Local Government Fracking Regulations:  
A Colorado Case Study

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The recent unconventional oil and gas development boom, better known as the “fracking” boom, is rapidly transforming communities nationwide. Substantial scholarly attention has focused on state and federal fracking regulations, but little has focused on local regulations. Articles that have addressed local government regulation have generally considered only whether local governments can regulate fracking and not how they should do so.

But while scholars continue to debate which level of government should regulate fracking, local governments nationwide have already begun enacting regulations. Accordingly, this Article explores how local governments may regulate fracking under state preemption law, using Colorado as a case study. Colorado has a longstanding legal framework for local government oil and gas regulation due to the industry’s continuous presence in the state prior to the recent fracking boom. Some eastern states have recently adopted Colorado’s approach. But lingering questions remain about the details of local authority, and conflict is brewing as many local governments begin to regulate fracking in their communities.

This Article addresses how the fracking boom presents unique challenges to local governments, their regulatory authority under Colorado law, and how they can approach regulation in a manner most likely to survive judicial review. It begins by explaining fracking’s socioeconomic and environmental impacts, focusing on impacts in rural Western communities. It emphasizes fracking’s socioeconomic impacts, which have

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been largely overlooked by other legal scholarship, yet constitute the strongest ground for local government regulation. The Article then addresses the legal basis for local government fracking regulation under Colorado law. It highlights that Colorado local governments, especially home rule municipalities, enjoy broad authority over land use matters. Next, the Article critically examines four frameworks for local government regulation—guides published by two organizations, and ordinances already enacted in several Colorado cities. It concludes by advocating that Colorado local governments regulate the fracking boom through land use ordinances targeting the boom’s socioeconomic impacts, rather than ordinances that directly regulate fracking or that target the fracking boom’s environmental impacts.

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I. INTRODUCTION

On July 17, 2012, the City of Longmont, Colorado passed an ordinance updating its zoning code to ban a specific industrial activity in residential zones, and requiring the activity to meet basic criteria or obtain a special use permit in commercial and industrial zones.¹

Nearly a century has passed since the Supreme Court first recognized local government authority to separate residential and industrial land uses in a case familiar to nearly every first year law student—Euclid.² But Longmont’s routine exercise of its land use authority set off a firestorm. The State of Colorado sued it 13 days later.³

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³. Scott Rochat, State Sues Longmont Over Oil and Gas Drilling Regulations, LONGMONT
The reason? Longmont’s ordinance regulated the oil and gas industry at a time when local governments nationwide have begun regulating the unconventional oil and gas boom, better known as the fracking boom. Longmont adopted its ordinance against the backdrop of a pair of 20-year-old Colorado Supreme Court cases, La Plata County and Voss, that establish the boundaries for local government regulatory authority over oil and gas. As other states begin adopting Colorado’s La Plata/Voss rule, local governments in Colorado and across the nation are closely watching how Longmont’s ordinance fares in court.

Despite public curiosity about the legality of ordinances like Longmont’s, legal academia to date has focused on state and federal regulation, mentioning the potential for local regulation only in passing. Those articles that have addressed local regulation have done so in passing.


4. See Local Actions Against Fracking, FOOD & WATER WATCH, www.foodandwaterwatch.org/water/fracking/fracking-action-center/local-action-documents (last visited Nov. 28, 2013) (listing local governments that have passed fracking bans and moratoria, other oil and gas regulations, and resolutions supporting federal and statewide bans and/or moratoria).


government regulation have generally considered only whether local governments can regulate fracking, and not how they should do so. Questions about what mechanisms local governments can use to regulate fracking, the scope of local authority over fracking, and which aspects of the fracking boom local government regulations can and should target remain largely unanswered.

This Article tackles the “how” question, using Colorado as a case study. Legal scholarship that has addressed local government fracking regulation to date has focused on the eastern states overlying the Marcellus and Antrim Shales. A few articles have


addressed local government fracking regulation in Western states, which have unique legal, ecological, and socioeconomic issues, and also a better-developed oil and gas jurisprudence. But no articles have comprehensively addressed local government authority to regulate fracking in Colorado, or indeed local government regulation of oil and gas in Colorado in general since the advent of the fracking boom.

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Although the La Plata/Voss doctrine remains the baseline for local government regulatory authority, the fracking boom presents novel issues for local governments. Additionally, Colorado land use law has changed over the past 20 years. But recent, non-academic resources available to local officials tend to be highly one-sided, and may be of little use to local officials attempting to discern what they can and cannot regulate. The Colorado Department of Local Affairs ("DOLA") has published a guide to local government regulation that takes a very narrow view of local authority. And the Community Environmental Legal Defense Fund ("CELDF") has published its own guide taking a very broad view of local authority that is unlikely to be upheld by a court.

This Article fills the gap in descriptions of how Colorado local governments can regulate the fracking boom by arguing that they should pass flexible, land use-based ordinances that target the boom’s socioeconomic impacts, rather than its environmental impacts. Part II summarizes these impacts, emphasizing their socioeconomic aspects. Part III summarizes local government regulatory authority in Colorado and examines the La Plata/Voss doctrine in light of recent jurisprudence expanding local government land use authority. Part IV explains how Colorado local governments can regulate fracking. It critically considers four models for local government regulation, and advocates a framework based on land use regulations, targeting the boom’s socioeconomic impacts. Part V specifically advocates adopting a flexible, point-based system to address aspects of the fracking regulations nationwide); Angela Neese, Comment, The Battle Between the Colorado Oil and Gas Conservation Commission and Local Governments: A Call for a New and Comprehensive Approach, 76 U. COLO. L. REV. 561 (2005) (advocating for legislative intervention to clarify local government regulatory authority over oil and gas); Nicole R. Ament, Note, A Perplexing Puzzle: The Colorado Oil and Gas Commission Versus Local Government, 27 COLO. LAW. 73 (1998) (tracing the history of oil and gas regulation in Colorado and describing the division of power between state and local governments following the La Plata County and Voss decisions); Kathryn M. Mutz, Note, Home Rule City Regulation of Oil and Gas Development, 23 COLO. LAW. 2771, 2774 (1994) (concluding that 1994 amendments to the Colorado Oil and Gas Conservation Act ("COGCA") did not preempt home rule municipalities from enacting stricter regulations on oil and gas development).


boom already regulated by state law, and passing traffic ordinances to protect infrastructure from damage by the trucking-intensive fracking boom.

II. ENVIRONMENTAL AND SOCIOECONOMIC IMPACTS OF THE FRACKING BOOM

A. Analytical Framework

To analyze the fracking boom’s impacts, it is first necessary to define “fracking.” Fracking is an abbreviation of “hydraulic fracturing,” the process of creating small fractures in nonporous geologic formations (most notably shales) by injecting them with pressurized fluids, chemicals, and sand. A combination of economic, technological, and regulatory factors precipitated an unprecedented boom in unconventional oil and gas production over the past decade. These factors include advances in high-volume, slick-water hydraulic fracturing, horizontal drilling, and multi-well pad drilling techniques; natural gas price spikes; and a permissive regulatory landscape. Since “the mid-2000s high-volume slick-water hydraulically-fractured multi-pad horizontally-drilled oil and gas boom” is somewhat of a mouthful, the boom is commonly referred to as the “hydraulic fracturing” or “fracking” boom. For simplicity’s sake, this article will follow this popular convention. This Article will similarly refer to the entire oil and gas exploration, production, gathering, and processing phases for hydraulically fractured wells as “fracking.”

Lenient federal regulations and state regulations of varying

17. COLORADO OIL AND GAS CONSERVATION COMMISSION (“COGCC”), INFORMATION ON HYDRAULIC FRACTURING 1 (2012), available at http://cogcc.state.co.us (select “Library” from menu on left, and select “Hydraulic Fracturing Information” under “Miscellaneous” header); see also Wiseman, Fractured Appalachia, supra note 8, at 236-39.
18. Wiseman, Untested Waters, supra note 8, at 142-47.
stringency have allowed the fracking boom’s substantial negative impacts to go largely unchecked. Legal scholars have long argued about what level of government should regulate environmentally-harmful activities, including fracking. Rather than rehash that debate, this Article assumes that local governments should be able to control the fracking boom as they see fit, because they must provide services to mitigate its negative impacts while enjoying relatively few of its benefits. This Article’s goal is not to advocate that local governments exceed their regulatory authority under state law. Rather, it is to clarify the scope of local government authority in the fracking context and to determine effective methods of exercising that authority.

B. Environmental Impacts: Surveying an Evolving Science

Although significant unknowns remain, fracking’s impacts on air quality, water quality, water quantity, and wildlife habitat are well-documented.

Fracking creates significant air pollution problems from hydrocarbon emissions throughout the production process, especially during well completion. Numerous studies have documented that oil and gas development can create significant

21. See Wiseman, Fractured Appalachia, supra note 8, at 241-49.
22. See generally, e.g., Craig, supra note 7 (advocating an increased federal role in water-related regulations); Freilich & Popowitz, supra note 11, at 535 (advocating increased local control over fracking); Powers, supra note 9, at 917-18 (advocating local hydraulic fracturing regulation to complement state and federal regulations); Scott, supra note 7, at 217-23 (advocating state level regulation).
23. See Spence, supra note 8, at 463-64 (explaining that when externalities from economic activities primarily impact local communities, local governments often lack the resources to address them); cf. Counties and Municipalities, COLO. DEP’T OF LOCAL AFFAIRS (DOLA), http://www.colorado.gov/cs/Satellite/DOLA-Main/CBON/1251593244436 (last visited Oct. 28, 2013) (explaining the shares of Colorado’s severance tax and mineral leasing revenues allocated to local governments).
25. EPA, Regulatory Impact Analysis: Final New Source Performance Standards and Amendments to the National Emissions Standards for Hazardous Air Pollutants for the Oil and Natural Gas Industry 3-5 to 3-6 (2012) (estimating that fracking emissions are 230 times greater than conventional oil and gas production emissions at the well completion stage).
ozone pollution in rural areas, and worsen ozone pollution in urbanized areas like Colorado’s Front Range. Fracking operations emit many known and likely carcinogens, which public health officials have concluded increase cancer and other health risks. Fracking also emits methane, a greenhouse gas 105 times more powerful than carbon dioxide, at rates that may eliminate the climate benefits that natural gas has over coal.


29. See Ramón A. Alvarez et al., Greater Focus Needed on Methane Leakage from Natural Gas Infrastructure, 109 PROC. NAT’L ACADEM. SCI. U.S. AM. 6435, 6437 (2012) (explaining how
Fracking can contaminate surface water and groundwater through several pathways. The main pathway is spills. There were 513 reported spills in Colorado in 2011 alone, 26% of which contaminated surface or groundwater. The flash floods that devastated Colorado’s Front Range in September 2013 caused fourteen “notable” oil spills, with a total spill of over 48,000 gallons, and seventeen major produced water spills with a total spill of over 43,000 gallons. Fracking wastewater can also enter surface flows through unlined or poorly lined waste ponds. Fracking injects millions of gallons of water, sand and chemicals through a narrow wellbore, separated from the surrounding groundwater-bearing formations by only a few inches of cement casing. Unsurprisingly, several studies have found that fracking causes groundwater contamination, although these results


32. Sally Entrekin et al., Rapid Expansion of Natural Gas Development Poses a Threat to Surface Waters, 9 FRONTIERS ECOLGY & ENV’T 503, 508 (2011).

33. House, supra note 20, at 22, 25, 27-28 (describing the cementing process, wellbore dimensions, volume of water used in hydraulic fracturing, and the use of sand in fracturing fluid); see also Hannah Wiseman, Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation, 57 ADVOC. 8, 8 (2011) (explaining the process of cementing the wellbore).

remain controversial.\textsuperscript{35}

Beyond its impacts on water quality, fracking also uses extraordinary volumes of water. The Colorado Oil and Gas Conservation Commission ("COGCC") estimates fracking will use 32 billion gallons of water in Colorado between 2010 and 2015 alone.\textsuperscript{36} This water is usually brought to the well pad one truckload at a time, increasing the total number of truck trips and the associated noise, dust, and air pollution, and traffic accident risk.\textsuperscript{37} Scholars and scientists increasingly focus attention on the quantity of water that fracking requires, especially in dry Western states.\textsuperscript{38}

The infrastructure necessary for fracking—well pads, wastewater pits, storage tanks, pipelines, compressors, and access roads—fragments wildlife habitat.\textsuperscript{39} Wastewater pits can kill birds and mammals that drink toxic water.\textsuperscript{40} Fracking may pose significant threats to endangered, threatened, and unlisted rare species in Colorado.\textsuperscript{41} Endangered species are not the only ones at


\textsuperscript{37} See Spence, \textit{supra} note 8, at 444-45 (describing the high amounts of construction activity and truck traffic required for fracking operations).


\textsuperscript{39} See Roberson, \textit{supra} note 35, at 127; see also Carlos R. Romo, \textit{Rethinking the ESA’s “Orderly Progression” Recovery System Credits and Energy Development on Public Lands}, 49 IDAHO L. REV. 471, 478-80, 488 (2013) (discussing methods to protect endangered species habitat from oil and gas development on BLM lands).


\textsuperscript{41} See, e.g., Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Ipomopsis polyantha (Pagosa skyrocket), Penstemon debilis (Parachute beardtongue), and Phacelia submutica (DeBeque phacelia), 76 Fed. Reg. 45078, 45096 (proposed July 27, 2011) (to be codified at 50 C.F.R. pt. 17); Endangered and Threatened
risk—fracking and its attendant infrastructure development can reduce deer and elk habitat and populations, harming hunting-based tourism. As a result, hunters and other wildlife advocates have called for stronger rules to protect wildlife habitat from fracking.

C. Socioeconomic Impacts: Boomtown Sociology Revisited

Socioeconomic impacts describe how an activity changes a community’s social fabric—a more qualitative measure—and its economic status—a quantitative measure. Socioeconomic impact analysis is a well-established practice required in federal and some state environmental impact analyses. But to date, legal academia has focused on fracking’s environmental impacts, rather than the ways in which a fracking boom impacts daily life in the communities where it occurs. Many legal scholars that have


45. See Hanly v. Kleindienst, 471 F.2d 823, 830-31 (2d Cir. 1972) (finding that the National Environmental Policy Act requires consideration of social and economic factors); Chinese Staff & Workers Ass’n v. City of New York, 502 N.E.2d 176, 180 (N.Y. 1986) (affirming that New York state impact analysis law requires assessment of socioeconomic impacts, including impacts on “community character”).

46. A large number of articles, including many cited above, have assessed fracking’s environmental impacts. See generally, e.g., Bagnell, supra note 8; Burleson, supra note 8; Craig, supra note 7; Parenteau & Barnes, supra note 29; Spence, supra note 8; Wiseman, Fractured Appalachia, supra note 8; Wedeking, supra note 24; Wiseman, Fracturing Regulation Applied, supra note 7; Wiseman, Untested Waters, supra note 8. Fewer articles have analyzed fracking’s socioeconomic impacts, and they have been limited in scope and targeted to specific areas. See generally, e.g., Joshua P. Fershee, The Oil and Gas Evolution: Learning from the Hydraulic Fracturing Experiences in North Dakota and West Virginia, 19 Tex. Wesleyan L. Rev. 23, 25-30 (2012) [hereinafter Fershee, The Oil and Gas Evolution] (assessing positive and negative social and economic impacts of the North Dakota oil fracting boom and the West Virginia gas fracting boom); Joshua P. Fershee, North Dakota Expertise: A Chance to Lead in Economically and Environmentally Sustainable Hydraulic Fracturing, 87 N.D. L. Rev. 485, 492-95 (2011) [hereinafter Fershee, North Dakota Expertise] (assessing both positive and negative social and economic impacts of North Dakota’s fracting boom); Peter J. Kiernan, An Analysis of Hydrofracturing Gubernatorial Decision Making, 5 ALB. GOV’T L. REV. 769, 806-07 (2012) (discussing socioeconomic impacts analysis in New York).
addressed the socioeconomic impacts of fracking have declared the impacts to be unqualifiedly positive, often based on how they impact the entire American economy, without exploring actual changes in community members’ lives.47

But daily life in communities where fracking occurs is often negatively impacted.48 Fracking tends to proceed in a “boom” and “bust” cycle. Technological advances and high natural gas prices triggered a rapid expansion in fracking during the past decade, causing many isolated, rural communities throughout the United States to undergo sudden population “booms” due to a sudden influx of oil and gas workers.49 Although the fracking boom is recent, the challenges of “boomtown” life are hardly new. Rural sociologists have developed a robust literature assessing the social and economic tolls of what is known as the “Boom & Bust” cycle in rural communities.50

47. See, e.g., Wes Deweese, Fracturing Misconceptions: A History of Effective State Regulation, Groundwater Protection, and the Ill-Conceived Frac Act, 6 OKLA. J.L. & TECH. 49, 80-81 (2010) (asserting that fracking will have an unqualifiedly beneficial impact on the American economy and international relations); Fershee, The Oil and Gas Evolution, supra note 46 at 25-26 (2012) (emphasizing the positive socioeconomic impacts of the fracking boom in North Dakota and West Virginia); Kent Holsinger & Peter Lemke, Water, Oil, and Gas: A Legal and Technical Framework, 16 U. DENVER WATER L. REV. 1, 2 (2012) (describing the positive economic impacts of hydraulic fracturing as “tremendous” and asserting that the Rocky Mountain West could produce as much oil and gas as Saudi Arabia); Roberson, supra note 35 at 67-68, 115 (“[d]espite the economic benefits, environmental groups continue to attack the industry with allegations of environmental harm”).


1. Socioeconomic benefits at the federal, state, and local level.

At the state and national level, the fracking boom has a number of fiscal, social, and economic benefits. Fracking booms can also have economic benefits at a local level, but these benefits are often outweighed by the boom’s socioeconomic costs.

Total federal revenues from all onshore and offshore oil and gas operations in fiscal year 2012 were $10 billion. Half of federal mineral leasing revenues are allocated to the states where mineral development occurs, an amount totaling just under $2 billion in 2011. Most states with oil and gas production also levy a severance tax. Colorado has one of the lowest severance taxes in the country, allowing oil and gas producers to deduct their property taxes from their severance tax, so many oil and gas producers pay no severance tax whatsoever, and the effective statewide severance tax has historically been as low as 1.3%. Colorado’s 2011 severance tax revenue was only $114.9 million, meaning the effective tax rate was as low as 0.25%.

Fiscal policy aside, fracking directly benefits many higher education institutions. Since 2002, nationwide enrollment in Petroleum Engineering undergraduate programs has tripled, and the master’s program enrollment has doubled.

53. Distinct from mineral lease fees, which are levied by the federal government, severance taxes are taxes on mineral extraction levied by states, with Pennsylvania being a notable exception. See Kristen Allen, The Big Fracking Deal: Marcellus Shale—Pennsylvania’s Untapped Resource, 23 VILL. ENVT'L. L.J. 51, 74-82, 85-87 (2012) (describing political controversy around enacting the tax and advocating for its creation).
56. Calculations on file with author.
Mines have received millions in industry funding for research and new facilities.58

Further, because natural gas is a regional, rather than a global commodity,59 the fracking boom dramatically increased the supply and lowered the wellhead price of natural gas in the continental United States.60 Natural gas sold to residential and commercial consumers is a regulated monopoly, so consumer prices will not respond to the new market conditions until individual utilities’ next ratemaking cycle.61 But low natural gas prices have contributed to an overall shift away from coal-generated electric power, which has potentially significant long- and short-term benefits to public health in communities near coal-fired electrical generation facilities. Scholars have also noted that low natural gas prices have similarly undercut the renewable energy industry, potentially reversing socioeconomic gains related to any climate benefits natural gas may have over coal.62

Jobs created by the fracking boom are its most frequently discussed economic benefit. According to the Bureau of Labor Statistics, the oil and gas extraction sector employed 195,000 people in July 2013.63 These workers are relatively well paid—the median annual income for a roustabout (a well pad laborer) was $33,900 in 2012, which is relatively high among comparable positions.64 By contrast, the American Petroleum Institute (“API”) claims the oil and gas sector supports 9.2 million jobs.65 This

58. Id.
60. U.S. Natural Gas Wellhead Price, U.S. ENERGY INFO. ADMIN., http://www.eia.gov/dnav/ng/hist/n9190us3m.htm (last updated Sep. 30, 2013); see also Spence, supra note 8, at 433, 439 (describing price declines).
62. See Parenteau & Barnes, supra note 29, at 542-49.
discrepancy of 9 million between the Bureau of Labor Statistics’ number and the API’s claim exists because API’s estimate includes “spillover” jobs—jobs in service industries that support oil and gas workers, including janitors, daycare providers, librarians, cashiers, cooks, retail clerks, pharmacists, and bank tellers. It is unclear how many of these jobs would not exist but for the fracking boom. Nevertheless, service sector employment gains in communities impacted by the fracking boom are undeniably substantial.

A related benefit to increased service-sector activity is increased sales tax revenue for local governments. One recent analysis attributed a nearly nine-fold increase in sales tax revenues in several Texas counties to the Eagle Ford shale boom. Such dramatic sales tax gains can substantially boost local government purchasing power, especially for goods and services purchased outside the government’s immediate vicinity. But these dramatic gains must be viewed in the broader context of fracking’s fiscal impact on local governments. Price volatility in the natural gas market means that the gains can evaporate as quickly as they manifest. And, as will be described in greater detail below, the costs of providing additional services to oil and gas workers and to replace infrastructure damaged by heavy truck traffic can quickly outpace even the most substantial gains in sales tax revenue.

66. Id. at 4.
69. But see Fershee, The Oil and Gas Evolution, supra note 46 at 26; John McChesney, Oil Boom Puts Strain on North Dakota Towns, NAT’L PUB. RADIO, Dec. 2, 2011, www.npr.org/2011/12/02/142695152/oil-boom-puts-strain-on-north-dakota-towns (explaining that fracking booms can cause significant inflationary pressure at the local level, potentially eliminating gains in local purchasing power).
70. See Joseph Spector, Once a Beneficiary of Fracking, Chemung County Has Decline in Sales-Tax Revenue, POL. ON THE HUDSON (Jan. 14, 2013, 3:48 PM), http://polhudson.lohudblogs.com/2013/01/14/once-a-beneficiary-of-fracking-chemung-county-has-decline-in-sales-tax-revenue (describing how sales tax revenue in a New York County that provided services to oil and gas workers in neighboring Pennsylvania initially grew, then declined in response to a boom and decline in oil and gas production in Pennsylvania).
2. Direct socioeconomic impacts at the local level.
   a. Employment and labor.

   More relevant to local governments than the number of jobs is the distribution of those jobs—who gets high-paying oilfield jobs, and who gets a new shift at a gas station staying open late to serve overnight fracking operations. Contrary to popular belief, most jobs in the oil and gas industry do not go to local residents. Oil and gas jobs require substantial training, and operations are highly mobile. It is not economically viable for companies to invest in training local workers when they will quickly move to a new area and have to train new workers. The jobs created for boomtown residents themselves thus are lower-wage jobs in the service sector.

   Although nearly all oil and gas sector workers are transplants from other locations, they are a part of the community where they live and work during a boom, and as a result, the economic conditions of their employment are relevant to the socioeconomic picture of the community as a whole. It thus bears noting that oilfield jobs are incredibly dangerous. The workplace mortality rate for the oil and gas sector is 27.5 deaths per 100,000 workers, seven times higher than the rate for the United States as a whole. The sector reported 716 fatalities between 2003 and 2009. By comparison, there were 886 American military casualties in the war in Afghanistan in the same time period. 1.2% of oil and gas sector workers reported a nonfatal workplace-related injury in 2010. By comparison, only 0.6% of nuclear power plant workers—a profession often thought to be very dangerous—reported a nonfatal workplace-related injury during the same crisis and credit rating decrease in Williston, North Dakota, at the heart of the Bakken shale oil boom, where rapidly expanding sales tax revenue was unable to keep pace with the city's need to provide additional services and infrastructure).

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72. Brasier et al., supra note 50, at 35.
73. See id. (citing Stephen B. Lovejoy & Ronald L. Little, Energy Development and Local Employment, 16 SOC. SCI. J. 27 (1979)).
75. Id.
year.78 These fatalities and injuries are unevenly distributed. Workers employed by small companies are five times more likely to be killed on the job than workers at large companies.79 Contractors have a 1.5 to 3 times greater risk of mortality than employees.80

b. Public health costs.

On-the-job mortality is far from the only health-related cost of a fracking boom. Public health risks associated with residential proximity to fracking operations are better documented. Many homes are located very close to wells—COGCC recently increased its setback requirement to 500 feet from houses, replacing the old standard of 150 feet in rural areas.81 Residents living within one half mile of a well have high exposure rates to both carcinogenic and other hazardous air toxics.82 Fracking also causes more broadly dispersed air pollution issues, notably ozone formation, which causes asthma, respiratory illness, and premature mortality.84

The fracking boom is too recent for any longitudinal studies examining health risks to oil and gas workers to have completed, so the exact magnitude of such risks is presently unknown. However, since it is known that living in close proximity to well pads drives health risks, it is reasonable to assume that workers, who are even closer to well pads than nearby homeowners, face health risks from exposure to toxics used in fracking.85

These health impacts can be costly. For example, the average person who develops asthma due to fracking-related air pollution can expect to spend $3259 a year on treatment.86 Sickness and

78. Id. at 24.
80. Id.
81. 2 COLO. CODE REGS. § 404-1-604(a)(1); see also Mark Jaffe, Colorado Oil and Gas Well Setback Fight Headed to State Legislature, DENVER POST (Feb. 11, 2013), www.denverpost.com/breakingnews/ci_22566166/colorado-oil-and-gas-commission-votes-500-foot (describing the regulatory change).
82. McKenzie et al., supra note 28, at 83-85
83. See supra notes 26-27.
85. McKenzie et al., supra note 28, at 83-85 (describing health risks for people living close to wellpads).
caring for sick family members can cause missed days of work and school, adding further costs in the form of missed wages, opportunity costs from missed learning opportunities, and productivity losses for employers.\textsuperscript{87} Trips to medical facilities can be particularly time consuming and costly in rural areas, where health care access is a long-standing problem.\textsuperscript{88} Finally, ozone and cancer-related premature mortality imposes both quantitative and qualitative costs.\textsuperscript{89} Adding to this expense, most oil and gas sector workers are contractors, often lacking healthcare benefits.\textsuperscript{90} The increased expenditures on healthcare can slow economic growth, and, at a local level, may channel revenue to larger state and national healthcare companies located in faraway cities. Moreover, the need to provide additional healthcare facilities, and to subsidize additional treatment for beneficiaries of public health benefits systems can impose further stress on local government and state budgets.

c. Quality of life.

Fracking also impacts the overall quality of life for people living close to drilling operations. As noted above, drilling operations may be as close as 500 feet to a residence in Colorado.\textsuperscript{91} Drilling often proceeds twenty-four hours a day and can be incredibly noisy.\textsuperscript{92} Colorado’s recently-revised regulations allow sound levels ranging from eighty decibels during the day in industrial areas to fifty decibels at night in residential, rural, and agricultural areas.\textsuperscript{93} For reference, 80 decibels is the sound level in a single-rotor

\begin{footnotesize}
\begin{enumerate}
\item EPA, \textit{supra} note 84; accord EPA, National Ambient Air Quality Standards for Ozone, 75 Fed. Reg. 2,938, 2,952 (Jan. 19, 2010).
\item See Jaffe, \textit{supra} note 81 (describing Colorado’s setback rules).
\item See Reeder, \textit{supra} note 9, at 1009.
\item 2 COLO. CODE REGS. § 404-1(802)(b) (2013).
\end{enumerate}
\end{footnotesize}
helicopter, and unprotected exposure to steady noise at ninety decibels for just a few hours can cause temporary hearing impairment.94

In jurisdictions where flaring—burning off excess natural gas at the wellhead—is allowed, flares can be a nuisance.95 A flare burning just a few hundred feet from a home can cause substantial light pollution.96 Although flaring controls pollution better than directly venting methane into the atmosphere,97 the image of fires burning across a landscape is nevertheless alarming.98 And it is a particular nuisance to those who live close by.99

3. Indirect socioeconomic impacts at the local level.


The fracking boom has a wide range of indirect socioeconomic impacts on local communities, better known as “Boomtown Effects.” They stem from the pace and scope of fracking—the “boom”—and the fact that fracking employs a mobile workforce, rather than local residents. Fracking booms bring a rapid influx of well-paid newcomers (mostly young men) working dangerous jobs in a profession known to cause high levels of depression and substance abuse into usually rural areas with limited housing and recreational opportunities.100 This is a perfect recipe for many social ills.

Rural sociologists have long documented that the influx of oil and gas workers can cause upswings in issues including substance

97. Fershee, The Oil and Gas Evolution, supra note 46, at 27.
100. See Dobb, supra note 96.
abuse, crime, the sex trade, and domestic violence in rural areas.\textsuperscript{101} Today’s fracking boom bears out that trend. In the first few years of the fracking boom in western Colorado’s Piceance Shale, the Garfield County Sheriff’s Department had to hire fifteen new deputies, and total offenses per year increased from 100 to 600, with assaults, DUIs, and drug-related crimes becoming especially problematic.\textsuperscript{102}

Because oil and gas workers are mostly male, the social issues and crimes associated with the fracking boom tend to be gendered in nature.\textsuperscript{103} The large influx of young men results in increased sex work, with sex workers sometimes coming to the community from far away.\textsuperscript{104} The gender imbalance in boomtowns has been linked to overall increases in sexual assault and sex crimes.\textsuperscript{105} And while the increased crime rate is keeping some prosecutors busy, in Indian Country the fact that most of the oil and gas workers moving to reservations are not enrolled members of a tribe has made prosecuting alleged perpetrators in tribal court impossible.\textsuperscript{106} Until the 2013 Violence Against Women Act goes into effect in 2015, tribal prosecutors will be unable to prosecute non-tribal members for any crimes. This has created a severe disparity in sexual assault and rape prosecution on and off

\begin{itemize}
\item \textsuperscript{102} Tharp, supra note 48.
\item \textsuperscript{104} See John Eligon, An Oil Town Where Men are Many and Women Are Hounded, N.Y. TIMES (Jan. 15, 2013), http://www.nytimes.com/2013/01/16/us/16women.html?pagewanted=all&_r=0 (describing gender imbalance in North Dakota’s Bakken shale).
\item \textsuperscript{105} See Joel Berger & Jon P. Beckmann, Sexual Predators, Energy Development, and Conservation in Greater Yellowstone, 24 CONSERVATION BIOLOGY 891, 894 (2010) (finding that sex offender registries increased more rapidly in towns with energy development).
\end{itemize}
b. Growing pains: Housing and traffic.

The rapid influx of workers does more than just alter a community’s demographic profile. The need to shelter a large number of new residents is often impossible, especially in smaller rural towns. Most oil and gas workers live in “man camps” — clusters of mobile homes, RVs and trucks, often located without formal land use approval. Man camps often lack electricity, running water, sewage, or adequate heat, creating a positive feedback loop with the high rates of depression, substance abuse, and crime discussed above. Not all workers live in man camps. Many move into hotels, competing with the tourism industry critical to many rural Western communities. Those oil and gas workers who are able to secure rental properties tend to displace the poorest residents in rural communities, causing widespread eviction, and potentially homelessness for the original residents.

Fracking booms also strain physical infrastructure by causing extreme traffic problems. One state estimates fracking requires 2000 truck trips per well, with the need to transport drilling rigs, workers, fracking fluids, millions of gallons of water, and remove wastewater. Some estimates have put the number closer to


108. See Brasier et al., supra note 50, at 36.


110. See Brown, supra note 48; Tharp, supra note 48.

111. Tharp, supra note 48.


Rural communities are rarely equipped to handle this traffic, with many having only a few paved roads and no options to bypass residential areas. Traffic accidents are also a major problem. One recent study of traffic accidents in Pennsylvania's oil and gas producing region found a 2% increase in traffic accident risk per additional well drilled per month, controlling for changes in population and traffic accident patterns over time. As with chemical exposure-related public health hazards, oil and gas workers are most at risk. Between 2002 and 2012, 300 oil and gas workers were killed in work-related traffic accidents, a problem often attributed to truck drivers working very long shifts, and to frequent violations of federal traffic safety laws restricting truck-driving hours. Two-thirds (thirty-three out of fifty-five) of traffic fatalities in North Dakota between January and June 2013 occurred in the remote Bakken Shale, where the high number of traffic fatalities involving oil and gas industry trucks has caused an outcry by tribal members residing on the Fort Berthold Indian Reservation. Spills associated with truck accidents are a major public safety hazard. Local governments can incur substantial emergency services-related costs responding to the increased number of traffic accidents and health risks associated with spills, so it is hardly surprising that traffic issues have been a major focal


117. See Ian Urbina, Deadliest Danger Isn’t at the Rig but on the Road, N.Y. TIMES (May 14, 2012), http://www.nytimes.com/2012/05/15/us/for-oil-workers-deadliest-danger-is-driving.html?_r=2&adxnnl=1&pagewanted=1&adxnnlx=1384999458-6SY20Ex8d5kkYU7iU1ZQ.

118. Dustin Monke, An Enlightening 12-hour Drive around the Bakken, DICKINSON PRESS (June 9, 2013), http://www.thedickinsonpress.com/content/monke-enlightening-12-hour-drive-around-bakken (documenting the traffic fatality rate in the Bakken oil shale region); see also Raymond Cross, Development’s Victim or its Beneficiary?: The Impact of Oil and Gas Development on the Fort Berthold Indian Reservation, 87 N.D. L. REV. 535, 546-47 (2011) (describing impacts of traffic on the Reservation); Eloise Ogden, Three Affiliated Tribes Ask BIA for Help with Highway Safety Issues, MINOT DAILY NEWS (Feb. 22, 2011), http://www.minotdailynews.com/page/content_detail/id/552162.html (describing a hearing over a large number of traffic fatalities associated with oil and gas trucks on the Ft. Berthold Reservation); NORTH DAKOTA FLIGHT SPARKS DISCUSSION ON IMPACT OF OIL BOOM, LIGHTHAWK (Sept. 2010), http://www.lighthawk.org/WayPoint/Waypoint%20September%202010.pdf (documenting traffic problems at Ft. Berthold).

119. See Wiseman, Fractured Appalachia, supra note 8, at 258-60.
point of local government attempts to regulate oil and gas.120

c. Building the bust: Traditional economic drivers suffer.

The numerous socioeconomic changes in fracking boomtowns create significant net harm to the industries that typically sustain local economies. Agriculture and natural resource-based tourism are the primary economic sectors in the modern rural West.121 Fracking booms harm both, which is especially problematic because the oil and gas sector’s price volatility makes it prone to “busts.”122 Further, because the natural gas commodity market is regional, rather than global, the fracking boom has begun to saturate the North American natural gas market sufficiently, which substantially slows the nationwide boom and causes “busts” in some areas.123 Damage to traditional economic sectors makes “busts” more severe and longer lasting.124

Fracking makes tourism less desirable and less affordable. Drilling rigs disrupt scenic vistas and harm wildlife, particularly deer and elk, which discourages hunting.125 The loss of birds and other rare and endangered species may deter tourists seeking charismatic fauna.126 And as discussed above, housing shortages often result in low hotel vacancy rates, raising prices for tourists, if rooms are available at all.127

Fracking harms agriculture by competing for the limited water supply available in the West.128 Ozone pollution suppresses vegetation growth and reduces yield, harming crop farming and

120. See, e.g., Bd. of Cnty. Comm’rs v. Bowen/Edwards Assoc’s., 830 P.2d 1045, 1050 n.3 (Colo. 1992); Riley, supra note 11, at 385 (discussing traffic-based regulations in the City of Deer Park, TX).


124. See Brasier et al., supra note 50, at 34.

125. See supra notes 42-43 and associated text.

126. See supra notes 41-42 and associated text.

127. Tharp, supra note 48.

128. See supra notes 36-38 and associated text.
grazing operations. One study found that fracking’s footprint directly displaces agricultural land use. Anecdotal evidence also confirms that fracking booms can displace farmers and ranchers. Spills and unfenced or poorly-fenced wastewater pits can kill cattle and other livestock who drink contaminated water. Organic and natural food niche farms may be unable to obtain the certification necessary for their business model if their farms are exposed to unknown chemicals.

Finally, fracking impacts both outdoor-recreation-based tourism and agriculture because methane emissions accelerate climate change. In Colorado, climate change harms both industries by decreasing the amount and timing of precipitation and snowmelt, exacerbating water shortage problems. This will make recovery from fracking’s short-term impacts more difficult for farmers and outdoor-recreation-based tourism operations facing a “permanent” drought increased in magnitude by fracking.

d. Pigs in a parlor: Community character impacts.

“Community character” is a term scholars employ to describe citizens using local self-governance to create the sort of community in which they want to live. Local government authority to enact

134. See supra note 29 and associated text.
zoning ordinances to shape community character has been universally recognized since the Supreme Court decided *Euclid*.138 Fracking booms can change that character, decreasing a community’s cohesion as it struggles with the issues that arise from the influx of a large group of outsiders.139 Fear of increasing crime rates creates stress among both the original residents and the migrants who arrived with the “boom.”140 Sharp divides can arise between formerly friendly neighbors over whether to promote or fight fracking.141 While some community members, especially those who own mineral rights, may benefit financially from a fracking boom, many others do not and must face the boom’s impacts while enjoying few of its benefits.142

4. *Fiscal impacts: Providing more services with less revenue.*

The disparity between the fracking boom’s beneficiaries and those who must bear its costs exists not only at the individual level, but also between levels of government.143 Local governments are faced with regulating booms that change their communities’ character and harm the health, safety and welfare of their citizens.

To deal with the fracking boom’s impacts, county governments must provide social and health services to address new housing problems, substance abuse, and crime,144 and likely will need to hire more social workers, law enforcement, and emergency response personnel.145 Hiring these staff can be difficult, because housing shortages in communities experiencing a fracking boom146 make living costs unaffordable on entry-level government salaries.

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139. Brasier et al., *supra* note 50, at 36.


142. *Id.*

143. *See* Spence, *supra* note 8, at 481-82 (explaining that the externalities from oil and gas development primarily impact local communities, but local governments often lack the resources to address them).

144. *See id.*

145. Brasier et al., *supra* note 50, at 36, 47.

146. *See* Tharp, *supra* note 48 (describing difficulties in hiring and retaining teachers in Garfield County, CO).
Cities and counties also must also repair roads damaged by heavy truck traffic. The cost of improving roads to deal with increased fracking-related truck traffic in one rural county was over 16 times its annual budget. And planning commissions must make tough decisions ranging from where to locate wells and man camps to whether to allow permanent housing construction, despite the risk that houses will sit empty in the event of a bust.

Despite the substantial costs borne by local governments, the primary government revenues from fracking—mineral leasing revenues and severance taxes—go to federal and state governments, not to local governments. A few states, including Colorado, transfer some of those funds to local governments. But these transfers are very low compared to fracking’s costs. In Colorado, transfers totaled $94 million in fiscal year 2012. For perspective, the annual revenues of just one city, Denver, are an order of magnitude higher—$945 million in 2013. And state transfer policies do not take into account disparities caused by Colorado’s property tax exemption, so communities with lower tax bases, like southwest Colorado’s San Juan Basin, end up financing severance tax grants to wealthier communities on the Front Range.

Local governments derive revenue primarily from two sources: property taxes and sales taxes. Of the two, property taxes tend to provide the primary revenue stream, especially for county governments. As noted above, fracking booms can provide limited gains in sales tax revenue, as population increases boost retail sales.

But property taxes are another story. Fracking depresses nearby property values due to its noise and light pollution and potential health impacts. And although fracking creates a housing shortage,
under the property tax lag model, it takes several years for property tax assessments to catch up to changing property values, by which time the fracking boom likely will be over and demand for housing back to normal. The lag is exacerbated by residents who live close to fracking operations and who try to sell their properties to escape the nuisance of fracking. Their devalued properties become a disproportionate number of new assessments.

III. STATE AND LOCAL REGULATORY AUTHORITY OVER FRACKING IN COLORADO

A. Background: The Nature of Local Governments in Colorado

There are five types of local governments in Colorado: home rule municipalities, statutory municipalities, home rule counties, statutory counties, and special districts. This Article addresses how each of the first four can regulate fracking. It first describes the overall scope of their powers.

There are currently ninety-seven home rule municipalities in Colorado. Two of them—Denver and Broomfield—are consolidated cities and counties. Article XX, section 6 of the Colorado Constitution authorizes municipalities to approve charters granting themselves home rule powers. It enumerates many broad powers, including eminent domain, taxation, and election holding. But home rule powers are broader than those listed in the Constitution. Section 6 also grants home rule municipalities “all other powers necessary, requisite or proper for the government and administration of its local and municipal matters,” and states that the enumeration of powers should not be construed to deny them “any right or power essential or proper to the full exercise of [self-government] right[s].” Section 6 provides that state law is superseded by ordinances passed

158. Active Colorado Municipalities, DOLA, https://dola.colorado.gov/gis/municipalities.jsf;jsessionid=3dc1c164505400e530df648300d4e3tfdi=&jffi=municipalities.jsf (last visited Nov. 27, 2013) (on website, use “find” feature and search for “home rule”).
159. COLO. CONST. art. XX, § 1 (Denver); COLO. CONST. art. XX, § 10 (Broomfield).
160. COLO. CONST. art. XX, § 6.
161. Id. §§ 1, 6.
162. Id. § 6.
pursuant to home rule charters. The Colorado Supreme Court recently held that “Article XX vests in home rule municipalities every power which the legislature could have conferred.”

In addition to home rule municipalities, Colorado also has 171 statutory municipalities. Rather than holding all powers necessary and proper for local government, they have only those powers explicitly granted to them by Titles 29 and 31 of Colorado’s Revised Statutes. These powers are notably broad. They include general police powers, zoning, and water pollution control. But they are limited to the powers enumerated by the General Assembly.

Like statutory municipalities, Colorado’s sixty statutory counties hold similar enumerated powers under Title 29, including land use powers. They are also granted county-specific powers under Title 30, including police powers, oil and gas leasing authority, and zoning authority. But, like statutory municipalities, statutory counties are also limited to their enumerated powers and powers necessary to exercise them, and cannot exercise any powers not explicitly delegated to them by the General Assembly.

Unlike home rule municipalities, home rule counties are

163. Id.
165. DOLA, supra note 158 (on website, use “find” feature and search for “statutory”). Notably, the Town of Georgetown is neither a home rule city nor a statutory municipality. It is a territorial charter municipality that operates under a charter from the Territory of Colorado. See COLO. CONST. art. XIV § 13.
167. Id. § 31-23-301 (2013).
169. See Colorado Counties, DOLA, https://dola.colorado.gov/lgis/counties.jsf (last visited Oct. 28, 2013) (listing Colorado’s 64 counties); Colorado Counties, Inc., Counties, ccionline.org/counties (last visited Nov. 27, 2013) (noting that a total of four counties are organized as home rule counties or as combined cities and counties, which indicates that the remaining 60 counties are statutory counties).
170. COLO REV. STAT. ANN. § 29-20-104 (West 2013).
171. Id. § 30-15-401.
172. Id. § 30-11-302.
173. Id. § 30-28-111.
created pursuant to statute, and not the Colorado Constitution. The General Assembly granted home rule counties narrower authority—only forty-six enumerated (albeit broad) powers, with no “necessary and proper” or non-enumerated powers clauses. Perhaps because of this, relatively few counties have chosen to adopt home rule charters. Besides the aforementioned consolidated cities and counties of Denver and Broomfield, only Weld and Pitkin Counties have adopted home rule charters.

B. State Law Preemption of Local Ordinances

In addition to the explicit limitations set by the Colorado Constitution, General Assembly, and courts, local governments' regulatory powers may also be preempted by other state statutes that grant the state authority to regulate in certain areas. Under Colorado state law, preemption analysis proceeds differently depending on the type of local government involved.

1. Home rule municipalities.

Because municipal home rule authority derives from the Colorado Constitution, courts use a four-part test to determine whether a home rule municipality’s ordinance that potentially conflicts with state law can survive: “[1] Whether there is a need for statewide uniformity of regulation; [2] whether the municipal regulation has an extraterritorial impact; [3] whether the subject matter is one traditionally governed by state or local government; and [4] whether the Colorado Constitution specifically commits the particular matter to state or local regulation.”

But courts do not subject every action taken by home rule municipalities to this preemption analysis. In 2008, the Colorado Supreme Court issued a landmark opinion affirming an expansive view of home rule municipalities’ powers. In *Telluride v. San Miguel*, a developer challenged the City of Telluride’s use of its eminent domain power to condemn an area outside the city’s boundaries

175. COLO REV. STAT. ANN. § 30-11-501 (West 2013).
176. Id. § 30-35-201.
179. Id. at 723 (citing Voss v. Lundvall Bros., 830 P.2d 1061, 1067 (Colo. 1992)). One scholar described this as more properly being understood to be a two-part test. The first three factors condense into a single inquiry as to whether an ordinance is a matter of statewide, local, or shared concern. Laurie Reynolds, *Home Rule, Extraterritorial Impact, and the Region*, 86 DENV. U. L. REV. 1271, 1287-88 (2009).
The court distinguished inquiries into the powers granted to home rule municipalities by the Colorado Constitution from the preemption analysis courts apply regarding powers granted to home rule municipalities by statute. It explained that “[w]here the constitution specifically authorizes a municipal action which potentially implicates statewide concerns,” the municipality may exercise those powers, unconstrained by the “local purpose” inquiry of preemption analysis.

The court then considered whether exercising eminent domain power to acquire property for parks and open space constituted a “lawful, public, local, and municipal purpose” over which the Colorado Constitution grants home rule municipalities extraterritorial eminent domain powers. It concluded that Telluride’s use of its eminent domain power did indeed constitute a lawful municipal purpose because the General Assembly had previously authorized local governments to exercise eminent domain authority to acquire property for parks and open space purposes and because home rule authority includes all powers that the state has authority to grant. The court affirmed that “land use policy traditionally has been a local government function.” The court thus held that extraterritorial condemnation for parks and open space is a power expressly granted to home rule municipalities by the constitution, and upheld Telluride’s action.

Telluride v. San Miguel expanded home rule municipal authority in two ways. First, it explicitly affirms that when home rule municipalities act under authority explicitly granted to them by the Colorado Constitution, ordinary preemption analysis does not apply. If a home rule municipality is exercising such a power, it need only show that its action conforms with the terms of that constitutional provision, irrespective of whether the power is more traditionally state or local in nature. The Telluride v. San Miguel

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181. Id. at 167.
182. Id.
183. Id. at 167-68.
184. Id. at 168 (citing Town of Telluride v. Lot Thirty-Four Venture, L.L.C., 3 P.3d 30, 39 n.9 (Colo. 2000)).
185. Id. at 167-69.
186. But cf. Reynolds, supra note 179 at 1271 (criticizing the court for taking an overly broad view of home rule municipal authority).
Second, the court “recognize[d] that land use policy traditionally has been a local government function,” and thus land use is an area of traditional local concern under Colorado law. 187 The court expanded on dicta from an earlier case in which it concluded that a rent control ordinance was a matter of economic policy, rather than land use policy, and thus a matter of mixed state and local concern under the fourth prong of the preemption test. 188 Although the Telluride v. San Miguel court was interpreting what constituted a “local” purpose under the constitution’s home rule eminent domain provision, it made clear that its reasoning was cross-applicable to its standard preemption analysis. 189 Accordingly, in future preemption inquiries, land use ordinances can be considered exclusively local under the fourth prong of the test.

2. Statutory counties.

Statutory counties only possess powers expressly granted by the state, including “implied powers reasonably necessary” to exercise them. 190 The extent of their powers is thus dictated by “the ordinary rules of statutory construction.” 191

Preemption inquiry for statutory counties proceeds along the lines of federal/state preemption analysis, with courts determining whether a state law expressly, impliedly, or operationally preempts a local ordinance. 192 “Express preemption arises when the express language of the statute indicates the state’s intent to preempt all local authority over the given subject matter,” and the legislature has “provided a clear and unequivocal statement of intent to prohibit the exercise of local government authority.” 193 Implied

188. See Telluride v. Lot Thirty-Four, 3 P.3d at 39 n.9.
189. San Miguel, 185 P.3d at 168.
191. Id. at 724.
192. Id. at 723 (explaining that “[o]ur preemption methodology for resolving state and local legislative conflicts borrows from our cases involving federal preemption analysis.”).
preemption exists if state law indicates local regulation would be impermissible, depending on whether the state law is “sufficiently dominant” to override the local ordinance. 194 Finally, operational preemption inquiries decide either that the state and local rules can be harmonized,195 or that the local rule “materially impedes” or destroys state law, and must be struck down.196

The Colorado Supreme Court has recognized that statutory counties have “broad land use authority,” and their zoning ordinances are presumptively valid.197 But statutory counties’ land use authority is less broad than home rule municipalities’, and is constrained to those powers expressly delegated to them by the General Assembly through the Colorado Local Government Land Use Control Enabling Act (“Enabling Act”) and other statutes.198

3. Statutory municipalities.

Statutory municipalities enjoy a legal status very similar to statutory counties, sharing the same authority over land use decisions under the Enabling Act.199 Statutory municipalities also have enumerated powers distinct from those of counties, codified in Title 31.200 Fewer cases have applied preemption analysis to statutory municipality oil and gas ordinances, but one appellate court used the same express/implied/operational preemption analysis applied to statutory counties.201

4. Home rule counties.

Because there are relatively few of them, and thus fewer cases involving them have come before state courts, home rule counties have a more ambiguous legal status than other Colorado local governments. Because county home rule authority is statutory and

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194. Summit Cnty., 199 P.3d at 724 (citing Voss v. Lundvall Bros., 830 P.2d 1061,1068 (Colo. 1992)).
195. Id. at 730 (citing Voss, 830 P.2d at 1068-69).
197. Summit Cnty., 199 P.3d at 730 (citing Bd. of County Comm’rs of Boulder County v. Thompson, 493 P.2d 1358, 1361 (Colo. 1972)).
200. Id. § 31-15-103 (granting “municipalities” authority to enact ordinances to promote public safety, health, prosperity, morals, and convenience).
not constitutional, it may be less broad than the land use authority the Colorado Supreme Court recognized in *Telluride v. San Miguel*. Since home rule county powers are limited to the forty-six enumerated ones discussed above, a court would likely apply the same preemption analysis to a home rule county as a statutory county.

C. *Preemption Jurisprudence in the Oil and Gas Context*

Many key cases shaping Colorado’s preemption jurisprudence have involved local oil and gas ordinances. A pair of cases handed down by the Colorado Supreme Court on the same day in 1992 defines that jurisprudence: *La Plata County* and *Voss*.

In *La Plata County*, the court upheld a statutory county’s land use ordinance requiring oil and gas operations to obtain a special use permit from the County Commissioners or planning staff. The court first explained that the powers granted to statutory counties are narrower than home rule municipalities’ constitutional powers. In the land use realm, those powers come from the Enabling Act, and the Title 30 provisions granting county-specific land use authority. The court concluded that the Enabling Act and Title 30 provisions left “no doubt” that La Plata County had land-use regulation powers, and that oil and gas development “involved the use of land and undoubtedly has some impact on a county’s interests in land use control.” With this background, the court turned to whether the Colorado Oil and Gas Conservation Act (“COGCA”) preempted the La Plata County ordinance.

First, the court found no basis for either express or implied preemption of local governments’ land use authority over oil and gas development. It then applied the operational preemption test, and held that, based on the record before it, there was no conflict between the land use ordinance and state law. It reasoned that the ordinance was “designed to harmonize oil and

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204. *La Plata Cnty.*, 830 P.2d at 1050-51.
205. *Id. at* 1055.
206. *Id. at* 1056.
207. *Id.*
208. *Id. at* 1058-59.
209. *Id. at* 1059-60.
gas developmental and operational activities with the county’s overall plan for land-use and with the state’s interest in those developmental and operational activities.”

The court went on to list in dicta three areas of possible operational preemption: “safety regulations,” “technical conditions,” and “land restoration requirements.” But these were not hard and fast rules—the court concluded by explaining that questions of operational preemption “must be resolved on an ad-hoc basis under a fully developed evidentiary record.”

Voss addressed the validity of a ban on all oil and gas production and exploration in Greeley, a home rule city in Weld County. The Colorado Supreme Court first extolled the broad powers of home rule municipalities, opening the case by distinguishing it from the statutory county preemption issue decided in La Plata, and finally enumerating in great detail the powers, land use and otherwise, enjoyed by home rule municipalities. The court then laid out the four part test, described in Part III(B)(1) above, used in home rule preemption analyses to determine whether the matter being regulated was of purely local, purely state, or mixed state and local concern.

On the test’s first three prongs, the court concluded that oil and gas regulation is an area of traditional state concern warranting statewide uniformity, in part because local regulations can have extraterritorial impacts since oil-bearing formations do not conform to municipal boundaries. On the fourth prong, the court found that Greeley’s total ban “substantially impedes” statewide regulations since it prohibited development altogether, and concluded that it was thus operationally preempted.

The court limited its holding to ordinances which completely banned oil and gas development. It stated that “we do not mean to imply that Greeley is prohibited from exercising any land-use
authority over those areas of the city in which oil and gas activities are occurring or are contemplated,” and affirmed that its La Plata County conclusion about local government land-use authority applied to home-rule municipalities, as well. Indeed, the Court overturned the appellate court’s finding that there was “no room” for local government oil and gas regulations, and laid out an explicit framework for future regulations by home-rule municipalities:

If a home-rule city, instead of imposing a total ban on all drilling within the city, enacts land-use regulations applicable to various aspects of oil and gas development and operations within the city, and if such regulations do not frustrate and can be harmonized with the development and production of oil and gas in a manner consistent with the stated goals of the Oil and Gas Conservation Act, the city’s regulations should be given effect.

Perhaps due to the court’s clarity in setting this framework, there have been relatively few cases involving local government oil and gas regulations in the intervening years.

In La Plata County v. COGCC, the Court of Appeals overturned a COGCC rule that state drilling permits “shall be binding with respect to any conflicting local governmental permit or land use approval process.” Because the rule’s purpose of interpreting the La Plata/Voss doctrine was outside COGCC’s area of expertise, the court found the agency was not entitled to judicial deference. It reasoned that the rule’s use of the term “any conflicting” had a “much broader meaning” than the “operational conflicting” standard from La Plata/Voss. Since the rule would “erode[] the delicate balance” established in La Plata/Voss by “preempt[ing] local government actions beyond those that materially impede or destroy the state interest,” and since it “would give oil and gas operators license to disregard local land use regulation,” the court struck down the rule.

In Frederick, the Court of Appeals overturned parts of a statutory town’s ordinance allowing oil and gas development only
through a special-use permit approved by the town Board of
Trustees, with a $1000 application fee, and subject to setback,
noise mitigation, aesthetic impact regulation, and other
provisions. First, the court held that the 1994 COGCA
Amendments did not impliedly preempt all local regulation of oil
and gas development. Indeed, the court noted the COGCA
Amendments explicitly stated that they did not prohibit local
governments from charging fees “for inspection and monitoring
for road damage and compliance with local fire codes, land use
permit conditions, and local building codes.” The court then
applied the Voss preemption analysis and held that the setback,
noise abatement and visual impact provisions of the ordinance
were invalid because they established “technical conditions” for
well drilling in areas that the state already regulated. The court
upheld Frederick’s authority to enforce its ordinance by obtaining
injunctive relief against violators, noting that “[i]t is illogical to
conclude that a local government retains the authority to regul ate
in certain areas relating to oil and gas operations, but has no
ability to enforce such operations.”

The Frederick decision is notable for two reasons. First, the court
did not perform an extensive analysis of exactly why and how the
setback, noise abatement, and visual impact provisions “materially
impeded” the COGCC regulations addressing the same issue.
Second, the court essentially ignored the fact that Frederick is a
statutory town, a form of local government distinct from that of the
defendants in La Plata and Voss.

The second and final Court of Appeals case assessing a local
government regulation under the La Plata/Voss framework was a
facial challenge to a Gunnison County ordinance that extensively
regulated the oil and gas industry largely based on its
environmental impacts. The court found that three parts of the

225. Id. at 763.
226. Id. (emphasis removed) (citing COLO. REV. STAT. ANN. § 34-60-106(15) (West
2013)).
227. Id. at 765.
228. Id. at 767.
229. The only reference to Frederick’s legal status is the court stating that “[a]s a
statutory town, Frederick has the power to enact ordinances not inconsistent with state law
that are necessary and proper to provide for the health, safety, prosperity, order, comfort,
and convenience of the municipality.” Id. at 761.
230. Bd. of Cnty. Comm’rs of Gunnison Cnty. v. BDS Int’l, LLC, 159 P.3d 773, 777
(Colo. App. 2006) (noting that the ordinance regulated, among other things, wildlife and
wildlife habitat analysis, vegetation, water quality, drainage and erosion control, livestock
ordinance (which assessed impact mitigation fees, mandated access to drilling company records, and required extra bonding) were preempted by state statutes and regulations addressing the same issues.\textsuperscript{231} It then held that the ordinance provisions regulating water quality, soil erosion, wildlife and vegetation, livestock, geologic hazards, cultural and historic resources, wildfire protection, and recreation were not \textit{per se} in conflict with state regulations, and remanded the issue to the trial court for further evidentiary hearings.\textsuperscript{232} The court also upheld Gunnison’s permit duration provision even though it was shorter than the state’s.\textsuperscript{233}

Although no other appellate-level cases have interpreted the \textit{La Plata/Voss} framework for oil and gas, in 2009, the Colorado Supreme Court applied the \textit{La Plata/Voss} preemption framework when it held that a county ordinance banning cyanide heap leaching was impliedly preempted by state law.\textsuperscript{234} Although the case involved a different statute, the court addressed both the \textit{La Plata/Voss} preemption framework and the bounds of local government land use authority at length.\textsuperscript{235} Justice Hobbs, writing for the majority, synthesized the “common themes” of the \textit{La Plata/Voss} standard: “(1) [T]he state has a significant interest in both mineral development and in human health and environmental protection, and (2) the exercise of local land use authority complements the exercise of state authority but cannot negate a more specifically drawn statutory provision the General Assembly has enacted.”\textsuperscript{236}

\textit{Summit County} foreshadows how the Colorado Supreme Court might decide a preemption case in the oil and gas context. Since the court did not reach the issue of operational preemption (and land use-based oil and gas ordinances are neither expressly nor impliedly preempted by COGCA),\textsuperscript{237} \textit{Summit County} would not

\begin{itemize}
  \item \textsuperscript{231} Id. at 779-80.
  \item \textsuperscript{232} Id. at 780-82.
  \item \textsuperscript{233} Id. at 782.
  \item \textsuperscript{234} Colo. Mining Ass’n v. Bd. of Cnty. Comm’rs of Summit Cnty., 199 P.3d 718, 733 (Colo. 2009). Cyanide heap leaching is a common practice used in hard-rock mining, especially gold mining.
  \item \textsuperscript{235} Id. at 723-25, 728-30.
  \item \textsuperscript{236} Id. at 730.
  \item \textsuperscript{237} Voss v. Lundvall Bros., 830 P.2d 1061, 1066 (Colo. 1992) (“It is also settled, as evidenced by our decision in \textit{Bowen/Edwards}, that nothing in the Oil and Gas Conservation Act manifests a legislative intent to expressly or impliedly preempt all aspects of a local
directly apply to local governments interested in regulating oil and gas. But the case affirms that at least Justices Hobbs and Rice, who remain on the court, are inclined to leave the La Plata/Voss framework in place, essentially unaltered. Another three Justices—Martinez, Eid, and Coats—believed that Voss should be limited to home rule municipalities. Justice Martinez, who has since retired from the bench, dissented on this basis and would have found the Summit County ordinance valid under the La Plata County framework. The court’s two more conservative Justices, Eid and Coats, agreed with Martinez that Voss should be limited to home rule municipalities, but concurred with the majority in judgment on the basis that the Summit County ordinance was preempted because the state’s mining reclamation law was more specific than the more general Enabling Act.

How the court’s three new Justices—Justice Márquez, who replaced Chief Justice Mullarkey (who had voted with the majority), Justice Hood, who will replace Chief Justice Bender (who had also voted with the majority), and Justice Boatright, who replaced Justice Martinez—will treat the issue of Voss’s applicability to statutory counties and municipalities remains to be seen.

D. Synthesizing a Rule for Local Government Oil and Gas Authority

The La Plata/Voss doctrine remains the bedrock of Colorado’s local government preemption doctrine with respect to oil and gas regulations.

Under Voss, home rule municipalities can enact any regulation that is not operationally preempted by state law, as determined by a four-part test: “[1] whether there is a need for statewide uniformity of regulation; [2] whether the municipal regulation has an extraterritorial impact; [3] whether the subject matter is one government’s land-use authority over land that might be subject to oil and gas development and operations within the boundaries of a local government.”.

238. Summit Cnty., 199 P.3d at 721 (Hobbs, J. for the majority). Justices Eid and Coats concurred and Justice Martinez dissented, indicating that Chief Justice Bender and Justices Mullarkey and Rice joined the majority.

239. Id. at 741 (Martinez, J., dissenting).

240. Id. at 736 (Eid, J., concurring in judgment).


traditionally governed by state or local government; and [4] whether the Colorado Constitution specifically commits the particular matter to state or local regulation.” 244 Outright bans on oil and gas development are operationally preempted under this framework.245 Voss also extended the La Plata County Court’s recognition of full local government land use-based regulatory authority to home rule municipalities.246 No later cases have addressed home rule municipalities’ regulatory powers.

The intervening decision in Telluride v. San Miguel adds another layer to this analysis—home rule municipalities have absolute authority over any function explicitly delegated to them by the Colorado Constitution, which includes, among other things, eminent domain, taxation, police powers, and any power which could have been granted to the municipality by the General Assembly.247 The Telluride v. San Miguel Court also concluded that matters of land use policy can be considered exclusively local under the third and fourth prongs of the preemption test.248

Under La Plata County, statutory counties can regulate oil and gas through land use ordinances, so long as they can be harmonized with state regulations and are not operationally preempted by “materially impeding” or “destroying” them.249 Ordinances involving “technical conditions” may be operationally preempted, but such a determination would have to be made on a case-by-case basis.250 Court of Appeals decisions have found impact fee assessments, recordkeeping requirements, financial assurances, setback requirements, noise abatement, and visual impact provisions stricter than similar state regulations to be such invalid technical conditions.251 The Court of Appeals has also concluded

244. Voss, 830 P.2d at 1067.
245. Id. at 1068.
246. Id. (holding that “[w]hat we said in [La Plata County] concerning the land-use authority of a county applies to a home-rule city”).
247. Town of Telluride v. San Miguel Valley Corp., 185 P.3d 161, 167 (Colo. 2008) (discussing the authority given to home rule municipalities under Article XX of the Colorado Constitution); compare supra notes 160-64 and accompanying text (discussing the authority of home rule municipalities under the Colorado Constitution), with 166-68 and accompanying text (describing the authority which the General Assembly has granted to statutory municipalities, which, under Telluride v. San Miguel, falls under the authority of home rule municipalities since the General Assembly has the power to grant it).
248. San Miguel, 185 P.3d at 167.
250. Id. at 1060.
251. Bd. of Cnty. Comm’rs of Gunnison Cnty. v. BDS Int’l, LLC, 159 P.3d 773, 779-80
that statutory county ordinances regulating water quality, soil erosion, wildlife and vegetation, livestock, geologic hazards, cultural and historic resources, wildfire protection, and recreation are not *per se* preempted by state regulations and, therefore, require case-by-case determinations. It has not yet been resolved whether Voss’s prohibition on outright bans also applies to statutory counties.

No court has addressed the regulatory authority of either statutory municipalities or home rule counties, but based on their status under state law, it would presumably be very similar to the authority of statutory counties.

E. State Authority: The COGCA and COGCC’s Regulations

Understanding what powers local governments have to regulate the fracking boom also requires understanding what local governments cannot regulate—areas directly regulated by the state. Thus, a familiarity with Colorado’s state oil and gas statutes and regulations is necessary to understand how Colorado local governments can and should regulate fracking.

The purpose statement of the COGCA makes clear that environmental protection is a priority, finding it to be in the public interest to foster responsible, balanced oil and gas development “consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources.”

The COGCA grants COGCC power to make and enforce regulations “reasonably . . . necessary” to implement it. It has relatively few other specific guidelines for the COGCC, emphasizing its role to prevent waste by granting it authority to

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252. *BDS Int’l, LLC*, 159 P.3d at 781-82.
254. *See supra* Part III.B.3-4; *see also supra* note 229 and accompanying text (explaining that the Frederick court did not address whether the town’s status as a statutory town was relevant to its regulatory authority). This issue may soon have to be resolved, as the City and County of Broomfield recently enacted a fracking moratorium. *See infra* notes 325 & 327 and accompanying text (noting that the City & County of Broomfield recently enacted a fracking moratorium, which might provide a unique test case to determine the scope of constitutionally-authorized counties’ regulatory authority).
256. *Id.* § 34-60-105(1).
establish drilling and unitization agreements.\textsuperscript{257} It prohibits operators from wasting oil and gas,\textsuperscript{258} and directs them to “accommodate[] the surface owner by minimizing intrusion upon and damage to the surface of the land.”\textsuperscript{259} The 2007 COGCA Amendments added provisions directing COGCC to minimize adverse impacts on wildlife and to enact rules for permit-specific habitat conservation plans, use best management practices, and minimize surface disturbances.\textsuperscript{260}

By contrast, COGCC’s 2008 implementing regulations are extremely specific and cover a large number of areas. The 300 Series covers well drilling requirements,\textsuperscript{261} including bonding and financial assurance,\textsuperscript{262} mechanical integrity testing,\textsuperscript{263} groundwater protection,\textsuperscript{264} and varying well spacing requirements by production field.\textsuperscript{265} The 600 Series covers health and safety requirements, including fire prevention,\textsuperscript{266} statewide groundwater baseline sampling and monitoring,\textsuperscript{267} and setback and mitigation requirements for various types of buildings.\textsuperscript{268} The 800 Series covers nuisance mitigation, including noise abatement,\textsuperscript{269} light pollution,\textsuperscript{270} visual impact mitigation,\textsuperscript{271} and odor and dust control.\textsuperscript{272} The 900 Series extensively regulates all aspects of waste management,\textsuperscript{273} requiring liners for waste pits,\textsuperscript{274} allowing the establishment of centralized waste disposal facilities,\textsuperscript{275} and banning “unnecessary” venting and flaring.\textsuperscript{276} Finally, the 1200

\textsuperscript{257} Id. §§ 34-60-116, 118.
\textsuperscript{258} Id. § 34-60-117.
\textsuperscript{259} Id. § 34-60-127(1)(a).
\textsuperscript{260} Id. §§ 34-60-128(2), (3)(b)-(c), (3)(d)(III).
\textsuperscript{261} 2 COLO. CODE REGS. § 404-1.317 (2013).
\textsuperscript{262} Id. § 404-1.304; see also id. § 404-1.709.
\textsuperscript{263} Id. § 404-1.326.
\textsuperscript{264} Id. § 404-1.324A.d.
\textsuperscript{265} See, e.g., id. § 404-1.318A (spacing requirements for Greater Wattenberg Field).
\textsuperscript{266} Id. § 404-1.606A.
\textsuperscript{267} Id. § 404-1.609.
\textsuperscript{268} Id. § 404-1.604.
\textsuperscript{269} Id. § 404-1.802.
\textsuperscript{270} Id. § 404-1.803.
\textsuperscript{271} Id. § 404-1.804.
\textsuperscript{272} Id. § 404-1.805.
\textsuperscript{273} Id. § 404-1.907.
\textsuperscript{274} Id. § 404-1.904.
\textsuperscript{275} Id. § 404-1.908.
\textsuperscript{276} Id. § 404-1.912(a).
Series establishes a comprehensive wildlife protection system.277 Accordingly, these aspects of oil and gas development can be regulated by Colorado local governments only if the local government regulations can be harmonized with state regulations and would not “materially impede” or “destroy” the state regulation.278 Notably, nearly all of the state level regulations address “technical conditions” of the sort that the La Plata Court indicated might be inappropriate for local governments to regulate.279 Many legal questions remain about the exact boundaries of local government authority over aspects of oil and gas drilling regulated by the state. But it is safe to conclude that local government regulations that address aspects of oil and gas development already regulated by the state are more likely to be preempted than those that are not already regulated.

IV. HOW CAN COLORADO LOCAL GOVERNMENTS REGULATE FRACKING?

Despite the remaining legal questions about the exact scope of local government authority to regulate oil and gas drilling in Colorado, many local governments have enacted ordinances, and a few groups have attempted to define the authority in publicly available reports. As the first step in determining how local governments can regulate fracking, this Article will assess two such reports, as well as the regulatory approaches taken by several Colorado local governments.

A. Analysis of Potential Approaches to Local Government Authority

1. Colorado Department of Local Affairs.

The Colorado Department of Local Affairs (“DOLA”) published a guide in 2010, synthesizing the legal and factual basis for local government oil and gas regulations. But it emphasizes the limitations of local authority, which might cause local officials to underestimate the scope of their regulatory powers. Specifically, the DOLA guide offers a questionable reading of key cases, eliding the important differences between the scope of authority afforded to statutory and home rule municipalities. Thus, although the

277. Id. §§ 404-1.1201-1205 (requiring operators to identify impacted wildlife and creating area-specific restrictions).
279. Id. at 1058.
guide seeks to give local governments a comprehensive understanding of their regulatory authority over oil and gas operations, its conservative description of the scope of local government authority makes it a much less valuable tool than it might otherwise be.

First, DOLA collapses the distinction between home rule municipalities and statutory counties into the single preemption test for statutory counties established in La Plata, claiming the test is applicable to all local governments. Its only reference to home rule municipalities having distinct authority from statutory counties is to emphasize how Voss limited their authority to enact total bans. Further, it does not explain Telluride v. San Miguel's broad interpretation of home rule municipality control over land use, instead referencing it only once for the proposition that "land use planning has long been established as a matter of local concern."  

Second, DOLA leans heavily on the Court of Appeals ruling in Frederick as support for its narrow view of local authority. Indeed, the guide goes so far as to include 14 references to the relatively restrictive ruling in Frederick, with several including the word “not” in boldface. But DOLA stretches Frederick too far. Frederick involved a statutory town, not a home rule municipality. And the Frederick court only held that a few specific regulations in the town’s ordinance were preempted. Making DOLA’s reliance even more suspect, Gunnison County, not Frederick is the most recent Court of Appeals case addressing local government authority, and it took a much broader view. Yet DOLA cites Gunnison County only four times.

As the Court of Appeals noted in La Plata v. COGCC, COGCC’s interpretation of the scope of local government regulatory authority is neither binding nor subject to judicial deference. It is the role of the courts, not the executive branch, to determine the scope of local government regulatory authority over fracking based on Colorado’s Constitution, statutes, and cases interpreting...

281. See, e.g., id. at 12 (framing the case as if it establishes a bright-line rule).
282. Id. at 17.
283. Id. at 20; see also supra notes 220-33 and accompanying text (discussing the relative precedential value of Frederick, La Plata County v. COGCC, and Gunnison County, and the extent to which the three decisions comply with the La Plata/Voss framework).
284. See, e.g., id. at 21.
them. Although DOLA’s narrow reading of *La Plata County* and strong emphasis on *Frederick* may inform the agency’s own actions and decisions, DOLA’s legal opinions are in no way binding upon local governments. Local governments that read those cases more broadly than DOLA are as justified in their interpretations as DOLA itself, and it is up to courts, not DOLA, to determine which interpretation is correct. Accordingly, local government officials seeking to regulate fracking should not read the DOLA guide as an authoritative source defining the scope of their authority, and rather should rely on their own legal counsel’s interpretation of the relevant case law.


CELEDF has successfully organized citizens and officials in nineteen communities to enact ordinances recognizing a right to a healthy environment and banning all fossil fuel development.286 These ordinances use exceptionally broad language and ban a wide range of activities. Such ordinances represent the exact sort of outright ban on oil and gas development the Colorado Supreme Court struck down as unlawful for home rule municipalities in *Voss.* Further, the broad language of the CELDF ordinances could have unintended consequences, such as inviting takings challenges.287 CELDF is certainly aware of these challenges, and it acknowledges each of them in its “Guide to Banning Fracking for Colorado Communities.”288 CELDF’s guide, though, takes the opposite approach to DOLA’s guide—it provides such an expansive view of Colorado local governments’ regulatory authority that it may lead local officials and citizens groups to believe they have authority that they very likely lack under state law. For example, it claims that enacting a charter amendment that


287. See generally Mcginley, *supra* note 9, at 229-30 (discussing vulnerability of local government hydraulic fracturing regulations to takings suits).

288. CMTY. ENVTL. LEGAL DEF. FUND, *supra* note 16.
recognizes a community right to a healthy environment and bans all fossil fuel extraction would not be preempted by state law because it “does not regulate any activity,” and rather “asserts an already-existing right to local self-government.”289 Rather than delving into the nuances of the La Plata/Voss doctrine to justify this view, though, the CELDF guide argues:

The larger strategy behind organizing locally to assert rights has zero to do with relying on the courts. The courts might not vindicate our rights; they might, on behalf of the corporations, strip them, as they have done for many years. Community Rights Ordinances force them to do so publicly, clearly, and not in a quiet blizzard of legal mumbo-jumbo hidden away from public attention or interest.290

CELDF’s approach may have long term benefits from focusing public attention on legal restrictions of local government authority, potentially creating political pressure for change. But for local governments in the short term, CELDF’s advice is less helpful. Indeed, CELDF implicitly acknowledges the likelihood of its regulations being overturned in court, albeit through a “quiet blizzard of legal mumbo-jumbo.”291 Communities hoping their fracking regulations will survive judicial scrutiny would do well to avoid a CELDF rights-based approach, and instead focus on their narrower regulatory authority under current law.

3. Longmont’s regulatory ordinance and fracking amendment.

One Colorado local government has already followed this approach. The City of Longmont, a home rule municipality, made headlines in July 2012 when its City Council passed a comprehensive set of oil and gas regulations,292 COGCC immediately sued Longmont over the ban,293 and the Colorado Oil and Gas Association (“COGA”), the main oil and gas trade association in Colorado, moved to intervene in support of COGCC. No decision has been issued at the time of this Article’s writing.

289. Id. at 1.
290. Id. at 4.
291. Id.
292. See Rochat, supra note 1.
In November 2012, Longmont voters went further than the City Council, and passed Ballot Measure 300, which banned fracking altogether. Ballot Measure 300 specifically banned both the “use [of] hydraulic fracturing to extract oil, gas or other hydrocarbons within the City of Longmont,” and the storage of fracking fluids in waste pits. COGA sued Longmont over Ballot Measure 300. COGCC joined the suit, supporting COGA, eight months later. Four environmental groups have intervened in the lawsuit on Longmont’s behalf. The case has not yet been argued, although the venue was recently changed from Weld to Boulder County.

Longmont’s carefully written Ordinance highlights a path that local governments can follow to regulate fracking and likely prevail against any preemption challenges. But its Charter Amendment’s fate is less certain.

The Ordinance was written carefully to survive preemption analysis. Its purpose is to “facilitate the exploration and production of oil and gas in a responsible manner.” It stresses that it was enacted to preserve mineral owners’ rights “while ensuring the health, safety, and general welfare” of Longmont’s residents. It is explicitly grounded in the City’s land use and police powers, and for its authority cites the Colorado Constitution’s home rule provisions, the Enabling Act, and statutes governing local government oil and gas regulation and land use.

294. Boulder County Election Results: Local, Statewide Races and Ballot Measures, BOULDER DAILY CAMERA (Nov. 7, 2012), www.dailycamera.com/ci_21940200/election-results-boulder-county (noting that Measure 300 passed with 60% of the vote); see also Bruce Finley, Longmont Drill Ban Flames Anti-Frack Forces on Eve of “Prosper” Rally, DENVER POST (Nov. 13, 2012), www.denverpost.com/ci_21983880/longmont-drill-ban-flames-anti-frack-forces-eve (noting that the Longmont measure was an outright ban).


299. Id.


301. Id.
Beyond its purpose statements, the Ordinance operates as a zoning ordinance that is clearly targeted to avoid preemption issues. It allows oil and gas development in all zones except residential and mixed-use residential zones. It requires varying levels of review for oil and gas activities based on their potential to disturb residents’ quality of life. Wells conforming to the Ordinance’s minimum and recommended standards are subject to minimal, administrative review. It requires conditional use permitting and public hearings for more dangerous and potentially disruptive activities, including wells meeting minimum standards but not recommended standards. It uses separate minimum and recommended standards to regulate several areas subject to COGCC regulations: setbacks, noise, light pollution, waste disposal, air quality, visual impact mitigation, wildlife impact mitigation, watershed protection, reclamation, and signage. The minimum standards generally match COGCC’s rules. Thus, to obtain a special use permit, operations need only comply with state law, and compliance with extra “recommendations” will be decided in case-by-case Special Operation Permit review. The ordinance’s only outright prohibition is on temporary worker

302. Id.

303. Notably, it includes an express savings clause for any provisions that are operationally conflicted. Id. at 7-8. Operators can request a special exception based on a perceived operational conflict, which will be adjudicated by a quasi-judicial decision-making body, where the applicant will have the burden of proving an operational conflict. Id. at 7. Should the applicant do so, the decision-making body will grant a special exception, which does not itself operationally conflict with state law, as appropriate to protect the health and welfare of Longmont residents. Id. at 8. Final decisions can be appealed in state court. Id.

304. Id. at 3. The Ordinance specifically permits oil and gas development in the Commercial, Central Business District, Regional Commercial, Business Light Industrial, Mixed Industrial, General Industrial, “Public” (parks and open space), Agricultural, and Regional Parks Zones. Id. at 42; see also CITY OF LONGMONT, COLORADO, ZONING DISTRICT MAP (Nov. 7, 2011), www.ci.longmont.co.us/planning/maps/documents/zoning_revised_112011.pdf (providing a legend explaining the abbreviations used to describe zones in the Ordinance).

305. Longmont, Colo., Ordinance O-2012-25, supra note 300, at 4-5. Oil and gas facilities must also obtain standard building permits and sales tax and use licenses. Id. at 9.

306. Id. at 4.

307. Id. Requested variances similarly require conditional use permitting and public hearings. Additional guidelines for variance requests are found in Section (m) of the Ordinance. Id. at 6-7.

308. Id. at 18-19.

309. Id. at 18.
housing—man camps—which are not regulated by COGCC.\textsuperscript{310}

The COGCC complaint objected to the ordinance on eight grounds.\textsuperscript{311} Longmont has not yet responded to the merits of these claims, but has moved to dismiss the case on procedural grounds.\textsuperscript{313} Longmont has also opposed COGA’s Motion to Intervene.\textsuperscript{314} The court has not yet reached a decision. Although a complete analysis of the case is beyond the scope of this Article, two of COGCC’s grounds for objection are noteworthy: Longmont’s ban on development in residential zones and its requirements for visual impact mitigation.

Longmont’s ban on development in residential zones is a clear example of a land use-based rule, which falls within local government authority under \textit{La Plata County}, and certainly within the more expansive view of Home Rule municipality land use authority in \textit{Telluride v. San Miguel}. Local government authority to determine that industrial uses are inappropriate in residential areas has been clear since \textit{Euclid}, and if anything, was expanded by \textit{La Plata County} and \textit{Telluride v. San Miguel}. Indeed, the General Assembly has explicitly delegated local governments with zoning authority through the Enabling Act.\textsuperscript{315} Under the reasoning of \textit{Telluride v. San Miguel}, this raises local government zoning authority to a constitutional level.

COGCC’s strongest argument is its challenge to Longmont’s visual impact rule. COGCC already regulates visual impacts, requiring operators to paint facilities to match the landscape.\textsuperscript{316}

\begin{footnotes}
\item[310] Id. at 4; \textit{see also supra} notes 108-112 (describing the housing shortage caused by the fracking ban and the “man camps” in which many workers live).
\item[313] Id. at 5-7. COGCC has responded to the motion, but not with any substantive arguments relevant to this Article. See Colo. Oil and Gas Conservation Comm’n Response in Opposition to City of Longmont’s Motion to Dismiss Complaint, Colo. Oil & Gas Conservation Comm’n v. City of Longmont, No. 2012-cv-702 (Colo. Dist. Ct. Boulder Cnty. Oct. 12, 2012).
\item[315] \textit{COLO. REV. STAT. ANN.} § 29-20-104(1)(b) (West 2013) (Enabling Act provision establishing local government land use authority to “Regulat[e] development and activities in hazardous areas”).
\item[316] 2 \textit{COLO. CODE REGS.} § 404-1.804 (2013).
\end{footnotes}
Although the ordinance’s minimum requirements match COGCC’s painting requirements, they go further than COGCC by stating that “[o]n-site relocation may be necessary.”\textsuperscript{317} Visual impacts were among the “technical conditions” the Frederick court found to be operationally preempted, although it did not explain why visual impacts were a technical condition, finding operational preemption simply because they were regulated by COGCC.\textsuperscript{318} A court reviewing Longmont’s ordinance will have to address whether a home rule municipality’s broader constitutional authority allows it to regulate visual impacts, even though a statutory municipality’s regulation was operationally preempted. Since visual impacts relate closely to the idea of proactively preventing nuisances on which Euclidean zoning authority is based,\textsuperscript{319} it seems likely that a court would uphold it as part of home rule municipalities’ broad land use authority.

The fate of Longmont’s Charter Amendment banning fracking is less certain. COGA’s lawsuit raised three major issues with the Amendment, of which one is particularly relevant to this Article: the Amendment is operationally preempted because fracking is a stimulation technique, which is a technical aspect of oil and gas drilling.\textsuperscript{320}

On its face, banning a drilling technique seems to conflict with both Voss’ prohibition on outright bans and La Plata’s dicta warning that “technical conditions” would likely be operationally preempted. But a more specific consideration indicates that Longmont’s fracking ban could very well survive judicial scrutiny.

Unlike the Greeley ordinance struck down in Voss, the Longmont Charter Amendment prohibits only a certain practice used by oil and gas developers, and not oil and gas development itself. Notably, COGCC does not specifically regulate fracking. Aside from a few definitions, COGCC only requires disclosure of the chemicals used,\textsuperscript{321} and imposes dust controls for fracking sands.\textsuperscript{322} Longmont’s ban does not seem to materially impede any


\textsuperscript{319} ROBERT C. ELLICKSON & VICKI L. BEEN, LAND USE CONTROLS: CASES & MATERIALS 74-75, 516-17 (3d ed. 2005).


\textsuperscript{321} 2 COLO. CODE REGS. § 404-1.205(A) (2013).

\textsuperscript{322} 2 COLO. CODE REGS. § 404-1.805 (2013).
aspect of COGCC regulation. Conventional oil and gas operations can proceed unimpeded under the Longmont Ban. Indeed, it seems to be a relatively straightforward case of the City exercising its constitutional police powers to protect its citizens’ health and safety by enacting a regulation prohibiting a potentially dangerous activity.\textsuperscript{323}

Although well stimulation techniques are undeniably “technical conditions,” the \textit{La Plata County} Court used “technical conditions” as an example, and not a hard and fast rule. A court will thus face an issue of first impression: whether home rule municipalities’ police powers allow them to regulate a “technical condition” of oil and gas development which is not itself regulated by COGCC. Given that there seems to be no reason why a fracking ban would materially conflict with any specific COGCC regulations, a court could well find it not to be operationally preempted.

4. Fracking regulations in other Colorado cities and counties.

As the fracking boom in the Denver-Julesburg basin moves closer to the heavily populated Front Range, many other local governments have contemplated or taken action to restrict, ban, or regulate the boom. Most recently, in November 2013, three home rule municipalities—Boulder, Fort Collins, and Lafayette—\textsuperscript{324} and the City and County of Broomfield passed ballot measures regulating fracking.\textsuperscript{325} Lafayette’s measure was a permanent ban based on the CELDF “community rights” model,\textsuperscript{326} while Boulder,

\textsuperscript{323} \textit{See} \textit{COLO. REV. STAT. ANN. § 29-20-104(1)(a)} (West 2013) (Enabling Act provision establishing local government land use authority to “Regulat[e] development and activities in hazardous areas”).


\textsuperscript{325} Megan Quinn, \textit{Broomfield Fracking Ban: Results Flip; Measure Approved by 17 Votes After Outstanding Ballots Counted}, \textit{Broomfield Enterprise} (Nov. 14, 2013), www.broomfieldenterprise.com/broomfield-news/ci_24524511/final-tally-ballots-broomfield-becomes-all-day-affair.

Broomfield and Fort Collins all enacted five-year moratoria. The passage of the four bans has triggered statewide conversations about the role of local governments in regulating the oil and gas industry and statewide oil and gas regulatory measures.

Commerce City has adopted an ordinance targeting the fracking boom, which takes a flexible, case-by-case approach. It prohibits drilling near two major wildlife areas (Barr Lake State Park and Rocky Mountain Arsenal National Wildlife Refuge). For all other areas, operators must negotiate specific agreements with the City on a case-by-case basis. The Commerce City ordinance has not been challenged in court. The fact that the state has not raised a legal challenge suggests that such a flexible approach does not impose sufficiently specific requirements to “materially impede” COGCC regulations. The lack of an industry challenge may indicate only that no specific development company has been harmed by the ordinance, but may similarly highlight that Commerce City’s flexible approach does not raise a colorable conflict with state regulations.

Other Colorado local governments, including many on the Front Range, have longstanding oil and gas regulations that predate the fracking boom.

Greeley’s ordinance is highly instructive as to the permissible scope of home rule municipality regulations. After the Colorado Supreme Court struck down its ban on oil and gas development in

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327. Id. at 8 (describing City of Boulder Ballot Question 2H, Oil and Gas Exploration Moratorium Extension); CITY AND CNTY. OF BROOMFIELD CLERK AND RECORDER, PROPOSED CHARTER AMENDMENT 300, www.broomfield.org/DocumentCenter/ View/5636 (last visited Nov. 28, 2013) (providing text of Broomfield Charter Amendment enacting a five-year moratorium); Kevin Duggan, Voters Put Brakes on Fracking, FORT COLLINS COLORADOAN (Nov. 5, 2013), www.coloradoan.com/article/20131105/NEWS01/311050093/ (describing the measure passed in Fort Collins as a five-year moratorium).

328. See, e.g., Sarah Gilman, Why It Doesn’t Matter Whether Colorado’s Fracking Bans Hold up in Court, HIGH COUNTRY NEWS (Nov. 19, 2013), www.hcn.org/blogs/goat/why-it-doesn’t-matter-whether-colorados-fracking-bans-hold-up-in-court (discussing the local government bans as an impetus for statewide regulatory action); Bruce Finley, Colorado Pitches New Rules to Cut Oil and Gas Industry Air Pollution, DENVER POST (Nov. 18, 2013), www.denverpost.com/environment/ci_24548337/proposed-colorado-air-pollution-regs-clamp-down-oil (suggesting that Governor Hickenlooper’s support for stronger controls on oil and gas air pollution may be attributable to the political strength behind the four local government bans).


330. Id.

331. Id.
Voss, Greeley passed a less restrictive ordinance.\(^{332}\) It is remarkably similar to Longmont’s 2012 ordinance. Among other things, it requires special use permits for all oil and gas operations,\(^{333}\) creates setback requirements based on population density,\(^{334}\) requires noise and visual impacts mitigation,\(^{335}\) wildlife mitigation planning and cumulative impacts analysis,\(^{336}\) and has enforcement, inspection, and signage provisions.\(^{337}\) Greeley’s visual impact mitigation requirements are stricter than Longmont’s, recommending several location-related requirements “to the maximum extent practicable,” mandating minimal vegetation removal, requiring submission of a visual impact mitigation plan for facilities granted an exception to normal setback requirements, and allowing the imposition of one or more of five measures, including “cutting rock areas to create irregular forms” on a case-by-case basis.\(^{338}\)

Despite the Greeley ordinance’s extensive scope, it appears never to have been subject to judicial scrutiny. It has done little to prevent development—there are roughly 427 wells within the city limits today\(^{339}\)—and the current City government is committed to promoting oil and gas development.\(^{340}\) But the lack of either a state or industry lawsuit may be more than political. It could indicate a belief that the ordinance is unlikely to be overturned by a court, especially given both the state and industry’s willingness to challenge ordinances in nearby towns like Longmont and Frederick. Greeley’s ordinance may thus provide insight to other home rule municipalities about the scope of their regulatory


\(^{333}\) GREELEY, COLO., MUN. CODE § 18.56.020(b) (2013); id. § 18.56.170(a).

\(^{334}\) Id. § 18.56.040(a).

\(^{335}\) Id. § 18.56.110(a), (b).

\(^{336}\) Id. § 18.56.110(d).

\(^{337}\) Id. § 18.56.210 (inspections); id. § 18.56.220 (enforcement); id. § 18.56.080 (signage).

\(^{338}\) Id. § 18.56.110(b)(1)-(5), (10), (11).

\(^{339}\) See Finley, supra note 332; Healy, supra note 332.

authority.

B. Recommendations: How Should Local Governments Regulate Fracking?

A full understanding of the fracking boom’s impacts, Colorado’s preemption law, the scope of state regulations, and past approaches to regulation indicates that Colorado local governments should regulate fracking through land use-based ordinances. Although COGCC extensively regulates the technical aspects and environmental impacts of oil and gas development, ordinances targeting the fracking boom’s socioeconomic impacts are unlikely to be preempted. This is especially true for home rule municipalities because their plenary authority over both land use and their citizens’ health and welfare is embedded in the Colorado Constitution, and was expanded by Telluride v. San Miguel in the 20 years since La Plata County and Voss were decided.

1. Home rule municipalities should exercise their full constitutional authority.

Telluride v. San Miguel highlights that home rule municipalities exercising powers explicitly enumerated in the Colorado Constitution are subject to especially deferential preemption analysis. Three such powers are relevant to regulating the fracking boom.

First, under their eminent domain authority, home rule municipalities have direct control over all land uses within their jurisdiction. Further, the Telluride Court specifically affirmed that this authority can be used to create parks and open space.341 Eminent domain is at least a backstop option for home rule municipalities to prevent particularly harmful fracking projects. Using eminent domain to prevent oil and gas development is hardly unprecedented in Colorado. Seventeen years before it passed its oil and gas regulations, Longmont condemned a gas well located at what is now the Ute Creek Golf Course, citing safety concerns.342 However, eminent domain is controversial. It is also costly due to compensation requirements. Broad use of eminent domain to prevent fracking could create a backlash, especially from those concerned about property rights. It is only a viable

341. See supra notes 180, 183 & 185 and accompanying text.

substitute for more specific regulations in wealthy cities with very limited oil and gas resources, such as Fort Collins and Boulder.\textsuperscript{343}

The \textit{Telluride v. San Miguel} court recognized that home rule municipalities have all powers that \textit{could} be delegated to them by the state government.\textsuperscript{344} And the Constitution grants home rule municipalities all “right[s] or power[s] essential or proper” to self-government.\textsuperscript{345} Based on these powers, home rule municipalities can pass ordinances, which enjoy constitutional status and cannot be preempted by state law, to regulate three fracking-related issues. First, they can require any proposed well to demonstrate that it has an adequate supply of water.\textsuperscript{346} Second, they can impose impact fees to fund infrastructure and services necessary to serve oil and gas development, including roads, emergency management, and city planning and enforcement staff time.\textsuperscript{347} Finally, they can require operators to pay impact fees to prevent and clean up water pollution.\textsuperscript{348}

Finally, regardless of what ordinance they enact, home rule municipalities are constitutionally authorized to enact heavy fines for violating municipal ordinances. The Colorado Constitution grants them power over the “imposition, enforcement and collection of fines and penalties for the violation of any of the provisions of the charter, or of any ordinance adopted in pursuance of the charter.”\textsuperscript{349} Especially given the relatively lax enforcement of state level laws,\textsuperscript{350} the threat of local enforcement may lead operators to act more responsibly.

\textsuperscript{343} See Kevin Duggan, \textit{Fort Collins Oil-and-Gas Moratorium to End, FORT COLLINS COLORADOAN} (July 16, 2013), www.coloradoan.com/article/20130716/NEWS01/307160035 (explaining that only a single oil and gas operator is seeking to develop in the northeast corner of Fort Collins); Erica Meltzer, \textit{Boulder Enters Fracking Fray: City Council to Consider Moratorium in June, BOULDER DAILY CAMERA} (May 8, 2013), http://www.dailycamera.com/news/boulder/ci_23203032/boulder-enters-fracking-fray-city-council-consider-moratorium (noting that the “the risk of anyone attempting to drill for oil and gas within city limits is remote”).

\textsuperscript{344} See supra note 183 and accompanying text (describing the \textit{Telluride v. San Miguel} court’s holding); see also supra note 162 and accompanying text (describing provision in Article XX, section 6 of the Colorado Constitution granting Home Rule municipalities all powers “necessary, requisite and proper for the government and administration of its local and municipal matters”).

\textsuperscript{345} \textsc{Colo. Const.} art. XX, § 6.


\textsuperscript{347} \textit{Id.} § 29-20-104.5(1).

\textsuperscript{348} \textit{Id.} § 31-15-710(1)(a); see also \textit{id.} § 31-15-401(1)(c) (granting municipalities authority to identify and fine public nuisances in general).

\textsuperscript{349} \textsc{Colo. Const.} art. XX, § 6(h).

\textsuperscript{350} See \textsc{EARTHWORKS}, supra note 30, at 49-50.
2. *Local governments should enact competitive special use permit allocation ordinances.*

Under Colorado preemption law, and based on past regulatory efforts by Colorado local governments, the most successful and legally defensible mechanism to regulate oil and gas is a competitive special use permitting system that awards a limited supply of permits to operators that commit to best management practices to minimize their negative impacts.

Home rule municipalities, statutory municipalities, home rule counties, and statutory counties all enjoy relatively broad land use control under the *La Plata/Voss* framework. Both the Colorado Supreme Court in *La Plata County* and the Court of Appeals in *Frederick* and *Gunnison County* have upheld local government rules that permitted oil and gas development only after careful review of a special use permit. Neither COGCC nor COGA have challenged Greeley’s special use permitting ordinance or Commerce City’s case-by-case approach.

Special use permitting can allow local governments to control the issues at the root of the fracking boom’s socioeconomic impacts: the boom’s pace and scope.\(^{351}\) Local governments can enact ordinances that make available a finite number of operating permits within an appropriate unit of time. The number of permits and time period can vary depending on the local government’s geographic area and the amount of resources available. In a large county with substantial oil and gas resources, like Weld County, offering 100 permits a quarter might be reasonable, while in a smaller area, perhaps a municipality with more limited resources, offering a single permit a year might be equally reasonable. To avoid takings suits, the number of permits available should be targeted so as not to make development impossible within the ordinary duration of a lease.

The ordinance could specify best management practices that would receive a certain number of “points.” Prospective permittees committing to practices worth the greatest number of points would receive permits at the end of each allocation period, while prospective permittees who committed to fewer best management practices would be less likely to receive permits.

The point system would be based on local governments’ land use and zoning authority. More points would be necessary to

\(^{351}\) *See supra* Part II.C.3.a (explaining that the pace and scope of the fracking boom is at the root of its indirect socioeconomic, or “boomtown,” impacts).
receive a permit in a residential zone or a public park than in an industrial or agricultural zone. Local governments could use lower point thresholds to direct development to zones in which it is more appropriate, without risking a lawsuit over an outright ban on development in any particular zone, as Longmont now faces.

So long as the threshold for receiving a permit was not set so high as to be unattainable, they could hardly “materially impede” or “destroy” COGCC rules. Because operators would be committing to them voluntarily, their operational preemption would thus be very unlikely. The system would be more akin to Commerce City’s case-by-case negotiating system, except that it would follow Longmont’s model of providing very clear guidance about what practices will allow an operator to obtain a permit. But, unlike Longmont’s Ordinance, under which it is possible for substantial amounts of drilling to proceed very rapidly if a sufficient number of operators commit to meeting the minimum and recommended standards, a competitive special use permit allocation system ensures that the pace and scope of a fracking boom will remain under local government control.

The point system could focus on best management practices that exceed state and federal standards in areas that are regulated by COGCC. By not requiring that operators exceed state standards, but providing preferential treatment to those that do, the ordinance would neither materially impede nor destroy COGCC regulations, so long as it adopted a reasonable threshold that operators could comply with without exceeding state regulation in every aspect of operations. Many areas relating to the fracking boom’s environmental and quality of life impacts are already regulated by COGCC and would be good subjects for the point system. Extra points could be rewarded to operators committing to larger setbacks, additional visual impact mitigation, additional noise mitigation, no night time operations, 100% capture of all gas emissions at the wellhead to reduce air pollution, no flaring, concentrating development onto multi-well pads, not using any on-site waste pits, conducting extensive wildlife impact mitigation planning, public disclosure of chemicals transported to the well site and used in the fracking process, and conducting before-and-after ground water testing.

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352. This could be achieved by not making any of the points mandatory.

Points could also be awarded to operators that committed to minimize the socioeconomic impacts of the fracking boom, which are generally unregulated by COGCC, but might be preempted by other state and federal laws. Extra points could be awarded to operators that committed to higher wages for employees, contractors, subcontractors, and their employees, and provided more generous leave and health benefits policies. The point system could also be used to incentivize employers to take responsibility for providing housing to their workers, preventing the need for man camps and avoiding issues with homelessness, motel overcrowding, and increased rental prices. Although it is likely illegal to require employers to provide affordable housing for their employees directly under Colorado law, there should be no legal problem with awarding additional “points” to employers that committed to finding affordable housing solutions for their employees, contractors, and subcontractors. Extra points can also be granted to operators that commit to mitigate their traffic impacts, either by restricting truck traffic to certain times of day, limiting the number of truck trips per well per period of time, building pipelines to avoid having to truck in water where possible, and providing funds to repair and/or expand roads that will be damaged by heavy truck traffic.

The “point system” can be supplemented by more specific regulations for the “boom town” effects, which neither COGCC regulations nor other state and federal laws address.

One such area is workers’ rights. A local ordinance could mandate that all oil and gas employees and contractors be paid a living wage. It can also require that employers provide adequate physical and mental health services to their employees, and provide resources to educate workers about depression, substance abuse, and the other common issues that arise in a “boom town” culture. Local governments could require that all employees have a mental health awareness component to their training, contact information for substance abuse and mental health care facilities posted on job sites, and monthly check-ins conducted either by company staff or trained mental health professionals. Given the known higher accident rates for contractors, it is particularly

important that contractors receive the same level of services. Local
governments can experiment with either requiring operators to
provide mental health services for their contractors directly, or to
require contractors to provide such services themselves.

Another area that could be addressed is worker housing.
Although, as discussed above, it may not be possible under
Colorado law to affirmatively require operators to provide
affordable housing for their workers, an ordinance can follow
Longmont’s lead and ban temporary worker housing camps in all
city zones. Alternatively, an ordinance can adopt stricter standards
for “man camps,” requiring access to running water, sewer
systems, electricity and heating. Combined with a strong bonus for
providing adequate housing in the “point” system, such rules
provide a very strong incentive to operators to provide adequate
housing for their employees.

Finally, local governments can require all operators to submit
monthly reports on the number of workers they anticipate at their
well sites, housing conditions for their workers, any known mental
health and substance abuse incidences, and information on the
anticipated volume, timing, and location of truck traffic. Such
information can be crucial to local governments that need to know
how to allocate scarce resources.

3. Local governments should enact strict traffic controls.

An ordinance narrowly tailored to the uniquely heavy truck
traffic necessary to frack a well is the most straightforward and
legally defensible strategy to achieve an effective fracking ban.

Traffic is a classic example of land use authority and
traditionally a matter of local control in Colorado. See, e.g., City of Commerce City v. State, 40 P.3d 1273, 1282-83 (Colo. 2002) (explaining that traffic control is an area of traditional local concern, although authority to employ novel traffic enforcement devices is an area of mixed state and local concern); City of Colorado Springs v. Smartt, 620 P.2d 1060, 1062 (Colo. 1980) (holding that “lessening traffic congestion and facilitating transportation” is “a legitimate zoning objective”); Retallack v. Policy Ct. of City of Colorado Springs, 351 P.2d 884, 885 (Colo. 1960) (holding that “[i]t is generally held . . . that . . . all regulations governing movements of vehicles, street cars, and of pedestrians on streets and sidewalks is the primary function of local government); W. Paving Constr. Co. v. Bd. of Cnty. Comm’rs of Jefferson Cnty., 689 P.2d 703, 707 (Colo. App. 1984) (holding that minimizing adverse traffic conditions is a legitimate zoning objective); C & M Sand & Gravel v. Bd. of Cnty. Comm’rs of Boulder Cnty., 673 P.2d 1013, 1017 (Colo. App. 1983) (describing “traffic congestion” and “compatibility of land use” as “matters which are traditionally of concern to local zoning authorities”); see also Laidley v. City & Cnty. of Denver, 798 F. Supp. 2d 1193, 1198-99 (D. Colo. 2011) aff’d, 477 F. App’x 522 (10th Cir. 2012) (applying Colorado
Assembly has granted municipal governments broad authority to control traffic flow. Further, COGCC regulations have minimal requirements related to traffic flow and safety. But fracking-related truck traffic causes major negative impacts on public safety, convenience, and air quality. And given its intensive water demand and waste production, fracking is impossible without substantial truck traffic.

Accordingly, ordinances restricting truck traffic can substantially mitigate the fracking boom’s impacts on a community. Instead of levying an infrastructure tax, or granting preferential permitting treatment to operators limiting truck traffic, a potential ordinance could ban any activity requiring more than 1000 truck trips a month. Since fracking a well takes anywhere from 1000 to 4000 truck trips, and typically happens in less than a month, this would effectively limit fracking except under carefully controlled conditions. Such an extreme level of truck traffic is unsuitable in most municipalities, especially on smaller, relatively isolated rural roads where most oil and gas development takes place. Especially given the infrastructure costs and major accident risks posed by fracking traffic, such a ban would be well within a local governments’ land use and police powers.

Local governments would have to carefully consider such an ordinance to avoid unintended consequences for large retail operations and any warehousing or other commercial and industrial activities with heavy truck traffic. To avoid these unintended consequences, the ban could be limited in scope to trucks transporting fluids or potentially hazardous chemicals.

V. CONCLUSION

As the COGCC and COGA challenges to Longmont’s Ordinance and Charter Amendment continue to move through state law and discussing which aspects of traffic control are matters of local concern); but cf. Webb v. City of Black Hawk, 295 P.3d 480, 489-91 (Colo. 2013) (finding a citywide ban on bicycling to implicate a matter of statewide concern, in large part due to its extraterritorial impacts).

357. See 2 COLO. CODE REGS. § 404-1(334) (2013) (requiring oil and gas operators subject to COGCC regulations to follow all state traffic and highway laws, but specifying no additional requirements).
358. See supra notes 113-20 and accompanying text.
359. See supra notes 36-38 & 113-14 and accompanying text.
360. See supra notes 113-14 and accompanying text.
the court system, local governments in Colorado and throughout the country will remain focused on Longmont’s fate. But local governments in Colorado need not wait to enact their own laws regulating the fracking boom. Existing Colorado law and the experiences of other cities and counties reveal that land use-based ordinances, which target the fracking boom’s socioeconomic impacts, while leaving environmental issues largely to state regulation, are likely to prevail in court.