THE 2016 MONTANA BAKKEN REGION TRANSITION SURVEY

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The Montana Board of Crime Control
Statistical Analysis Center (SAC)

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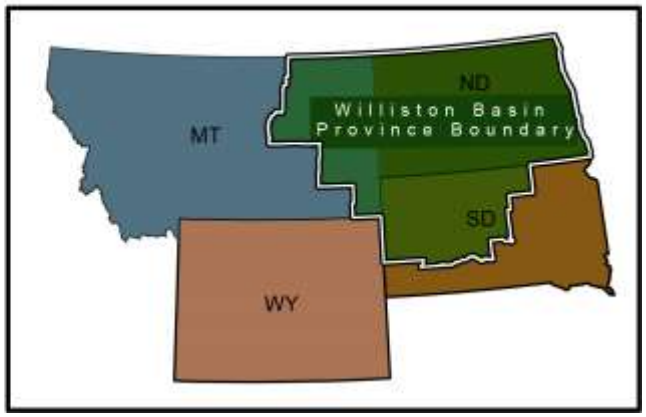


EXECUTIVE SUMMARY

INTRODUCTION

- The Montana Bakken Residential Transition Survey (MBRTS) is the result of a three-year (36-month) project funded through the Bureau of Justice Statistics (BJS) State Justice Statistics Program for Statistical Analysis Centers (CFDA #16.550) from 2014 through 2016.
- Members of the Criminology Research Group analyzed data reported on the MBRTS about respondents' perceptions of crime, safety, and community cohesion before and after the downturn in oil activity in the Greater Bakken Region of Eastern Montana.
- Respondents were asked about experience with person crimes (robbery, aggravated assault, and simple assault), property crimes (home burglary and motor vehicle theft), and a small number of miscellaneous crimes (stalking, identity theft, property damage, and theft from a motor vehicle).
- This combination of perceptions of crime and experiences of crime victimization provides a means to explore the relationship between changing socio-economic conditions residents' experience of crime, and community perceptions.

METHODOLOGY

- The MBRTS was administered to a representative sample of adults living in the 12 counties within the Greater Bakken Region identified by the Montana Board of Crime Control (MBCC) as having experienced an increase in crime rates from 2011 to 2014 (MBCC 2012, 2013, 2014).
    - This includes Custer, Daniels, Dawson, Fallon, Garfield, McCone, Prairie, Richland, Roosevelt, Sheridan, Valley, and Wibaux counties.
    - 2,000 households were randomly selected to participate in the study. A total of 788 completed surveys were received yielding an overall response rate of 39.4%.
    - Data collection began on Feb 10, 2017. The survey closed on April 22, 2017. The survey was in the field for a total of 70 days.
- MBRTS is a mixed mode survey that includes both pen and paper and online versions. The mixed mode design was selected to maximize both sample size and the overall response rate, given available resources.
    - There are geographic regions and demographic groups in Montana with limited access to the Internet, computers and smart phones, and/or

resources for (or interest in) digital literacy. This complicated a strict online approach.

- In an effort to ensure that the data are representative of all persons in the 12 counties where the sample was draw, the data are weighted to further compensate for both sampling and non-sampling errors. The random sampling error rate for this survey is +/- 3.5%.

SUMMARY OF RESULTS

OLD-TIMERS AND NEWCOMERS

The findings section of the report compares old-timers (persons who had lived in the Greater Bakken Region 11 or more years) and newcomers (persons who had lived in the Greater Bakken Region 10 or fewer years) who had moved since 2016.

- 75% of the respondents are old-timers; newcomers represent 25% of the respondents.
    - Most newcomers (88.3%) have previous experience working in the oil industry compared to 28.8% of old-timers.
- Newcomers have higher incomes, are younger, have larger households, and are more likely to live in the most active oil production zones in Montana compared to old-timers.
- Newcomers are significantly more likely to consider moving. 16.8% report they plan on moving in the near future, compared to only 9% of old-timer's.
    - Pursuing economic opportunities, wanting to be closer to family, employment considerations, community does not feel like home anymore, and limited access to health services are the most commonly reported reasons for leaving.
    - Crime issues (76.7% versus 54.9%) and affordable housing (76% versus 58.7%) were more likely to be cited as important/very important factors by newcomers than old-timers to influence the decision to stay of go.
- The majority of newcomers (83%) and old-timers (91.9%) said they would remain in the Greater Bakken Region if oil activity returned to where it was during the most recent boom.

PERCEPTIONS OF COMMUNITY, SAFETY AND FEAR, CRIME, AND DRUGS

Respondents were asked about perceptions of community, safety and fear, crime, and drugs during the most recent boom between 2008 and 2014 and since the 2014 downturn in oil development.

- Newcomers report higher levels of neighborhood participation than old-timers during the boom and since the downturn.
    - Old-timer's perceptions of neighborhood participation started out lower than newcomers during the boom and drop even further since the downturn.
    - Newcomers did not experience any change in neighborhood participation during this period of time.
- Both newcomers and old-timers report an increase in community trust since the downturn compared to the boom.
- The percentage of newcomers and old-timers who report feeling unsafe from crime is low.
    - This percentage drops for both newcomers (12.3% to 5.7%) and old-timers (10.8% to 5.7%) since the downturn.
- At the county level, perceptions of crime safety are lower in counties at the core of resource development activities.
    - The percentage of respondents who do not feel safe from crime is highest among residents of Roosevelt and Richland Counties.
- Most respondents (between 84.4% and 94.2%) were not fearful of being a victim of a violent crime such as a mugging, murder, or rape.
    - The percentage of respondents reporting always or almost always being fearful of a violent crime during the boom compared to the downturn is notably higher for both newcomers (13% versus 5.7%) and old-timers (15.6% versus 8.7%).
- The percentage of respondents reporting they are afraid to walk or jog alone at night is higher for both old-timers (35.8%) and newcomers (30.4%) during the boom when compared to reports based on perceptions since the downturn (26% for old-timers and 25.5% for newcomers).
- There are differences in perceptions of crime during the boom and since the downturn.
    - The majority of old-timers (65.4%) and newcomers (61.7%) report somewhat or great increases in crime during the boom.
    - Newcomers (41.3%) are more likely than old-timers (25.6%) to report somewhat or great decreases in crime since the downturn.

- Perceptions of drug use and distribution have improved since the downturn.
    - 64% of old-timers and 65.6% of newcomers described drug use and distribution in the community during the boom as somewhat or greatly increasing.
    - Since the boom, 31% of newcomers and 22.3% of old-timers describe drug use and distribution in the community as decreasing.
- Trust in law enforcement to deal with drug problems in the community is uniformly high.
    - Most newcomers (87.7%) and old-timers (82.9%) report trusting or somewhat trusting law enforcement to deal with drug problems in the community.
    - There are slight drops in trust for both newcomers (85.9%) and old-timers (79.9%) since the downturn.
- Drug abuse and distribution were reported as problems by the majority of newcomers (66.6%) and old-timers 69.9% during the boom.
    - Despite declines compared to perceptions during the boom, the majority of newcomers (56.5%) and old-timers continue to view drug abuse and distribution as a problem since the downturn.
    - Prescription drug abuse and distribution was the most commonly reported drug abuse issue during the boom (81.6% of newcomers; 74.8% of old-timers) and continues to be perceived as a problem since the downturn (71.1% of newcomers; 70.7% of old-timers).

PREVALENCE OF VICTIMIZATION

- Violent crime was rare for both newcomers and old-timers
    - Overall, only 2.5% of Bakken region residents reported a robbery, aggravated, or simple assault (1.6% of newcomers and 2.8% of old-timers).
- Serious property crime was more common than violent crime.
    - Home burglary (11.1% for newcomers and 8.1% for old-timers) was the most commonly reported than motor vehicle theft (6.2% for newcomers and 3.4% for old-timers)
- Miscellaneous crimes were more commonly reported than other individual types of victimizations.
    - Identity theft (11.1% for newcomers and 11.5% for old-timers) was the most common type of crime victimization among Bakken region residents.

- Stalking was experienced by 7.4% of Bakken region residents, but twice as likely to be experienced by newcomers (13%) than old-timers (5.9%).

CRIMES REPORTED TO THE POLICE

- The majority of persons (61.2%) who reported experiencing crime victimization did not report this event to the police.
- Property crimes were the most likely types of victimization reported to the police
  - 60% of home burglaries and 53.4% of motor vehicle thefts were reported to the police.
  - Newcomers (91.1%) were more than twice as likely to report motor vehicle theft as old-timers (45.0%).
  - Identity theft (14.7% overall) was the crime least commonly reported to the police (27% of newcomers and 12.3% of old-timers).
- The most common reason cited by both newcomers (50%) and old-timers (37.9%) for not reporting a crime was the belief that the police could not do anything to help as the reason for not reporting.
  - Not having enough evidence or information was also common (25% of newcomers and 25.9% of old-timers).

INTERACTIONS WITH LAW ENFORCEMENT

- Direct contact with law enforcement since the downturn was common for both newcomers (53.1%) and old-timers (38.7%).
  - Ratings of these interaction where largely positive.
    - 60.5% of newcomers and 48% of old-timers rated the way they were treated by law enforcement as “Very Good”.
    - Only 5.9% of newcomers and 2.6% of old-timers rated the way they were treated by law enforcement as “Very Bad”.
  - Causal Conversation was the most common reason given for direct contact with the police (65.7% of newcomers and 63.6% of old-timers).
    - Asking law enforcement for information, traffic stops, and community activities were the next most common reasons reported (between 29.4% and 20.4% of direct contacts).
  - Persons who had experienced crime victimization were less likely to report favorable rating of the law enforcement than non-victims.
    - This is true for both newcomers and old-timers.

RECOMMENDATIONS

There are a number of recommendations associated with findings from the current investigation.

- There is a need to better understand the factors that influence changes in perceptions of crime, fear, and safety for newcomers and old-timers.
- It is important to understand the factors that influence perceptions of trust and neighborhood participation.
- There is a need to more fully explore the reasons why perceptions of crime, drug issues, fear, and safety changed during the downturn compared to the boom.
- A better understanding is needed about the process associated with consistently positive ratings of law enforcement even when most respondents perceived increases in crime during the boom.
- Prioritize funding to gauge experiences of commuters who live and work in the Greater Bakken Region, but do not have permanent residences there.
- Information gathered through research conducted in the Greater Bakken Region should be used as a part of evidence-based planning in the region.
    - The first of the studies recommended above should focus on understanding the reasons and situations associated with persons who came to work in the region and have stayed in the region after the downturn.

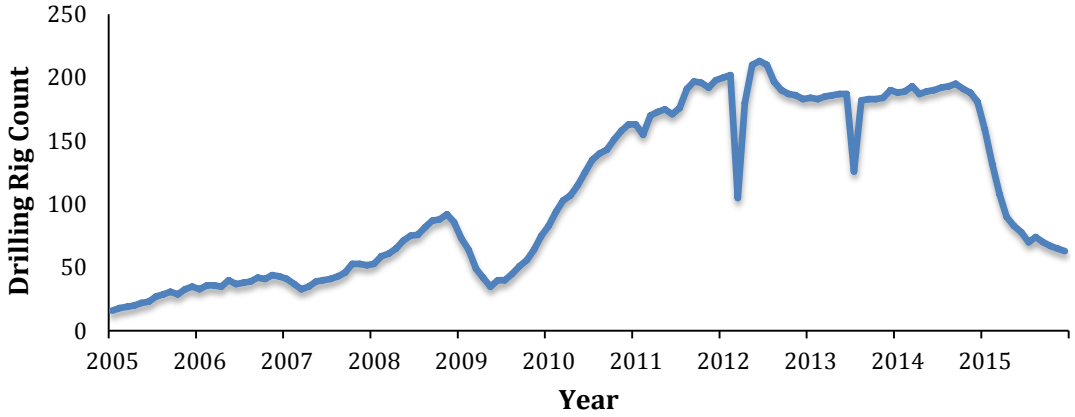
CONCLUSION

- The importance of understanding social changes in community perceptions during times of rapid population shifts has been a focus of American community sociologists since the industrial revolution.
- Future research will need to recognize the importance of perspectives of persons who came to the region to participate in the economic opportunities associated with the oil production boom and stayed during the decline.
- Future research will need to plan for and prioritize funding for research that focuses on commuters who live and work in the region but maintain permanent residences elsewhere.
- The findings and recommendations reported here provide information that can inform planning, policy, and practice for future waves of natural resource development in the Greater Bakken Region of Eastern Montana.

Prior to 2004, the landscape at the Montana-North Dakota border was defined by agricultural production and the farming communities that support it. The region has been one of North America's great industrial breadbaskets for nearly a century, producing spring wheat, sunflowers, dry beans and sugar beets for markets around the world (Mercier, 1985). Around 2004, oil infrastructure development in this region began to increase at an unprecedented rate—making previous oil booms in the 1950s and 1970s look minor in terms of production.

The emergence of hydraulic fracturing technologies, along with record oil prices between 2004 and 2014, meant a large mass of equipment, traffic, and workers flowed into this region. Like many rural places, there was little there in the way of transportation, storage and housing infrastructure to store and circulate this influx of labor and capital, posing new challenges for municipal and county governments and social service agencies (Jacquet, 2014). By the time the barrel price of oil plummeted from over $90 to under $50 in 2015, the region had come to be identified with the geological stratum tapped by this wave of labor and technology: the Bakken. The recent boom and contraction in oil production in the Bakken region can be observed in Figure 1, which displays the average monthly drilling rig count in North Dakota from 2005 to 2015.

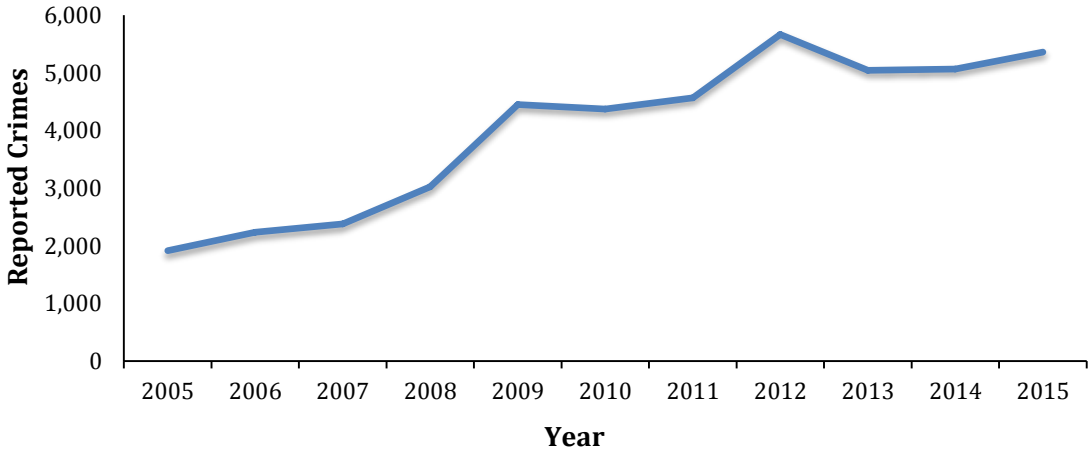
Figure 1: Average Monthly Drilling Rig Count in North Dakota, 2005-2015



The Bakken shale formation sits a mile and more beneath the surface of much of northwestern North Dakota and about six counties in northeastern Montana on the North Dakota border, but the immediate economic and social impacts of shale oil development ripple outward to many more Montana communities, especially along Interstate 94. For this reason, this study focuses on the impacts of oil development and its decline in the Greater Bakken Region of Montana (GBR)—12 counties identified by the Montana Board of Crime Control (MBCC) as having experienced an increase in crime rates from 2011 to 2014

(McLean & Ruppert, 2014; Ruppert & Kirby, 2015; Wilkins, Ruppert, & Kirby, 2016). These counties included Custer, Daniels, Dawson, Fallon, Garfield, McCone, Prairie, Richland, Roosevelt, Sheridan, Valley, and Wibaux. Figure 1 shows this increase in reported crime in the Greater Bakken Region from 2005 to 2015.

Figure 2: Total Reported Crimes in the Greater Bakken Region of Montana, 2005-2015



MBCC reports indicate that the GBR has experienced an increase in crime; yet, it is unclear how this rise in reported crime corresponds to the true rate of crime victimization (which includes crimes not reported to law enforcement). Additionally, these official crime statistics do not provide insight into residents' perceptions of crime and safety in their communities. Research from booms in rural areas during previous decades suggests that the rapid growth associated with resource development in rural regions is often accompanied by an increase in a variety of factors associated with crime, such as social disorganization and fear of crime (Freudenburg 1986; Krannich 2012). Additionally, recent research strongly supports the idea that the Bakken oil boom was associated with an increase in both crime and resident perceptions of the risk of victimization, along with a reduction in quality-of-life indicators such as community commitment (Fernando & Cooley, 2015; Ruddell & Ortiz, 2014).

The relationship between crime and the contraction (of both population and industrial capital) associated with "busts" is less well known. Other than the suggestions of Ore's (2016) field study, no academic or technical study has focused on the consequences of this contraction in the Bakken region, despite its rapid pace over 2015 and 2016 (perhaps best illustrated by the decline in monthly rig counts over 2014 and 2015). Researchers at the University of Montana Criminology Research Group (CRG) designed the Montana Bakken Region Transition Survey (MBRTS) to begin to understand the effects of changes associated with the influx and decline of human, social, and financial resources from resource development in communities in Eastern Montana on resident's perceptions of crime, safety, and community cohesion.

The MBRTS asked questions about respondents' perceptions of crime, safety, and community cohesion before and after the downturn in oil activity. It also asked respondents to share their experience of property and personal crimes. This combination of perceptions of crime and experiences of crime victimization and a wide range of demographic characteristics yields a powerful means of exploring the relationship between changing socio-economic conditions and GBR residents' experience of crime, perceptions of community, and orientations to dramatic socio-economic change.

BACKGROUND

The MBRTS was originally conceived as an interception survey. The research design called for the survey to be completed in a face-to-face setting in the "man camps" that housed many of the commuters who were working in the GBR, but did not have a permanent physical address in Montana. The dramatic decline in oil production and associated workforce led to a mass closure of these temporary living communities and thereby nullified the original data collection design.

The MBRTS is the result of a three-year (36-month) project funded through the Bureau of Justice Statistics (BJS) State Justice Statistics Program for Statistical Analysis Centers (CFDA #16.550) from 2014 through 2016. The project developed in three phases, each 12 months in length: (1) planning, (2) data collection, and (3) analysis.

The planning phase had three main objectives: (1) obtain University of Montana Institutional Review Board approval, (2) conduct a comprehensive literature review, and (3) begin designing the MBRTS survey instrument.

In the second year of the project, the CRG completed the online version of the survey instrument and research partners at the University of Montana Bureau of Business and Economic Research (BBER) converted it into the paper version. The surveys were distributed on February 10th, 2017, and the data collection phase was terminated on April 22nd, 2017.

In year three, CRG personnel addressed inconsistencies in the data (discussed in the Methods chapter) and conducted preliminary analyses. The BBER provided technical support in weighting the data for analysis. Finally, CRG personnel performed data analysis and wrote this report.

In the next chapter, we will discuss the methodological approach used in this survey.

METHODS

CRG personnel sought to draft a transition survey instrument that is replicable, cost-effective, and comprehensive, while conforming to best practices. The University of Montana Institutional Review Board approved this study after reviewing both the sampling procedure and the survey instrument. A simple random sample of 2,000 adults across Montana was notified of their inclusion in the study by a pre-notification letter containing a two-dollar bill as incentive to complete the survey. Full paper surveys were sent to households that did not complete an online survey after two weeks of the initial pre-notification letter. The data collection period was closed on April 22nd, 2017 after 788 valid surveys (paper and online) were collected.

PRECEDENTS FOR INSTRUMENT DESIGN

The MBRTS was drafted after an extensive review of literature on survey research generally and research findings from surveys done in communities across the country that had undergone similar population increase and decline associated with natural resource development. The Tailored Design Method developed by Dillman, Smyth, and Christian (2014) informed the design elements of the MBRTS instrument and the data gathering process associated with its administration. The questions asking about personal and property crime victimization and questions were modeled after three primary sources: (1) the National Crime Victimization Survey (NCVS) administered by the Bureau of Justice Statistics. (2) the Montana Crime Victimization Survey 2010 instrument, and (3) recent state-administered victimization surveys, including Arizona 2013 (Stevenson, 2014), Idaho 2012 (Wing, 2012), Nevada 2011 (Hart & Culver, 2012), Maine 2011 (Rubin, Dodge, & Chiasson, 2011), Utah 2010 (Peterson, 2010), and Minnesota 2008 (Buskovick & Peterson, 2009). Questions were modified as needed to be appropriate to the self-response survey mode used in the MBRTS. The questions focused on participants' neighbors and neighborhoods were drawn from prior research examining the relationship between informal social control, social cohesion, violent crime (Sampson, Raudenbush, & Earls, 1997).

INSTRUMENT MODE: ONLINE AND PAPER SELF-RESPONSE

MBRTS is a paper and online self-response survey. This style (or "mode") of survey instrument was selected to maximize both sample size and the overall response rate, given available resources. While not without its limitations, the mixed paper and online self-response survey mode was thought to ensure access to both the widest demographic range and greatest number of respondents and ultimately yielded a high response rate (see Orchowsky, Trask, & Stabile, 2014).

Online surveys allow rapid, widespread, and inexpensive administration of surveys, flexibility in design elements, and largely automate the data collection process; however,

this mode is still problematic in terms of selection bias. There are geographic regions and demographic groups in Montana with limited access to the Internet, computers and smart phones, and/or resources for (or interest in) digital literacy. To ameliorate this issue, the CRG designed a paper survey to mirror the online version. Respondents were offered a link to the online survey in their initial contact letter, and then automatically sent a paper survey if they did not complete the online version after fourteen days after the online survey link was received. See the "Survey Administration and Sampling Weighting Procedures" section below for details on response rates for each survey instrument.

INSTRUMENT DEVELOPMENT

The literature review was completed in the fall of 2015. The MBRTS instrument underwent numerous drafts and revisions from August 2015 to February 2017. Throughout 2016, CRG personnel designed, wrote, and tested the online version of the survey and prototyped early versions of the paper survey. Research partners at BBER developed the paper survey and completed the final draft in January of 2017. Online and paper versions of the survey were continuously tested by CRG and periodically sent to MBCC for feedback.

The MBRTS survey instrument presented questions to respondents in six sections, with the titles given below (the survey instrument is available in the Appendix):

(1) *Bakken Residency*: county or residency in the last 12 months, length of residence in the Bakken Region of Montana, and length of time at current address.

(2) *Perceptions Since the 2014 Downturn*: fear of crime, changes in community crime, perceptions of and interaction with law enforcement, changes in drug use and distribution, contact with neighbors, and willingness to stay in the community in the near future.

(3) *Perceptions During the Boom (2008-2014)*: community of residence, length of time residing in the community, fear of crime, changes in community crime, perceptions of and interaction with law enforcement, changes in drug use and distribution, and contact with neighbors.

(4) *Crime Victimization*: property crime victimization, property crimes reported to the police, identity theft victimization, identity theft reported to the police, personal crime victimization, and crimes against person reported to the police.

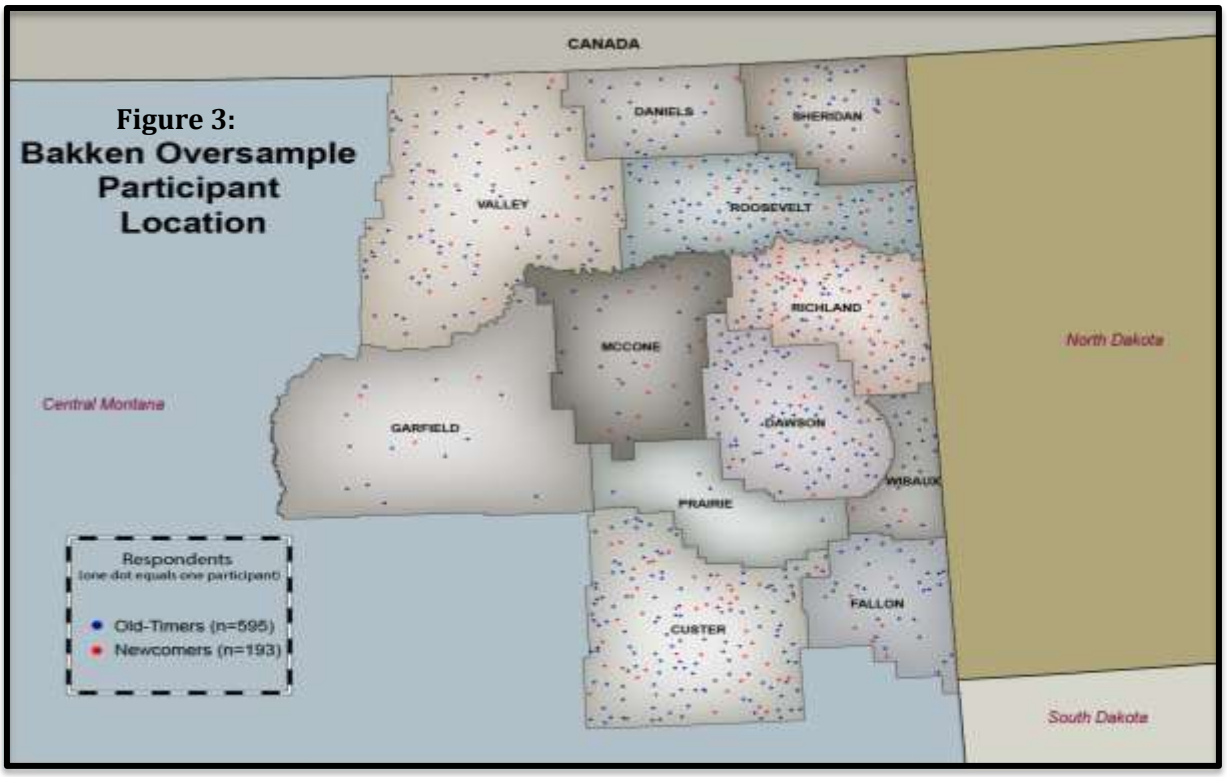
(5) *Demographics*: basic demographic information (e.g., gender, race, age, and income).

SURVEY ADMINISTRATION, SAMPLING, AND WEIGHTING PROCEDURES

The MBRTS was administered to a representative sample of adults living in the 12 counties identified by the Montana Board of Crime Control (MBCC) as having experienced an increase in crime rates from 2011 to 2014 (MBCC 2012, 2013, 2014). This includes Custer, Daniels, Dawson, Fallon, Garfield, McCone, Prairie, Richland, Roosevelt, Sheridan, Valley,

and Wibaux counties. The sample excluded individuals living in institutional settings such as hospitals and prisons, homeless individuals, and individuals living in military barracks.

The location of these counties and the number of respondents submitting data from them are presented in Figure 3 below. To ensure anonymity, respondents' locations in Figure 3 are only accurate to the county they reside.



Pre-notification letters were sent to 2,000 residential addresses to inform residents that they had been randomly selected to participate in the survey. Seven-hundred-eighty-eight Bakken region residents participated during the sampling timeframe, resulting in a response rate of 39.4%. Of these participants, 563 (71.5%) filled out the paper version of the survey, and 225 (28.5%) filled out the survey online. Median age of the persons in the sample is 51 years old. Responses from persons in Custer (n=174), Valley (n=120), Richland (n=116), Dawson (n=104), and Roosevelt (n=101) counties represent the largest number of respondents by county. This level of survey response yielded an overall random sampling error rate of +/- 3.5%. The term random sampling error focuses on the effect of random sampling on survey estimates. If this survey was administered 100 times, in 95 of the administrations the estimates for answers to the questions would be within +/- 3.5% of those presented in this report.

The pre-notification letter instructed the adult individual (18 years and older) with the most recent birthday in each household to complete the survey. The pre-notification letter was created using the best practice model developed by Dillman and colleagues (2014). Specifically, it described the survey and invited the potential respondent to take the survey online. The letterhead contained the official MBCC logo and contact information for MBCC Executive Director, Deb Matteucci. Importantly, the letter also explained that if potential respondents would rather take the survey by hand, a paper copy of the survey would be sent to them in approximately two weeks. Each respondent was given an individual identifier to ensure no participant completed the survey more than once.

Nonresponse error occurs when some groups of respondents respond less frequently to a survey than others. For example, in addition to being more likely to not receive a survey in the first place (coverage error), college-aged individuals may be more likely to lose or otherwise compromise their surveys due to their relative lack of a permanent address compared to other groups. CRG used several strategies to reduce nonresponse error. As previously discussed 2000 potential respondents were identified and sent a letter inviting them to participate. The initial invitation letter sent to potential respondents contained a $2 bill. This practice has been shown to increase response rates, as well as improve respondents' trust in the research process (Dillman et al., 2014).

In an effort to ensure that the data are as representative of all persons in the 12 counties where the sample was drawn, the data were weighted to further compensate for both sampling and non-sampling errors. The sample weights were calculated using a three-step process. First, a base weight was calculated to account for the probability of selection of each individual in the sample. The population control total was based on the U.S. Census Bureau's American Community Survey 2015 5-year estimate for the population in Montana of persons ages 18 and older. Second, the base weight was modified to adjust for possible nonresponse bias. Finally, the nonresponse-adjusted weight was calibrated to population control totals derived from the U.S. Census Bureau's American Community Survey 2015 5-year estimates for the population in Montana of persons ages 18 and older.[1]

Below is a summary timeline of the data collection process:

(1) *February 10th 2017*: Initial invitation letters sent to 2,000 addresses within the 12 counties that comprise the Greater Bakken Region of Eastern Montana with a link to complete the survey online.

(2) *February 17th 2017*: A paper copy of the survey was sent to respondents who did not complete the survey online. A self-addressed stamped return envelope was included.

[1] Survey weight calibration was conducted using the Gest_Calibration module of Generalized Estimation System version 2.01 (March 2017).

(3) *March 10th 2017*: Post cards reminding potential respondents to take the survey and post cards thanking participants who completed the survey were sent out to all households.

(4) *March 31st 2017*: A final follow-up letter containing an additional paper survey was sent to those who had not responded along with a self-addressed stamped return envelope.

(5) *April 22nd 2017*: Survey data collection complete. The survey was in the field for a total of 70 days.

In the next section, we will examine the results from the BRTS.

RESULTS

WHO REMAINS?

Media, policymakers, and scholars tend to think of the Greater Bakken Region (GBR) in terms of the semi-transient population of oil workers moving in and out of the region for shift work during the boom. As the feverish development of 2008 to 2013 declined, no one investigated the basic question of who remains there and why. These data indicate that there are significant numbers of individuals who came for the boom and have chosen to remain in the region. Individual reasons for staying in the GBR could range from being "stuck" in the region (i.e., without the resources necessary to leave) to forming genuine commitment to the communities they live in. Regardless of their motives, MBRTS data indicates the populations in the GBR have begun to transition to a relatively cohesive post-bust community. In the next section, we will investigate how the transition to a post-bust community affects perceptions of safety, trust, and neighborhood cohesion.

MBRTS asked respondents a number of questions related to their experience in the oil industry and their tenure in the GBR. The resulting data show two distinct populations in the region: those who lived there before and those who moved there during or after the hydraulic fracturing boom. In keeping with the terminology used by the previous generation of boomtown research (e.g., Freudenburg, 1986), we call the pre-boom residents "old-timers" and the post-boom migrants "newcomers." MBRTS data indicates old-timers form over 75% of the population, while newcomers are a significant minority at just under 25% of the population. These populations were further characterized by a stark difference in their experience with the oil industry. Among the newcomers, an overwhelming majority (88.3%) has at least some experience in oil. The situation is the reverse among old-timers, where a large minority (28.8%) have oil experience (Table 1).

About 45% of newcomers with oil experience have worked in the oil industry in the last year. However, this oil-worker subgroup only accounts for 13% of all newcomers who responded to the survey. Newcomers are well represented in a range of occupational settings, including construction, education and healthcare, and service or hospitality positions. Importantly, these data show that newcomers cannot be characterized by their relationship to the oil industry. In fact, the majority of newcomers have begun to find work elsewhere—even if they came to the region to work directly in oil production to begin with. This has important consequences for the social situation of newcomers, as well as the ways in which their notions of trust and neighborhood participation have changed since the downturn in oil infrastructure development (a topic examined in the next section).

Table 1: The Post-Boom Population

	Newcomer (n=191)	**Old-Timer** (n=587)	**Total** (n=778)
Total	24.4%	75.6%	100%
Oil Experience			
Yes	88.3%	28.8%	21.4%
No	28.8%	71.2%	78.6%
Average Age	39.0	53.5	49.9
Average Household Size	2.8	2.5	2.6
Average Number of Children	0.9	0.6	0.7
Average Number of Adults	1.9	1.9	1.9
Location in Greater Bakken Region			
Greater	13.9%	50.5%	64.3%
Primary	10.5%	25.2%	35.7%
Race			
White	22.8%	70.2%	93.0%
Native American	1.2%	4.0%	5.2%
Other Non-White	0.2%	1.5%	1.8%
Household Income			
Less than $30,000	2.3%	20.7%	22.9%
$30,000 to $59,999	6.2%	27.8%	34.0%
$60,000 to $89,999	4.8%	14.0%	18.8%
$90,000 or higher	12.0%	12.3%	24.3%
Employment Status			
Employed	20.8%	53.1%	73.9%
Unemployed	2.0%	3.4%	5.4%
Retired	1.3%	17.2%	18.5%
Disabled	0.4%	0.7%	2.2%
Survey Mode			
Paper	14.8%	56.7%	71.5%
Online	9.6%	18.9%	28.5%

On average, newcomers are over ten years younger than the typical GBR resident. Newcomers also have more children in their households (while, paradoxically, those with oil experience have significantly fewer children, but significantly more adults, than the average GBR household). Additionally, newcomers were present in disproportionately large numbers within the four-county "core Bakken region," among the employed in the population, and among households in the population earning more than $90,000 a year. In sum, relative to those residents of the GBR who lived there prior to 2006, newcomers have

higher incomes, are younger, have larger households, and are more likely to live in the most active oil production zones in Montana.

PERCEPTIONS OF OIL INFRASTRUCTURE DEVELOPMENT

As described in Table 2 below, 11% of the residents in the Bakken region plan on moving from their community in the near future. Newcomers are significantly more likely to consider moving in the near future (16.8%) compared to only 9% of old-timers. Newcomers report their main reasons for leaving are because of economic opportunities (59.4%), a want to be closer to family (50%), employment (59.4%), the community doesn't feel like home anymore (43.8%), and their access to health services are limited (40.6%). Similarly, old-timers report their main reasons for leaving are: economic opportunities (45.3%), that the community no longer feels like home (39.6%), and a desire to be closer to family (37.7%).

Table 2: Plans to Move

Do you plan to move from your community in the near future?	**Newcomer** (n=191)	**Old-Timer** (n=590)
Yes	16.8%	9.0%
No	83.2%	91.0%
If you plan on moving in the near future, what are your reasons for leaving?	**Newcomer** (n=32)	**Old-Timer** (n=53)
There are better economic opportunities elsewhere	59.4%	45.3%
Employment	59.4%	22.6%
I want to be closer to family	50.0%	37.7%
Doesn't feel like home anymore	43.8%	39.6%
Limited access to health services (including physical and mental health)	40.6%	32.1%
It's not safe	28.1%	18.9%
Limited access to social services (job training, child care, parenting support)	18.8%	7.5%
Limited educational opportunities	15.6%	15.1%
Professional obligations	12.5%	20.8%
Lack of affordable housing	9.4%	0.0%

Table 3 below presents the findings from the question "Would you stay in the Bakken Region if oil activity returns to where it was during the most recent boom?" Interestingly, newcomers reported to being twice as likely to leave (17%) if oil activity returns to where it was during the most recent boom comparted to old-timers (8.1%). This seems to contradict the current perception of the newcomer as a transient population who is there to take advantage of the economic opportunities in the area; however, this could be an indication of newcomers' and old-timers' perceptions of their communities during times of economic instability. The next section on community perceptions explores this idea further.

Table 3: Stay in Bakken Region

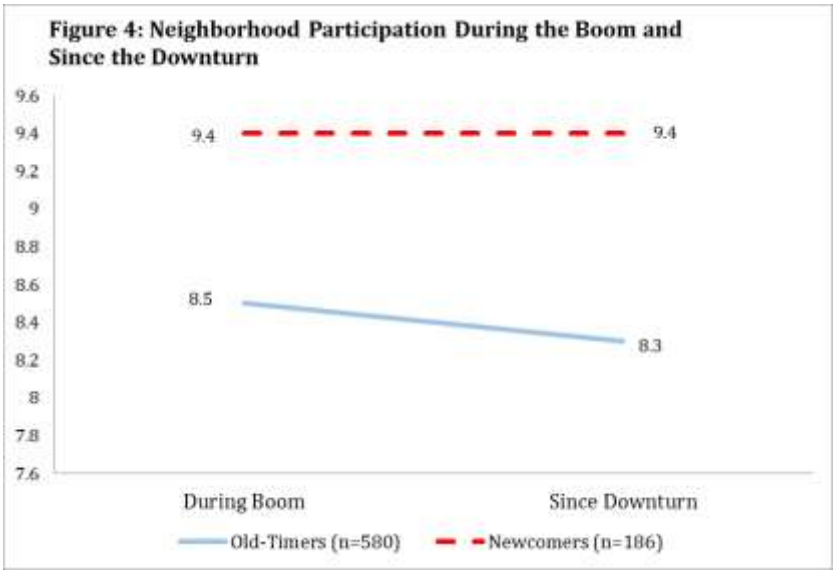
		Newcomer (n=188)	**Old-Timer** (n=593)
Would you stay in the Bakken Region if oil activity returns to where it was during the most recent boom?	Yes	83.0%	91.9%
	No	17.0%	8.1%

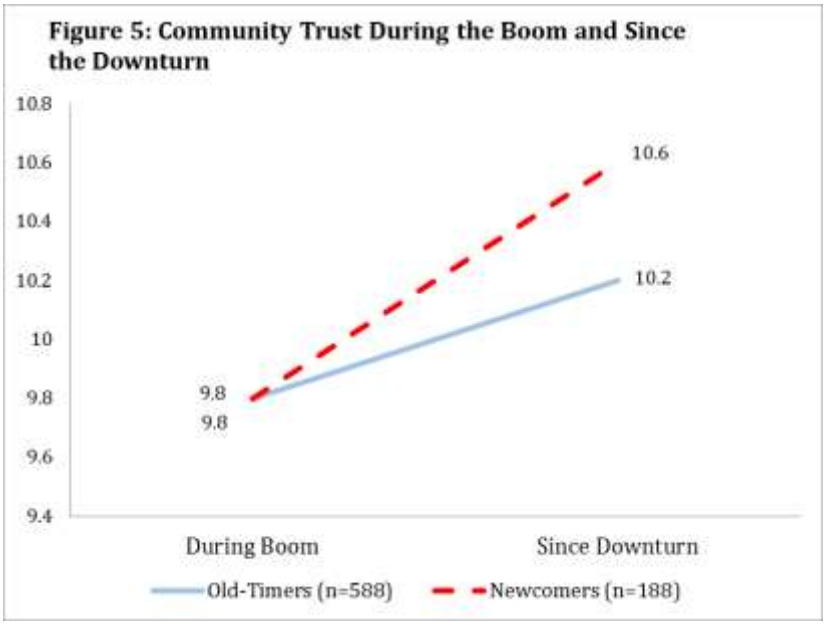
PERCEPTIONS OF COMMUNITY

MBRTS asked respondents a number of questions about opinions of their neighbors and community. These questions were taken directly from prior research examining the relationship between informal social control, social cohesion, violent crime (Sampson, Raudenbush, & Earls, 1997). "Neighborhood participation" measures informal social control in the respondent's neighborhood using five items. Participants were asked how likely their neighbors would be to intervene for the good of the neighborhood in various social situations (very unlikely, unlikely, likely, or very likely). These five situations included: (1) children skipping school, (2) children spray-painting graffiti, (3) children disrespecting an adult, (4) a fight breaking out in front of their house, and (5) their fire station being threatened with budget cuts. These five items were combined to create a variable that ranged from zero (lowest level of neighborhood participation) to fifteen (highest level of neighborhood participation).

"Community trust" measures social cohesion in the community using five items. Participants indicated whether they agreed with various characterizations of their neighbors and neighborhood (strongly disagree, disagree, agree, or strongly agree). Participants were asked: (1) whether neighbors are willing to "help" each other, (2) whether the neighborhood is "close-knit", (3) whether their neighbors can be trusted, (4) whether neighbors get along, and (5) whether neighbors "share the same values." These five items were combined to create a variable that ranged from zero (lowest level of community trust) to fifteen (highest level of community trust).

The changes in neighborhood participation from the boom to the downturn among old-timers and newcomers are presented in Figure 4. Newcomers reported higher neighborhood participation both during the boom and since the downturn compared to old-timers. Newcomers also believe there was no change in neighborhood participation during the boom and since the downturn. Old-timers, however, perceived a drop in neighborhood participation during this time period. This suggests that old-timers feel that their neighborhoods have lower level of informal social control overall and have experienced a decrease in informal social control since the downturn.





The changes in community trust from the boom to the downturn among old-timers and newcomers are presented in Figure 5. Interestingly, in contrast to the perception that neighborhood participation has decreased in recent years, both groups felt that community trust had increased since the boom. Newcomers and old-timers felt identical levels of community trust during the boom. However, newcomers experienced a greater increase since the downturn, reporting higher levels of community trust than old-timers.

The post-bust community appears to be characterized by an overall increase in trust among neighbors. Much of this increase appears to be due to newcomers becoming significantly more trusting of their neighbors in the post-bust period. This is the strongest indication that some level of cohesion is returning to GBR communities in the post-bust period.

The survey examined participants' perceptions of crime and fear in their communities during the boom and after the downturn. Figure 6 shows results related to perceptions of safety during the boom and since the decline. Few respondents reported feeling unsafe. For both old-timers (10.8% to 8.6%) and newcomers (12.2% to 5.7%) the percentage reporting feeling unsafe from crime is lower since the downturn that it was during the boom. The drop in the percentage of individuals who reported feeling unsafe is more pronounced for newcomers than for old-timers.

Figure 6: Feeling Unsafe from Crime During the Boom and Since the Downturn

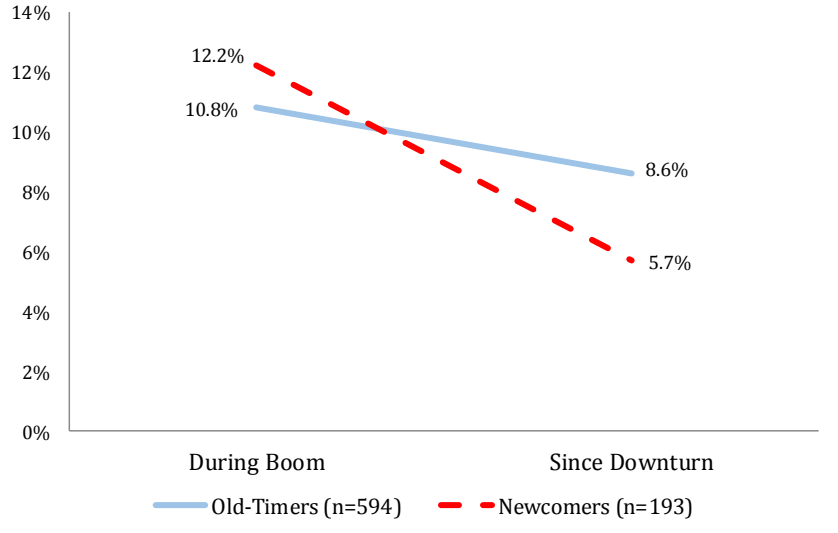


Figure 7 below shows the percent of respondents reporting they did not feel safe from crime during the boom at the county level. Roosevelt County, which is at the heart of the oil development in the Bakken Region, has the highest percentage (34.4%) of respondents reporting they did not feel safe from crime during the boom. Richland County, also at the heart of oil production activities has the next highest percentage of respondents who reported not feeling safe from crime at 22.8%. Neighboring counties show lower levels of fear with Garfield, Daniels, Prairie, and Custer counties reporting the lowest levels of fear.

Figure 8 shows perceptions of safety since the downturn. Similar to the patterns reported above, the percentage of respondents reporting they do not feel safe from crime is highest in Roosevelt County (29.3%). This is a 5% reduction compared to the boom. Richland and McCone Counties show the largest decreases of fear when comparing the boom and the downturn. Approximately 14.2% fewer respondents from Richland County reported not feeling safe from crime since the downturn compared to the boom. Levels in McCone County dropped from 11.1% of its respondents not feeling safe from crime during the

boom to 0% since the downturn. The remaining counties reported minor decreases or similar percentages from the boom to downturn.

Figure 7:

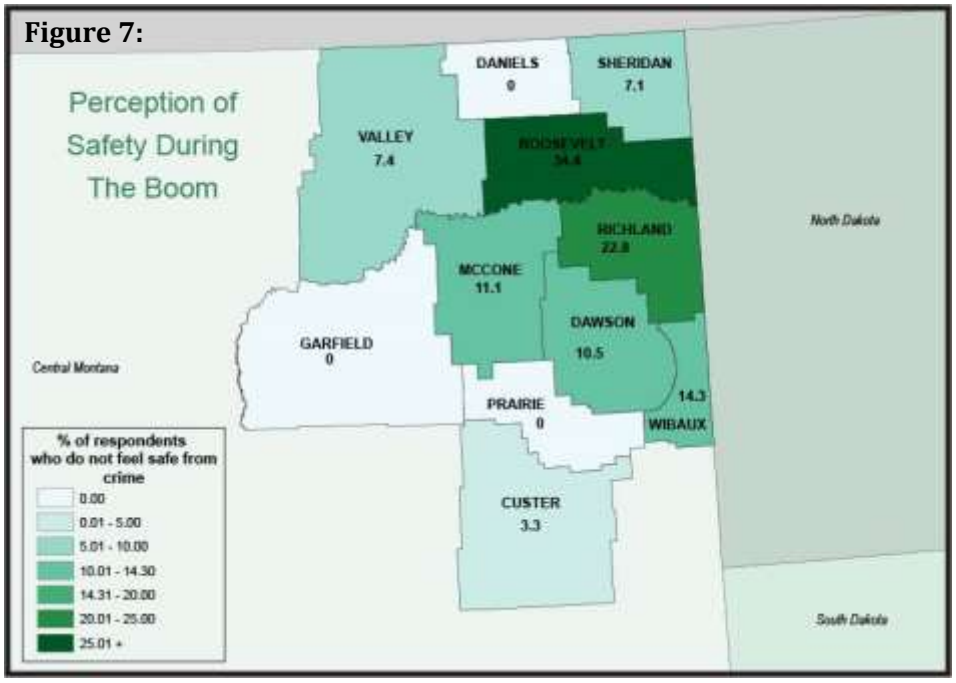
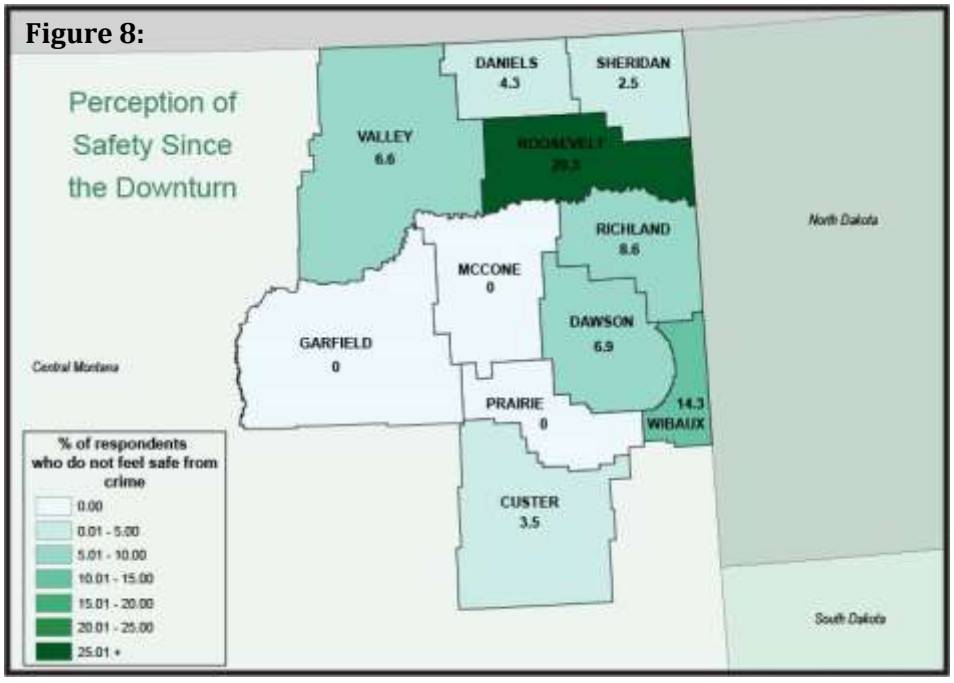
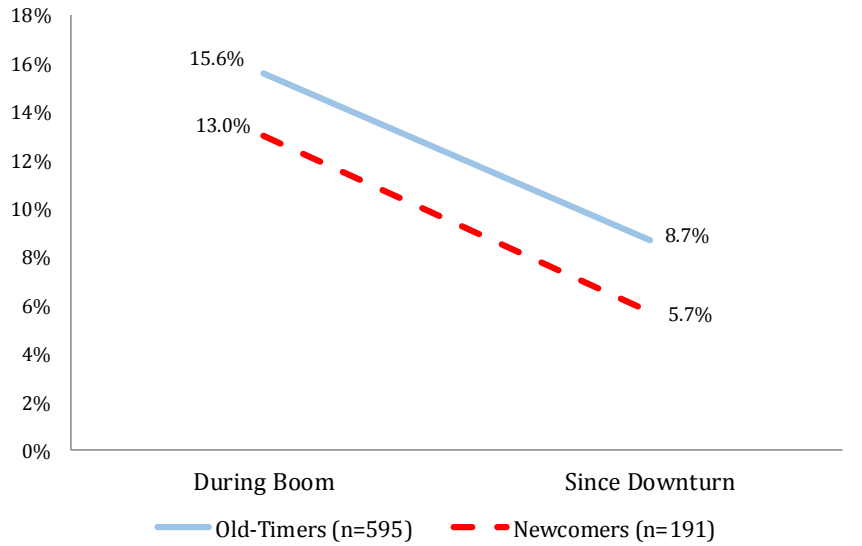


Figure 8:



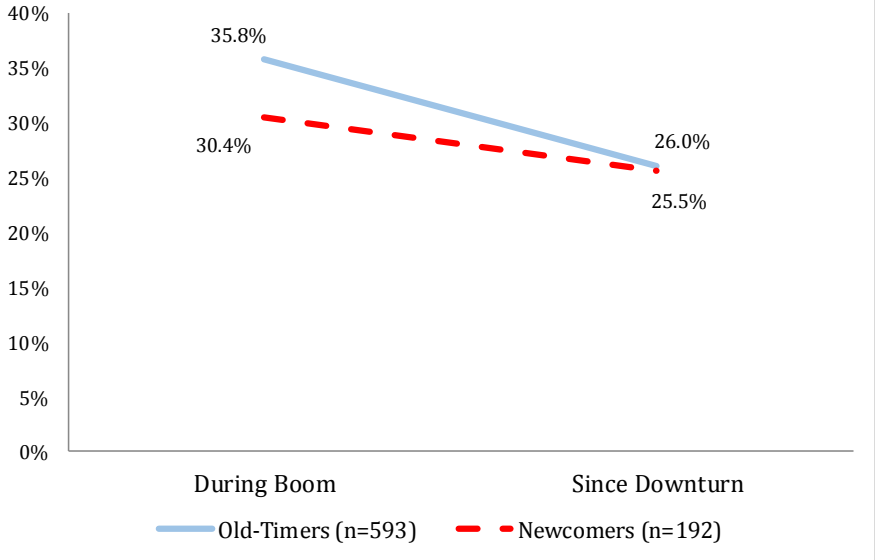
The patterns of responses from questions asking about fear of being a victim of a violent crime are reported in Figure 9 below. The findings show that most respondents are not fearful of being a violent crime victim. The percentage of old-timers (15.6%) reporting always or almost always being fearful of crime during the boom is higher than the percentage reported by newcomers (13%). For both groups, the fear of violent crime during the boom is notably higher than during the downturn (8.7% for old-timers and 5.7% for newcomers.

Figure 9: Fear of Violent Crime During the Boom and Since the Downturn



A similar pattern is observed in Figure 10 regarding fear of walking or jogging alone at night within a mile from home. The percentage of respondents reporting they are afraid is higher for both old-timers (30.4%) and newcomers (35.8%) during the boom when compared to reports since the downturn (26% for old-timers and 25.5% for newcomers). These data show that the percentage of old-timers reporting being afraid during the boom is higher than for newcomers. Since the downturn the percentages are nearly identical for both groups.

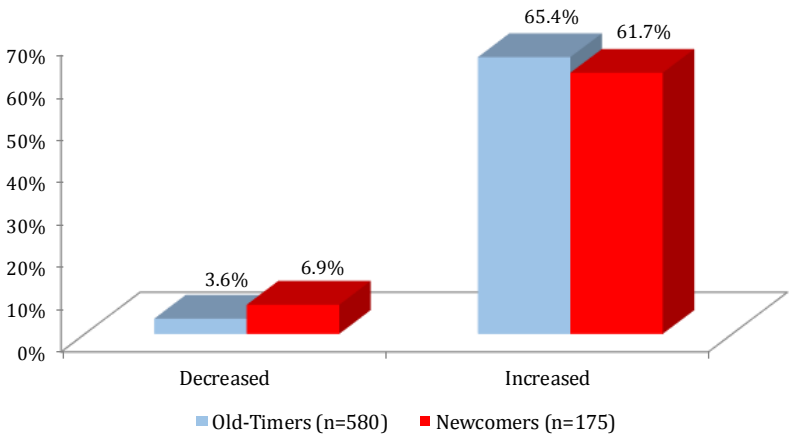
Figure 10: Fear of Walking Alone at Night During the Boom and Since the Downturn



PERCEPTIONS OF CRIME

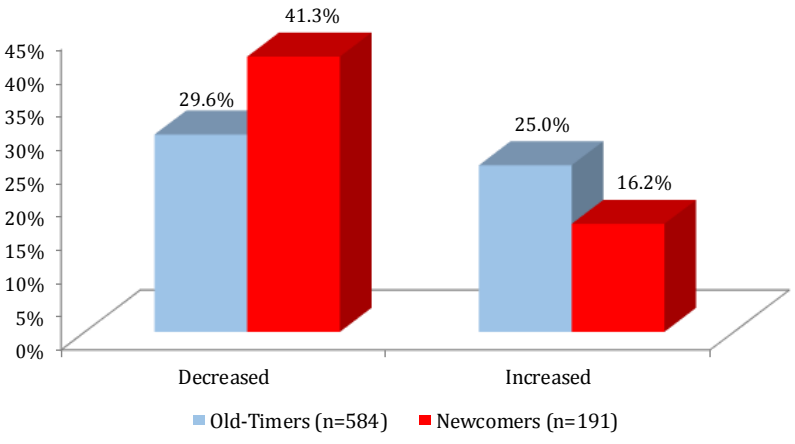
The data in Figures 11 and 12 are based on responses to questions asking respondents about changes in crime in the communities where they live. The figures show the percentages of respondents who either felt that crime had decreased or felt that crime had increased during the boom/since the downturn (the figures do not show the participants who indicated that crime had stayed the same). The patterns suggest changes in perceptions of crime during the boom and since the downturn. Figure 11 shows that, during the boom, most old-timers and newcomers felt that crime increased (65.4% and 61.7%, respectively). Turning to Figure 12, both groups are also more likely to believe that crime has decreased since the downturn; however, there are large differences between old-timers and newcomers. Newcomers are more than twice as likely to report that crime has decreased rather than increased during this time period (41.3% decreased and 16.2% increased). In contrast, the old-timers are almost evenly divided between decreased (29.6%) and increased (25%). Overall, this suggests that everyone believed that crime increased during the boom, but newcomers are much more likely than old-timers to perceive a decrease in crime since the downturn. This could be due to differences in perception of the community, or it could be related to the different ways in which these two groups experienced the boom and the downturn. Perhaps newcomers were exposed to more crime during the boom, and therefore they have experienced a greater decline in the crime they experience since the downturn.

Figure 11: How did Crime Change During the Boom?



Note: Participants could select "decreased," "increased," or "stayed the same." The response category "stayed the same" has been omitted from the figure.

Figure 12: How Has Crime Changed Since the Boom?



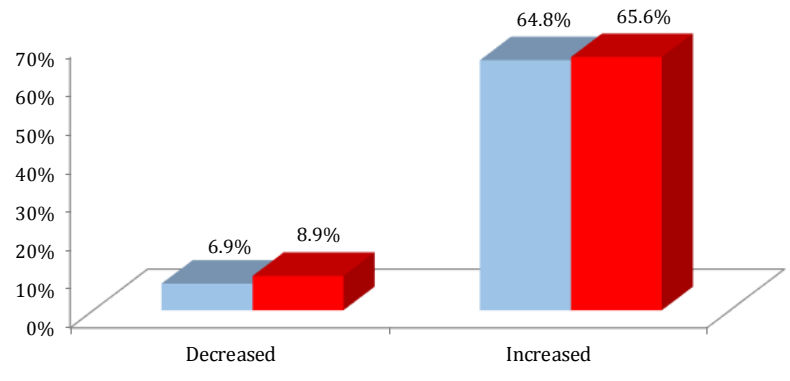
Note: Participants could select "decreased," "increased," or "stayed the same." The response category "stayed the same" has been omitted from the figure.

PERCEPTIONS OF DRUG USE AND DISTRIBUTION

The survey examined participants' perceptions of substance use and distribution in the community and confidence in law enforcement's ability to deal with these drug problems. Figures 13 and 14 show how participants thought overall drug use and distribution changed in their community during the boom and since the downturn, respectively (participants could also indicate that drug use/distribution had stayed the same; these responses are not show in the figures).

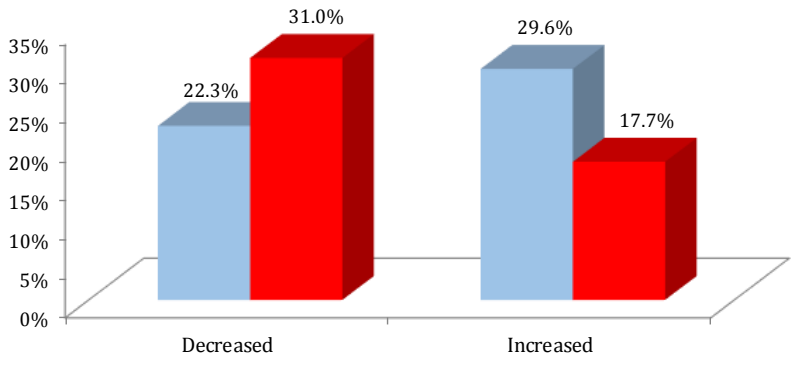
As shown in Figure 13, both old-timers (64.8%) and newcomers (65.6%) generally felt that the drugs in their communities got worse during the boom. Interestingly, there is a lack of consensus between old-timers and newcomers regarding drugs since the downturn. Figure 14 shows that old-timers are more likely to think that drug use and distribution have increased rather than decreased since the downturn (22.3% increased versus 29.6% increased), whereas newcomers are almost twice as likely to think that drugs have decreased instead of increased since the downturn (31% decreased versus 17.7% increased).

Figure 13: How Did Drug Use and Distribution Change During the Boom?



Note: Participants could select "decreased," "increased," or "stayed the same." The response category "stayed the same" has been omitted from the figure.

Figure 14: How Have Drug Use and Distribution Changed Since the Downturn?



Note: Participants could select "decreased," "increased," or "stayed the same." The response category "stayed the same" has been omitted from the figure.

Respondents were asked to rate the extent to which they had confidence in law enforcement to deal with the drug problems in their communities both during the boom and since the downturn. These data are presented in Figure 15. In general, the majority of residents expressed confidence in law enforcement during and after the boom. However, both groups showed a slight decrease in their confidence since the downturn. Newcomers expressed somewhat higher levels of confidence in law enforcement to deal with drug problems both during the boom (87.7% versus 82.9%) and since the downturn 85.9% and 79.9%).

Figure 15: Confidence in Law Enforcement's Ability to Deal with Drugs in the Community During the Boom and Since the Downturn

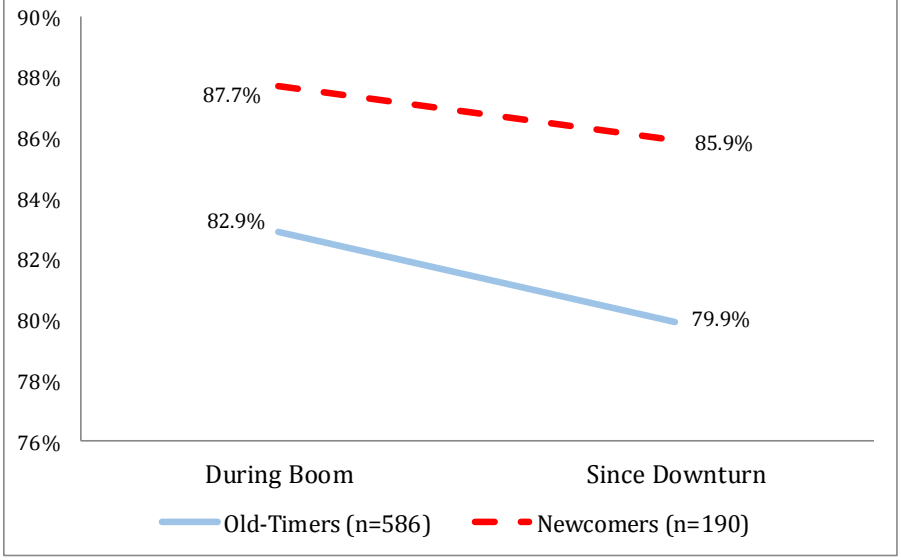


Figure 16 shows that most participants thought that drug use and distribution were a problem both during the boom and since the downturn. Both old-timers and newcomers indicated that the problem had decreased slightly since the downturn, but old-timers were slightly more likely to view drugs as a problem in both time periods. Participants were also asked specifically about whether they viewed the use and distribution of specific drugs as problems during the boom and since the downturn: marijuana, alcohol, methamphetamine, cocaine, heroin, prescription painkillers, and other prescription drug abuse. Overall, the patterns seen in general drug use (Figure 16) were reflected in these specific drugs: both old-timers and newcomers though that the problems had improved since the downturn and old-timers perceived the drug problem to be worse both during the boom and since the downturn. However, there were two notable exceptions: methamphetamine and the abuse of prescription painkillers. We examine these patterns in Figures 17 and 18.

Figure 16: Drug Abuse/Distribution Seen as a Problem in the Community During the Boom and Since the Downturn

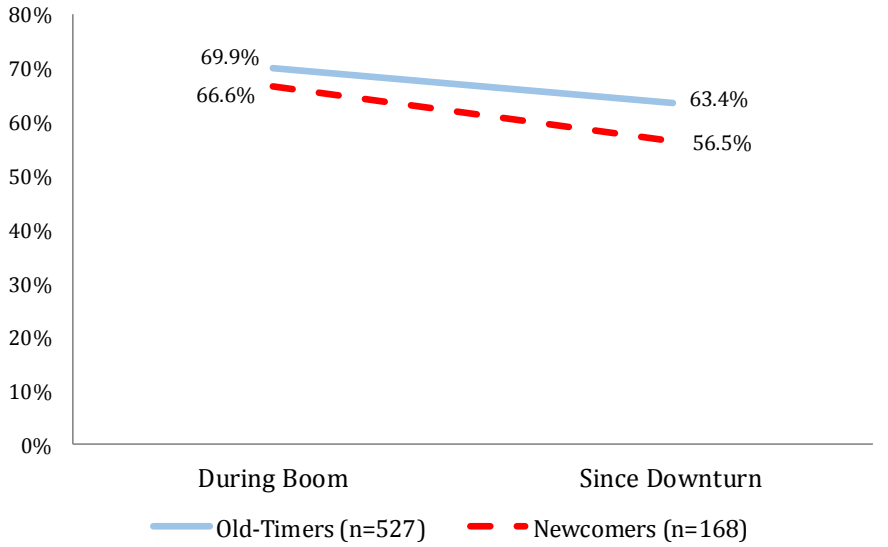


Figure 17 shows that newcomers were more likely than old-timers to perceive methamphetamine use and distribution as a problem during the boom (88.4% versus 85.8%). Additionally, newcomers thought that the methamphetamine became less of a problem since the downturn (79.9% versus 82.8%). This shows a much steeper decline among newcomers who viewed methamphetamine as a problem during the boom and since the downturn. Figure 18 shows that a similar pattern emerges with prescription painkillers. During the boom, newcomers were more likely than old-timers to think that the abuse and distribution of prescription painkillers (e.g., OxyContin, Vicodin, and Fentanyl) was a problem during the boom (81.6% versus 74.8%). However, there was a steeper decline in newcomers who perceived prescription painkillers to be a problem since the downturn, virtually eliminating this large gap between old-timers and newcomers (71.1% of newcomers and 70.7% of old-timers perceived prescription painkillers to be a problem since the downturn).

Perhaps newcomers perceived methamphetamine and prescription painkillers as more of a problem during the boom because they were more likely to directly experience the use and distribution of these drugs due to their lifestyles, neighborhoods, occupations, and the people they interacted with. This could also explain the steeper declines among newcomers who viewed these drugs as problems since the downturn. For drug in general, the common perception is that the problem has gotten better since the downturn. If newcomers were directly experiencing the brunt of methamphetamine and prescription painkillers during the boom, then it is reasonable to assume that the decrease felt generally across the community could be far more salient to them with these two substances.

Figure 17: Methamphetamine Abuse/Distribution Seen as a Problem in the Community During the Boom and Since the Downturn

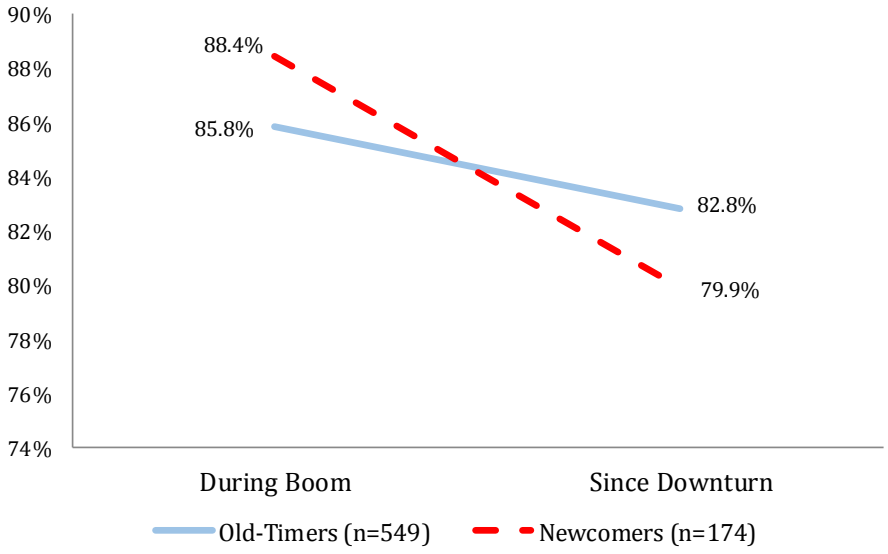
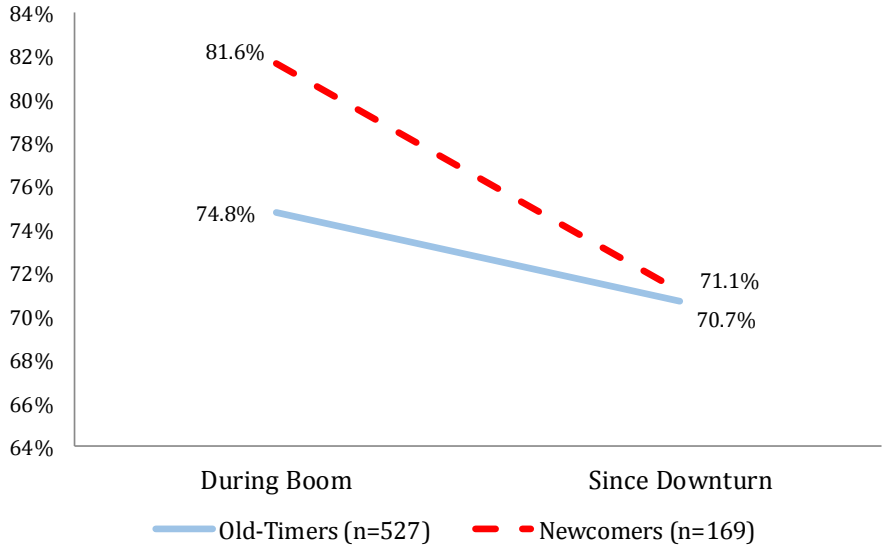


Figure 18: Prescription Painkiller Abuse/Distribution Seen as a Problem in the Community During the Boom and Since the Downturn



PREVALENCE OF VICTIMIZATION

MBRTS gathered information on respondents' experiences with crime during the past 12 months. Participants were asked about three categories of victimization: violent crime (including robbery, aggravated assault, and simple assault), serious property crime (including home burglary and motor vehicle theft), and miscellaneous crime (including stalking, identity theft, property damage, and theft from a motor vehicle). The specific wording of the victimization questions can be found in the survey instrument (see Appendix).

In this section, we examine the prevalence rates for victimization among residents in the Greater Bakken Region of Montana broken down by newcomers and old-timers. Prevalence rates indicate the number of individuals in the population who experienced one or more victimization (Truman & Morgan, 2016).[2] These rates are presented as simple percentages that indicate how many individuals experienced the specified category of crime (e.g., 8.8% of Bakken Region residence experienced at least one home robbery in the past twelve months).

Overall, newcomers and old-timers present similar prevalence rates of victimization. Violent crime victimization was experienced by 2.5% of the Bakken Region residents. Old-timers were slightly more likely to experience all types of violent victimization with a total of 2.8% experiencing at least one category of violent crime victimization compared to newcomers with 1.6%. Overall, four times as many residents experienced an assault (2.4%) compared to robbery victimization (0.6%). Old-timers were only slightly more likely to be a victim of robbery (0.7%) compared to their newcomer counterpart (0.4%). Simple assault was the most common assault category, with 2.2% of the total population experiencing this form of victimization. Old-timers were two-and-a-half times as likely (2.5%) to experience a simple assault compared to newcomers (1%). Aggravated assault was experienced by 1.1% of the total population with old-timers (1.3%) twice as likely to have experienced this crime compared to newcomers (0.6%).

Bakken Region residents were significantly more likely to experience a serious property crime than violent crime. Home burglary was experienced by 8.8% of the total population. Newcomers were more likely to experience this crime with 11.1% compared to old-timers with 8.1%. Motor vehicle theft was not as common with only 4.1% of the total population experiencing this crime victimization. Newcomers, once again were slightly more likely to experience this crime with 6.2% compared to their old-timer counterpart of 3.4%.

[2] $\text{Prevalence rate} = \frac{\text{Number of participants who experienced victimization}}{\text{Number of participants who answered the victimization screening question}} \times 100$

Table 4: Prevalence Rate by Type of Crime

	Total (n=776)*	**Newcomers** (n=188)	**Old-Timers** (n=588)
Violent Crime			
Overall Violent Crime	2.5%	1.6%	2.8%
Robbery	0.6%	0.4%	0.7%
Assault	2.4%	1.6%	2.6%
Aggravated Assault	1.1%	0.6%	1.3%
Simple Assault	2.2%	1.0%	2.5%
Serious Property Crime			
Home Burglary	8.8%	11.1%	8.1%
Motor Vehicle Theft	4.1%	6.2%	3.4%
Miscellaneous Crime			
Stalking	7.4%	13.0%	5.9%
Identity Theft	11.4%	11.1%	11.5%
Property Damage	9.0%	9.3%	9.0%
Theft from Motor Vehicles	6.1%	5.9%	6.2%

* Approximately 200 fewer participants responded to the violent crime questions.

Overall, miscellaneous crime victimizations were experienced with a greater frequency than any other crimes. Stalking was experienced by 7.4% of the total population with newcomers being twice as likely (13%) than old-timers (5.9%) to experience this victimization. Identity theft was the most common victimization in the Bakken region with 11.4% of the residents experiencing a least one victimization. Newcomers (11.1%) and old-timers (11.5%) had similar prevalence rates of identity theft victimization. Property damage was experienced at a similar rate between newcomers (9.3%) and old-timers (9%). Finally, theft from a motor vehicle shows similar prevalence rates between newcomers (5.9%) and old-timers (6.2%).

CRIMES REPORTED TO THE POLICE

Overall, it is apparent that the majority of victims did not report their crimes to the police. In total, only 38.8% of the victims reported their victimization to the police. Table 5 below presents the percent of each type of crime victimization that was reported to the police. Violent crime victimizations were not included in this table due to the limited sample size.

Home burglary was the highest reported victimization crime category with 60%. Old-timers were slightly more likely to report home burglaries (61.1%) than newcomers (54%). About half (53.4%) of motor vehicle thefts were reported to the police. Interestingly, newcomers were significantly more likely (91.1%) to report their motor vehicle theft than old-timers (45%). Those victims who reported to being a victim of

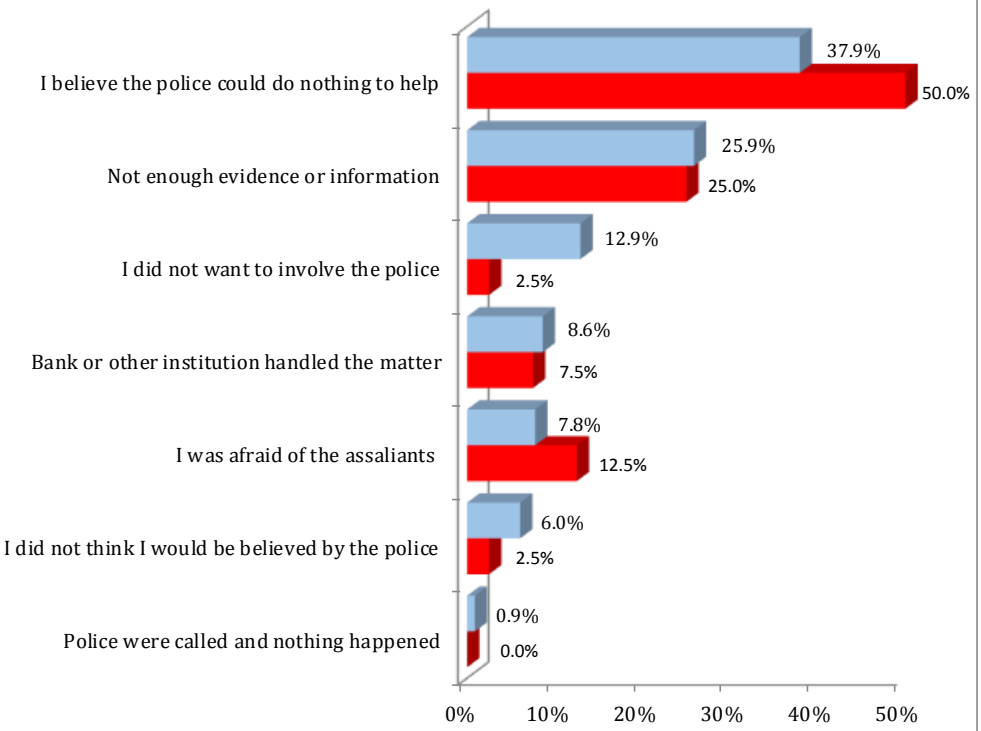
stalking reported their victimization about half (45.8%) of the time. Newcomers were less likely (33.1%) than old-timers (55.3%) to report this victimization. Identity theft was not often reported to police (14.7%), but respondents explained that they reported these victimizations to banks, credit card companies, or other entities instead of involving the police (see Figure 19). Only half (50.2%) of the property victimizations were reported to the police with newcomers being slightly more likely (64.6%) than old-timers (46.8%) to report these victimizations. Under half (41.3%) of all thefts from motor vehicles were reported to the police. Newcomers were more likely (62.5%) to report this victimization to police than old-timers (38.8%).

Table 5: Crimes Reported to the Police

	Total (n=776)	**Newcomers** (n=188)	**Old-Timers** (n=588)
Serious Property Crime			
Home Burglary	60.0%	54.0%	61.1%
Motor Vehicle Theft	53.4%	91.1%	45.0%
Miscellaneous Crime			
Stalking	45.8%	33.1%	55.3%
Identity Theft	14.7%	27.0%	12.3%
Property Damage	50.2%	64.6%	46.8%
Theft from Motor Vehicles	41.3%	62.5%	38.8%

Figure 19 below present the reasons respondents did not report their victimization to the police. The most common explanation for both old-timers (37.9%) and newcomers (50%) was they believed the police could do nothing to help. The second most common response was they did not think there was enough evidence or information to bring to the police. A similar percentage of newcomers (25%) and old-timers (25.9%) gave this explanation. Old-timers were five times more likely (12.9%) than newcomers (2.5%) to explain that they did not want to involve the police in their victimization. A similar percent of newcomers (7.5%) and old-timers (8.6%) did not report their victimization to police because they had a bank or other institution handle the matter. Newcomers were more likely (12.5%) than old-timers (7.8%) to not report their victimization because they were afraid of the assailant. Old-timers were more likely (6%) than newcomers (2.5%) to not involve the police because they think the police would not believe them. Finally, one old-timer resident explained that the police were called but nothing else happened.

Figure 19: Reasons for Not Reporting Crime to the Police



LAW ENFORCEMENT

The survey examined participants' interactions with police and other law enforcement officers, including whether victims of crime reported the incident to law enforcement. In general, many of the participants had some interaction with law enforcement, most participants thought they were treated well by the police during this interaction, and the most common form of contact was simply a casual conversation. Table 6 displays the results examining participants' interactions with law enforcement.

Taken together, 42.3% of respondents said that they had some form of direct contact with local law enforcement since the downturn. Newcomers were more likely, however, than old-timers to have direct contact with law enforcement (53.1% and 38.7% respectively). Respondents reported these contact with law enforcement were mainly positive with 90.5% of newcomers and 91.5% of old-timers describing their treatment from law enforcement as either "very good" or "good". Newcomers were also more likely (5.9%) to report their treatment as "very bad" compared to old-timers (2.6%).

The types of interactions that these individuals had with law enforcement officers ranged widely. Respondents could select each category that applied to their contact with the police. The most common type of contact for both newcomers and old-timers was a casual

conversation (65.7% and 63.6%, respectively). Similarly, approximately one third of newcomers (29.4%) and old-timers (29.3%) reported to having asked law enforcement for information. Traffic stops were experienced at a higher rate by newcomers (28.4%) than their old-timer counterpart (15.1%). Old-timers were almost twice as likely to have had contact with law enforcement because they were a witness to a crime or accident (18.2%) compared to newcomers (9.8%). Old-timers were also more likely to have contact with law enforcement because they were a victim of crime (19.6%) compared to newcomers (12.7%). Approximately one fifth of both newcomers (23.5%) and old-timers (20.4%) had contact with law enforcement during a community activity. Old-timers were almost five times as likely (10.2%) to have contact with law enforcement after being involved in an accident compared to newcomers (2.9%). Fewer respondents reported contact with law enforcement as a result of being questions by police (newcomers=3.9%; old-timers=4%), business or residential alarm (newcomers = 4.9%; old-timers =10.7%), vehicle problems (newcomers=1%; old-timers=4%) being arrested (newcomers=1%; old-timers=2.7%), or working with or for law enforcement (newcomers=2%; old-timers=4.9%).

Table 6: Interactions with Law Enforcement

Since the downturn, did you have any direct contact with local law enforcement?		**Yes**	**No**
	Newcomer (n=191)	53.1%	46.9%
	Old-Timer (n=582)	38.7%	61.3%

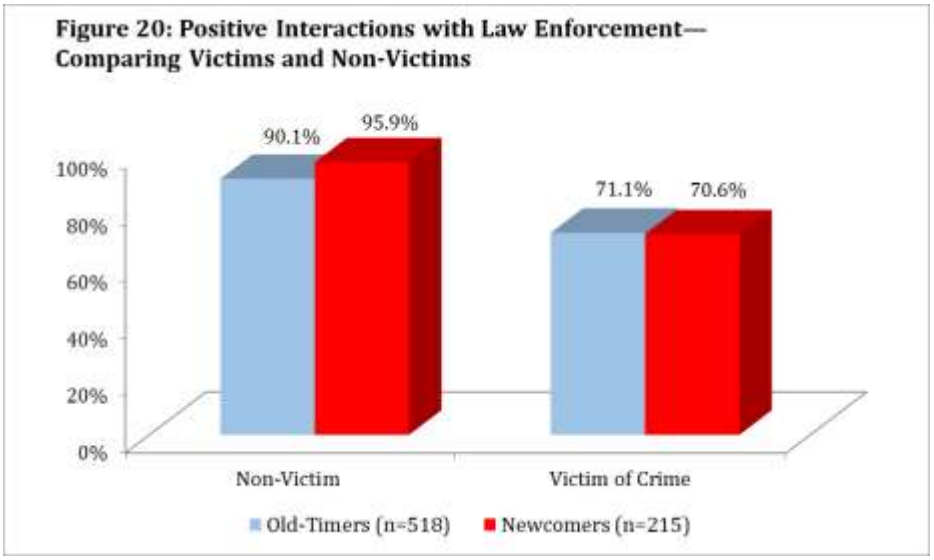
How were you were treated by law enforcement?		**Very Good**	**Good**	**Bad**	**Very Bad**
	Newcomer (n=129)	60.5%	30.0%	3.7%	5.9%
	Old-Timer (n=315)	48.0%	43.5%	5.9%	2.6%

What was the nature of this contact with law enforcement?	**Newcomers** (n=102)	**Old-Timers** (n=225)
Casual conversation	65.7%	63.6%
Asked law enforcement for information	29.4%	29.3%
Traffic stop	28.4%	15.1%
Witness to crime, accident, etc.	9.8%	18.2%
Victim of crime	12.7%	19.6%
Community activity	23..5%	20.4%
Involved in an accident	2.9%	10.2%
Questioned by police	3.9%	4.0%
Business/residence alarm	4.9%	10.7%
Vehicle problem (car not working, keys locked inside, etc.)	1.0%	4.0%
Arrested	1.0%	2.7%
Work with or for Law Enforcement	2.0%	4.9%

*Note: Participants could select more than one response, so the percentages total more than 100%.

Though most participants viewed their interactions with law enforcement positively, a distinct pattern emerged when comparing victims and non-victims for both newcomers and old-timers. When examining individuals' perceptions of how they were treated by law

enforcement, we find that victims reporting a crime are less likely to characterize these interactions as "good" or "very good" compared to individuals having any other form of contact with police (e.g., casual conversation, traffic stop, community activity, etc.). These results are displayed in Figure 20. Over 90% of non-victims (90.1% newcomers and 95.9% old-timers) indicated that their experience with law enforcement was "good" or "very good." Alternatively, roughly 70% (71.1% newcomers and 70.6% old-timers) of victims expressed their interactions were "good" or "very good." Ultimately, this pattern of victims having more negative views of their interactions with police could impact a victim's decision to report crime to law enforcement in the first place. This could contribute to the high level of crimes going unreported: as discussed in the previous section, over 60% of victims in the study did not report their experience with crime to law enforcement.



DISCUSSION AND RECOMMENDATIONS

The objective of this study was to examine perceptions of resident living in the Greater Bakken Region of Eastern Montana about their sense of community, perceptions of safety, levels of crime, and experiences as crime victims. Information in this report investigates perceptions and experiences both during the most recent petroleum develop boom between 2008 and 2014 and since the downturn that began in 2014. This investigation is unique as it provides a comparison between long term residents (more than 10 years) and those who had moved to the region in the past ten years.

Findings show that newcomers are much more likely than old-timers to have prior experience working in the oil industry; both old-timers and newcomers report they would remain in the region if old activity levels returned to where they were during the boom. Newcomers are more likely to report that they would consider moving in the near future and cite crime issues and affordable housing as more important considerations in this decision than old-timers.

Fear of crime is rare among newcomers and old-timers. This includes fear of violent crime such as a mugging, murder, or rape. Although rare, a higher percentage of old-timers report fear of violent crime when compared to newcomers. This is true both during the boom and during the downturn. There are increases in respondent's perceptions of safety and decreases in fear of crime during the downturn compared to levels for both groups during the boom. The percentage of respondents reporting somewhat or great increases in crime are far lower since the downturn for both newcomers and old-timers.

Perceptions of drug use and distribution have improved since the downturn. The majority of respondents report somewhat or great increases in drug distribution during the boom; since the downturn this shifted to a majority reporting that levels stayed the same or decreased. Alcohol, marijuana, methamphetamines, and prescription painkillers were the substances most likely to be reported as a problem. Despite perceptions of increases in drug use and distribution during the boom, trust in law enforcement to deal with drug problems by both newcomers and old-timers remained high throughout the boom and in to the downturn.

Evidence comparing perceptions of community, crime, and drug issues show a distinct pattern. The findings show that newcomers, when compared to perceptions old-timers, are more likely to perceive problems during the boom and also more likely to see improvement after the downturn. This pattern is common across many of the figures presented above. A possible interpretation of this trend is that newcomers, whether due to location where they resided or their increased likelihood to be employed in oil industry activities more readily observed the negative aspects of a dramatic increase in population (e.g., crime, drugs, or violence) and also were more attuned to changes in these after the decline.

Findings show that violent crime victimization is rare. Property crimes and miscellaneous crimes are more commonly reported. Overall, the majority of crimes are not reported to the

police. Property crimes are more likely than violent crimes to be reported to the police. Home burglaries and motor vehicle thefts were the most common offenses reported to the police. Nearly all motor vehicle offenses (motor vehicle thefts and thefts from a motor vehicle) that were experienced by newcomers were reported to the police. In general, perceptions of law enforcement are positive among newcomers and old-timers. For both groups, perceptions become less positive when they involve crime victimization.

CAUTIONS AND LIMITATIONS

Before moving to the recommendations, we should discuss a few cautions regarding the implications of findings from the MBRTS data. In gauging the impact of the findings, it is important to remember that they are based on self-reported experiences. The trends reported here are influenced by the characteristics of the individuals who choose to participate and those who did not. The sample may suffer from some degree of selection bias, meaning that the participants who completed the survey are systematically different from those who decided not to participate. Unfortunately, we cannot know why households sampled in to the study did not complete the survey, so we cannot assess the degree to which selection bias impacts the final MBRTS sample. The MBRTS is based on reports from persons who have physical addresses in the 12 county Greater Bakken Region of Eastern Montana. It does not include persons from outside of these counties who may reside in the region while they are working, but return home to their permanent residence. The perspectives of these individuals are valuable, but it was not feasible to gather these data following the closure of the temporary locations "Man Camps" where a large number of these migratory workers were living. An additional limitation pertains to the information reported above on violent crime. The victimization and prevalence rates about violent crime (robbery, aggravated assault, and simple assault) should be interpreted with caution as some respondents did not have the opportunity to provide this information on the online survey. Even though the denominator used in the rates reported are based on only the total number of responses received, it is possible that experiences associated with violent crime that were not captured may influence the findings reported here.

Despite its limitations, the findings reported here offer several important contributions. First, the MBRTS provided an opportunity to examine perceptions of community, crime, drug issues, and safety and gauge experiences with crime victimization during a period of rapid change. The findings contribute to earlier investigations in other parts of the country where natural resource production "booms" and "busts" have provided a unique look at differences and similarities between long-term residents and those who moved to the region during, or very shortly before the most recent natural resource boom. In this regard, the findings provide a benchmark for current and future planning in the region. Additionally, the data in this report have been weighted to ensure that they are representative of the demographic composition of the 12-county Greater Bakken Region of Eastern Montana. The information gathered and reported here should provide accurate data similar to what would be expected in the population of residents that the sample is drawn from.

With these cautions in mind, there are a number of recommendations associated with the findings from the current investigation.

- Perceptions of community
  - There is a need to better understand the factors that influence changes in perceptions of crime, fear, and safety for newcomers and old-timers.
    - The importance of crime issues and affordable housing on the decision to move were more likely to be reported by newcomers.
    - This also includes investigating reasons for the similarities about willingness to stay in the Greater Bakken Region if oil production returned to similar levels during the most recent boom by newcomers and old-timers.
  - It is important to understand the factors that influence perceptions of neighborhood participation and community trust.
    - This includes information about the process responsible for differences between newcomers and old-timers with regard to belief in the likelihood that neighbors will intervene to enforce informal social controls.
- Perceptions of crime, drug issues, fear, and safety
  - There is a need to explore the reasons why perceptions of crime, drug issues, fear, and safety changed during the downturn compared to the boom.
    - It is also important to understand the factors that influence increases in perceptions of safety and decreases in perceptions of crime, drug issues, and fear of crime during the downturn are important.
- Public perceptions of law enforcement to deal with drug distribution and substance abuse problems
  - A better understanding is needed about the process associated with consistently positive ratings of law enforcement even when most respondents perceived increases in crime during the boom.
    - The information in this report related to perceptions of law enforcement was specific to drug issues. It will be important to expand this to other elements of crime, fear, and safety in future investigations.
    - It will also be important to understand reasons why abuse of methamphetamines and prescription drugs were so commonly reported as community problems by both newcomers and old-timers.

- Evidence based planning and decision making
    - Findings from the MBRTS serve as a benchmark for future planning and decision making.
    - Prioritize funding to gauge experiences of commuters who live and work in the Greater Bakken Region, but do not have permanent residences there.
        - Agreements and funding for this work should be negotiated with the companies who are granted permits to house workers in the temporary "man camps" or existing hotels/motels in the region.
    - Information gathered through research conducted in the Greater Bakken Region should be used as a part of evidence-based planning in the region.
        - The first of the studies recommended above should focus on understanding the reasons and situations associated with persons who came to work in the region and have stayed in the region after the downturn.

CONCLUSION

The importance of understanding social changes in community perceptions during times of rapid population shifts has been a focus of American community sociologists since the industrial revolution. Population booms and busts associated with natural resource development across the country during the late 20th and early 21st century provide a smaller scale of the transitions that were observed during the rural-urban turnaround of the late 19th century. The findings and recommendations reported here provide information that can inform planning, policy, and practice for future waves of natural resource development in the Greater Bakken Region of Eastern Montana.

The study has examined perceptions and experiences of long term and short term residents and has presented patterns during a period of rapid change where there was a dramatic increase in natural resource development and an equally dramatic decline. Future research efforts should recognize the importance of perspectives of persons who came to the region to participate in the economic opportunities associated with oil production and stayed during the decline. Future research studies will also need to plan and prioritize funding for research that focuses on commuters who live and work in the region but maintain permanent residences elsewhere.

Much time and resources have been dedicated during the most recent boom in many communities across the Greater Bakken Region of Eastern Montana to build and improve infrastructure. These facilities provide an opportunity to examine current social and treatment needs in the region and develop strategies to think about how to use existing resources to address needs. Rather than closing facilities that were intended to house and serve the influx associated with the boom, creative thinking about how to repurpose them to strengthen needs of the residents who remain will be important.

In conclusion, the history of natural resource development associated with oil resources in the Bakken Oil Shale has shown that the likelihood of future booms and associated busts are likely to repeat in the future. The boom and downturn in the current investigation was the first in the region to be impacted by significant increases in fracturing technologies that have increased the ability to reach and extract crude-oil that was not retrievable during previous cycles. The evolution of new extraction technologies will need to be taken into consideration during this planning process.

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APPENDIX: MONTANA BAKKEN REGION TRANSITION SURVEY INSTRUMENT

Crime Victimization in the Bakken Region of Montana

You are invited to participate in an effort to gather information about crime victimization and services for crime victims in the greater Bakken region of Montana. For the purposes of this survey, the "greater Bakken region" is defined as the following twelve counties:

Custer, Daniels, Dawson, Fallon, Garfield, McCone, Prairie, Roosevelt, Richland, Sheridan, Valley, and Wibaux.

This online survey should take about 30 minutes to complete. Participation is voluntary and responses will be kept anonymous. You have the option to not respond to any questions that you choose. Submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age.

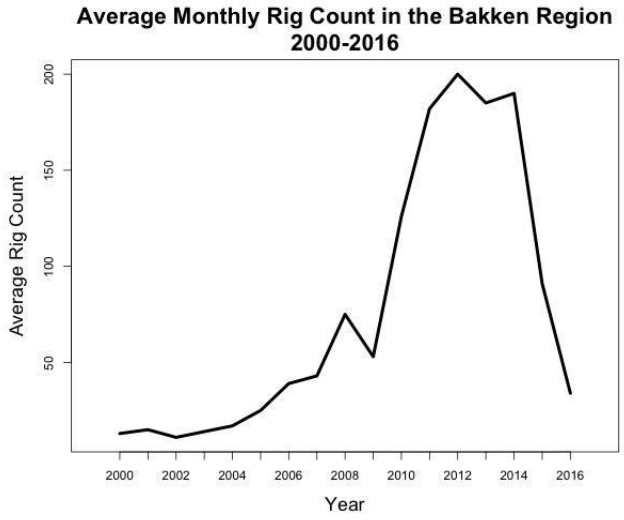
No personally identifiable information will be used in any reporting of the research. All written information provided will be reported in a summary format to protect the anonymity of participants. Your name and physical address will never be used in any report or analysis of the data obtained from this survey.

Some of the questions included in this survey are about traumatic events that may or may not have happened to you in the last year. Whether or not these events have occurred in your life, some of these questions may make you uncomfortable or upset. Despite the sensitive nature of these topics, this information is perhaps the most critical for developing a more comprehensive picture of crime in Montana.

With your help, the information from this survey will be used to better understand and plan crime victimization services in Montana. If you have any questions about the research, please contact the Survey Field Coordinator, Janet Stevens, via email at janet.stevens@mso.umt.edu or via telephone at (406) 243-5114. If you have any questions regarding your rights as a research participant, contact the University of Montana Institutional Review Board at (406) 243-6672.

Please turn to the next page and begin.

Before You Begin ⟶ Since December of 2014, you have probably seen a slowdown in oil production activity. As you know, this can be measured in part by the number of active drilling rigs in the Bakken Region:



As someone living in the greater Bakken region, you have expert knowledge about the effects of this shift on your community. The purpose of this survey is to gather this knowledge so that we might better understand the impacts of resource development in eastern Montana. After a few additional questions about where you have lived in the Bakken, we will ask about:
(1) the downturn after 2014
(2) the "boom" prior to 2014
(3) any crimes you experienced in the past 12 months

1. In which of the following counties did you live in the past 12 months? Mark all that apply (X).

- ☐ Custer
- ☐ Daniels
- ☐ Dawson
- ☐ Fallon
- ☐ Garfield
- ☐ McCone
- ☐ Prairie
- ☐ Roosevelt
- ☐ Richland
- ☐ Sheridan
- ☐ Valley
- ☐ Wibaux

2. How long have you lived in the Bakken region of Montana? For the purposes of this survey, the Bakken region of Montana includes Custer, Daniels, Dawson, Fallon, Garfield, McCone, Prairie, Roosevelt, Richland, Sheridan, Valley, and Wibaux counties. Mark one circle (X).

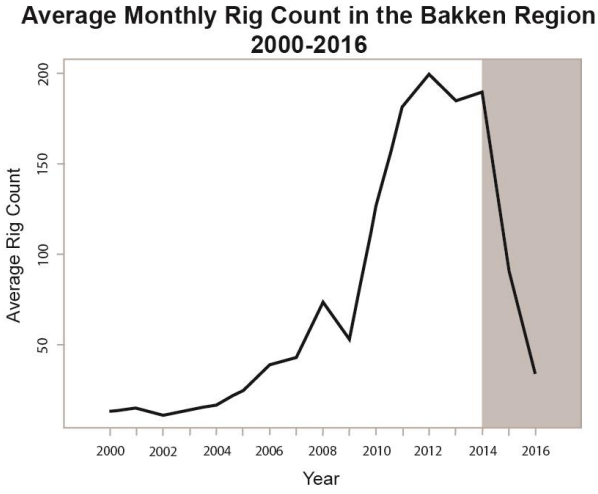
- ○ Less than 1 year
- ○ 1 to 2 years
- ○ 3 to 5 years
- ○ 6 to 10 years
- ○ 11 years or more

3. How long have you lived at your current address? Mark one circle (X).

- ○ Less than 6 months
- ○ 6 months to 1 year
- ○ 1 to 2 years
- ○ 3 to 5 years
- ○ 6 to 10 years
- ○ 11 years or more

Community Since the Downturn in Oil Activity

This section asks questions about your thoughts on crime, police effectiveness, and substance abuse in your community since the 2014 downturn in oil development (the shaded region in the plot below).



4. Since the downturn, how often have you felt safe from crime in your community? Mark one circle (X).

- ○ Always safe
- ○ Almost always safe
- ○ Almost never safe
- ○ Never safe

5. Since the downturn, how often have you been fearful of being a victim of a violent crime (such as mugging, murder, or rape)? Mark one circle (X).

- ○ Always fearful
- ○ Almost always fearful
- ○ Almost never fearful
- ○ Never fearful

6. Is there an area within a mile of your home where you are afraid to walk or jog alone at night? Keep in mind that we are asking specifically about crime. If ONLY natural threats, such as wild animals or environmental conditions, are a concern for you, then please select "No."

- ○ Yes
- ○ No

7. Which of the following best describes changes in crime in your community since the downturn? Mark one circle (X).

- ○ Crime has greatly decreased
- ○ Crime has somewhat decreased
- ○ Crime has stayed the same
- ○ Crime has somewhat increased
- ○ Crime has greatly increased

8. Overall, how would you rate the job law enforcement is doing in your community since the downturn? Mark one circle (X).

- ○ Excellent
- ○ Good
- ○ Bad
- ○ Terrible

9. Since the downturn, how likely are your fellow community members to intervene if the following events occurred? Please respond to each item listed below (X).

	Very Unlikely	Unlikely	Likely	Very Likely
a. Children skipping school and hanging out in the neighborhood	○	○	○	○
b. Children spray-painting graffiti on a local building	○	○	○	○
c. Children showing disrespect to an adult	○	○	○	○
d. A fight breaking out in front of your neighbor's house	○	○	○	○
e. The fire station closest to their house being threatened with budget cuts	○	○	○	○

10. How strongly do you agree with the following descriptions of your community since the downturn? Please respond to each item listed below (X).

	Strongly Disagree	Disagree	Agree	Strongly Agree
a. People around here are willing to help their neighbors	○	○	○	○
b. This is a close-knit community	○	○	○	○
b. People in this community can be trusted	○	○	○	○
c. People in this community generally don't get along with each other	○	○	○	○
d. People in this community do not share the same values	○	○	○	○

11. Since the downturn, did you have any direct contact with local law enforcement?

- ○ Yes ⟶ **GO TO NEXT QUESTION 11A**
- ○ No ⟶ **SKIP TO QUESTION 12 PAGE 3**

11a. Which best describes your contact(s) with local law enforcement since the downturn? Mark all that apply (X).

- ☐ Casual conversation
- ☐ Asked law enforcement for information
- ☐ Community activity
- ☐ Victim of crime
- ☐ Witness to crime, accident, etc.
- ☐ Involved in an accident
- ☐ Traffic stop
- ☐ Vehicle problem (car not working, keys locked inside, etc.)
- ☐ Questioned by police
- ☐ Arrested
- ☐ Business/residence alarm
- ☐ Other (please specify) _____

11b. Overall, how would you describe the way you were treated by local law enforcement during your contact with them since the downturn? Mark one circle (X).

- ○ Very good
- ○ Good
- ○ Bad
- ○ Very bad

12. Do you agree or disagree that the abuse and/or distribution of the following drugs and substances are a problem in your community since the downturn? Please respond to each substance listed below (X):

	Agree	Disagree
a. Marijuana	○	○
b. Alcohol	○	○
c. Methamphetamine	○	○
d. Cocaine	○	○
e. Heroin	○	○
f. Prescription painkillers (such as abuse of Vicodin, OxyContin, and fentanyl)	○	○
g. Other prescription drugs (such as abuse of Adderall, Ambien, and Valium)	○	○

13. Since the downturn, to what extent do you trust or distrust law enforcement to deal with drug distribution and substance abuse problems in your community? Mark one circle (X).

- ○ Trust law enforcement
- ○ Somewhat trust law enforcement
- ○ Somewhat distrust law enforcement
- ○ Distrust law enforcement

14. Which of the following best describes changes in drug use and distribution in your community since the downturn? Mark one circle (X).

- ○ It greatly decreased
- ○ It somewhat decreased
- ○ It stayed the same
- ○ It somewhat increased
- ○ It greatly increased

15. Since the downturn, how many of your neighbors do you know well enough that you are on a first name basis? Mark one circle (X).

- ○ All of my neighbors
- ○ Most of my neighbors
- ○ Some of my neighbors
- ○ Few of my neighbors
- ○ None of my neighbors

16. Do you have plans to move from your community in the near future?

- ○ Yes → **GO TO NEXT QUESTION 16A**
- ○ No → **SKIP TO QUESTION 17**

16a. Why do you plan to move away from your community? Mark all that apply (X).

- ☐ Employment
- ☐ It doesn't feel like home anymore
- ☐ I want to be closer to family
- ☐ There are better economic opportunities elsewhere
- ☐ Limited access to health services (including physical and mental health)
- ☐ It's not safe
- ☐ Professional obligations
- ☐ Limited access to social services (job training, child care, parenting support)
- ☐ Limited educational opportunities

17. Would you stay in the greater Bakken region if oil activity returns to where it was during the most recent boom?

- ○ Yes
- ○ No

18. How important would each of the following factors be in your decision to stay or go? Please respond to each item listed below (X).

	Not at all important	Somewhat important	Important	Very Important
a. Employment Opportunities	○	○	○	○
b. Community Growth	○	○	○	○
c. Affordable Housing	○	○	○	○
d. Crime	○	○	○	○
e. Health Services	○	○	○	○
f. Family/Friends	○	○	○	○
g. Educational Opportunities	○	○	○	○
h. Recreational Opportunities	○	○	○	○
e. Lack of Infrastructure (roads, utilities, public buildings)	○	○	○	○

19. Between 2008 and 2014, in which of the following counties did you live? Mark all that apply (X).

- ☐ Custer
- ☐ Daniels
- ☐ Dawson
- ☐ Fallon
- ☐ Garfield
- ☐ McCone
- ☐ Prairie
- ☐ Roosevelt
- ☐ Richland
- ☐ Sheridan
- ☐ Valley
- ☐ Wibaux

GO TO NEXT QUESTION 20

- ☐ I did not live in any of the counties listed above during that time → **SKIP TO QUESTION 33 ON PAGE 6**

20. Between 2008 and 2014, how long did you live in the greater Bakken region? Mark one circle (X).

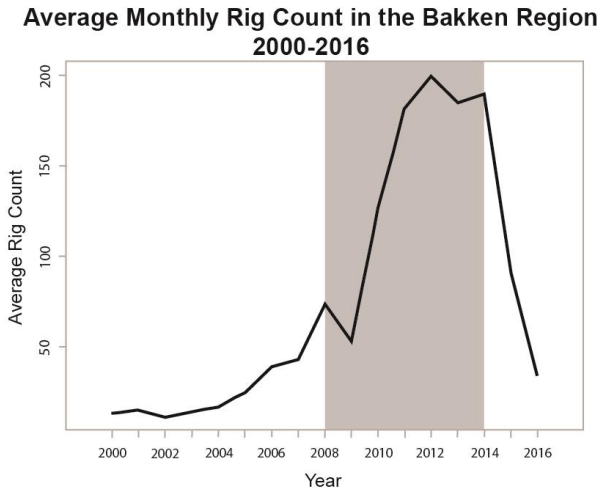
- ○ Less than 6 months
- ○ 6 months to 1 year
- ○ 1 to 2 years
- ○ 3 to 4 years
- ○ 5 to 6 years

PLEASE CONTINUE IN NEXT COLUMN →

Your Community During the "Boom"

To compare your experiences of the "boom" with your experiences during recent downturn, this section includes many questions that are similar to the ones you answered in the previous section.

This section asks questions about your thoughts on crime, police effectiveness, and substance abuse in your community during the most recent period of intensive oil development that took place from about 2008 to late 2014 (the shaded region in the following plot).



21. During the boom, how often did you feel safe from crime in your community? Mark one circle (X).

- ○ Always safe
- ○ Almost always safe
- ○ Almost never safe
- ○ Never safe

22. During the boom, how often were you fearful of being a victim of a violent crime (such as mugging, murder, or rape)? Mark one circle (X).

- ○ Always fearful
- ○ Almost always fearful
- ○ Almost never fearful
- ○ Never fearful

23. Was there an area within a mile of your home where you were afraid to walk or jog alone at night during the boom? Keep in mind that we are asking specifically about crime. If ONLY natural threats, such as wild animals or environmental conditions, are a concern for you, then please select "No."

- ○ Yes
- ○ No

24. Do you believe that crime changed in your community during the boom? Mark one circle (X).

- ○ Crime greatly decreased
- ○ Crime somewhat decreased
- ○ Crime stayed the same
- ○ Crime somewhat increased
- ○ Crime greatly increased

25. During the boom, how would you rate the job law enforcement did in your community? Mark one circle (X).

- ○ Excellent
- ○ Good
- ○ Bad
- ○ Terrible

26. How likely were your fellow community members to intervene if the following events occurred during the boom? Please respond to each item listed below (X).

	Very Unlikely	Unlikely	Likely	Very Likely
a. Children skipping school and hanging out around town	○	○	○	○
b. Children spray-painting graffiti on a local building	○	○	○	○
c. Children showing disrespect to an adult	○	○	○	○
d. A fight breaking out in front of a community member's house	○	○	○	○
e. The fire station closest to their house being threatened with budget cuts	○	○	○	○

27. How strongly do you agree with the following statement about your community during the boom? Please respond to each item listed below (X).

	Strongly Disagree	Disagree	Agree	Strongly Agree
a. People around here were willing to help their neighbors	○	○	○	○
b. This was a close-knit community	○	○	○	○
c. People in this community could be trusted	○	○	○	○
d. People in this community generally didn't get along with each other	○	○	○	○
e. People in this community did not share the same values	○	○	○	○

28. During the boom, did you have any direct contact with local law enforcement?

- ○ Yes ⟶ **GO TO NEXT QUESTION 28A**
- ○ No ⟶ **SKIP TO QUESTION 29 ON PAGE 6**

28a. Which best describes your contact(s) with local law enforcement during the boom? Mark all that apply (X).

- ☐ Casual conversation
- ☐ Asked law enforcement for information
- ☐ Community activity
- ☐ Victim of crime
- ☐ Witness to crime, accident, etc.
- ☐ Involved in an accident
- ☐ Traffic stop
- ☐ Vehicle problem (car not working, keys locked inside, etc.)
- ☐ Questioned by police
- ☐ Arrested
- ☐ Business/residence alarm
- ☐ Other (please specify) _____

28b. Overall, how would you describe the way you were treated by local law enforcement during your contact with them during the boom? Mark one circle (X).

- ○ Very good
- ○ Good
- ○ Bad
- ○ Very bad

29. Do you agree or disagree that the abuse and/or distribution of the following drugs and substances were a problem in your community during the boom? Please respond to each substance listed below (X).

	Agree	Disagree
a. Marijuana	○	○
b. Alcohol	○	○
c. Methamphetamine	○	○
d. Cocaine	○	○
e. Heroin	○	○
f. Prescription painkillers (such as abuse of Vicodin, OxyContin, and fentanyl)	○	○
g. Other prescription drugs (such as abuse of Adderall, Ambien, and Valium)	○	○

30. To what extent did you trust or distrust law enforcement to deal with drug distribution and substance abuse problems in your community during the boom? Mark one circle (X).

- ○ Trusted law enforcement
- ○ Somewhat trusted law enforcement
- ○ Somewhat distrusted law enforcement
- ○ Distrusted law enforcement

31. Which of the following best describes changes in drug use and distribution in your community during the boom? Mark one circle (X).

- ○ It greatly decreased
- ○ It somewhat decreased
- ○ It stayed the same
- ○ It somewhat increased
- ○ It greatly increased

32. During the boom, how many of your neighbors did you know well enough that you were on a first name basis? Mark one circle (X).

- ○ All of my neighbors
- ○ Most of my neighbors
- ○ Some of my neighbors
- ○ Few of my neighbors
- ○ None of my neighbors

Property Crimes

This section contains questions about property crimes. Property crimes occur when property is used, taken, defaced or destroyed without the owner's permission. Property crime includes theft, arson, breaking and entering, and trespassing.

33. In the past 12 months, did anyone use without your permission, steal, or attempt to steal your motor vehicle (such as your truck, car, motorcycle, or ATV)? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 33A**
- ○ No ⟶ **SKIP TO QUESTION 34 ON PAGE 7**

33a. In the past 12 months, how many times did someone use without permission, steal, or attempt to steal your motor vehicle? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

33b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

PLEASE CONTINUE ON NEXT PAGE ⟶

34. In the past 12 months, did anyone steal or attempt to steal, anything that belonged to you from inside your motor vehicle, such as packages, money, phone, or clothing? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 34A**
- ○ No ⟶ **SKIP TO QUESTION 35 BELOW**

34a. In the past 12 months, how many times did anyone steal or attempt to steal, anything that belonged to you from inside your motor vehicle? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

34b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

35. In the past 12 months, did anyone break into or attempt to break into, your home, garage, or some other building on your property? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 35A**
- ○ No ⟶ **SKIP TO QUESTION 36 IN NEXT COLUMN**

35a. In the past 12 months, how many times did anyone break into or attempt to break into, your home, garage, or some other building on your property? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

35b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

36. In the past 12 months, was your property damaged or vandalized (such as graffiti, hit and run, or a broken window)? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 36A**
- ○ No ⟶ **SKIP TO QUESTION 37 BELOW**

36a. In the past 12 months, how many times was your property damaged or vandalized? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

36b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

37. In the past 12 months, did someone take or attempt to take something directly from you by using violence or the threat of violence? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 37A**
- ○ No ⟶ **SKIP TO QUESTION 38 ON PAGE 8**

37a. In the past 12 months, how many times did someone take or attempt to take something directly from you by using force or the threat of force? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

37b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

38. In the past 12 months, other than a credit/debit card account, did someone, use, or attempt to use, any of your existing accounts (such as telephone, bank, or social media accounts) without your permission? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 38A**
- ○ No ⟶ **SKIP TO QUESTION 39 BELOW**

38a. In the past 12 months, how many times did someone use or attempt to use any of your accounts without your permission? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

38b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

39. In the past 12 months, did someone use or attempt to use your personal information without your permission to obtain a new credit card or loans, run up debts, open other accounts, or otherwise commit theft, fraud, or some other identity crime? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 39A**
- ○ No ⟶ **SKIP TO QUESTION 40 IN NEXT COLUMN**

39a. In the past 12 months, how many times have you discovered that someone used or attempted to use your personal information without permission? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

39b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

Personal Crimes

This section deals with crimes against your person. Personal crimes include battery, assault, and stalking, among others. Remember, your answers will be kept completely confidential. We appreciate your willingness to discuss these difficult events.

40. In the past 12 months, did anyone hit, or attempt to hit, attack, or beat you up by using only their hands and feet? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 40A**
- ○ No ⟶ **SKIP TO QUESTION 41 ON PAGE 9**

40a. In the past 12 months, how many times did anyone hit, or attempt to hit, attack, or beat you up by using only their hands and feet? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

40b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

PLEASE CONTINUE ON NEXT PAGE ⟶

41. In the past 12 months, did anyone injure you or attempt to injure you with a weapon, such as a knife, gun, or blunt object? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 41A**
- ○ No ⟶ **SKIP TO QUESTION 42 BELOW**

41a. In the past 12 months, how many times did anyone injure you or attempt to injure you with a weapon, such as a knife, gun, or blunt object? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

41b. How many of these incidents did you report to the local law enforcement? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

42. In the past 12 months, did you feel threatened by anyone because they were following you or spying on you, sending you unasked for messages, vandalizing your property, threatening harm to you or your pets, or showing up at your home, workplace, or school uninvited? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 42A**
- ○ No ⟶ **SKIP TO QUESTION 43 NEXT COLUMN**

42a. In the past 12 months, how many times did you feel threatened? Mark one circle (X).

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

42b. How many of these incidents did you report to the police? Mark one circle (X).

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more

43. If you did not report one or more incidents to local law enforcement, what were the reasons you decided against reporting? Please consider all victimization described in previous questions, and Mark all that apply (X).

- ☐ I was not a victim of crime in the past 12 months
- ☐ I reported all incidents to local law enforcement
- ☐ I believed the police could do nothing to help
- ☐ I did not want to involve police
- ☐ I did not think I would be believed by police
- ☐ I was afraid of the assailant(s)
- ☐ I felt there was not enough evidence or information
- ☐ Other (Please Specify) _____

Demographic Information

The following questions ask you to provide some basic information about yourself. This information will be used for research purposes only. Please note this is the final section of the survey.

44. What is your gender? Mark one circle (X).

- ○ Male
- ○ Female

45. Which of the following do you identify yourself with? Mark all that apply (X).

- ☐ Heterosexual or straight
- ☐ Homosexual or gay or lesbian
- ☐ Other (Please Specify) _____

46. In what year were you born? Please enter the full year

☐☐☐☐ Year (for example: 1973)

47. What is your marital status? Mark one circle (X).

- ○ Married
- ○ Divorced
- ○ Single, never been married
- ○ Widowed
- ○ Partner sharing a home

48. Which category best describes the highest level of education you have completed? Mark one circle (X).

- ○ 8th grade or less
- ○ Some high school (9th through 12th grade) but did not graduate
- ○ High school graduate or GED
- ○ Some college but did not graduate
- ○ Two year degree
- ○ Bachelor degree
- ○ Graduate or advanced degree

49. How would you describe your current residence? Mark one circle (X).

- ○ Apartment
- ○ Condominium or townhouse
- ○ Hotel or motel
- ○ Trailer Home
- ○ Recreational Vehicle (RV)
- ○ Single bedroom house
- ○ Multiple bedroom house
- ○ Low income or subsidized housing
- ○ No permanent residence

50. How many people over 18 years of age (including yourself) live in your current residence?

☐ people

51. How many people under 18 years of age live in your current residence? Please write 0 if none

☐ people

52. Which category best describes your current employment status? Mark one circle (X).

- ○ Employed Full Time
- ○ Employed Part Time
- ○ Homemaker
- ○ Unemployed
- ○ Retired
- ○ Disabled or unable to work

53. Which of the following industries most closely matches your employment? Mark one circle (X).

- ○ Agriculture
- ○ Extractive industries
- ○ Manufacturing
- ○ Transportation or warehousing
- ○ Construction (residential or commercial)
- ○ Utilities
- ○ Waste management or remediation services
- ○ Professional, scientific or technical services
- ○ Finance or insurance
- ○ Information Technology
- ○ Public Administration
- ○ Education
- ○ Retail trade
- ○ Health care or social assistance
- ○ Real estate or rental and leasing
- ○ Wholesale trade
- ○ Retail trade
- ○ Food services
- ○ Hospitality
- ○ Arts, entertainment or recreation

54. Have you ever been employed in the oil industry? Mark one circle (X).

- ○ Yes ⟶ **GO TO NEXT QUESTION 55**
- ○ No ⟶ **SKIP TO QUESTION 57**

55. How recently were you employed in the oil industry? Mark one circle (X).

- ○ I worked in the oil industry within the last year
- ○ I worked in the oil industry one to five years ago
- ○ I worked in the oil industry five to ten years ago
- ○ I worked in the oil industry ten to fifteen years ago
- ○ I worked in the oil industry fifteen or more years ago

56. In which sector were or are you primarily employed? Mark one circle (X).

- ○ Upstream (exploration and production)
- ○ Midstream (transportation, including pipelines)
- ○ Downstream (refining, processing)
- ○ Service and Supply

57. Are you enrolled as a student? Mark one circle (X).

- ○ Yes, Full-time
- ○ Yes, Part-time
- ○ No

58. What race(s)/ethnicities do you consider yourself to be? Mark all that apply (X).

- ☐ White/Caucasian
- ☐ American Indian
- ☐ Asian
- ☐ Black/African American
- ☐ Hispanic
- ☐ Pacific Islander
- ☐ Latino
- ☐ Other (please specify) _____

59. In 2015, what was your total yearly household income? Include income from spouse or any other income that you consider to be part of your total household income. Mark one circle (X).

- ○ Under $9,999
- ○ $10,000-19,999
- ○ $20,000-29,999
- ○ $30,000-39,999
- ○ $40,000-49,999
- ○ $50,000-59,999
- ○ $60,000-69,999
- ○ $70,000-79,999
- ○ $80,000-89,999
- ○ $90,000-99,999
- ○ $100,000 or more

Thank you very much for your time and effort!

Thank you for your help with this important research!

BUREAU OF BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF MONTANA

Crime Victimization in the Bakken Region of Montana Survey

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