Initiative #97
Increased Setback Requirement for Oil and Natural Gas Development

Proposition ? proposes amending the <u>Colorado statutes</u> to:

- ♦ require that new oil and natural gas development be located at least 2,500 feet from occupied structures, water sources, and areas designated as vulnerable.

Summary and Analysis

Proposition ? requires that any new oil and natural gas development be located at least 2,500 feet from occupied structures and other areas designated as vulnerable. This type of requirement is commonly known as a setback. Entering a previously plugged or abandoned oil or natural gas well is held to this same setback requirement. The measure also allows the state or a local government to require a setback distance greater than 2,500 feet. If two or more local governments with overlapping boundaries establish different setbacks, Proposition ? requires that the greater distance be used.

The measure does not apply to federal land, which includes national forests and parks and comprises about 36 percent of the land in Colorado.

Under the measure, oil and natural gas development includes the exploration for, and the drilling, production, and processing of oil or natural gas. Oil and natural gas development also includes hydraulic fracturing, flowlines between oil and natural gas facilities, and the treatment of associated waste. Occupied structures include buildings where people live or work. Proposition ? designates certain areas as vulnerable, including certain recreation areas and water sources, such as public and community drinking water sources, canals, reservoirs, lakes, rivers and streams (whether continuously flowing or not), and any other area designated by the state or a local government as vulnerable.

State regulation of oil and natural gas. The Colorado Oil and Gas Conservation Commission (COGCC) in the Colorado Department of Natural Resources establishes and enforces regulations on oil and natural gas operations in the state. The COGCC is charged with fostering the responsible development, production, and use of oil and natural gas resources in a manner that protects public health, safety, welfare, and the environment. The COGCC consults with the Colorado Department of Public Health and Environment (CDPHE) to consider the health and safety of the public when regulating oil and natural gas operations. The CDPHE regulates air pollution, the discharge of water to surface water bodies, and the disposal of hazardous waste related to industrial activities, including oil and natural gas operations.

Existing setback requirements. Current COGCC regulations, approved in 2013, prohibit oil and natural gas wells and production facilities from being located closer than:

- 500 feet from a home or other occupied building; and
- 1,000 feet from high-occupancy buildings such as schools, health care institutions, correctional facilities, and child care centers, as well as neighborhoods with at least 22 buildings.

The surrounding area encompassed by the current 500-foot setback includes about 18 acres, and the 1,000-foot setback area includes about 72 acres. Proposition ? increases the setback to a minimum of 2,500 feet, or about 450 surrounding acres.

The current setback requirement may be waived in certain instances by the COGCC and a building owner. Proposition ? does not include a waiver provision.

Oil and natural gas resources in Colorado. Geologic formations containing oil and natural gas are found in many areas of Colorado, with some formations underlying multiple local communities. Recent development of these resources has been concentrated in Weld, Garfield, La Plata, Rio Blanco, and Las Animas Counties, as well as portions of surrounding counties. Most of the state's oil production occurs in the Denver-Julesburg Basin, primarily in Weld County and other nearby counties. A COGCC map of current oil and natural gas activity can be found online at:

http://coloradobluebook.com/initiative97map

Oil and natural gas resources are owned or leased by many different private companies, governments, financial institutions, nonprofits, and private individuals. Oil production in Colorado doubled between 2013 and 2017. Natural gas production in Colorado has been stable over the past ten years. In 2016, Colorado ranked seventh among the states in domestic oil production and fifth in natural gas production. In 2017, there were about 54,000 producing wells in Colorado, a 48 percent increase since 2007.

Oil and natural gas extraction technologies. Changes in industry technologies, such as hydraulic fracturing, or "fracking," and horizontal drilling, have led to substantial oil and natural gas production increases in Colorado and nationally, as well as an increase in the number of wells and related facilities. Hydraulic fracturing is used for most new wells and involves pumping a mixture of mostly water and sand, and small amounts of chemicals and other additives, into underground rock layers where oil or natural gas is located. The pressure of the water creates small fractures in the rock. The sand keeps the fractures open, allowing the oil or natural gas to escape and flow up the well. Hydraulic fracturing enables access to oil and natural gas formations that were previously inaccessible. Horizontal drilling enables oil and natural gas operators to drill multiple wells from a single location to improve their efficiency and minimize surface disturbances. With current technologies, oil and natural gas wells have the greatest production in their first year of operation and decrease in production each successive year until the wells are depleted.

State and local revenue from oil and natural gas. Companies that extract mineral resources, including oil and natural gas, coal, and metallic minerals, pay severance taxes to the state. Oil and natural gas tax collections fluctuate annually. From budget years 2012-13 to 2016-17, state severance tax collections from oil and natural gas producers ranged from $4.0 million to $264.7 million per year. Under current law, Colorado severance tax revenue is split between state programs and local governments. The state also collects some revenue from royalty and lease payments. Oil and natural gas producers also pay income taxes, sales taxes, and local property taxes. In 2017, Colorado oil and natural gas producers paid an estimated $496.7 million in property taxes to impacted local governments, school districts, and special districts.

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Arguments For

1) Oil and natural gas operations may adversely impact public health, safety, and the environment. Some people living near these operations have reported negative health effects to the CDPHE, including sinus and respiratory conditions, as well as other symptoms such as headaches and nausea. Such development increases noise, traffic, dust, light, and odors. Proposition ? requires that new oil and natural gas development be located farther away from homes, schools, businesses, and other occupied buildings, thereby reducing nuisance impacts and potential exposure to air pollutants. Proposition ? also establishes a required setback from water sources and recreation areas to help protect those resources.

2) Over the past several years, Colorado's northern Front Range has seen both substantial urban development and increased oil and natural gas activity. Proposition ? provides property owners with greater certainty about the location of new oil and natural gas development in their communities. Keeping oil and natural gas development farther away from occupied structures reduces resident exposure to industrial activity and the potential hazards related to such activity. It may also improve the quality of life for nearby residents. Some people are reluctant to purchase or rent a home or visit a business or recreation area located near oil or natural gas development.

Arguments Against

1) Proposition ? eliminates new oil and natural gas activity on most non-federal land in Colorado. According to the COGCC, about 85 percent of Colorado's non-federal land would be excluded from development with the required 2,500-foot setback. Oil and natural gas development is important to Colorado's economy, generating an estimated $10.9 billion in production value in 2017 and supporting many other industries and jobs. Proposition ? will reduce the economic benefits the oil and natural gas industry provides for the state and may result in the loss of jobs, lower payments to mineral owners, and reduced tax revenue that is used for local schools and other governmental services and programs.

2) Proposition ? is unnecessary because the existing COGCC setback requirements provide a balanced approach to protecting public health, safety, and the environment. The state's existing setback requirements were developed through a collaborative rule-making process and guided by technical expertise. When adopting its setback rules, the COGCC considered the concerns of mineral owners, residents, schools, businesses, and others. Under current law, the COGCC has the authority to modify setback requirements in the future, if necessary.

Estimate of Fiscal Impact

State government revenue and spending. Proposition ? is expected to decrease the amount of severance tax, royalty payments, and lease revenue that state government collects in the future. Because the measure does not impact existing oil and natural gas development, no immediate impact on state revenue is anticipated; however, because the measure reduces the surface land available for the development of new oil and natural gas operations, future state revenue from these sources will be reduced. Proposition ? will also reduce future income taxes to the state. Since the economic conditions and geographic limitations affecting oil and natural gas production are uncertain, the specific reductions in state revenue cannot be estimated.

Department of Natural Resources. Severance tax revenue received by the state funds both operating expenses of the department and specific programs, including water supply project grants, low-income energy assistance, control of invasive species, and a variety of other programs. Funding for these programs will be reduced.

Local government revenue and spending. Proposition ? is also anticipated to reduce future property tax revenue collected by local governments. Limitations on new drilling will reduce local property tax collections, since producing well sites have higher assessed value than inactive nonproducing areas. The change in local revenue and expenditures also cannot be estimated. Local governments receive a share of the state's severance taxes to offset the impacts of oil and natural gas development. This revenue will be reduced.

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Arguments For

1) Oil and natural gas operations may adversely impact public health, safety, and the environment. Some people living near these operations have reported negative health effects to the CDPHE, including irritation of the eyes, nose, throat, lungs or skin, or other symptoms such as headaches, dizziness, nausea, and vomiting. Such development may also increase noise, traffic, dust, light, and odors. Proposition ? requires that new oil and natural gas development be located farther away from homes, schools, businesses, and other occupied buildings, thereby reducing nuisance impacts and potential exposure to air pollutants. Proposition ? also establishes a required setback for water sources and recreation areas.

2) Over the past several years, Colorado's northern Front Range has seen both substantial urban development and increased oil and natural gas activity. Proposition ? provides property owners with greater certainty about the location of new oil and natural gas development in their communities. Keeping oil and natural gas development farther away from occupied structures reduces resident exposure to industrial activity and the potential hazards related to such activity. It may also improve the quality of life for nearby residents. Some people are reluctant to purchase or rent a home or visit a business or recreation area located near oil or natural gas development.

Arguments Against

1) Proposition ? eliminates new oil and natural gas activity on most non-federal land in Colorado. According to the COGCC, about 85 percent of Colorado's non-federal land would be excluded from development with the required 2,500-foot setback. Oil and natural gas development is important to Colorado's economy, generating an estimated $10.9 billion in production value in 2017. Proposition ? will reduce the economic benefits the oil and natural gas industry provides for the state and may result in the loss of jobs, lower payments to mineral owners, and reduced tax revenue that is used for local schools and other governmental services and programs.

2) Proposition ? is unnecessary because the existing COGCC setback requirements provide a balanced approach to protecting public health, safety, and the environment. The state's existing setback requirements were developed through a collaborative rule-making process and guided by technical expertise. When adopting its setback rules, the COGCC considered the concerns of mineral owners, residents, schools, businesses, and others. Under current law, the

COGCC has the authority to modify setback requirements in the future, if necessary.

Estimate of Fiscal Impact

State government revenue and spending. Proposition ? is expected to decrease the amount of severance tax, royalty payments, and lease revenue that state government collects in the future. Because the measure does not impact existing oil and natural gas development, no immediate impact on state revenue is anticipated; however, because the measure reduces the surface land available for the development of new oil and natural gas operations, future state revenue from these sources will be reduced. Proposition ? will also reduce future income taxes to the state to the degree that oil and natural gas production is decreased. Since the economic conditions and geographic limitations affecting oil and natural gas production are uncertain, the specific reductions in state revenue cannot be estimated.

Department of Natural Resources. Severance tax revenue received by the state funds both operating expenses of the department and specific programs, including water supply project grants, low-income energy assistance, control of invasive species, and a variety of other programs. Funding for these programs will be reduced.

Local government revenue and spending. Proposition ? is also anticipated to reduce future property tax revenue collected by local governments. Limitations on new drilling will reduce local property tax collections, since producing well sites have higher assessed value than inactive nonproducing areas. The change in local revenue and expenditures also cannot be estimated. Local governments receive a share of the state's severance taxes to offset the impacts of oil and natural gas development. This revenue will be reduced.

Last Draft Comments from Interested Parties

Initiative 97
Increased Setback Requirement for Oil and Natural Gas Development

Jason R. Dunn, representing Protecting Colorado's Environment, Economy and Energy Independence as an opponent:

Mr. Dunn's comments are included as Attachment A.

Tricia Olson, representing Colorado Rising for Health and Safety as a proponent:

The following comments address the third draft of the Blue Book Analysis for Initiative 97. Except for the comments on the "Arguments For" section, these comments are in order by page and line number.

The constitutional responsibilities for the Ballot Analysis/Blue Book include
1. To present an impartial analysis
2. With the major arguments for and against the measure
3. In a factually correct manner.

A. "Irritation," Arguments For 1), page 3, lines 4-5

When describing common complaints from people who live near oil and gas operations, the literature is generally specific: nosebleeds,[1] sore throats and rashes or itching[2]. In contrast, "irritation" in lines 4-5

> "…including irritation of the eyes, nose, throat, lungs or skin, or other symptoms…"

is much too general, and the word is also associated with an emotional reaction. Like the literature and the complaints, the Blue Book should be more specific:

> "including eye irritation, nosebleeds, sore throats, rashes or itching, or other symptoms…"

B. Asthma, Arguments For 1), page 3, lines 5-6

New cases of asthma and worsening of existing asthma have been reported to the CDPHE and should be included in reported symptoms along with "headaches, dizziness, nausea, and odors."[3]

C. Scientific studies, Arguments For 1), page 3, line 6

The current paragraphs in Arguments For do not reference scientific studies, and the distance 2,500' was chosen based on studies. This can be remedied by mentioning that there are professional reports, adding a sentence after "…nausea, and vomiting:"

1 Connections in the literature: https://ehp.niehs.nih.gov/15-10547/, https://www.utne.com/environment/gas-compressors-and-nose-bleeds-zm0z15fzsau, https://www.momscleanairforce.org/fracking-colorado-mom/
2 In the literature: https://ehp.niehs.nih.gov/1307732/
3 A connection in the literature: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2534153

Last Draft Comments from Interested Parties

Tricia Olson, representing Colorado Rising for Health and Safety as a proponent (Cont.):

> "Some professional reports indicate more serious health impacts for residents living near oil and gas development."[4] [5] [6] [7]

D. Use of "may," Arguments For 1), page 3, line 6

The use of the word "may" in line 6 implies uncertainty. However, oil and gas operations clearly produce noise (drilling and fracking), traffic (trucks and construction equipment), dust, bright lights at night and often odors.[8] These emanations are recognized by the COGCC, addressed in rules and reported in COGCC complaints[9]. Thus, the sentence

> "Such development may also increase noise, traffic, dust, light, and odors."

should be changed to something like:

> "Such development increases noise, traffic, dust, light, and odors."

E. Nuisance impacts, Arguments For 1), line 9

The phrase "nuisance impacts" in line 9 equates "noise, traffic, dust, light, and odors" to a nuisance like a pesky fly. In fact, the noise alone from these operations can last weeks at a time and impact health.[10] The word "disruptive" would better capture what happens in "noise, traffic, dust, light, and odors."

> "…thereby reducing disruptive impacts and potential exposure…"

F. Harmful or toxic, Arguments for 1), lines 9-10

Regarding the phrase, "potential exposure to air pollutants," the word ""harmful" or "toxic" should be added.

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4 Multiple risks: Haley,M et al. 2016. Adequacy of current state setbacks for directional high-volume hydraulic fracturing in the Marcellus, Barnett, and Niobrara Shale Plays. Environ Health Perspect 124:1323-1333. https://ehp.niehs.nih.gov/15-10547/

5 Increased risk of cancer, neurological and respiratory risks within ½ mile: McKenzie LM, et al. 2012. Human health risk assessment of air emissions from development at unconventional natural gas resources. Science of the Total Environment. 424:79-87 2012. https://doi.org/10.1016/j.scitotenv.2012.02.018

6 Infant health with impacts shown at 3 km, greatest impacts within 1 km (.62 mi): Currie, Janet et al. 13 Dec 2017. Hydraulic Fracturing and infant health: new evidence from Pennsylvania. Science Advances. http://advances.sciencemag.org/content/3/12/e1603021

7 Indicates greater risks within ½ mile, recommends 1 mile setbacks from occupied dwellings where children might spend substantial time: Webb, E et al. 2016. Potential hazards of air pollutant emissions from unconventional oil and natural gas operations on the respiratory health of children and infants. Rev Environ Health 2016 Jun 1; 31(2):225-43. https://www.ncbi.nlm.nih.gov/pubmed/27171386

8 https://www.denverpost.com/2017/08/20/noise-complaints-oil-gas-industry/

9 http://cogcc.state.co.us/documents/complaints/Complaint_Detailed_Report_2015_2018_5_11_2018.pdf

10 http://news.berkeley.edu/story_jump/noise-pollution-from-fracking-may-harm-human-health/

Tricia Olson, representing Colorado Rising for Health and Safety as a proponent (Cont.):

Not only are residents of Erie reporting high blood levels of toxic benzene and ethylbenzene11, but residents even a half mile away have reported to the COGCC smelling hydrogen sulfide gas when wells are "scrubbed."12 Dr. McKenzie of the Colorado School of Public Health mentions toxic benzene in her research:

> "We do know that concentrations of hazardous air pollutants like benzene are closer to these oil and gas well sites. So, it's not surprising that the health risks are also higher as you get closer to those sites," said the study's lead author, Lisa McKenzie, an assistant research professor.13

Side note: Not all health-impacting complaints are made to the CDPHE, but are sometimes included in complaints to the COGCC.

G. Water and spills, Arguments For 1), lines 10-11 and 2), lines 15-17

The first section mentions the required setback for water sources and recreation in lines 10-11, but it does not provide any arguments for the inclusion of water sources in the setbacks. Not alone, but high among the fundamental concerns and reasons for a setback from drinking water sources is contamination from hazardous liquid spills.14

The subject of spills can be addressed at the same time another fundamental concern is addressed – risks from fires and explosions. "Potential hazards" should be more specific - risks from fire and explosions.15 In lines 15-17, it would be accurate and present one of the major arguments for the measure by saying:

> "Keeping oil and gas development farther away from occupied structures, water and recreation areas reduces exposure to industrial activity and the potential hazards, including spills, fires and explosions, related to such activity."

H. Property values, Arguments For 2), line 18

The following sentence appeared in the initial fiscal estimate prepared in January 2018:

> "Increasing the setback distance may preserve property values for homeowners most affected by the setback and, to the extent less development improves health outcomes for affected residents, may increase productivity and reduce medical costs."

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11 https://www.thedenverchannel.com/news/local-news/erie-mom-concerned-about-benzene-found-in-sons-blood and https://www.thedenverchannel.com/news/360/oil-and-gas-group-tries-to-discredit-denver7-over-report-on-benzene-found-in-erie-boys-blood

12 It is difficult for us to provide links to specific complaints, although presumably not impossible for a government agency to examine them.

13 http://www.cpr.org/news/story/study-coloradans-who-live-close-to-oil-gas-wells-face-higher-cancer-risk

14 https://www.denverpost.com/2018/01/12/colorado-oil-gas-spills-increase/

15 https://www.denverpost.com/2017/12/06/colorado-oil-gas-explosions-since-firestone-explosion/

Tricia Olson, representing Colorado Rising for Health and Safety as a proponent (Cont.):

Part of that sentence,

> "Increasing the setback distance may preserve property values for homeowners most affected by the setback."

should appear before "Some people" in line 18:

I. Use of the phrase "natural gas" throughout

The term "natural gas" is *never* used in the initiative itself and it is more correct to use the simpler and more common phrase, "oil and gas" throughout the analysis rather than to insert the word "natural."

The Title Board used the phrase "oil and gas," not the phrase "oil and natural gas," and in fact, the initiative refers to "other gaseous and liquid hydrocarbons. See Initiative #97 at 34-60-131(2)(b):

> "OIL AND GAS DEVELOPMENT" MEANS EXPLORATION FOR, AND DRILLING, PRODUCTION, AND PROCESSING OF, OIL, GAS, OR OTHER GASEOUS AND LIQUID HYDROCARBONS, AND…"

The underlining is mine, and the phrase includes mining for carbon dioxide, which occurs in Colorado.16 It isn't accurate to limit "gas" to "natural gas."

The law that establishes the COGCC also doesn't limit regulation to oil and "natural gas." The Oil and Gas Conservation Act (Title 34, Article 60) generally uses "oil and gas," not "oil and natural gas." In fact, at 34-60-103(5), "'Gas" means all natural gases and all hydrocarbons not defined in this section as oil."

Opponents of the measure have recently changed to using the phrase "oil and natural gas" vs. "oil and gas," thus making this usage not actually impartial.

J. Recent development, page 2, lines 14-16

While the inclusion of a map is welcome, the sentence in lines 15-17,

> "Recent development of these resources has been concentrated in Weld, Garfield, La Plata, Rio Blanco, and Las Animas Counties, as well as portions of surrounding counties,"

is still slightly misleading, because truly recent and planned development goes much farther afield, not at all limited to the areas mentioned.

As you see from the map at https://cogccmap.state.co.us/cogcc_gis_online/17 development is going into Broomfield, Adams and Arapahoe Counties currently, and the basins include the counties listed plus Larimer, Jefferson, Douglas, El Paso Pueblo, Crowley, Huerfano, Alamosa, Park, Jackson, Mesa, Gunnison, Delta, San Miguel, Dolores, etc.

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16 http://www.coloradoindependent.com/151977/wait-theyre-drilling-for-co2-in-colorado

17 Under layers, I suggest checking Permits and all the check boxes under Permits, along with the Directional Wellbores, Actual and Planned and the boxes for those selections. For visual simplicity's sake, I would suggest turning off "Shaded Relief" and a number of other check boxes, keeping "Counties" and "Oil & Gas Basins." .

Tricia Olson, representing Colorado Rising for Health and Safety as a proponent (Cont.):

It would still be simpler to indicate that development can happen in other areas with something like:

> "Recent development of these resources has been concentrated in Weld, Garfield, La Plata, Rio Blanco, and Las Animas Counties but can occur throughout Colorado's oil and gas basins."

K. The number of wells and related facilities, page 2, line 23

Along with more wells and more facilities, the size of individual production facilities has also increased. Size is relevant. We have gone from single pump jacks to facilities with 56 or more wells. Note the proposal for Boulder County at the COGCC web site[18] showing 56-well pads and 196 wells along a 3 mile stretch of highway.

This could be addressed simply on line 23 by something like:

> "…as well as an increase in the number and size of facilities and the number of wells.

L. High pressure, page 2, lines 23-25

Most definitions of hydraulic fracturing mention that the mixture of water, sand and chemicals is injected at high pressure into the underground rock layers.[19] The definition in lines 23-25 leaves out that very important component. The sentence should instead read:

> "Hydraulic fracturing is used for most new wells and involves injecting a mixture of mostly water, sand and chemicals and other additives at high pressure into underground rock layers where oil or gas is located."

M. Horizontal drilling, page 2, lines 29-30

In 2016, one of the Blue Book drafts included the sentence "Current technology enables wells to extend 10,000 or more feet horizontally." Any statement on the technology should address this topic, because it is pertinent to the subject of distance/setback. 10,000 feet laterals are common, and super laterals of 3 and 4 miles are projected.[20] It can be conservatively addressed on lines 29-30 with something like:

> "Horizontal drilling enables oil and natural gas operators to drill multiple wells extending thousands of feet underground, often 10,000 feet or more, from a single location to improve their efficiency and minimize surface disturbances."

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18 https://cogcc.state.co.us/documents/library/Special_Projects/Crestone_CDP/Final_Draft/Attachment%20A%20-%20Crestone%20CDP%20FINAL%20Draft.pdf

19 Among many other websites: https://www.britannica.com/technology/fracking

20 https://seekingalpha.com/article/4085071-shale-oil-arrival-super-laterals-just-matter-time

Tricia Olson, representing Colorado Rising for Health and Safety as a proponent (Cont.):

N. How severance tax is split, page 2, lines 43-44.

This section addresses revenue only; however, as part of the total financial equation, the voter needs to know that there are expenses involved. For example, how much money has been spent on the regulation of oil and gas development as a state program (the COGCC) in the budget years used? The cost of refunds to oil and gas operators in the last fiscal year is important public information,[21] along with costs borne for the clean-up of orphan wells,[22] additional oil and gas-related road construction and repair and emergency services. Those should be added as qualifiers. Revenue is lowered, but so are future expenditures.

O. "Production value," Arguments Against, page 3, line 26

Voters may need to know what "production value" means in the context used here:

> "…generating an estimated $10.9 billion in production value in 2017."

Does this mean profit, market value, or something else? By the way, while I can't find a specific definition for the phrase, the dollar amount appears to be in error, off about $2 billion too high compared to the figures in a memo sent on January 12, 2018 to the Colorado Legislative Council Staff by Larson Silbaugh, Principal Economist.[23]

P. "Used for local schools," Arguments Against, page 3, lines 29-30

The use of "local schools" doesn't specify that tax revenue from oil and gas applies only to those schools in impacted areas, making this usage misleading. The phrase, "*some* local schools," would be more accurate and impartial.

Comments on the Estimate of Fiscal Impact, page 4

Q. "Future income taxes," line 8

Line 8 predicts a reduction in future income taxes if the measure passes, but this statement is too simplistic and may not consider all factors. Future income taxes may drop if the measure doesn't pass, and tourism and/or the general health of Colorado's population suffers as a result of intolerable air quality. In addition, the industry is doing more with fewer workers,[24] so that income taxes related to oil

21 http://www.boulderweekly.com/news/cogcc-budget-peril/
22 https://www.denverpost.com/2018/07/18/hickenlooper-executive-order-orphan-wells/
23 https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwii6sPsvOfcAhWC2YMKHesjDM0QFjAAegQIChAC&url=https%3A%2F%2Fleg.colorado.gov%2Fsites%2Fdefault%2Ffiles%2Finterested_persons_memo_on_severance_taxes.pdf&usg=AOvVaw2Vr_kXPOgWhxI1JBJ5R8Go
24 https://www.houstonchronicle.com/business/article/Output-surging-but-Texas-oil-employment-at-12535137.php and https://www.kansascityfed.org/en/publications/research/oke/articles/2018/2q-oil-and-gas-productivity

Tricia Olson, representing Colorado Rising for Health and Safety as a proponent (Cont.):

and gas may drop whatever happens in November. Jobs in the renewables industry also provide good wages, and Colorado has a worker shortage, which is already impacting plans in other sectors. Not only is there a worker shortage Not only has the industry is becoming more efficient (more mechanization, fewer direct jobs), but Colorado has a worker shortage.

R. State government revenue and spending, lines 2-11

This section may be titled to include spending, but reference to spending by the state toward oil and gas development is not included. Of course, money is spent by the COGCC to regulate oil and gas development, and there have been the cost of refunds to oil and gas operators in the last fiscal year,[25] along with costs borne for the clean-up of orphan wells.[26] Those should be added as qualifiers. Revenue may be lowered, but in the future, there may be less demand for associated services and remediation.

S. Department of Natural Resources, lines 12-15

Nowhere is it mentioned that the regulation of oil and gas development falls under the Department of Natural Resources. It should be mentioned as one of the programs.

T. Local government revenue and spending, lines 16-22

As above for the state government, there are costs associated with oil and gas development. Those include oil and gas-related road construction and repair and emergency services.

U. Economic Impacts

This section was part of the draft/abstract we received at the Legislative Council hearing. While part of the information included in that section appears elsewhere, it addressed items not in the current fiscal estimate or the Analysis. Of interest to us:

> "Increasing the setback distance may preserve property values for homeowners most affected by the setback and, to the extent less development improves health outcomes for affected residents, may increase productivity and reduce medical costs."

Some of the economic impacts are mentioned in the Arguments Against, but the arguments in the sentence above should appear in the Arguments For.

Jan Rose, representing herself as a proponent:

Ms. Rose's comments are included as Attachment B.

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25 http://www.boulderweekly.com/news/cogcc-budget-peril/

26 https://www.denverpost.com/2018/07/18/hickenlooper-executive-order-orphan-wells/

Initiative #97
Increased Setback Requirement for Oil and Natural Gas Development

Proposition ? proposes amending the Colorado statutes to:

- require that new oil and natural gas development be located at least 2,500 feet from occupied structures, water sources, and other designated areas ~~designated as vulnerable~~.

Commented [JD1]: We appreciate the partial change that was made here, but continue to believe that using the word "vulnerable" improperly conveys to voters that only those areas that are truly "vulnerable" to some sort of harm can be designated and protected. The measure does not have any such limitation or requirement, and any area in which a governmental body wants to prohibit drilling and/or fracking, for any reason, can simply be designated as vulnerable. The term is simply being used in the measure to elicit voter support. The blue book should avoid such terms, except perhaps in the argument sections.

Summary and Analysis

Proposition ? requires that any new oil and natural gas development be located at least 2,500 feet from occupied structures and other areas designated as vulnerable. This type of requirement is commonly known as a setback. Entering a previously plugged or abandoned oil or natural gas well is held to this same setback requirement. The measure also allows the state or a local government to require a setback distance greater than 2,500 feet. If two or more local governments with overlapping boundaries establish different setbacks, Proposition ? requires that the greater distance be used.

Commented [JD2]: Same comment as above.

The measure does not apply to federal land, which includes national forests and parks and comprises about 36 percent of the land in Colorado.

Commented [JD3]: This is an important aspect of the measure and should be kept as a separate paragraph as in the last version so that voters clearly understand the measure's scope.

Under the measure, oil and natural gas development includes the exploration for, and the drilling, production, and processing of oil or natural gas. Oil and natural gas development also includes hydraulic fracturing, flowlines between oil and natural gas facilities, and the treatment of associated waste. ~~Occupied structures include most buildings where people live or work~~. Occupied structures include any building or other structure intended for human occupancy. Proposition ? designates certain areas as vulnerable, including certain recreation areas and water sources, such as public and community drinking water sources, canals, reservoirs, lakes, rivers and streams (whether continuously flowing or not), and any other area designated by the state or a local government as vulnerable. The measure does not require any showing that an area actually be "vulnerable", but rather only that a governmental entity describe it as such.

Commented [JD4]: As noted in response to the last draft, "occupied structures" is much more broad than simply buildings where people live or work and includes virtually any structure that is intended for occupancy, including temporary structures, abandoned structures, etc. Voters need to understand the true scope of the measure.

Commented [JD5]: This language is important because the measure, and the blue book as drafted, given the erroneous perception that only areas that are somehow vulnerable to harm can be protected, which is not the case.

State regulation of oil and natural gas. The Colorado Oil and Gas Conservation Commission (COGCC) in the Colorado Department of Natural Resources establishes and enforces regulations on oil and natural gas operations in the state. The COGCC is charged with fostering the responsible development, production, and use of oil and natural gas resources in a manner that protects public health, safety, welfare, and the environment. The COGCC consults with the Colorado Department of Public Health and Environment (CDPHE) to consider the health and safety of the public when regulating oil and natural gas operations. The CDPHE regulates air pollution, the discharge of water to surface water bodies, and the disposal of hazardous waste related to industrial activities, including oil and natural gas operations.

Existing setback requirements. Current COGCC regulations, approved in 2013, prohibit oil and natural gas wells and production facilities from being located closer than:

- 500 feet from a home or other occupied building; and

- 1,000 feet from high-occupancy buildings such as schools, health care institutions, correctional facilities, and child care centers, as well as neighborhoods with at least 22 buildings.

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The surrounding area encompassed by the current 500-foot setback includes about 18 acres, and the 1,000-foot setback area includes about 72 acres. Proposition ? increases the setback to a minimum of 2,500 feet, or about 450 surrounding acres.

The current setback requirement may be waived in certain instances by the COGCC and a building owner. Because Proposition ? is statutory and the current waiver right is an administrative rule of the COGCC, the right of a landowner to waive the setback would be eliminated. ~~does not include a similar waiver provision.~~

Commented [JD6]: As noted, this is a very important effect of the measure. Currently, landowners may ask the COGCC to waive the setback. This measure installs a mandatory minimum setback of 2500 and thus would trump the current COGCC rule that allows a waiver. This has a substantial impact on landowners and should be adequately described in the blue book.

Oil and natural gas resources in Colorado. Geologic formations containing oil and natural gas are found in many areas of Colorado, with some formations underlying multiple local communities. Recent development of these resources has been concentrated in Weld, Garfield, La Plata, Rio Blanco, and Las Animas Counties, as well as portions of surrounding counties. Most of the state's oil production occurs in the Denver-Julesburg Basin, primarily in Weld County and other nearby counties. A COGCC map of current oil and natural gas activity can be found online at:

http://XX

Oil and natural gas resources are owned or leased by many different private companies, governments, financial institutions, nonprofits, and private individuals. Oil production in Colorado doubled between 2013 and 2017. Natural gas production in Colorado has been stable over the past ten years. In 2016, Colorado ranked seventh among the states in domestic oil production and fifth in natural gas production. In 2017, there were about 54,000 producing wells in Colorado, a 48 percent increase since 2007.

Oil and natural gas extraction technologies. Changes in industry technologies, such as hydraulic fracturing, or "fracking," and horizontal drilling, have led to substantial oil and natural gas production increases in Colorado and nationally, as well as an increase in the number of wells and related facilities. Hydraulic fracturing is used for most new wells and involves pumping a mixture of mostly water and sand, and small amounts of chemicals and other additives, into underground rock layers where oil or natural gas is located. The pressure of the water creates small fractures in the rock. The sand keeps the fractures open, allowing the oil or natural gas to escape and flow up the well. Hydraulic fracturing enables access to oil and natural gas formations that were previously inaccessible. Horizontal drilling enables oil and natural gas operators to drill multiple wells from a single location to improve their efficiency and minimize surface disturbances. With current technologies, oil and natural gas wells have the greatest production in their first year of operation and decrease in production each successive year until the wells are depleted.

State and local revenue from oil and natural gas. Companies that extract mineral resources, including oil and natural gas, coal, and metallic minerals, pay severance taxes to the state. Oil and natural gas tax collections fluctuate annually. From budget years 2012-13 to 2016-17, state severance tax collections from oil and natural gas producers ranged from $4.0 million to $264.7 million per year. Under current law, Colorado severance tax revenue is split between state programs and local governments. The state also collects some revenue from royalty and lease payments. Oil and natural gas producers also pay income taxes, sales taxes, and local property taxes. In 2017, Colorado oil and natural gas producers paid an estimated $~~496.7~~688 million in property taxes to impacted local governments, school districts, and special districts.

Commented [JD7]: Again, more recent analysis puts this measure at $688MM.

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http://www.sos.state.co.us/pubs/elections/Initiatives/InitiativesHome.html

Arguments For

1) Oil and natural gas operations may adversely impact public health, safety, and the environment. Some people living near these operations have reported negative health effects to the CDPHE. ~~, including irritation of the eyes, nose, throat, lungs or skin, or other symptoms such as headaches, dizziness, nausea, and vomiting.~~ Such development may also increase noise, traffic, dust, light, and odors. Proposition ? requires that new oil and natural gas development be located significantly farther away ~~from homes, schools, businesses, and other occupied buildings~~, thereby reducing nuisance impacts and potential exposure to air pollutants. Proposition ? also establishes a required setback for water sources and recreation areas.

Commented [JD8]: Including anecdotal statements of a very small number of unsubstantiated complaints is overly inflammatory and redundant and shouldn't be included here. The statement that there have been a small number of health complaints should be sufficient for purposes of the blue book.

Commented [JD9]: As noted above, this is a misstatement of the measure, which goes much farther than simply occupied structures to include ANY structure that is intended for human occupancy.

2) Over the past several years, Colorado's northern Front Range has seen both substantial urban development and increased oil and natural gas activity. Proposition ? provides property owners with greater certainty about the location of new oil and natural gas development in their communities. Keeping oil and natural gas development farther away from any structure that may be intended for human occupancy ~~occupied structures~~ reduces resident exposure to industrial activity and the potential hazards related to such activity. ~~It may also improve the quality of life for nearby residents.~~ Some people are reluctant to purchase or rent a home or visit a business or recreation area located near oil or natural gas development.

Commented [JD10]: As previously noted, this statement is wholly unsubstantiated, and in fact incorrect as there are an exponentially greater number of people that will have their lives negatively impacted by this measure through job loss (tens of thousands, if not more) than any supposed improvement to their quality of life by a virtual ban on drilling.

Arguments Against

1) Proposition ? eliminates new oil and natural gas activity on most non-federal land in Colorado. According to the COGCC, about 85 percent of Colorado's non-federal land would be excluded from development with the required 2,500-foot setback. Oil and natural gas development is important to Colorado's economy, generating an estimated $~~10.9~~30 billion in production value in 2017. Proposition ? will significantly reduce the economic benefits the oil and natural gas industry provides for the state and may result in the loss of jobs, higher energy prices, lower payments to mineral owners, and reduced tax revenue by hundreds of millions of dollars that is used for local schools and other governmental services and programs.

Commented [JD11]: it is important to give scale to the impacts that are already known.

2) Proposition ? is unnecessary because the existing COGCC setback requirements provide a balanced approach to protecting public health, safety, and the environment. The state's existing setback requirements were developed through a collaborative rule-making process and guided by technical expertise. When adopting its setback rules, the COGCC considered the concerns of mineral owners, environmentalists, residents, schools, businesses, and others. Under current law, the COGCC has the authority to modify setback requirements in the future, if

necessary.

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Estimate of Fiscal Impact

State government revenue and spending. Proposition ? is expected to significantly decrease the amount of severance tax, royalty payments, and lease revenue that state government collects in the future. Because the measure does not impact existing oil and natural gas development, no immediate impact on state revenue is anticipated; however, because the measure reduces the surface land available for the development of new oil and natural gas operations, future state revenue from these sources will be reduced. Proposition ? will also reduce future income taxes to the state ~~to the degree that oil and natural gas production is decreased~~. Since the economic conditions and geographic limitations affecting oil and natural gas production are uncertain, the specific reductions in state revenue cannot be estimated, but the fact that the reduction will over time be very significant, if not close to total, is certain.

Commented [JD12]: This language gives the impression that production decreases aren't certain, which of course they are, as the blue book generally states above.

Department of Natural Resources. Severance tax revenue received by the state funds both operating expenses of the department and specific programs, including water supply project grants, low-income energy assistance, control of invasive species, and a variety of other programs. Funding for these programs will be reduced.

Local government revenue and spending. Proposition ? is also anticipated to reduce future property tax revenue collected by local governments. Limitations on new drilling will reduce local property tax collections, since producing well sites have higher assessed value than inactive nonproducing areas. The change in local revenue and expenditures also cannot be estimated, but will likely be in the hundreds of millions of dollars. Approximately 40-50% of this loss will fall on local school districts. Local governments also receive a share of the state's severance taxes to offset the impacts of oil and natural gas development. This revenue will be significantly reduced.

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Initiative #97
Increased Setback Requirement for Oil and ~~Natural~~ Gas Development

Proposition ? proposes amending the Colorado statutes to:

♦

require that new oil and ~~natural~~ gas development be located at least 2,500 feet from occupied structures, water sources, and other areas designated as vulnerable.

(Ed note: The 'natural' brand appears 46 times in this document but zero times in the ballot text. It's a marketing term that skews the language toward industry yet this measure is a citizens' initiative. Further, the ballot text states 'OIL, GAS, OR OTHER GASEOUS AND LIQUID HYDROCARBONS'. The full term should be used somewhere, and I suggest the first textual instance… Thereafter, use the term 'oil & gas' which is the common and accepted usage even within the industry.)

Summary and Analysis

Proposition ? requires that any new oil ~~and natural~~, gas, or other gaseous and liquid hydrocarbons "oil & gas" development be located at least 2,500 feet from occupied structures and other areas designated as vulnerable. This type of requirement is commonly known as a setback. Entering a previously plugged or abandoned oil or ~~natural~~ gas well is held to this same setback requirement. The measure also allows the state or a local government to require a setback distance greater than 2,500 feet. If two or more local governments with overlapping boundaries establish different setbacks, Proposition ? requires that the greater distance be used. The measure does not apply to federal land, which includes national forests and parks and comprises about 36 percent of the land in Colorado.

Under the measure, oil and ~~natural~~ gas development includes the exploration for, and the drilling, production, and processing of oil or ~~natural~~ gas. Oil and ~~natural~~ gas development also includes hydraulic fracturing, flowlines between oil and ~~natural~~ gas facilities, and the

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treatment of associated waste. Occupied structures include most buildings where people live or work. Proposition ? designates certain areas as vulnerable, including certain recreation areas and water sources, such as public and community drinking water sources, canals, reservoirs, lakes, rivers and streams (whether continuously flowing or not), and any other area designated by the state or a local government as vulnerable.

State regulation of oil and ~~natural~~ gas. The Colorado Oil and Gas Conservation Commission (COGCC) in the Colorado Department of Natural Resources establishes and enforces regulations on oil and ~~natural~~ gas operations in the state. The COGCC is charged with fostering the responsible development, production, and use of oil and ~~natural~~ gas resources in a manner that protects public health, safety, welfare, and the environment. The COGCC consults with the Colorado Department of Public Health and Environment (CDPHE) to consider the health and safety of the public when regulating oil and ~~natural~~ gas operations. The CDPHE regulates air pollution, the discharge of water to surface water bodies, and the disposal of hazardous waste related to industrial activities, including oil and ~~natural~~ gas operations.

Existing setback requirements. Current COGCC regulations, approved in 2013, prohibit oil and ~~natural~~ gas wells and production facilities from being located closer than:

- 500 feet from a home or other occupied building; and
- 1,000 feet from high-occupancy buildings such as schools, health care institutions, correctional facilities, and child care centers, as well as neighborhoods with at least 22 buildings.

. The surrounding area encompassed by the current 500-foot setback includes about 18 acres, and the 1,000-foot setback area includes about 72 acres. Proposition ? increases the setback to a minimum of 2,500 feet, or about 450 surrounding acres. The current setback requirement may be waived in certain instances by the COGCC and a building owner. Proposition does

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not include a similar waiver provision.

. ***Oil and ~~natural~~ gas resources in Colorado.*** Geologic formations containing oil and ~~natural~~ gas are found in many areas of Colorado, with some formations underlying multiple local communities. Recent development of these resources has been concentrated in Weld, Garfield, La Plata, Rio Blanco, and Las Animas Counties, as well as portions of surrounding counties. Most of the state's oil production occurs in the Denver-Julesburg Basin, primarily in Weld County and other nearby counties. A COGCC map of current oil and ~~natural~~ gas activity can be found online at:

. *~~http://XX~~ https://www.denverpost.com/2017/05/01/oil-gas-wells-colorado-map/ (Ed Note: COGCC Dashboard showing all the 'activity' doesn't seem to have a static link . The above Denver Post interactive map is based on COGCC data)*

. Oil and ~~natural~~ gas resources are owned or leased by many different private companies, governments, financial institutions, nonprofits, and private individuals. Oil production in Colorado doubled between 2013 and 2017. Natural gas production in Colorado has been stable over the past ten years. In 2016, Colorado ranked seventh among the states in domestic oil production and fifth in ~~natural~~ gas production. In 2017, there were about 54,000 producing wells in Colorado, a 48 percent increase since 2007.

. ***Oil and ~~natural~~ gas extraction technologies.*** Changes in industry technologies, such as hydraulic fracturing, or "fracking," and horizontal drilling, have led to substantial oil and ~~natural~~ gas production increases in Colorado and nationally, as well as an increase in the number of wells and related facilities. Hydraulic fracturing is used for most new wells and involves pumping a mixture of mostly water and sand, and small amounts of chemicals and other additives, into underground rock layers where oil or ~~natural~~ gas is located. The pressure of the water creates small fractures in the rock. The sand keeps the fractures open, allowing the oil or ~~natural~~ gas to escape and flow up the well. Hydraulic fracturing enables access to oil and ~~natural~~ gas formations that were previously inaccessible. Horizontal drilling enables oil and ~~natural~~ gas operators to drill multiple wells from a single location to improve their efficiency and minimize surface disturbances. With current technologies, oil and ~~natural~~ gas wells have the greatest production in their first year of operation and decrease in production each successive year until the wells are depleted.

. ***State and local revenue from oil and ~~natural~~ gas.*** Companies that extract mineral resources, including oil and ~~natural~~ gas, coal, and metallic minerals, pay severance taxes to the state. Oil and ~~natural~~ gas tax collections fluctuate annually. From budget years 2012-13 to 2016-17, state severance tax collections from oil and ~~natural~~ gas producers ranged from $4.0 million to $264.7 million per year. Under current law, Colorado severance tax revenue is split between state programs and local governments. The state also collects some revenue from royalty and lease payments. Oil and ~~natural~~ gas producers also pay income taxes, sales taxes, and local property taxes. In 2017, Colorado oil and ~~natural~~ gas producers paid an estimated $496.7 million in property taxes to impacted local governments, school districts, and special districts.

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For information on those issue committees that support or oppose the measures on the ballot at the November 6, 2018, election, go to the Colorado Secretary of State's elections center web site hyperlink for ballot and initiative information:

http://www.sos.state.co.us/pubs/elections/Initiatives/InitiativesHome.html

Arguments For

Oil and ~~natural~~ gas operations may adversely impact public health, safety, and the environment. Some people living near these operations have reported ~~negative~~ significant health effects to the CDPHE, including irritation of the eyes, nose, throat, lungs ~~or~~ and skin, ~~or~~ and other symptoms such as headaches, dizziness, nausea, and vomiting. Respiratory illnesses such as asthma may also be adversely impacted by proximity to oil and gas wells and processing facilities. Exposure to radioactive substances and water contamination may occur. Such development ~~may~~ also increases pollution, noise, traffic, dust, light, and odors. Accidents, spills and explosions have happened in populated areas. Proposition ? requires that new oil and ~~natural~~ gas development be located farther away from homes, schools, businesses, and other occupied buildings, thereby reducing nuisance impacts and potential exposure to air pollutants. Proposition ? also establishes a required setback for water sources and recreation areas.

Over the past several years, Colorado's northern Front Range has seen both substantial urban development and increased oil and ~~natural~~ gas activity. Proposition ? provides property owners with greater certainty about the location of new oil and ~~natural~~ gas development in their communities. Keeping oil and ~~natural~~ gas development farther away from occupied structures reduces resident exposure to industrial activity and the potential hazards related to such activity. It may also improve the quality of life for nearby residents and maintain property values. Some people are reluctant to purchase or rent a home or visit a business or recreation area located near oil or ~~natural~~ gas development.

Arguments Against

Proposition ? eliminates new oil and ~~natural~~ gas activity on most non-federal land in Colorado. According to the COGCC, about 85 percent of Colorado's non- federal land would be excluded from development with the required 2,500-foot setback. Oil and ~~natural~~ gas development is important to Colorado’s economy, generating an estimated $xxx in revenue ~~$10.9 billion in production value~~ in 2017. (Ed Note: I had to look up ‘production value’. It says: *‘Three standard valuation approaches — the Income Approach, the Market Approach and the Asset Approach — typically are applied in valuing companies in the oil and gas industry. The first step in choosing the appropriate valuation approach is to understand the sector of the value chain in which the subject company operates.*’ How does this—production value—benefit Colorado or voters?) Proposition ? will reduce the economic benefits the oil and ~~natural~~ gas industry provides for the state and may result in the loss of jobs, lower payments to mineral owners, and reduced tax revenue that is used for local schools and other governmental services and programs.

Proposition ? is unnecessary because the existing COGCC setback requirements provide a balanced approach to protecting public health, safety, and the environment. The state’s existing setback requirements were developed through a collaborative rule-making process and guided by technical expertise. When adopting its setback rules, the COGCC considered the concerns of mineral owners, residents, schools, businesses, and others. Under current law, the COGCC has the authority to modify setback requirements in the future, if necessary.

. **Estimate of Fiscal Impact**

. ***State government revenue and spending.*** Proposition ? is expected to decrease the amount of severance tax, royalty payments, and lease revenue that state government collects in

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the future. Because the measure does not impact existing oil and ~~natural~~ gas development, no immediate impact on state revenue is anticipated; however, because the measure reduces the surface land available for the development of new oil and ~~natural~~ gas operations, future state revenue from these sources will be reduced. Proposition ? will also reduce future income taxes to the state to the degree that oil and ~~natural~~ gas production is decreased. Since the economic conditions and geographic limitations affecting oil and ~~natural~~ gas production are uncertain, the specific reductions in state revenue cannot be estimated.

- ***Department of Natural Resources.*** Severance tax revenue received by the state funds both operating expenses of the department and specific programs, including water supply project grants, low-income energy assistance, control of invasive species, and a variety of other programs. Funding for these programs will be reduced.

- ***Local government revenue and spending.*** Proposition ? is also anticipated to reduce future property tax revenue collected by local governments. Limitations on new drilling will reduce local property tax collections, since producing well sites have higher assessed value than inactive nonproducing areas. Conversely, oil and gas restrictions may increase other business and home growth and therefore tax collections. The change in local revenue and expenditures also cannot be estimated. Local governments receive a share of the state's severance taxes to offset the impacts of oil and ~~natural~~ gas development. This revenue will be reduced but offsets will not be required.

Initiative #97
Increased Setback Requirement for Oil and Natural Gas Development
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Initiative #97
Increased Setback Requirement for Oil and Natural Gas Development
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Initiative 97
Increase Setback Requirement for Oil and Gas Development

Ballot Title: Shall there be a change to the Colorado Revised Statutes concerning a statewide minimum distance requirement for new oil and gas development, and, in connection therewith, changing existing distance requirements to require that any new oil and gas development be located at least 2,500 feet from any structure intended for human occupancy and any other area designated by the measure, the state, or a local government and authorizing the state or a local government to increase the minimum distance requirement?

Be it Enacted by the People of the State of Colorado:

SECTION 1. In Colorado Revised Statutes, **add** 34-60-131 as follows:

34-60-131. Mitigation of adverse oil and gas impacts to health and safety – buffer zones – legislative declaration - definitions. (1) THE PEOPLE OF THE STATE OF COLORADO FIND AND DECLARE THAT:

(a) PROXIMITY TO OIL AND GAS DEVELOPMENT, INCLUDING THE USE OF HYDRAULIC FRACTURING, HAS DETRIMENTAL IMPACTS ON PUBLIC HEALTH, SAFETY, WELFARE, AND THE ENVIRONMENT;

(b) SUCH IMPACTS ARE REDUCED BY LOCATING OIL AND GAS OPERATIONS AWAY FROM OCCUPIED STRUCTURES AND VULNERABLE AREAS; AND

(c) TO PRESERVE PUBLIC HEALTH, SAFETY, WELFARE, AND THE ENVIRONMENT, THE PEOPLE DESIRE TO ESTABLISH A BUFFER ZONE REQUIRING ALL NEW OIL AND GAS DEVELOPMENT IN THE STATE OF COLORADO TO BE LOCATED AN INCREASED DISTANCE AWAY FROM OCCUPIED STRUCTURES, INCLUDING HOMES, SCHOOLS AND HOSPITALS, AS WELL AS VULNERABLE AREAS.

(2) AS USED IN THIS SECTION,UNLESS THE CONTEXT OTHERWISE REQUIRES:

(a) "OCCUPIED STRUCTURE" MEANS ANY BUILDING OR STRUCTURE THAT REQUIRES A CERTIFICATE OF OCCUPANCY OR BUILDING OR STRUCTURE INTENDED FOR HUMAN OCCUPANCY, INCLUDING HOMES, SCHOOLS, AND HOSPITALS.

(b) "OIL AND GAS DEVELOPMENT" MEANS EXPLORATION FOR, AND DRILLING, PRODUCTION, AND PROCESSING OF, OIL, GAS, OR OTHER GASEOUS AND LIQUID HYDROCARBONS, AND FLOWLINES AND THE TREATMENT OF WASTE ASSOCIATED WITH SUCH EXPLORATION, DRILLING, PRODUCTION AND PROCESSING. "OIL AND GAS DEVELOPMENT" INCLUDES HYDRAULIC FRACTURING.

(c) "VULNERABLE AREAS" MEANS PLAYGROUNDS, PERMANENT SPORTS FIELDS, AMPHITHEATERS, PUBLIC PARKS, PUBLIC OPEN SPACE, PUBLIC AND COMMUNITY DRINKING WATER SOURCES, IRRIGATION CANALS, RESERVOIRS, LAKES, RIVERS, PERENNIAL OR INTERMITTENT STREAMS, AND CREEKS, AND ANY ADDITIONAL VULNERABLE AREAS DESIGNATED BY THE STATE OR A LOCAL GOVERNMENT.

(d) "LOCAL GOVERNMENT" MEANS ANY STATUTORY OR HOME RULE COUNTY, CITY AND COUNTY, CITY, OR TOWN LOCATED IN THE STATE OF COLORADO.

(3) THE PEOPLE OF THE STATE OF COLORADO HEREBY ESTABLISH THAT ALL NEW OIL AND GAS DEVELOPMENT NOT ON FEDERAL LAND MUST BE LOCATED AT LEAST TWO THOUSAND FIVE HUNDRED FEET FROM AN OCCUPIED STRUCTURE OR VULNERABLE AREA. FOR PURPOSES OF THIS SECTION, THE REENTRY OF AN OIL OR GAS WELL PREVIOUSLY PLUGGED OR ABANDONED IS CONSIDERED NEW OIL AND GAS DEVELOPMENT.

(4) THE STATE OR A LOCAL GOVERNMENT MAY REQUIRE THAT NEW OIL AND GAS DEVELOPMENT BE LOCATED A LARGER DISTANCE AWAY FROM OCCUPIED STRUCTURES OR VULNERABLE AREAS THAN REQUIRED BY SUBSECTION (3) OF THIS SECTION. IN THE EVENT THAT TWO OR MORE LOCAL GOVERNMENTS WITH JURISDICTION OVER THE SAME GEOGRAPHIC AREA ESTABLISH DIFFERENT BUFFER ZONE DISTANCES, THE LARGER BUFFER ZONE GOVERNS.

(5) THIS SECTION TAKES EFFECT UPON OFFICIAL DECLARATION OF THE GOVERNOR AND IS SELF-EXECUTING.

(6) THIS SECTION APPLIES TO OIL AND GAS DEVELOPMENT PERMITTED ON OR AFTER THE EFFECTIVE DATE.