions affected - generally the same
- Previous 'boom and bust' cycles:
 - Early-mid 1980s
 - Outcome of previous 'bust'
- Planning challenges:
 - Effective planning for boom-time must address what will happen in the long term
 - Acknowledgement of inevitable 'bust'
 - How you address housing, infrastructure and public services must be two-fold; what is needed now compared to what will be necessary 18 months (and 20 years) from now
 - Fluctuations in workforce related to the drilling of a well;
 - Peak when drilling, with potential reduction of 2/3 within 18-24 months.



ISSUES

Rapid increase in population

Transient vs. permanent population growth

Inability to quantify impacts using Census Data

Level of service needs - present and future

Affordable housing - quantity and quality

Aging infrastructure

Cost of operation and maintenance

Road impacts

Dust from gravel roads, air quality

Water availability

Increased crime & need for fire protection

Health care for varying population needs

Provision of public services

Water and sewer rates

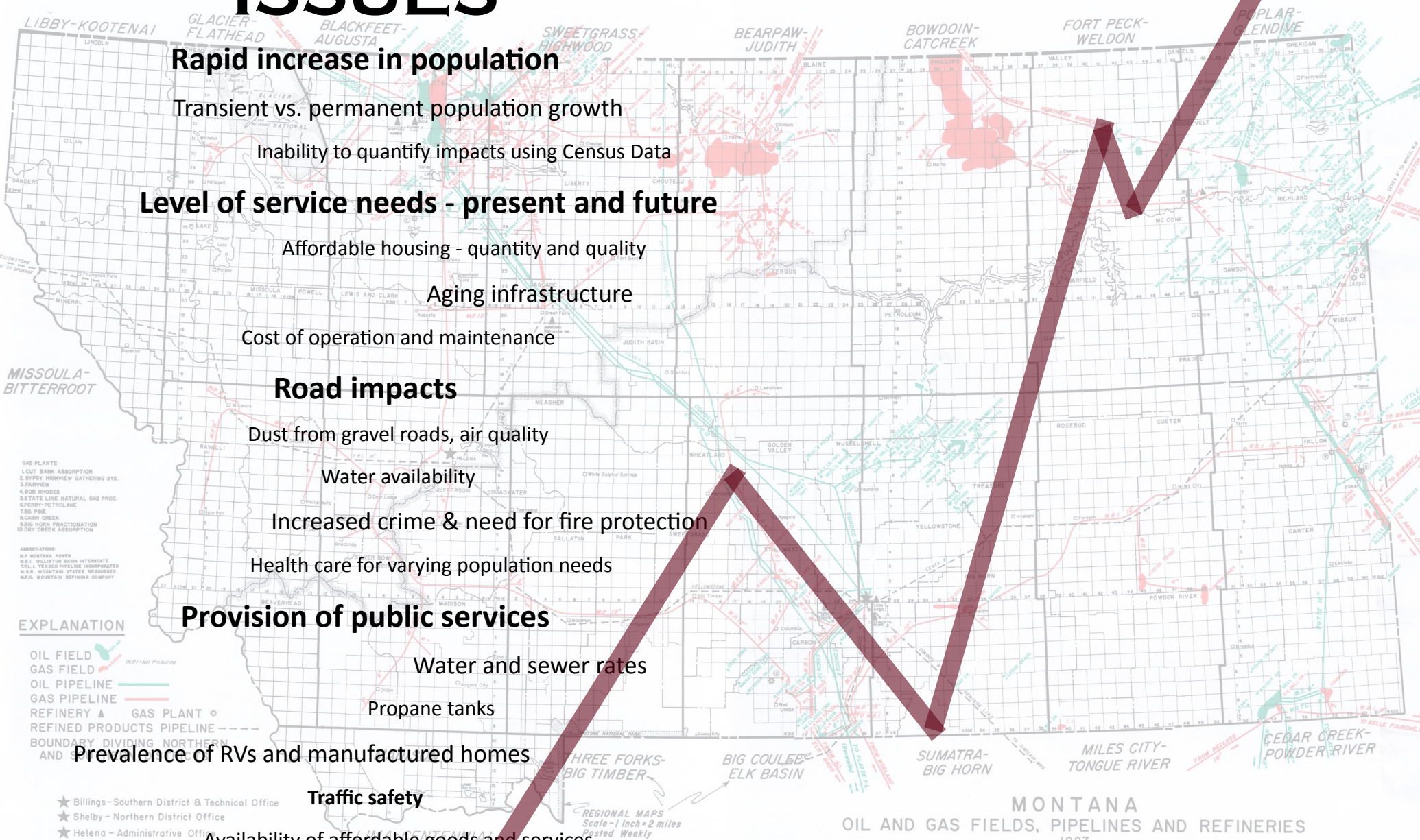
Propane tanks

Prevalence of RVs and manufactured homes

Traffic safety

Availability of affordable goods and services

Who's paying for development... and how?



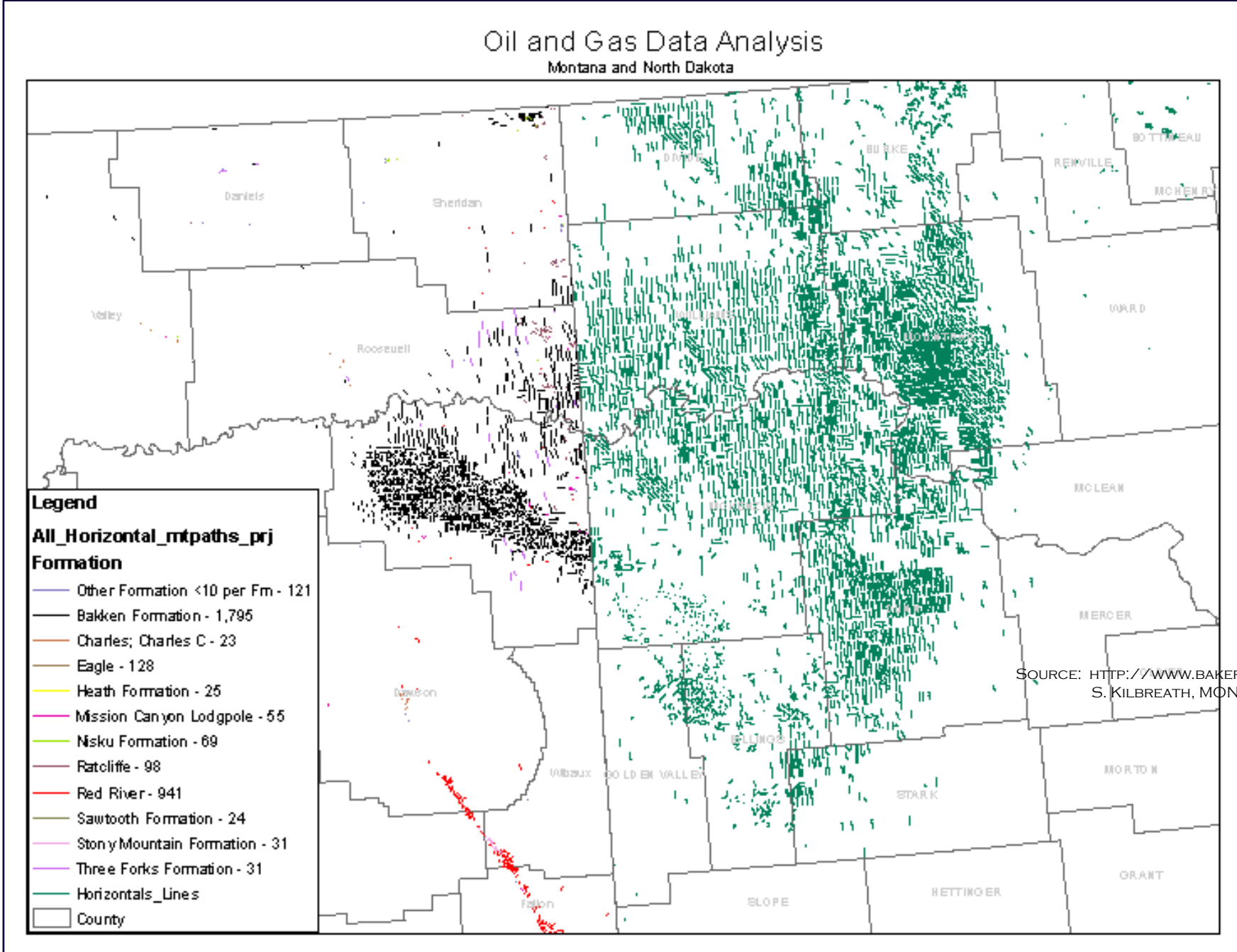
EXPLANATION

- OIL FIELD
- GAS FIELD (N.P. = Not Producing)
- OIL PIPELINE
- GAS PIPELINE
- REFINERY
- GAS PLANT
- REFINED PRODUCTS PIPELINE
- BOUNDARY DIVIDING NORTHERN AND SOUTHERN DISTRICTS
- ★ Billings - Southern District & Technical Office
- ★ Shelby - Northern District Office
- ★ Helena - Administrative Office

REGIONAL MAPS
Scale - 1 inch = 2 miles
Revised Weekly
BOARD OF OIL AND GAS CONSERVATION
2535 St. John's Avenue Billings, Mont. 59102 (406) 656-0040

MONTANA
OIL AND GAS FIELDS, PIPELINES AND REFINERIES
1987
BOARD OF OIL AND GAS CONSERVATION

THE NORTH DAKOTA EFFECT



HOUSING

Temporary Housing

Permanent Housing

Low Income Needs

Seniors and Fixed Income Needs

Man Camps

Mobile Homes & RVs

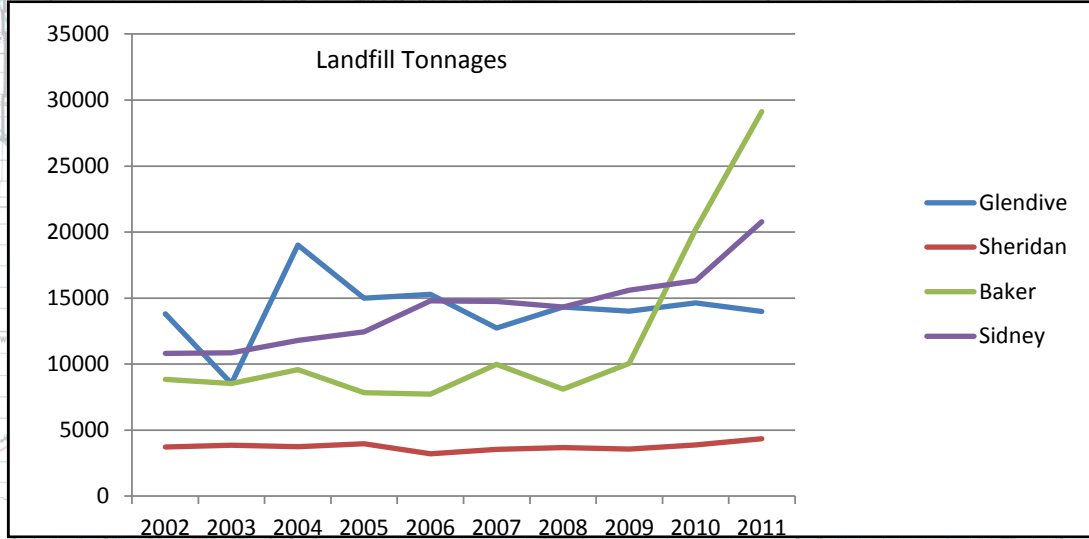


PUBLIC SERVICE NEEDS

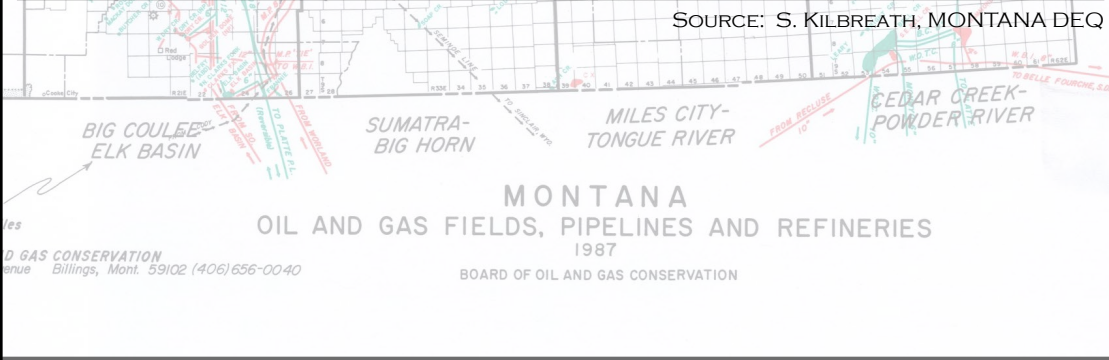
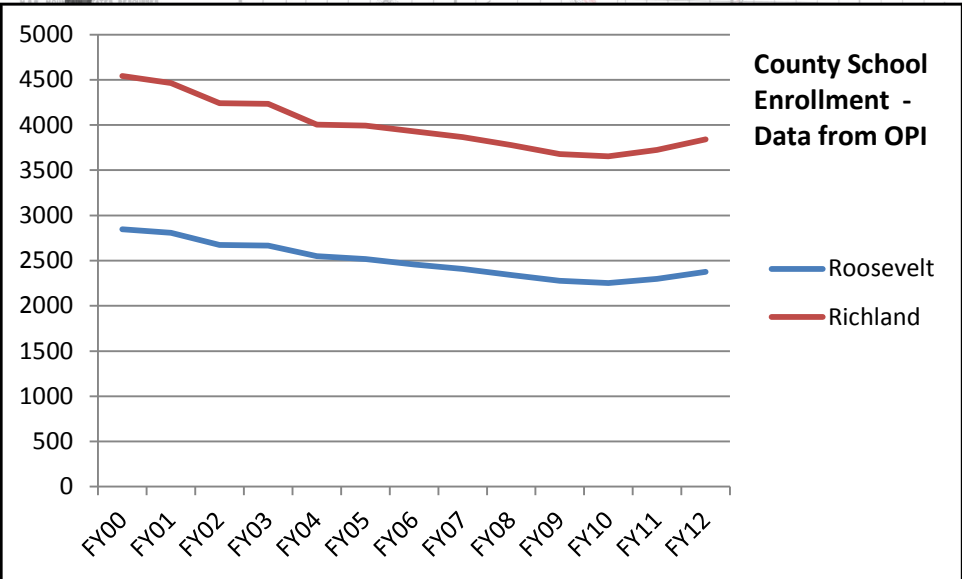
- Law enforcement
- School impacts
- Fire and ambulance
- Medical facilities
- Solid waste facilities



SOURCE: S. KILBREATH, MONTANA DEQ



SOURCE: S. KILBREATH, MONTANA DEQ



TRANSPORTATION

Increase in truck traffic = increased wear & tear on roads

Air quality issues - many roads in eastern MT remain gravel

Impacts to public health & safety - Main Streets are typically primary transit routes

Impacts to rail & air - moving people, goods and services between MT, ND & beyond



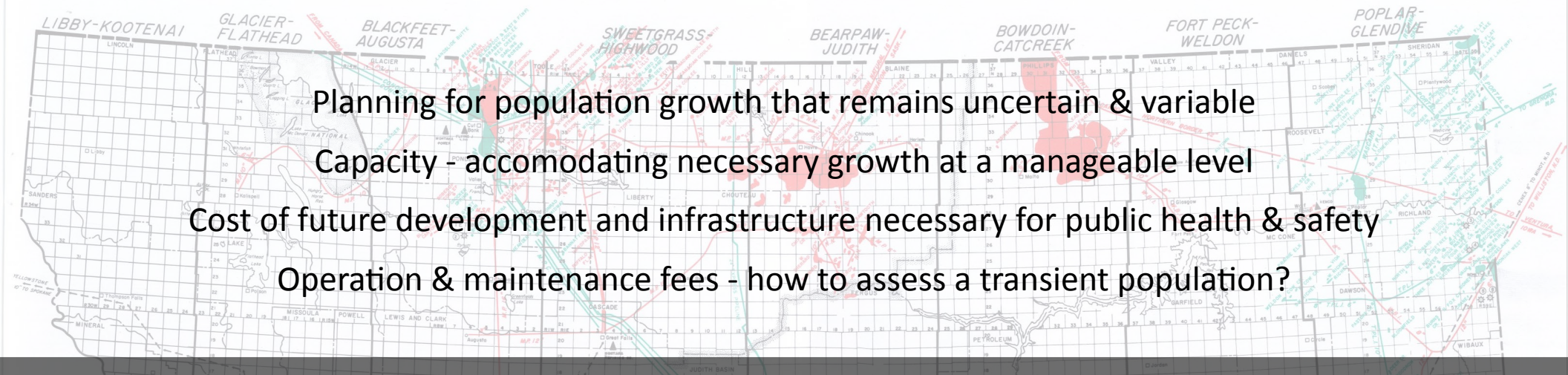
PUBLIC INFRASTRUCTURE

Planning for population growth that remains uncertain & variable

Capacity - accomodating necessary growth at a manageable level

Cost of future development and infrastructure necessary for public health & safety

Operation & maintenance fees - how to assess a transient population?



SIDNEY, MT

Jurisdiction	2000	2010	% Change
Sidney*	4774	5191	9%

- Sidney serves as County Seat; incorporated in 1913
- 3 major state highways intersect in or near Sidney
- 1,240 total road miles throughout the County's jurisdiction



ECONOMICS OF AN OIL BOOM



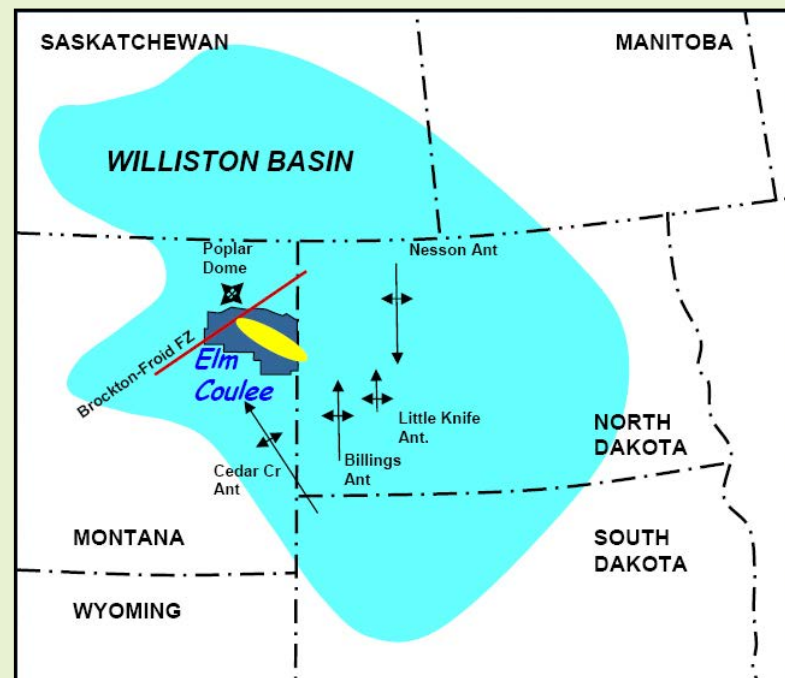
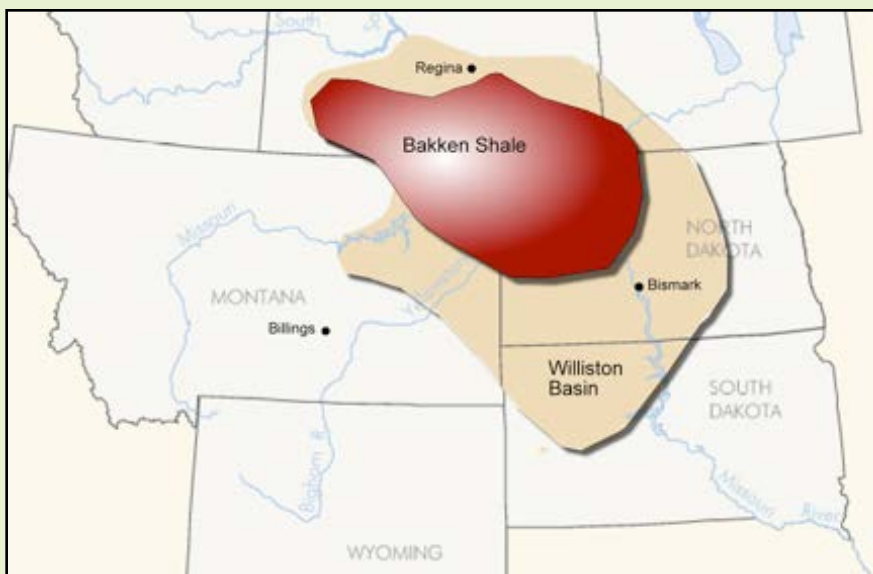
SOURCE: RICHLAND ECONOMIC DEVELOPMENT



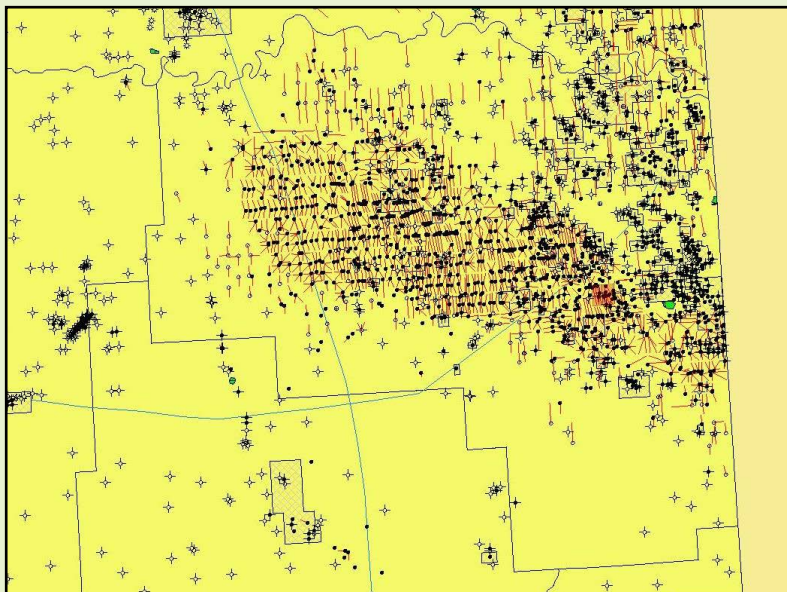
SOURCE: RICHLAND ECONOMIC DEVELOPMENT

- Oil boom in the late 1970's – late 1980's
- Main industry prior to oil development:
Agriculture
- Oil exploration in the Elm Coulee formation began in 2000; drilling continues today
- Unemployment rate in Jan of 2013 estimated at 2.1%
- Majority of oil extraction is occurring 45 miles from Sidney - across the MT/ND border in eastern North Dakota.....

Drilling & extraction began in 2000 around the Elm Coulee formation...



Oil well locations in Richland County



HOUSING

- Apartment Rentals:
Then \$250 - \$475...
...Now \$1,000 per bed
- Single Family Housing:
Then \$100k to \$150k...
...Now \$200k to \$350k
(standard time on market = 28 days)
- Hotels/Motels:
Used to be 4 in town...
...now 7, with 5 more proposed!
Rates that were once \$65/night...
...now \$200 to \$300 a night.



SOURCE (ALL PHOTOS): M.HAMBURG





.... HOUSING ALTERNATIVES

SOURCE: STEVE KILBREATH, MONTANA DEQ



RV PARK IN SIDNEY, MT

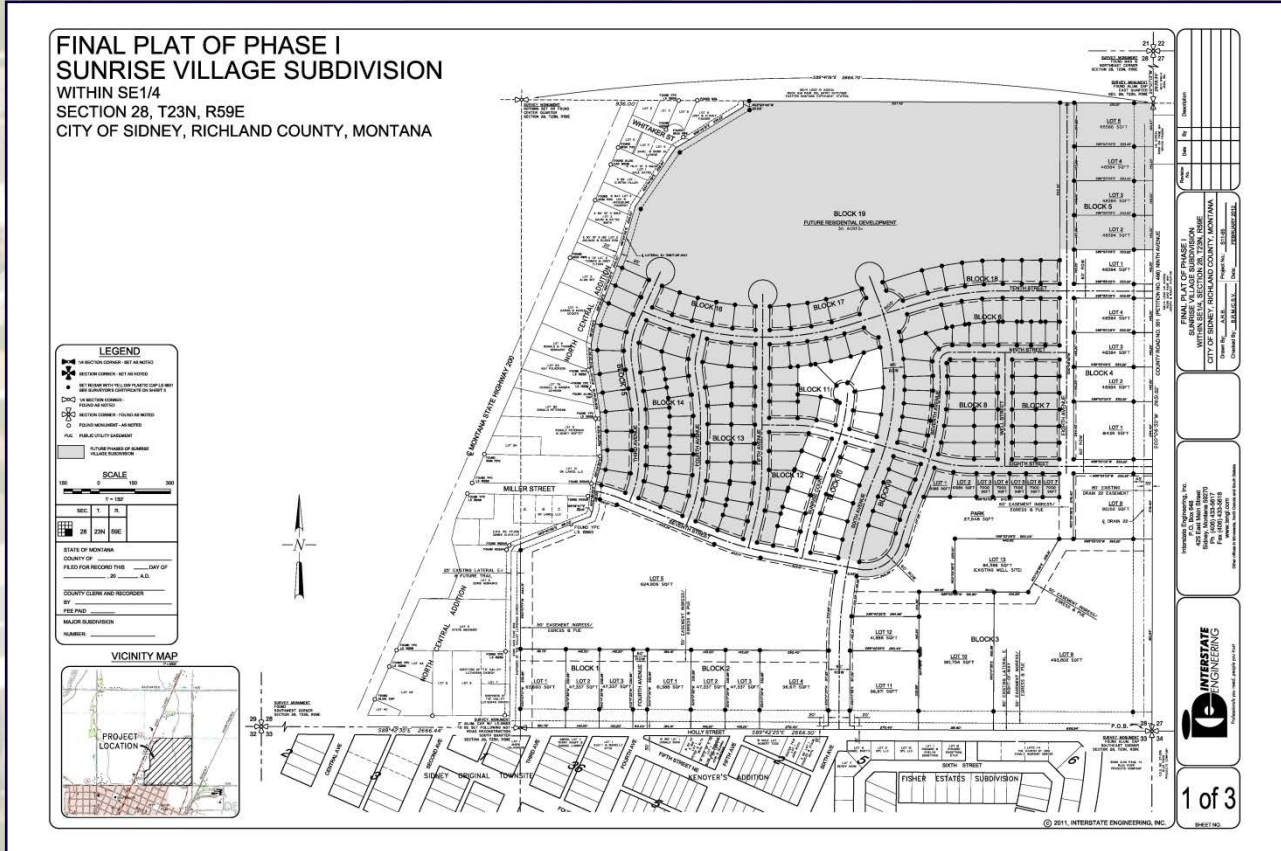
SOURCE: A. COSSITT, 2012



SUBDIVISION REVIEW

- 25 years between major subdivision submittals (1983 to 2007)
- As of June of 2010 - 37 major subdivisions submitted in Richland County
- Since 2010, 16 temporary workforce housing applications submitted

Year	Subdivision	Exemption Surveys	Total plats reviewed
1982	18	98	116
1987	1	26	27
1992	0	23	23
1997	7	8	15
2002	9	17	26
2007	14	24	38
2012	29	55	84



PUBLIC SERVICES

Impacts to public services include...

- Health services
- School facilities
- Fire and emergency services
- Law enforcement



RICHLAND COUNTY Montana
Discover the Richness



SOURCE: RICHLAND COUNTY ECONOMIC DEVELOPMENT



SOURCE: RICHLAND COUNTY ECONOMIC DEVELOPMENT

INFRASTRUCTURE

- 1,240 road miles to care for in Richland Co.
- Average weight of a 5-axle rig = 80,000 lbs.
- Causes more damage to road surface than 5,000 cars
- Increase weight to 90,000 lbs... expect 42% more damage to road surface

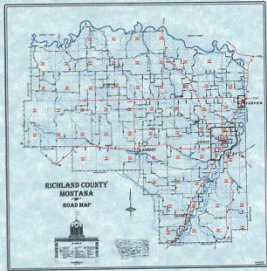


WATER & WASTEWATER



SOURCE: STEVE KILBREATH, MONTANA DEQ

**RICHLAND COUNTY
CITY OF SIDNEY
TOWN OF FAIRVIEW
SUBDIVISION
REGULATIONS**

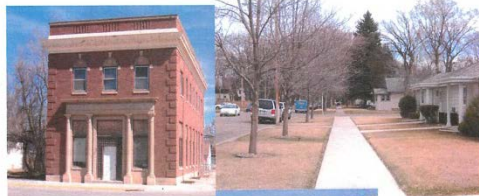


As Amended and Adopted by:
 Richland County March 13, 2012
 City of Sidney March 5, 2012
 Town of Fairview April 9, 2012

Prepared to comply with the
 Montana Subdivision and Platting Act
 (Incorporates the 2011 amendments to the Montana Subdivision and Platting Act)

LAND USE POLICIES & PRACTICE

**GROWTH POLICY
FOR RICHLAND COUNTY, SIDNEY,
AND FAIRVIEW**



January 2007

Prepared by: Richland City-County Planning Board
 With Assistance from: Cossitt Consulting

TRANSPORTATION PLAN

for the
 City of Sidney
 and
 Richland County, Montana

Leigh, Scott & Cleary, Inc.

EXPLANATION

- OIL FIELD
- GAS FIELD (N.P. = Not Producing)
- OIL PIPELINE
- GAS PIPELINE
- REFINERY
- GAS PLANT
- REFINED PRODUCTS PIPELINE
- BOUNDARY DIVIDING NORTHERN AND SOUTHERN DISTRICTS

- Policies were first adopted in 1983, during first oil boom
- ★ Billings - Southern District & Technical Office
- ★ Shelby - Northern District Office
- Hele In 2006, Growth Policy and Subdivision Regulations were updated
- Requiring update: Growth Policy, Capital Improvements Plan (CIP), Annexation Plan, Zoning Regulations...

REGIONAL MAPS
 Scale - 1 inch = 2 miles
 Contact: BOARD OF OIL AND GAS CONSERVATION
 2535 St. John's Avenue Billings, Mont. 59102 (406) 656-0040

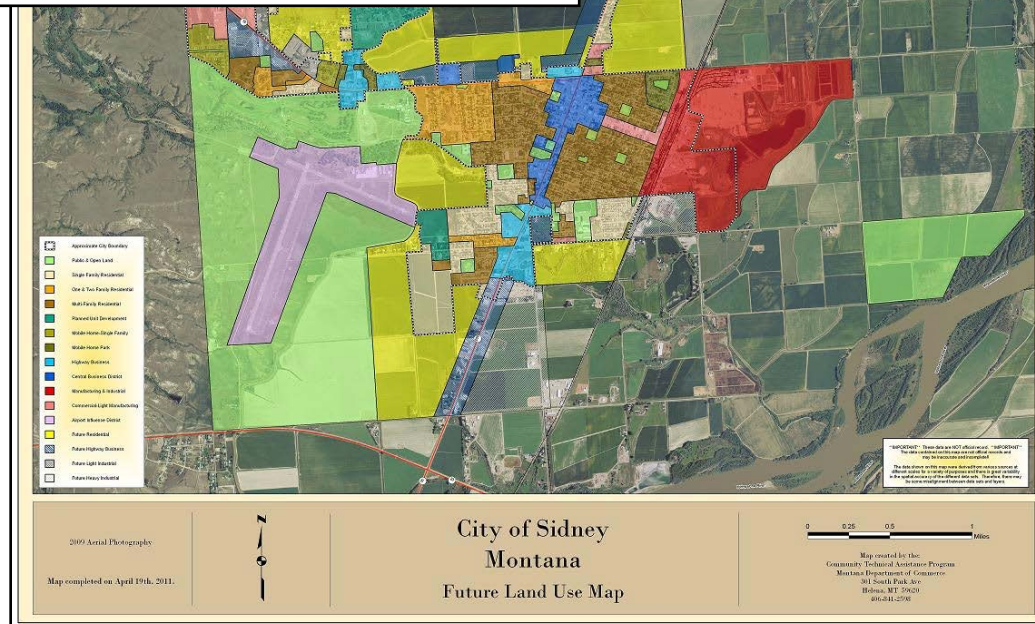
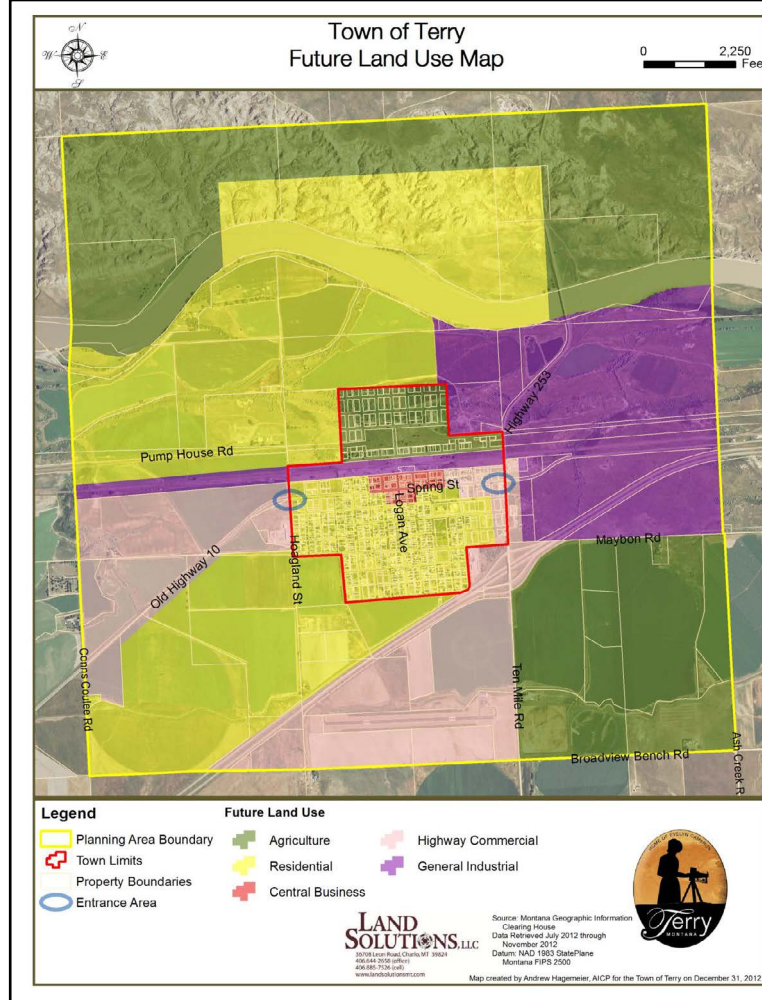
COMPREHENSIVE PLANNING IN MONTANA

76-1-605(2), MCA

MONTANA CODE ANNOTATED

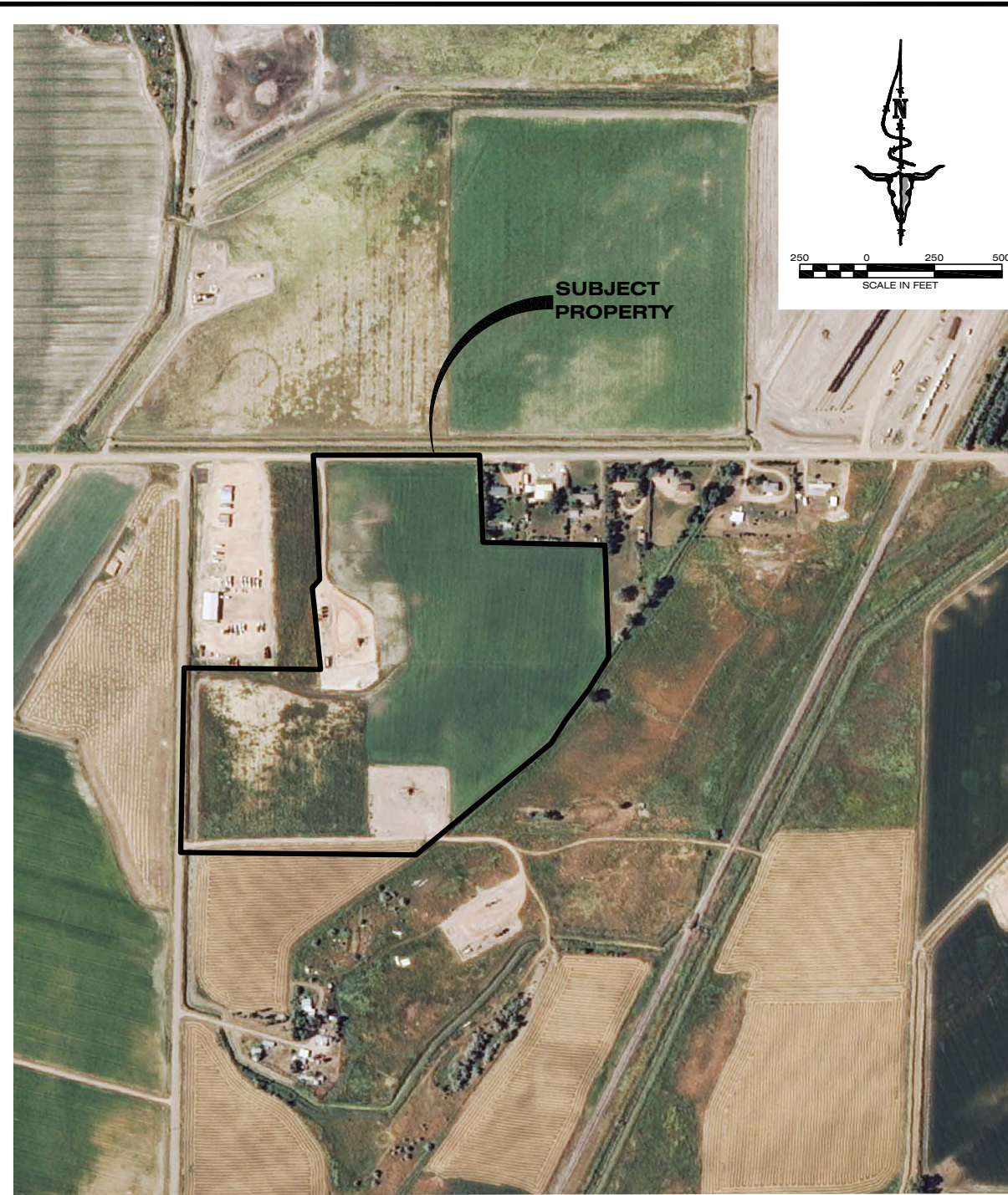
(a) “A growth policy is not a regulatory document and does confer any authority to regulate that is not otherwise specifically authorized by law or regulations adopted pursuant to the law.”

(b) “A governing body may not withhold, deny, or impose conditions on any land use approval or other authority to act based solely on compliance with a growth policy...”



SUBDIVISION REVIEW

- The 'De-Facto' planning tool in much of Montana
- Enabling legislation sounds like zoning, but does not truly address 'use'
- What happens when there is no zoning in place and subdivision is the prevailing regulation to guide growth and development?



TERRITORIAL LANDWORKS, INC.

Civil Engineering • Surveying • Land Use Consulting

Ph: (406) 721-0142

www.territoriallandworks.com

PO Box 3851

Fax: (406) 721-5224

Missoula, MT 59806

NRIS AERIAL PHOTO
RICHLAND CO. RV & INDUSTRIAL PARK
PORTION OF GOV'T LOTS 3 AND 4
SECTION 1, T23N, R59E, P.M.M.
RICHLAND COUNTY, MONTANA

PROJECT#: 12-2939

TAB: AERIAL PHOTO

DRAFTER: SA

DATE: 8/14/12

SHEET 1 OF 1

ZONING & ANNEXATION IN MONTANA

ORDINANCE ADOPTING ZONING FOR WORKFORCE HOUSING

MODEL ORDINANCE FOR MUNICIPALITIES

Under the authority of 76-2-301, MCA

[Insert Name of City], Montana

Ordinance No. _____

WHEREAS, recent technological advances in oil and gas drilling have allowed certain petroleum deposits to become economical to develop; and

WHEREAS, initial oil and gas well development [or pipeline construction] requires a large, temporary workforce that needs housing; and

WHEREAS, the rapid proliferation of workforce housing in the region requires measures to classify and regulate the location and conditions on such housing in order to provide a basic level of public health, safety, and general welfare and to mitigate the impacts so as to not unduly burden the residents of [insert name of jurisdiction]; and

WHEREAS, the [insert name of jurisdiction's] Growth Policy provides guidance for encouraging development that provides for [safe streets, safe and effective water supply and wastewater treatment, etc... fill in whatever policies, goals or objectives are met by the proposed zoning]; and

WHEREAS, the proposed zoning secures safety from fire and other dangers by providing a review process and criteria that ensure housing will be located in a manner that permits access by fire protection services, require adequate water supply for fire suppression, and reduce the risk of spreading fire by requiring structural separation; and

WHEREAS, the proposed zoning promotes the public health, public safety, and general welfare by providing for a review process and development standards that ensure availability of adequate water, wastewater, solid waste, and other public utilities for workforce housing; the provision of adequate emergency and other public services; adequate grading and drainage; legal and physical access to the housing facilities; landscaping and visual buffering of the site from adjacent uses; and provides for the appropriate location and construction standards of workforce housing to ensure the preservation of the values of the quality of life and property in the municipality while meeting the immediate demand for workforce housing; and



RESOLUTION NO. 20__ - __

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF [insert name], MONTANA ESTABLISHING A SERVICE PLAN FOR FUTURE ANNEXATIONS AS REQUIRED UNDER MONTANA CODES ANNOTATED TITLE 7, CHAPTER 2, PART 46 "ANNEXATION BY PETITION" AND PART 47 "ANNEXATION WITH PROVISION OF SERVICES."

A. Introduction

Whereas, the City of [insert name] hereby recognizes that Montana State law has established municipal governments for the purpose of providing local government municipal services essential for sound urban development of communities as well as for the protection of health, safety and welfare in areas either already being intensively used or undergoing development for residential, commercial, industrial, institutional and governmental purposes.

"Historically, the purpose of Montana's annexation statutes have been simply to provide expanding communities with:

1. a united and effective single form of government;
2. orderly growth through uniform regulations such as building codes, planning, and zoning standards; and
3. an equal sharing of community resources and financial responsibility for those resources by people living in an area united by social, political, and economic interests. (From *Montana's Annexation Laws: An Evaluation, November 1980, Montana Legislative Council*.)"

B. Long Range Plan

As required by MCA 7-2-4732, this plan anticipates development for a period of at least five years into the future. The 2010 Census lists the City of [insert name]'s population at [insert current population]. It is projected that the City could reach a population of [insert projected population] by 2017 [include source of projection]. Studies such as those noted below if available should be consulted when reviewing proposed annexations.

1. **Sewer** - The City's sewage treatment facility can serve a population of [insert amount]. An upgrade to the facility would service a population of [insert amount]. (Provide general description of sewer capacity and future upgrades, if currently planned, and describe any long range plans and future upgrades.)
2. **Water** - The City's water capacity can serve a population of [insert amount]. An upgrade to the system would service a population of [insert amount]. (Provide general description of water capacity, if currently planned, and describe any long range plans and future upgrades.)
3. **Roads** - Future road extensions shall be designed to accommodate projected demand. Where possible, logical extensions of the City's street network will be required. (Provide

BUILDING PERMITS



SOURCE: A. COSSITT, 2012

SOURCE: A. COSSITT, 2012



IMPACT FEES



SOURCE: STEVE KILBREATH, MONTANA DEQ



SOURCE: A. COSSITT, 2012

CHALLENGES..... AND OPPORTUNITIES

Challenge: Increased development but lack of affordable housing...

Opportunity: Restoration of housing stock previously in disrepair due to population decline.

Challenge: Planning comprehensively and integrating regulatory measures in a timely manner...

Opportunity: Establish a vision to create a place that people desire to live in when the boom subsides, to inspire local leaders to take action now.

Challenge: Long history of agriculture having to quickly adapt to a new boom reality...

Opportunity: Invest in community infrastructure, amenities and population to sustain another fifty years in this place.

Challenge: Dealing with the short and long term impacts of resource development spanning two states and multiple jurisdictions...

Opportunity: Statewide coordination to support regional planning and collaboration that will have long lasting impacts on communities within the Bakken.





ALLISON MOUCH, AICP
PLANNING BUREAU CHIEF
COMMUNITY DEVELOPMENT DIVISION
MONTANA DEPARTMENT OF COMMERCE

AMOUCH@MT.GOV
(406) 841-2598



STEVE KILBREATH
OIL & GAS COORDINATOR
MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
DIRECTOR'S OFFICE

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(406) 444-2872