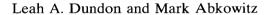
Article

Regulatory and Private Approaches to Addressing Impacts to Transportation Infrastructure from Oil and Gas Operations in Rural Communities:
Using the Law to Build a Policy Toolkit for Local Planners



The role of local transportation and community planners across the country can vary, but they are often – especially in rural communities – unpaid, volunteer or elected positions with little in the way of support staff, technologically advanced equipment, or other resources. With respect to the transportation system, these local planners are generally responsible for the maintenance and upkeep of local and rural roads, with varying degrees of financial support from the state to do so. While federal and state highways are generally built to accommodate heavy truck traffic, local and rural roads are more often designed for agricultural, "farm to market" types of loads and, as recent experience has shown, have been unable to withstand the intense heavy truck traffic that modern oil and gas development necessitates. For example, one study estimated 3,700 - 4,200 truckloads needed *per year* for cattle shipments, which is close to the number of truck trips occurring *over a matter of*

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weeks and months during some well development.1

With the rapid rise in drilling across the country that began in the mid-2000s, many rural communities faced substantial challenges maintaining their road infrastructure, with little time for local planners to develop effective strategies.2 North Dakota perhaps best exemplifies the rapidity with which oil and gas development can increase in a region. Between 1981 and 2005 the average annual oil production was 101,000 barrels per day.³ From 2013 to 2016 the average was 1,057,500 million barrels per day, a more than ten-fold increase in just a few years, and moved North Dakota to second place among the largest oil and gas producing states in the nation.⁴ Likewise, in Pennsylvania over 6,700 wells were drilled between 2004 and 2013.5 Road and bridge infrastructure degradation can occur very rapidly - many years of damage can be experienced within a matter of weeks, exceeding the design life of the bridge in a relatively short time period.⁶ Accordingly, maintaining roads and bridges is often one of the largest challenges facing these local governments when large scale oil and gas drilling moves into an area.

Transportation infrastructure is the lifeline of a community, providing access to jobs, markets, emergency and other services, and social connection and cohesion. While there is much debate today regarding the role of government in society, the vast majority of Americans still see maintaining infrastructure as a "major role" of the government.⁷ If local planners cannot maintain their local roads and bridges, both the oil and gas operators and local residents will experience negative impacts, and are likely to blame the government.⁸

In addition to financial considerations, the approaches available to

^{1.} YONG BAI, ET AL., ESTIMATING HIGHWAY PAVEMENT DAMAGE COSTS ATTRIBUTED TO TRUCK TRAFFIC 88—89 (Mid-America Transportation Center) (2010).

^{2.} RESEARCHING FRACKING IN EUROPE, WHAT IS THE IMPACT OF ROAD TRAFFIC GENERATED BY FRACKING? (Newcastle University) (last visited Jan. 11, 2019).

^{3.} U.S. Energy Information Administration, North Dakota Field Production of Crude Oil (2017).

^{4.} *Id*

^{5.} Lauren A. Patterson & Kelly O. Maloney, Transport of Hydraulic Fracturing Waste from Pennsylvania Wells: A County-Level Analysis of Road Use and Associated Road Repair Costs, 181J. OF ENVIL MGMT., 353 (2016).

^{6.} DAVID BIERLING, ET AL., ENERGY DEVELOPMENT IMPACTS ON STATE ROADWAYS: A REVIEW OF DOT POLICIES, PROGRAMS AND PRACTICES ACROSS EIGHT STATES, (Texas A&M Transportation Institute) (2014).

^{7.} PEW RESEARCH CENTER, BEYOND DISTRUST: HOW AMERICANS VIEW THEIR GOVERNMENT (Pew Research Center) (2015); Jacquelyn Pless, Oil and Gas Severance Taxes: States Work to Alleviate Fiscal Pressures Amid the Natural Gas Boom 1 NAT'L CONF. OF ST. LEGISLATURES (2012).

^{8.} Leah A. Dundon, et al., Addressing Impacts to Transportation Infrastructure from Oil and Gas Extraction in Rural Communities: A Case Study in the Mississippi Tuscaloosa Marine Shale, 13 JOURNAL OF RURAL AND COMMUNITY DEVELOPMENT (2018).

local governments to address these issues are limited by the amount of power the local government has been allocated by the state, which varies across the country. Most states operate under a version of "home-rule" authority, which means that the state gives local governments the authority to run their own affairs and generally exercise the power of the legislature, as long as doing so does not conflict with state law.⁹ Even within a state, some local governments (such as counties) may have more authority than others (such as towns).¹⁰

While numerous studies focus on road impacts, development of practical solutions or methodologies aimed at local and rural planners are largely missing, especially those that take into account the legal relationship between local and state governments and the power of the local government to act. Similarly, many scholars have addressed legal challenges to hydraulic fracturing, but largely from the perspective of environmental concerns. 11 The work set forth in this article reveals that the legal analysis is different when the underlying concerns being addressed by potential regulation of fracturing are related to preservation or maintenance of local infrastructure. A local government may have greater leeway to act in the interest of road or bridge protection than it would to address generalized environmental grievances or to ban or regulate hydraulic fracturing from a policy perspective. 12 This article delivers an in depth legal and policy survey of various regulatory actions local governments may take to address impacts to transportation infrastructure, and an assessment of potential legal challenges to those regulations.

I. Managing Oil and Gas Development: Local Governments

The United States Constitution establishes the form and powers of the nation's government. It creates the three branches of the federal government, enumerates their limited powers, and expressly provides that "powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to

^{9.} Paul A. Diller, Reorienting Home Rule: Part 2-Remedying the Urban Disadvantage Through Federalism and Localism, 77 LA. L. REV. 1045, 1065 (2017).

^{10.} *Id*

^{11.} See e.g., Amanda Skalski, Regulating Hydraulic Fracturing in Michigan: The Protection of Our Waters and Our People Hits Another Roadblock, 14 J. L. Society 277 (2013); David S. Steel, et al., Environmental and Social Implications of Hydraulic Fracturing and Gas Drilling in the United States: An Integrative Workshop for the Evaluation of the State of Science and Policy, 22 Duke Envil. L. & Poly F. 245 (2012); Morgan R. Whitacre, An Environmentally Hazardous Process: Why the United States Should Follow France's Lead and Ban Hydraulic Fracturing, 23 Ind. Int'l & Comp. L. Rev. 335 (2013); Adam J. Loos, When Prohibition Is Not Regulation: Analyzing the Court's Decision in Wallach v. Town of Dryden, 40 S. Ill. U. L.J. 121, 136 (2015).

^{12.} See e.g., Old S. Duck Tours v. Mayor & Aldermen of City of Savannah, 535 S.E.2d 751, 754 (Ga. 2000) (local government had police power to regulate public roads).

the people."¹³ As a sovereign in its own right, each state in the Union is vested with broad powers to govern and regulate its own affairs.¹⁴

While the federal government must point to a specific constitutional grant of power in order to act, the states can generally act as long as doing so is not expressly prohibited.¹⁵ The legislature of a state can adopt a state constitution, enact laws to promote the welfare and livelihood of its citizens, and has inherent authority to manage and regulate certain intra-state behavior. The source of this authority is often referred to as the State's "police power," which stems from English common law and has been subsequently recognized in a long line of Supreme Court cases.¹⁶ The police power includes zoning authority, criminal law enforcement, health and building codes, education, and more. The state's power to regulate is only circumscribed by the U.S. Constitution, and where it conflicts or is otherwise preempted by federal law in a sphere where the federal government has the authority to act.

A. THE POWER OF LOCAL GOVERNMENTS

The Constitution does not make any reference to political subdivisions of a state, such as counties, cities, or townships. However, since the founding of the country, state delegation of power to smaller, local entities for the expedient and efficient running of government has been part of the American system.¹⁷ "Recognizing the advantages of dividing power into more convenient units of political authority, every State in the Union has delegated general police powers to cities in one way or another."¹⁸ Nevertheless, political subdivisions of a state, such as cities, municipalities, townships, or counties, are created by the state, and are entitled to no more power than the state elects to provide them whether through delegations found in state statutes or the state constitution.¹⁹ In-

^{13.} U.S. Const. amend. X.

^{14.} See William E. Thro, That Those Limits May Not Be Forgotten: An Explanation of Dual Sovereignty, 12 WIDENER L.J. 567 (2003) (discussing sovereign powers of states within the federal system).

^{15.} See Nat'l Fed'n of Indep. Bus. v. Sebelius, 567 U.S. 519, 535 (2012).

^{16.} Bond v. U.S., 134 S. Ct. 2077, 2086 (2014) (stating "The States have broad authority to enact legislation for the public good—what we have often called a 'police power.'").

^{17.} State v. Baltimore & O.R. Co., 44 U.S. 534, 550 (1845) (stating "[t]he several counties are nothing more than certain portions of territory into which the state is divided for the more convenient exercise of the powers of government. They form together one political body in which the sovereignty resides."); U.S. v. Baltimore & O. R. Co., 84 U.S. 322, 329 (1872) (explaining that local governments are "representative not only of the State, but . . . a portion of its governmental power").

^{18.} Brief for Petitioners at 19, City of Columbus v. Ours Garage & Wrecker Serv., Inc., 536 U.S. 424 (2002).

^{19.} City of Columbus v. Ours Garage & Wrecker Serv., Inc., 536 U.S. 424, 428–29 (2002) (stating "Ordinarily, a political subdivision may exercise whatever portion of state power the

deed, "[m]unicipalities are ultimately state creations, having only as much authority as the state elects to provide."²⁰

A legal doctrine that originated in the common-law and later came to be known as "Dillon's Rule" provides that local governments, because they lack any inherent sovereign authority, cannot act at all without express legislative permission. Indeed, Chief Justice John Forest Dillon of the Iowa Supreme Court, for whom the rule was named in 1868, called local governments the "tenants at will of the legislature." This resulted in significant time spent by many towns and cities in lobbying state legislatures for specific powers to act. "In Florida, for example, it was not uncommon for more than 2,000 special acts to be filed by municipalities in a single session of the state legislature."

To alleviate this situation, many states adopted what are now known as "Home Rule" statutes or included Home Rule provisions within state constitutions.²⁴ These statutes or state constitutional provisions grant some form of blanket authority to local governments to adopt laws and regulations, as long as they do not conflict with or are not otherwise preempted by state law. Every state has delegated some form of this "Home Rule" authority to certain local governments, but the extent of that authority and the level of local government selected to wield it vary widely among the states.

Home Rule is often held up as antithetical to Dillon's Rule,²⁵ and as such local planners and others may assume that if the state in which they operate is considered a "home rule" state, then local governments have broad authority to regulate local matters around hydraulic fracturing. However, the reality is that the level of discretion and authority a local government has is more a matter of state constitutional and statutory law than any formalistic notion of whether the state purports to follow Dillon's Rule or Home Rule.²⁶ For example, Virginia follows Dillon's Rule

State, under its own constitution and laws, chooses to delegate to the subdivision."); City of Clinton v. Cedar Rapids & M.R.R., 24 Iowa 455, 475 (1868) (stating "Municipal corporations owe their origin to, and derive their powers and rights wholly from, the legislature. It breathes into them the breath of life, without which it cannot exist."); XO Missouri, Inc. v. City of Maryland Heights, 362 F.3d 1023, 1027 (8th Cir. 2004) (stating that "Inherent police power belongs to the states. Political subdivisions of a state have no inherent claim to such power.")

^{20.} See, Alexander Bukac, Fracking and the Public Trust Doctrine: This Land is Their Land, but After Robinson, Might This Land Really be Our Land? 49 U.S.F. L. REV. 361, 369 (2015).

^{21.} Sheffield v. City of Fort Thomas, 620 F.3d 596, 609 (6th Cir. 2010).

^{22.} National League of Cities, Local Government Authority (2017).

^{23.} *Id*.

^{24.} See generally, David J. Barron, Reclaiming Home Rule, 116 HARV. L. REV. 2255, 2290 (2003).

^{25.} See e.g., Village of Sugar Grove v. Rich, 808 N.E.2d 525, 530 (III. App. Ct. 2004) (describing Dillon's Rule and Home Rule as opposites).

^{26.} See Jon D. Russell & Aaron Bostrom, Federalism, Dillon Rule and Home Rule, Ameri-

to construe grants of authority to local governments strictly and narrowly,²⁷ but has also been recognized as a state which provides significant discretion and authority to local governments.²⁸ "Local governments in some states are not much more than appendages of the state government, whereas other states have granted local governments' extensive authority to make their own policy decisions."²⁹

In practice, determining the extent of local government power and authority can become quite complex to decipher, with some states granting authority only to municipalities, only to counties, only to certain types of local units that meet minimum population requirements, or to some combination of an endless variety of approaches.³⁰ By way of some examples, the Arizona constitution applies Home Rule to cities with at least 3,500 people, but Dillon's rule applies to cities with populations below 3,500.³¹ Alabama grants home rule authority only to "municipal corporations," and not counties, while Alaska's constitution "provide[s] for maximum local self-government" with a "liberal construction given to the powers of local government units."

The federal government has traditionally had a very limited role when it comes to regulating oil and gas extraction, with the states being the primary source of regulatory authority. Local governments have also played a more limited role but as increases in development have intensified in recent years thanks to the advances in hydraulic fracturing and horizontal drilling, especially in certain areas, local governments have sought a greater role in regulating development. A solid understanding of the source and extent of local government power — whether in counties, cities, or townships — is a necessary first step to determining what a local government can do to respond to activities taking place within its borders that it would like to encourage, prohibit, benefit from financially, or simply regulate in some way. This is especially critical to issues surrounding oil and gas drilling, which as described above, often occur in rural communities where the most immediate impacts, both positive and

CAN CITY COUNTY EXCHANGE WHITE PAPER 1, 5 (Jan. 2016), https://www. alec. org/app/uploads/2016/01/2016-ACCE-White-Paper-Dillon-House-Rule-Final.pdf. Indeed, this may explain why the number of states credited with following Home Rule, while clearly the majority of states, depends largely on an author's view and is rarely consistent among publications.

^{27.} W.M. Schlosser Co. v. Sch. Bd. of Fairfax Cty., 980 F.2d 253, 256 (4th Cir. 1992).

^{28.} U.S. Advisory Commission on Intergovernmental Relations, Measuring Local Discretionary Authority, 15 (USAICR, M-131, 1981). http://www.library.unt.edu/gpo/acir/Reports/information/M-131.pdf.

^{29.} Dale Krane, Platon N. Rigos, and Melvin Hill, Home Rule in America: A Fifty-State Handbook at ix (Cq Press, 2001).

^{30.} See Russel, supra note 26 at 5.

^{31.} Id. at 6.

^{32.} Ala. Code § 11-45-1 (1975).

^{33.} Alaska Const. art. X, § 1.

negative, are first felt. As Krane aptly noted, "[u]sually, a pressing problem or contentious issue must arrive before citizens discover their locality does not possess the power to act . . . "34"

II. LOCAL APPROACHES AT REGULATION

It may appear axiomatic that local governments should be able to regulate road repair and maintenance (or other local concerns) in a reasonable manner on the roads for which they are responsible, but the influx of oil and gas development, especially to rural areas not accustomed to a robust oil and gas sector, has tested this assumption. Instead, local planners often are faced with addressing impacts to transportation infrastructure, frequently without sufficient financial resources to do so or the power to act. In many cases, towns enact ordinances addressing the problem only to find themselves unsuccessfully defending the measures in court, often at considerable taxpayer expense.

Transportation focused literature has addressed these issues largely from an engineering perspective, but this article provides a policy framework of defensible methods for addressing or preventing those impacts. As discussed herein, no single approach will benefit or be available in every community, as state law and policy will provide the foundational context within which local communities operate and will vary from state to state. Nevertheless, understanding the primary legal and policy options available, as well as potential challenges, can serve as an important resource to local planners in selecting specific strategies that reflect the goals of the community.

A. ZONING OR LAND USE RESTRICTIONS

The power to determine where certain uses of land (such as residential or industrial) may be appropriate or prohibited within a community is the power to zone. Zoning perhaps best represents the classic police power of the state, and "enjoys a revered place in constitutional jurisprudence" among all of the traditional police powers. The power of local governments to control land use — to determine where certain uses could take place — was first recognized by the Supreme Court in Village of Euclid v. Ambler Realty Company, in which the Court determined that even if a local zoning ordinance diminishes or even destroys the value of private property, that does not conflict with fundamental notions of property and liberty under the Due Process Clause.

^{34.} See Krane, supra note 29, at ix.

^{35.} See Alex Ritchie, Creatures of Circumstance: Conflicts Over Local Government Regulation of Oil and Gas, 60 RMMLF-INST. (2014).

^{36. 272} U.S. 365 (1926).

Local governments across the country have attempted to use their zoning authority to address negative impacts (including road degradation) by prohibiting oil and gas drilling or hydraulic fracturing in certain areas (such as residential areas) or to ban it from the locality altogether. Zoning and land use restrictions are one method localities could utilize to address local road impacts. However, even where local jurisdictions are given broad Home Rule authority by the state, local governments generally cannot regulate activities in areas where the state has chosen to exercise control or in areas that traditionally implicate state-wide, as opposed to wholly local, concerns. Local efforts to do so are likely to be preempted by state law, and invalidated by the courts. However, unlike federal preemption jurisprudence which is well developed and applied relatively consistently across all jurisdictions, "each state has its own legal framework for local authority and its own preemption jurisprudence."37 Consequently, an important aspect of determining the reach of a locality's authority to regulate an activity that also touches state concerns will be at least some understanding of state preemption law.

Although state law varies, generally a local law will be pre-empted if it falls within one of three types of preemption: express preemption, conflict (or implied) preemption, or field preemption. A local law is said to be expressly preempted if a state law explicitly provides that the intent of the law is to preempt local efforts to control or regulate the activity addressed in the state statute. Conflict preemption occurs when a local regulation would conflict with the letter or policy of a state law (e.g., compliance with both state and local law would be impossible), even if the state law does not state any express intent to preempt local law. Finally, field preemption occurs when the state has so regulated an entire area that the state concerns are said to occupy the entire field, leaving no room for local control, even if the local law does not conflict with any state law. As noted, however, each state's interpretation and application of preemption analysis regarding local versus state law conflicts will vary and should be understood by localities attempting to regulate in areas where state policy may be implicated.

In every case obtained in which local governments have attempted to use the power to zone to impact oil and gas development, courts have found that oil and gas implicates at minimum both state and local concerns, raising important repercussions for local efforts to address well development.³⁸ However, local land use and zoning authority (at its most basic, the power to determine *where* certain activities may take place

^{37.} Uma Outka, Intrastate Preemption in the Shifting Energy Sector, 86 U. Colo. L. Rev. 927 (2015)

^{38.} Adam Vann, et al., Hydraulic Fracturing: Selected Legal Issues 26-27 (Congressional Research Service, September 26, 2014).

within local boundaries to safely separate, for example, homes, factories, and schools) also has long been recognized as specially within the province of local governments, and some courts will defer to local land use decisions even where state oil and gas law may be implicated. Accordingly, one of the overarching questions courts have grappled with where state oil and gas law is found to preempt local law (whether express, implied, or by conflict) is whether traditional local land use ordinances may nonetheless regulate some aspects of oil and gas development. The Colorado Supreme Court recognized this inherent tension between state regulation of oil and gas and local control over zoning and land use, stating

We also recognize[], however, that home-rule cities are authorized to control land use through the exercise of zoning authority. . . . for example, [Colorado law] grants local governments broad authority to plan for and regulate the use of land. Fracking touches on both traditions—the state's regulation of oil and gas development and [the City's] regulation of land use.³⁹

Indeed, even where the state legislature evidences an express intent to preempt local control, some courts nevertheless do not extend such preemption to local zoning and land use regulation, allowing local governments to determine *where* drilling may appropriately occur, just now *how* it occurs. Other courts, however, have found that state intent to regulate oil and gas (whether express or implied) is sufficient to invalidate even local zoning ordinances.

A number of illustrative examples make clear this tension and the differing outcomes that can obtain dependent on the state a local government happens to be in. In St. Tammany Par. Gov't v. Welsh,⁴⁰ a local government's effort to zone certain areas residential and prohibit drilling in those areas was preempted by a state law providing that local governments were "expressly forbidden . . . to prohibit or in any way interfere with the drilling of a well . . . by the holder of . . . [a state issued] permit."⁴¹ In St. Tammany Par. Gov't the court found the statute's language to be a clear statement of express preemption, but found further that the "pervasiveness of the legislation" indicated intent to impliedly preempt any local control over drilling, even traditional local zoning and land use controls.⁴²

Colorado, like Louisiana, has a robust energy sector and recent development there has also resulted in numerous local government efforts to limit, control, or ban large scale hydraulic fracturing. The Colorado courts have consistently invalidated local attempts to do so, even when

^{39.} City of Longmont v. Colo. Oil & Gas Ass'n., 369 P.3d 573, 581 (Colo. 2016).

^{40. 199} So. 3d 3, 8 (La App. 1st Cir. 2016).

^{41.} La. Rev. Stat. Ann. § 30:28.

^{42.} Id.

the efforts are exercises of local land use and zoning authority. For example, In *City of Longmont*, the court found no express or implied intent by the state to pre-empt local land use authority in the state oil and gas law, but enjoined a home rule city's ban on hydraulic fracturing and the storage of fracking wastes in the city limits on the basis of an operational conflict between state law and the local zoning ordinance.⁴³ The Court overturned the local ordinance despite recognizing the Colorado constitution's broad grant of home rule authority to municipalities, including a provision that, with respect to "local and municipal matters," local ordinances supersede any conflicting state law.⁴⁴

The Colorado Supreme Court explained that oil and gas drilling is a matter of mixed local and state concern, implicating both local zoning and land use powers but also "the state's interest in the efficient and fair development of oil and gas resources in the state." Accordingly, the city's ban on fracturing and waste storage "materially impedes" the state law and was invalid. In City of Fort Collins v. Colorado Oil & Gas Association, the city did not ban drilling, but issued a temporary (five year) moratorium on hydraulic fracturing and the storage of fracturing waste, which was similarly held invalid under a state law preemption analysis.

An important factor impacting any effort to use local land use ordinances to regulate oil and gas drilling — even simply to designate where within a local jurisdiction oil and gas drilling can occur — is the unique nature of oil and gas reserves. In invalidating local land use ordinances in Colorado, the Supreme Court of Colorado has explained that:

[O]il and gas are found in subterranean pools, the boundaries of which do not conform to any jurisdictional pattern....[C]ertain drilling methods are necessary for the productive recovery of these resources [and] it is often necessary to drill wells in a pattern dictated by the pressure characteristics of the pool; ... an irregular drilling pattern would result in less than optimal recovery and a corresponding waste of oil and gas, and it could adversely impact the correlative rights of the owners of oil and gas interests in a common source or pool by exaggerating production in one area and depressing it in another. [A] city's total ban on drilling within the city limits could result in uneven and potentially wasteful production of oil and gas from pools that underlie the city but that extend beyond the city limits. Accordingly, [even the] location and spacing of individual wells [are matters] of state concern.⁴⁸

Similarly, total bans within a town's limits are particularly suspect

^{43.} City of Longmont, supra note 39.

^{44.} Colo. Const. art. XX, § 6

^{45.} City of Longmont, supra note 39, at 580.

^{46.} Id. at 585.

^{47. 369} P.3d 586 (Colo. 2016).

^{48.} City of Longmont, supra note 39, at 580.

from a state perspective because such efforts "may create a 'ripple effect' across the state by encouraging other municipalities to enact their own fracking bans, which could ultimately result in a de facto statewide ban." 49

In New Mexico, a county ordinance stated that "[i]t shall be unlawful for any corporation to engage in the extraction of oil, natural gas, or other hydrocarbons within Mora County." The United States District Court for the District of New Mexico invalidated the county ordinance under a conflict preemption analysis, where the county ordinance "prohibit[ed] activities that state law permits: the production and extraction of oil and gas." The court did not find in the state law any express intent to preempt local regulation or any evidence of field preemption. Because of these findings, the court noted that if the locality had endeavored to regulate, as opposed to entirely ban, the activity that the state law allowed, the outcome may have been different under a conflict pre-emption analysis. 52

Counties in both West Virginia and Colorado that have enacted local land use ordinances which do not expressly ban oil and gas drilling, but impose burdensome restrictions by zoning certain activities necessary for drilling out of the county or township, also have seen those ordinances invalidated under a state-law preemption analysis.⁵³ In *EQT Production Co. v. Wender*, Fayette County's ordinance prohibited the storage of wastewater from oil and gas operations in the county. In striking down the ordinance on the basis of field preemption, the court rejected the county's argument that it has "sovereign powers" to make "legislative judgments" to which the court must give deference.⁵⁴ Rather, the court noted that:

County commissions, like municipalities, are artificial entities created by state statute. . . . As such, they possess only the powers expressly granted to them by the state constitution or legislature, or necessarily implied from those expressly given. . . . In other words, towns and cities, as well as counties, are without power to adopt ordinances which might, in any way, interfere with legislate enactment . . . passed in carrying out a particular policy of the [state] legislature.⁵⁵

Because, pursuant to the West Virginia Oil and Gas Act, "the state has comprehensively regulated this area, including storage activity at

^{49.} Id. at 581.

^{50.} Swepi, LP v. Mora Cty., N.M., 81 F. Supp. 3d 1075, 1093 (D. N.M. 2015).

^{51.} Id. at 1198.

^{52.} Id. at 1200.

^{53.} EQT Production Co. v. Wender, 191 F. Supp. 3d 583 (S.D. W. Va. 2016)

^{54.} Id. at 594.

^{55.} Id. at 594 (internal citations and quotations omitted).

drilling sites," the law left "no room for local control" and the county ordinance was preempted and permanently enjoined.⁵⁶

Some courts, however, have deferred to efforts by home-rule local governments to regulate oil and gas development within their borders through land use and zoning. For example, in *Wallach v. Town of Dryden*,⁵⁷ the New York state oil and gas law expressly stated that it "shall supersede all local laws or ordinances relating to the regulation of oil, gas, and solution mining industries,"⁵⁸ yet New York's highest court held this language was not intended to preempt the town's zoning laws.⁵⁹ Illinois courts also have upheld a non-home rule city's authority to prohibit oil and gas drilling within residential districts despite issuance of a state permit to drill, finding that the state law did not preempt the city ordinance because the state law expressly provided that local governments must provide "official consent" before a state drilling permit could issue.⁶⁰

Finally, rapid shale gas development in Pennsylvania has both benefited and burdened local governments, giving rise to a number of cases addressing the extent of local versus state control over oil and gas operations. The Pennsylvania Supreme Court in 2009 had ruled that express preemption language in the state law did not extend to local zoning and land use decisions, but that local governments could not regulate activities already covered by the state oil and gas law; accordingly, local government could use their zoning powers to determine the proper location of wells.⁶¹ In response, the state legislature enacted a law prohibiting local governments from enforcing existing zoning ordinances or adopting new ones that would conflict with the state's chosen policy of "rapid exploitation" of oil and gas, mandating that local governments allow drilling as a permitted use in "all zoning districts".⁶² Townships immediately brought constitutional and other challenges to this elimination of local land use power.

The Pennsylvania Supreme Court found that abrogating local zoning and land use authority violated the Environmental Rights Amendment of the Pennsylvania Constitution. The court determined that "as an exercise of police power, [these sections of the Act related to local zoning] are incompatible with the Commonwealth's duty as trustee of Pennsylvania's

^{56.} Id. at 598-99.

^{57. 23} N.Y.3d 728, 739 (2014).

^{58.} Id. at 744.

^{59.} Interestingly, the New York statute expressly retained the right of local governments to manage local roads, a specific exclusion from a preemption provision that is not often seen in other state oil and gas laws.

^{60.} Tri-Power Res., Inc. v. City of Carlyle, 967 N.E.2d 811, 813 (Ill. App. Ct. 2012).

^{61.} Huntley & Huntley v. Borough of Oakmont, 964 A.2d 855, 855-56 (Pa. 2009).

^{62. 58} PA. C.S. § 3304(b)(5)-(6)

public natural resources."⁶³ Because the *Robinson Township* decision relies on a unique state constitutional provision and not the common law public trust doctrine, it may be of limited impact in other states. However, even in Pennsylvania, local townships are still limited with respect to the impact they may have on oil and gas development, and local efforts to regulate which are tied to the traditional purposes served by land use and zoning authority are likely to be most successful.⁶⁴

The above cases provide just a few illustrations of the challenges that can arise when local activities such as oil and gas development raise both local and state concerns and local governments attempt to use land use or zoning powers to regulate the activity. Decisions allowing local governments to partially or totally ban oil or gas drilling appear to be outliers, and do not represent a likely outcome where local drilling regulations are challenged, especially in states where oil and gas development is an important economic driver. If oil and gas operators view a local regulation as unduly burdensome or an exceedance of local authority, they are more likely to bring legal challenges. The cost to the local government of defending these legal actions (which more often than not have been unsuccessful for the locality) can put a significant financial burden on local taxpayers.

If a locality elects to impose zoning restrictions on oil and gas operations, the more narrowly tailored the zoning regulation is to address a specific local problem, the more likely it is to survive preemption scrutiny. More limited attempts to zone the activity in certain approved areas consistent with the local government's existing approach to zoning are likely to be more successful. In her dissent from the Ohio Supreme Court's opinion invalidating local zoning efforts, Justice Lanzinger found that:

The ordinances reflect traditional zoning concerns, while the state statutes control technical aspects of the drilling of an oil and gas well. Local zoning exists to address such concerns as traffic control, traffic volume, property values, enhancement of municipal revenue, costs of municipal improvement, land use, nuisance abatement, and the general welfare and development of the community as a whole. Municipalities are more familiar with local conditions and are in the best position to determine which zoning regulations will best promote the health, safety, and general

^{63.} Robinson Twp., Washington Cty. v. Com., 83 A.3d 901, 985 (Pa. 2013).

^{64.} Penn. Gen. Energy Co., LLC v. Grant Twp., 139 F. Supp. 3d 706, 718 (W.D. Pa. 2015) (Pennsylvania township ordinance restricting deposition of fracing waste within township was invalid as exceeding grant of legislative authority from the state).

^{65.} Duffy, K. J. (2014). Regulating Hydraulic Fracturing Through Land Use: State Preemption Prevails. 85 U. Colo. L. Rev., 817.

^{66.} Tri-Power Res., supra note 60, at 812.

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welfare of their communities. This is why a "strong presumption" exists in favor of the validity of the ordinances, a fact that the lead opinion does not mention.⁶⁷

Localities are more likely to be able to impose restrictions on "where" drilling is conducted than on "how" the drilling is conducted.⁶⁸ Zoning goes to the heart of a locality's ability to separate, for example, the location of schools and houses from heavy industrial activity, within a Where local impacts need to be addressed, local planners should carefully develop effective and legally supportable responses. From a transportation perspective for example, if a particular district of a town or county has numerous old bridges that cannot support the increased heavy truck traffic, a land use regulation limited to that area and for that purpose, as opposed to banning drilling in the entire county or town, may be more likely to be upheld. Transportation is also unique in that both industry and local governments share a common interest in passable, high quality roads. Using local land use power to limit routes or otherwise minimize impacts to infrastructure likely falls within the authority of local governments and is less likely to be challenged by oil and gas operators than outright bans or burdensome regulatory restrictions. For this reason, working cooperatively with industry towards the common goal of maintaining high quality transportation infrastructure can be significantly more effective than engaging in policy debates about the value of hydraulic fracturing or oil and gas development in general.

B. Taxes and Exactions: Fees, Bonds, and Permits

Most states impose state-wide taxes, fees, or permit requirements on the hydrocarbon extraction industry. In 2010, thirty-one states had oil and gas specific severance taxes, which generated more than \$11 billion that year.⁶⁹ However, local governments have not always been allocated a sufficient percentage of these funds to support local roads, even though the economic activity that generates the funds is taking place at the local level and is burdening the local roads more than state roads. As one study noted, while some costs of high volume hydraulic fracturing are born by society at large, "roadway consumptive costs accrue directly to

^{67.} State ex rel. Morrison v. Beck Energy Corp., 37 N.E.3d 128, 143 (Ohio 2015) (Lanzinger, J., dissenting) (internal citations omitted).

^{68.} See Huntley & Huntley v. Borough of Oakmont, 964 A.2d 855, 865 (Pa. 2009) (noting that zoning laws serve a different purpose than laws aimed at regulating how oil and gas is produced or the use of natural resources, and finding that a local zoning ordinance which prohibited drilling in a residential district was not preempted by state law).

^{69.} Jacquelyne Pless, Oil and Gas Severeance Taxes: States Work to Alleviate Pressures Amid the Natural Gas Boom, NAT'L CONF. St. LEGISLATURES.

the state and local departments of transportation."70

Currently, most counties with significant oil and gas development fund their roads primarily out of the *ad valorem* (property) tax paid by the industry in their county. Because the *ad valorem* tax rate varies widely by state and county and because the tax proceeds may not be entirely funneled back to the local government,⁷¹ in many areas these taxes have not been sufficient to maintain roads supportive of modern oil and gas development. Some states may authorize local governments to include additional fees or taxes in order to address a local impact. If the burden of development falls disproportionately on local communities while the benefits inure to the states, local governments should be provided a larger share of the state-imposed tax, or be authorized to impose an additional impact fee to address local needs directly related to the development.⁷² As one author recognized, "attempts by local governments to veto [or regulate] local development are essentially fights over the distribution of the costs and benefits of development."⁷³

Although in the transportation context, locally imposed taxes, fees, permits, and bond requirements are all variations of local police power efforts to offset the damage done to roads by the extraction industry, there are key differences in these approaches. For example, a local government may be authorized to impose a fee, but not a tax, depending on

^{70.} Shmuel Abramazon et al, Estimating the Consumptive Use Costs of Shale Natural Gas Extraction on Pennsylvania Roadways, 20 J. INFRASTRUCTURE SYSS. 06014001 (2014).

^{71.} Cassarah Brown, State Revenues and the Natural Gas Boom: An Assessment of State Oil and Gas Production Taxes, NATIONAL CONFERENCE OF STATE LEGISLATURES (June 2013), http://www.ncsl.org/documents/energy/pdf_version_final.pdf.

^{72.} Although this article discusses these issues primarily where there are only two competing interests, the state government and a single local government, many states may have additional levels of governmental authority, each with its own jurisdictional interest in regulating oil and gas development. For example, if the hydraulic fracturing operations occur in a township, but the trucks must pass over town, county, and state roads, there should be a mechanism for sharing fees to account for these extraterritorial impacts. The principle of subsidiarity — that the smallest level of local government that will bear the costs is the one that should have the regulatory authority - provides one example of an approach that could be applied when impacts are experienced across a range of jurisdictions. These principles are established in the Treaty on European Union (TEU) with the stated goal that "powers are exercised as close to the citizen as possible" (European Parliament, 2017). One example of these more complex jurisdictional issues can be seen in Greene County, Pennsylvania, where fracking occurred both in Green County, but also in Cumberland Township within Greene County. The state received most of the fiscal benefit from oil and gas impact fees, and the township and county the least. See Herzenberg, S., Polson, D., and Price, M., Measuring the Costs and Benefits of Natural Gas Development in Greene County, Pennsylvania: A Case Study (2014). Approximately 60% of the per-well impact fee was to be split between the county and the township; but this raises additional issues regarding which governmental entity should have the power to regulate, and how best to regulate, when impacts generated in one jurisdiction are felt across another.

^{73.} David B. Spence, The Political Economy of Local Vetoes, 93 Tex. L. Rev. 351, 352 (2014).

bounds of state law.

the state. Generally, taxes raise revenue for general government spending and may require voter approval, whereas a fee raises money to pay for a specific program with a proper regulatory purpose and is typically paid to obtain a service or benefit (such as a fee to obtain a permit).⁷⁴ With respect to road degradation, the ability to impose a local tax or fee can be a key revenue raising approach for localities that do not have sufficient funds to maintain public roads, but it must be implemented within the

There also can be substantial overlap in these approaches. A fee may be required to obtain a county permit to drill, and the permit might require its holder to make repairs to roads, to provide gravel to the county, to undertake a road analysis, or to limit truck traffic to particular routes. A county might require a permit that contains some of these requirements, but also require heavy truck users to post a bond to assure repairs to roads are made. Importantly, weight limits and bonding may not always be the answer. For example, in some locations the majority of the truck loads impacting local county roads were under the legal weight limits; it was the significant increase in the number of trucks over concentrated time periods that led to road degradation.⁷⁵

In State ex rel. Morrison v. Beck Energy Corp., an Ohio community used a land use regulation to impose permitting requirements, fees, and bonding requirements on oil and gas operations in addition to those imposed by state law, only to have the local ordinances invalidated by the court. The Morrison decision is interesting because the Ohio Supreme Court distinguished between a local government's exercise of the police power, which is more circumscribed by state law preemption analysis, and "local self-government," which is entitled to more deference under Ohio's Home Rule provisions. The Ohio court noted that anytime a local government requires a license or permit to act, that is an exercise of the police power and, despite Ohio's broad grant of Home Rule authority in the Ohio constitution, the Home Rule provision did not authorize local governments to exercise the police power in a way that conflicts with the state's general laws. The object of the police power in a way that conflicts with the state's general laws.

However, other types of permits or fees may be more likely to go unchallenged or upheld, especially the more they are directly related to addressing a local problem (road degradation) rather than inhibiting or

^{74.} See e.g., USA Cash #1, Inc. v. City of Saginaw, 776 N.W.2d 346, 359 (Mich. Ct. App. 2009).

^{75.} See Lloyd MacAdam, Eastern Ohio Shale Play: ODOT's Response, OHIO DEP'T TRANSP., http://www.dot.state.oh.us/Divisions/Planning/Conference/Documents/Presentations/Luncheon/MacAdam_Luncheon.pdf (July 16, 2014).

^{76.} Beck Energy Corp., supra note 67, at 134-35.

^{77.} Id. at 133.

regulating technical aspects of state approved economic activity (hydraulic fracturing).⁷⁸ Arlington, Texas has a local ordinance that provides a good example of a permit scheme that addresses local road impacts.⁷⁹ Arlington's ordinance requires a city-issued Gas Well Permit before well construction can begin. To obtain the permit, an application must be submitted which shows the "proposed transportation routes and roads for equipment, supplies, chemicals or waste products used or produced by the gas operation" and the location of public roads used for ingress and egress and areas to be used for truck staging or storage.80 This allows the city to assess current road conditions and potential damage, and the ordinance additionally authorizes the city to impose a road damage fee.81 The ordinance provides for calculation of the fee based on the access lane miles for the appropriate road type, the assessment per lane mile, and the number of lane miles included in each gas well permit application. Replacement costs for asphalt and/or concrete road segments are determined from current cost per square yard of road surface material, including installation and labor.

Industry challenged the Arlington ordinance and the city eventually withdrew the more contentious provisions, but the road damage fee and permitting requirements remain.

C. VOLUNTARY AGREEMENTS / ROAD USE AND MAINTENANCE AGREEMENTS

As the oil and gas boom was well underway, Colorado Governor John Hickenlooper recognized the substantial resources that were being spent on litigating challenges to local efforts to regulate hydraulic fracturing, and created a task force to make recommendations for better state and local coordination.⁸² One of the recommendations of the task force was for local governments to enter into Memoranda of Understandings with oil and gas operators and state agencies tasked with oil and gas regu-

^{78.} While most local-state conflicts arise in the context of local governments imposing limits or banning oil and gas operations where the state has expressly authorized energy extraction, one state with oil and gas resources has banned hydraulic fracturing. See Findings Statement on the Oil, Gas, and Solution Mining Regulatory Program, N.Y. DEP'T OF ENVIL. CONSERVATION (2015) (adopting a "no action" alternative for high volume hydraulic fracturing), available at https://www.dec.ny.gov/docs/materials_minerals_pdf/findingstatehvhf62015.pdf (accessed Apr. 26, 2019). In New York, even if a local government wanted to authorize the activity, any effort to do so would be preempted by the state decision to prohibit it. See generally Chwick v. Mulvey, 915 N.Y.S.2d 578, 584 (N.Y. App. Div. 2010) (discussing conflict preemption and New York law).

^{79.} Arlington, Tex. Ordinance 11-068, § 5.02(C)(3)(a) (2011).

^{80.} Id.

^{81.} Id. at § 5.01(i).

^{82.} Colo. Exec. Order No. B2012-002; Colo. Const. art. IV, § 2 (creating the task force on cooperative strategies regarding state and local regulation of oil and gas development).

lation, rather than increase local ordinances or regulations.⁸³ Research suggests that some of the most successful approaches to road and bridge degradation in local communities were voluntary agreements between local governments and oil and gas operators.⁸⁴ Such approaches can range from informal oral understandings to formal binding contracts (known as Road Use Agreements (RUAs), Road Use and Maintenance Agreements (RUMAs), or Excess Use Agreements (EUA)). Indeed, some legal scholars have argued for the use of private agreements as a means to stave off litigation and enhance local governments' ability to address impacts.⁸⁵ Because the local oil and gas operators have a role in the development and terms of the agreement, legal challenges may be significantly less likely to occur then where local ordinances are unilaterally imposed on operators.

Oil and gas operators pay state and local taxes, and like individuals, expect the government to deliver passable roads without being singled out to pay extra for using those roads. However, interviews with operators and state department of transportation officials revealed that, in most cases, operators were willing to pay for extra-ordinary damage caused by intensive truck activity, but sought a fair process by which to do so.86 Many operators did not feel that imposition of local ordinances — which often lacked flexibility — accomplished the fairness they sought. In some states, local operators believed they were asked to pay for damage their trucks did not cause or to repair roads that were already damaged before the oil and gas industry arrived. This was especially the case where the agreements tended to be less formal or did not provide for a base line road assessment, or meaningful methods by which to distinguish between operators whose trucks may be sharing the same roads. In these localities, the relationship between local governments and operators was not as positive, and approaches to road maintenance or repair tended to be less effective than in localities where there was a more collaborative relationship between industry and local regulators.87

^{83.} Protocols Recommendation, Task Force on Cooperative Strategies Regarding State and Local Regulation of Oil and Gas Development, Colo. Dep't of Nat. Res. (2012).

^{84.} Leah A. Dundon et al., Assessing Impacts to Transportation Infrastructure from Oil and Gas Extraction in Rural Communities: A Case Study in the Mississippi Tuscaloosa Marine Shale Oil Play, 13 J. Rural Community Dev. 16 (2018).

^{85.} Kristen van de Biezenbos, Contracted Fracking, 92 Tul. L. REV. 587 (2018).

^{86.} See Dundon, supra note 84.

^{87.} Id. By way of some examples, Pennsylvania's Department of Transportation, which has jurisdiction over most of the roads in Pennsylvania, including county roads, required oil and gas operators to enter into Excess Maintenance Agreements in order to obtain an "Authorization to Exceed Posted Highway Weight Restriction" permit. See PennDOT Excess Maintenance Agreement, http://www.dot.state.pa.us/public/pubsforms/Forms/M-4902EMA.pdf (last accessed Apr. 26, 2019). The details of the EMA are agreed to between each operator and PennDOT, and

Ohio perhaps represents one of the most effective approaches to road impacts, as indicated by road maintenance/quality and effective collaboration between local governments and operators. In Ohio, the state Department of Transportation ("ODOT") facilitated discussions between industry and local governments, having learned from less the effective approaches implemented in other states. The majority of impacted roads in Ohio were county roads not under state jurisdiction; however, one of Ohio's successes was having a dedicated ODOT employee who facilitated discussion between industry, ODOT, and local governments, ODOT took responsibility for the state roads (which were designed for heavy truck use), but did not have jurisdiction on local or county roads. ODOT personnel facilitated conversations between local planners and industry. resulting in the development of the Ohio Road Use and Maintenance Agreement, a legally binding agreement that each operator executes with each affected local government entity. The RUMA's allow for standardization across the various oil and gas producing counties and with industry and local government support, the RUMA was incorporated into state law in 2012. In this respect, Ohio is something of a hybrid between voluntary and mandatory approaches. Ohio law requires operators to file a signed RUMA (or the operator must demonstrate a good faith effort to enter into a RUMA) as a pre-condition to obtaining a drilling permit, but the RUMA document was not codified, so counties, towns, and operators can develop terms that fit local needs or circumstances, and the terms are mutually agreed to. The type of work that is incorporated in the RUMA can include agreement to widen roads, full depth pavement rehabilitations, drainage improvements, and more. Local governments report that the RUMA approach has largely been successful.

In addition to the RUMA, involving the state DOT to help facilitate discussions between local governments and industry as issues arise has also been an important factor in Ohio's success. In this regard, ODOT personnel, albeit without jurisdiction over local county roads, have become an important information source in Ohio, standardizing discussions, sharing approaches that have worked or proved challenging in other counties, and even identifying to counties the companies that have enjoyed reputations elsewhere as responsible actors and those that may pose challenges to local regulators.

Ohio also created a careful record of the development of the RUMA that could be followed in other states. County attorneys in Ohio requested a formal opinion from the Ohio Attorney General as to the legality of road use agreements, especially because the RUMAs not only

typically include pavement analysis and planned routes, but only extends to "excess maintenance and restoration" not normal maintenance, which remains the responsibility of PennDOT.

required private companies to pay for public road repair, but often to arrange for or undertake the work themselves. Another unique feature of the county RUMAs was that RUMAs were required only of the oil and gas and wind industries. The Ohio Attorney General ultimately issued an opinion concluding that although the RUMA's raised novel questions of law, the RUMAs were supportable under state laws. The fact that the AG's interpretation of this novel approach has not been challenged may suggest that the approach is working well for both the regulated community and the regulators.

III. CHALLENGES

Preemption by state law is the most likely successful challenge to local efforts to regulate oil and gas, and is therefore discussed above in the context of zoning. However, as local governments consider what approaches would best advance the goals of road maintenance and responsible development of hydrocarbon resources, close collaboration with town, city, or county counsel and an understanding of other potential challenges can be useful. As noted, the best approach to maintaining transportation infrastructure will vary from jurisdiction to jurisdiction, as will the risk of challenges. Whether a challenge to a local regulation is successful or not, avoiding the costs of litigation may be a better use of resources. However, the framework discussed in this article provides a starting point by which townships can begin to examine potential options.

A. Exactions and Unconstitutional Conditions

Permit conditions and impact fees are known as exactions, that is, conditions or costs that governments impose on a developer in exchange for allowing certain land uses that the government could otherwise prohibit.⁸⁹ Exactions imposed by local governments are generally permissible if they do not violate the "unconstitutional conditions" doctrine; that is, the condition being sought by the government (whether money, road repair, an easement, or otherwise) must bear an "essential nexus" to a legitimate public interest and be "roughly proportional" to the projected impact of the property use.⁹⁰ The unconstitutional conditions doctrine

^{88.} Ohio Att'y Gen., Opinion Letter on Private Oil and Gas Drilling Operators Paying to Repair Public Road Damage (Sept. 19, 2012).

^{89.} Vicki Been, Community Benefits Agreements: A New Local Government Tool or Another Variation on the Exactions Theme?, 77 U. Chi. L. Rev. 5, 13 (2010).

^{90.} Dolan v. City of Tigard, 512 U.S. 374, 391 (1994); Nollan v. Cal. Coastal Comm'n, 483 US 825, 837 (1987) ("'[R]ough proportionality' best encapsulates what we hold to be the requirement of the Fifth Amendment . . . the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development.").

has its roots in the notion that the government should not be able to use its permitting or other regulatory powers to coerce individuals or companies into giving up constitutional protections.⁹¹ The U.S. Supreme Court has recognized the doctrine in a number of circumstances, from prohibiting the government from burdening the constitutional right to travel by conditioning health care benefits on local residency requirements, to pressuring a property "owner into voluntarily giving up property for which the Fifth Amendment would otherwise require just compensation."⁹²

Importantly, road and traffic impacts generated by development have traditionally been well within the realm of permissible impacts local governments can address by imposing an exaction⁹³ However, the ability of local governments to quantify the impacts to local roads stemming from oil and gas development is especially important in defending against claims of unconstitutional conditions. The local government would need to establish that any condition it imposes on the oil and gas operator (e.g., road repair and maintenance requirements, direct financial contribution to city road management, truck volume limits, etc.) are roughly proportional to the impact of the intended use of the property (the drilling of the well and use of the public roads to transport oil and gas). Accordingly, the specific impact that oil and gas development has on local roads (including the use of well technologies that necessitate higher truck volumes) is directly related to the types of conditions that the local government can constitutionally impose on operators. Thus, a thorough understanding of the impacts is vital to a locality's ability to address the impacts through local control measures.

Moreover, a local government cannot seek to remedy the impact of a number of operators or an entire industry in an area by burdening just one or a few companies. The condition the government imposes on an oil and gas operator must be roughly proportional only to that operator's proposed property use. This can be challenging with respect to local road maintenance in counties or townships where multiple oil and gas companies operate, because it is often difficult to determine which operator's trucks and how many of them are operating on any particular road. Accordingly, methods by which local governments can quantify road impacts using a per-well fee, road use permits, or other methods that accurately link potential impacts to individual operators are most useful to

^{91.} See Koontz v. St. Johns River Water Mgmt. Dist., 570 U.S. 595 (2013).

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^{93.} Vicki Been, "Exit" as a Constraint on Land Use Exactions: Rethinking the Unconstitutional Conditions Doctrine, 91 COLUM. L. REV., 473-545 (1991); See also B.A.M. Dev., L.L.C. v. Salt Lake City, 282 P.3d 41, 47 (Utah 2012) (upholding exact ion to offset traffic and road impacts).

establish the constitutionally required "rough proportionality" between the operator's property use and the condition imposed on that operator by the locality.

State constitutions and laws may impose additional limitations on the types of exactions local governments may impose, but challenges based on unconstitutional conditions may be likely if an operator believes the local government has violated these constitutional requirements. For example, in Arlington, Texas, the oil and gas association raised the unconstitutional exaction argument in its challenge to city permitting and fee requirements, although the case was ultimately settled after the city amended its ordinance.⁹⁴

Two important debates regarding exactions have emerged that are relevant to the oil and gas industry. First, the question of who ultimately pays the price of exactions imposed on development by local or state governments is critical to understanding which stakeholders such fees may ultimately benefit or burden.95 There is an argument that impact fees ultimately are passed on to the consumer. 96 In the context of oil and gas development, if the payment goes from an oil and gas operator to the local government for road maintenance, but the cost of that payment is reflected in the price of gas or oil to a national consumer, then consumers may be bearing more of the true cost of the resource extraction. If the revenue from such impact fees (or other benefits from similar exactions) are directed to the level of government where the impacts are most felt, with revenue sharing consideration given to neighboring jurisdictions which also bear associated costs, a more equitable allocation may result and assure that the revenue from impact fees will actually be used to address impacts, rather than support general revenue raising in far flung jurisdictions.97

Second, it is not entirely settled whether the exaction framework laid out in Nollan and Dolan applies to legislatively imposed exactions (in this context, the local government exercising the power of the legislature by

^{94.} City of Arlington v. Tex. Oil and Gas Ass'n, No. 02-13-00138-CV, 2014 WL 4639912 (Tex. App. Sept. 18, 2014). The primary challenge by industry was to a fee being charged to well developers for the training and equipping of City firemen on how to fight gas well fires, a charge that was never imposed on other industries and, in their view, amounted to an unlawful occupation tax under Texas Law. The city ultimately amended the ordinance and withdrew that fee, and the case settled. The road use permitting fees are still in force.

^{95.} Vicki Been, *Impact Fees and Housing Affordability*, CITYSCAPE: A JOURNAL OF POLICY DEVELOPMENT AND RESEARCH, 139 (2005).

^{96.} Forest E. Huffman et al., Who Bears the Burden of Development Impact Fees? 54 Journal of the Am. Planning Ass'n., 49-55 (1988).

^{97.} See Pennsylvania Public Utility Comm'n., Report of the Department of the Auditor General, Performance Audit Act 13 Impact Fees (2016).

enacting ordinances).⁹⁸ The argument is that because legislative actions (such as local ordinances) apply more widely than, for example, a more targeted administrative decision imposing a fee or permit requirement on a single company, legislative actions are less subject to improper government behavior. However, the majority view rejects exempting these types of legislative actions from the exactions framework.⁹⁹ Indeed, in at least in one case, local approaches have in fact singled out particular industries, rather than using a more objective measure – like weight or number of trucks — as a triggering factor for requiring a road use and maintenance agreement.¹⁰⁰

In contrast to legislatively imposed fees or costs, payments or costs imposed in an ad-hoc way fall squarely within the constitutional exactions framework. Figure 1 set forth below classifies ad-hoc decisions as subject to these types of challenges, but reflects a view that they are less likely to be challenged because of the voluntary nature by which they arise in the oil and gas context. Regardless, it is an issue that local governments should be aware of as they determine which approaches will be most effective for a particular locality.

B. TAKINGS

Private property is not absolute, and has traditionally been described as a "bundle of rights" that one may have with respect to some thing or interest (e.g., money, land, or an intellectual idea). For example, the bundle of rights might include the right to exclude others, the right to possess the property, the right to control its use and enjoyment, or the right to sell it. State law typically defines what "property" is 102, but once something is property, federal constitutional protections attach.

The U.S. Constitution allows the federal or state government to take private property for a public use if just compensation is paid to the property owner. U.S. Const. Amend. V and XIV. Like other state powers, the eminent domain authority belongs to the state but the state can, and

^{98.} Michael B. Kent, Jr., Theoretical Tension and Doctrinal Discord: Analyzing Development Impact Fees As Takings, 51 Wm. & MARY L. REV. 1883 (2010).

^{99.} Christopher T. Goodin, Dolan v. City of Tigard and the Distinction Between Administrative and Legislative Exactions: "A Distinction Without A Constitutional Difference", 28 U. HAW. L. REV. 139, 141 (2005).

^{100.} See MICHAEL DEWINE, OHIO ATTORNEY GENERAL, OPINION NO. 2012-029 (addressing question whether local governments could enter into agreements with oil and gas operators and wind farm operators for repair of public roads).

^{101.} San Remo Hotel L.P. v. City & County of S.F., 41 P.3d 87, 104-06 (Cal. 2002) (applying Nollan/Dolan to ad-hoc fees).

^{102.} Stop the Beach Renourishment, Inc. v. Fla. Dep't of Envtl. Prot., 560 U.S. 702, 707 (2010) ("Generally speaking, state law defines property interests.").

does, delegate that power to state agencies or to local governments.¹⁰³

The government, in the lawful exercise of its police power, also can enact regulations that burden or even extinguish one or more of the various "rights" in the bundle without having to pay the property owner compensation. If the situation were otherwise, and the government had to pay compensation every time it burdened private property by enacting regulations to support the public welfare, the government effectively would not have any real police power to exercise. However, where a legitimate government regulation of property requiring no compensation to be paid ends, and a taking requiring just compensation begins, is a question that often ends up in the courts to be decided on the facts of each case.

In the context of oil and gas development, the most common kind of takings challenges are regulatory takings challenges. In these cases, rather than seizing physical property, the government uses its police power to adopt regulations or laws that burden property rights that a mineral rights owner may have with respect to their ability to extract and sell the oil or gas. The property in these cases is typically the right to the value of an existing oil or gas lease, a recognized property interest. For example, regulations that mandate how drilling should be conducted, safeguards that must be put in place, the allowable locations for drilling, or a requirement that a permit be obtained all may burden the right of the leaseholder to extract and sell the oil or gas, but these are likely valid exercises of the police power of the state to protect the public and the environment.

A more difficult case may arise if a locality or a state bans hydraulic fracturing, or all oil and gas drilling, entirely. In that case an operator may argue that its mineral lease (in which it may have invested heavily in reasonable reliance on its expectation of being able to extract and sell the minerals) is now worthless, and that the government has taken its property by virtue of the regulation, requiring compensation (ultimately to be paid by local taxpayers). The Supreme Court has established that if a regulation wipes out all (100%) of the economically viable use of the property then a taking requiring compensation has likely occurred. However, if anything less than 100% of the value remains (whether it is

^{103.} See e.g., Borough of Essex Fells v. Kessler Inst. for Rehab., Inc., 673 A.2d 856, 860 (N.J. Super. Ct. Law Div. 1995) (power of eminent domain belongs to the state legislature, which it can delegate to political subdivisions).

^{104.} Penn. Coal Co. v. Mahon, 260 U.S. 393, 413 (1922) ("Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law. As long recognized some values are enjoyed under an implied limitation and must yield to the police power.").

^{105.} Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1018 (1992). The Court explained that these type of regulations "carry with them a heightened risk that private property is

1% or 99%) a fact specific balancing test is applied to determine if a compensable taking has occurred, looking at (1) the character of the regulation, (2) the extent of the diminution in value of the property caused by the regulation, and (3) the impact of the regulation on the reasonable investment-backed expectations of the property owner.¹⁰⁶

A number of considerations can impact the outcome; for example, is the "property" only the single mineral lease in a township, or if the operator holds multiple leases should they all be considered together (thereby diluting any economic impact of a drilling ban that may not impact all the leases)?¹⁰⁷ Should the operators have anticipated the possibility of a drilling ban or other limits when it made investments in expectation of being able to drill? Finally, the character of the regulation as a safety or other protection measure often weighs against finding a taking, as opposed to other types of property invasions, such as physical occupation of property.¹⁰⁸

Court opinions applying takings law to hydraulic fracturing regulations are rare because courts will avoid deciding matters on constitutional grounds when other bases exist; most local fracking bans have been struck down on the basis of state law preemption, not a takings analysis. However, operators are likely to continue to raise takings claims when local governments enact regulatory measures that impact the value of their mineral leases. For example, in *Swepi, LP v. Mora County*, a county ordinance prohibited all oil and gas extraction within the county, and the oil and gas company alleged, among other things, a takings claim. ¹⁰⁹ In finding that Swepi had standing to bring the claim, the court went further to discuss the merits of the takings claim, concluding that the effect of the ordinance was to wipe out all economically viable use of the property, the oil and gas lease. "[W]hat makes the right to drill for oil valuable—*i.e.* an

being pressed into some form of public service under the guise of mitigating serious public harm."

^{106.} Penn. Cent. Transp. Co. v. New York City, 438 U.S. 104, 124 (1978).

^{107.} For purposes of a Takings claim, defining the boundaries of the property is critical to whether such a claim is successful. If the "property" is a single oil and gas lease, a local action banning fracing would arguably wipe out 100% of the economic value of the property, and a takings claim may be more plausible. However, if the "property" is the value of all the oil and gas leases held by the operator affected, then a single town's actions may have less impact on the total value of the "property." Similarly, if the "property" included both surface and mineral rights, even extinguishing all the mineral rights would still leave the property owner with some value at the surface, again making a Takings challenge more difficult. This is known as the "denominator problem" referring to the comparison between the value that is taken and the value of the property that remains. See Steven J. Eagle, The Four-Factor Penn Central Regulatory Takings Test, Penn. St. L. Rev. 118, 601 (2013).

^{108.} See generally Kevin J. Lynch, Regulation of Fracking Is Not a Taking of Private Property, 84 U. Cin. L. Rev. 39 (2016).

^{109.} See Swepi, supra note 50 at 1151.

oil-and-gas lease valuable—is the ability to act on it by drilling for oil. Without that right, an oil-and-gas lease is worthless."¹¹⁰

As long as SWEPI, LP has an interest in the leases—i.e. a legally protectable, concrete interest—then it has standing if the Ordinance infringes on this interest, which it does. This taking and destruction of SWEPI, LP's property constitutes an injury in fact. Its leases provide it with a particularized, concrete interest in property that state law protects. The reduction in the leases' value and the destruction of all economic use is an actual injury, rather than one that is conjectural or hypothetical. Accordingly, SWEPI, LP has suffered a sufficient injury in fact to support its takings claim.¹¹¹

Local governments considering regulation of hydraulic fracturing should also be cognizant of the relevance of current norms within their area to the analysis of whether a particular ordinance or regulation takes private property. For example, it is understood that hydraulic fracturing is a necessary component of oil and gas drilling in most formations; without the technology a well could not be economically drilled at all. Also, if oil and gas drilling is prevalent in the area, operators may be more likely to succeed on claims that their investment backed expectations in mineral leases in the area are reasonable. 113

With respect to roads and other transportation infrastructure, local governments may have strong arguments that imposing fees or taking other measures sufficient to offset non-customary damages to infrastructure would be a legitimate use of the police power which does not consti-

^{110.} Id.

^{111.} *Id.* at 1153. Additional cases continue to address takings claims in the mineral lease context. For example, although the court determined that the city in Tri-Power Res., *supra* note 60, could ban drilling within residential districts, it expressly reserved judgment as to whether the company was entitled to compensation from the city because the ban would amount to a taking of private property. *See* Norse Energy Corp. USA v. Town of Dryden, 108 A.D.3d 25, 27, 964 N.Y.S.2d 714, 716 (2013), *aff'd sub nom.*, Wallach v. Town of Dryden, 23 N.Y.3d 728, 16 N.E.3d 1188 (2014), Amici Brief for Joint Landowners Coalition of New York (arguing that town-wide bans of hydraulic fracturing deprives landowners' of their rights to subsurface minerals and constitutions a compensable regulatory taking); Arsenal Minerals and Royalty v. Denton, Tex., No. 4:14-cv-00639, 2015 WL 13658062 (E.D. Tex. 2015) (raising takings claims, but ultimately dismissing the case because the city's regulations did not apply to the plaintiffs' mineral leases).

^{112.} See Longmont, supra note 39, at 580 ("the record before us demonstrates that many operators have determined that fracking is necessary to ensure the productive recovery of oil and gas. For these operators, banning fracking would result in less than optimal recovery and a corresponding waste of oil and gas."); Id. at 593 (virtually all oil and gas wells in Colorado are fracked).

^{113.} See e.g., City of Fort Collins v. Colorado Oil & Gas Ass'n., 369 P.3d 586, 594 (Colo. 2016) (rejecting the city's reliance on regulatory takings cases to argue that temporary moratoriums are aimed at preserving the status quo because oil and gas drilling was prevalent across the state and the city's ordinance "substantially disrupts" the status quo of extensive oil and gas development).

tute a taking, but the details of any potential regulation or ordinance should be carefully evaluated with both preemption and takings jurisprudence in mind to avoid costly litigation that may not be successful for the local government.

C. Dormant Commerce Clause Challenges

The regulation of interstate commerce is a power expressly given to the federal government by the Commerce Clause of the U.S. Constitution. Although states have some latitude to regulate interstate commerce, a state (and its political subdivisions operating under delegated authority), "may not exercise that police power where the necessary effect would be to place a substantial burden on interstate commerce." The interstate sale and transmission of oil and gas is within the scope of the commerce clause, and waste is also an item of commerce. If a local regulation imposes sufficient burdens on the management or movement of oil or gas production or hydraulic fracturing waste, it may violate the "dormant Commerce Clause," a description given to impermissible burdens on interstate commerce, even where Congress has not acted affirmatively.

The "fundamental objective" of the dormant commerce clause is to "preserve a national market for competition. . . . [T]here can be no local preference, whether by express discrimination against interstate commerce or undue burden upon it "¹¹⁷ Local regulations that burden interstate commerce must "effectuate a legitimate local public interest" and cannot be "excessive in relation to the putative local benefit."¹¹⁸

Accordingly, mineral rights owners have argued that local bans on hydraulic fracturing violate the dormant commerce by placing an undue burden on commerce. Local regulations on transportation of oil and gas, including those that "curtail transportation" have also been singled out as excessive burdens on commerce, but these arguments have not yet been resolved by courts.¹¹⁹ In *Grafe-Kieklak v. Town of Sidney*, local landowners sued the local town arguing that the local law banning hydraulic fracturing within town limits violated the dormant commerce clause.¹²⁰ The

^{114.} See U.S. Const. art.I, § 8.

^{115.} Line Corp. v. Hackensack Meadowlands Dev. Comm'n, 464 F.2d 1358, 1362 (3d Cir. 1972).

^{116.} C & A Carbone, Inc. v. Town of Clarkstown, 511 U.S. 383, 391 (1994) (invalidating local ordinance that required waste processed in town to be processed at the town's transfer station as violating the Commerce Clause).

^{117.} General Motors Corp. v. Tracy, 519 U.S. 278, 299 (1997).

^{118.} Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (2013).

^{119.} See Norse Energy Corp. USA v Town of Dryden, Amici Brief for Joint Landowners Coalition of New York, at *24.

^{120.} Grafe-Kieklak v. Town of Sidney, No. 213-602 (N.Y. Sup. Ct. Del. Cty. Jan. 9, 2014).

court invalidated the ban on other grounds, but some expect that dormant commerce clause claims will become more prevalent as local government attempts to exercise more control over oil and gas development, and the U.S. Supreme Court may need to "step in to remind us all once again that we do not exist in isolation."¹²¹

D. DISCRIMINATION / EQUAL PROTECTION

Imposing a tax, fee, or bonding requirements on one industry but not another may be seen as discriminatory, especially in relation to road impacts which are arguably a function of weight and truck volume, not truck contents, and could violate the state or federal constitution's equal protection clause. Corporations are "persons" within the meaning of the Constitution's Equal Protection clause and are entitled to its protections. Any time a law or regulation treats certain classes or groups differently than others similarly situated, equal protection may be implicated; however, unless the class or group allegedly discriminated against is recognized as a protected class (e.g., race or national origin) or the law burdens a 'fundamental right,' (e.g., freedom of speech), equal protection challenges are often very difficult to win. In these ordinary cases, to prevail the government need only establish that the classification is reasonably related to some rational government purpose, a low bar to meet.

Although oil and gas operators are not a suspect class, companies are raising equal protection challenges where local governments attempt to curtail oil and gas development. The oil and gas operators made such an argument in *City of Arlington v. Texas Oil and Gas Association*¹²³, reasoning that a city fee that singled out natural gas operators from other similar industries and imposed a disproportionate permit fee violated well operators' equal protection rights. The town charged a \$2400 per well fee to natural gas operators, but only a \$55 annual fee to other similarly situated business with similar risks and impacts. The court ruled that an industry association had standing to bring the equal protection claim on behalf of its members and while the case ultimately settled, local governments should be aware of these potential challenges.

Swepi, LP v. Mora County, provides a good example of how difficult it can be to prevail on equal protection claims in the oil and gas context.¹²⁴ In Swepi, the town banned hydrocarbon extraction by corporations, but not by individuals. The oil and gas operators argued that this

^{121.} Meredith A. Wegener, Drilling Down: New York, Hydraulic Fracturing, and the Dormant Commerce Clause, 28 BYU J. Pub. L. 2, 351 (2014).

^{122.} Metro Life Ins. Co. v. Ward, 470 U.S. 869, 881 n.9 (1985).

^{123.} See City of Arlington, supra note 94.

^{124.} See Swepi, supra note 50.

violated the equal protection clause by discriminating against corporations. Although the court found that the companies had standing to bring the equal protection claim and that it was ripe, the court ruled that the county's distinction between corporations and individuals was not arbitrary (corporations conduct virtually all of the oil and gas drilling, not individuals) and the purpose of the ordinance as stated by the county was legitimate (protecting its water supplies).¹²⁵ The court invalidated the ordinance on other grounds, but rejected the equal protection claim.

Nevertheless, courts have found these claims legally sufficient and have required local governments to establish that its classification meets the rational basis test. 126 Before the recent fracking boom, a zoning ordinance in the Town of Westfield, New York required commercial drillers to post a bond, but did not require a bond from landowners drilling gas wells on their own property for their or their tenants' use. Industry argued this discrimination violated their equal protection rights and the court remanded on the equal protection claim, requiring that the town "demonstrate that there is a rational basis for the classification which is fairly related to the objectives of the Ordinance."127 Especially with respect to road damage, local governments would likely have strong arguments that protecting roads is a legitimate government purpose and courts would be deferential to local government's approaches to do so; but, local planners should assure that proposed ordinances (and any classification scheme) are tailored so that they are "rationally related" to achieving these legitimate government purposes.

Ohio's approach to energy development impacts on roads is interesting in this regard because it generally applies only to private companies that conduct oil and gas drilling or operate wind farms, ostensibly regulating on the basis of the class of company, not on the basis of weight or the number of trucks. The statute requires that before a permit to drill a horizontal well can be issued, the operator must provide a copy of a RUMA entered into with a local official or an affidavit of a good faith

^{125.} Id. at 1180.

^{126.} When the constitutionality of a statute or ordinance is challenged, courts utilize one of three different levels of review to determine whether the law or ordinance may stand. The most lenient review is called "rational basis" review, where the court will uphold the law if it is merely rationally related to a legitimate government interest. Where a law impacts certain "suspect classes" of people (e.g., race or religion) or rights that have been found by courts to be "fundamental" (e.g., the right to certain forms of free speech), a much higher level of justification for the law is required, known as "strict scrutiny." The government must show that the law was narrowly tailored to further a compelling governmental interest, or the law will be invalidated. Finally, an intermediate level of review often applied to equal protection challenges to certain gender classification cases requires that the law be substantially related to an important government interest.

^{127.} Envirogas, Inc. v. Town of Westfield, 82 A.D.2d 117 (N.Y. App. Div. 1981).

attempt to obtain the RUMA.¹²⁸ Prior to codification of the requirement of a RUMA, local counties wanted to enter into such agreements only with oil and gas operators and wind farm operators, and sought an opinion from the Ohio Attorney General as to the legality of entering into such agreements with these two categories of private companies to "improve and repair public roads."¹²⁹ The Ohio Attorney General issued a formal opinion concluding such an approach is permissible.¹³⁰

E. Substantive Due Process

The Fourteenth Amendment's Due Process Clause provides that "no State shall . . . deprive any person of life, liberty, or property without due process of law." U.S. Const. amend. XIV, § 1. This clause has both a procedural component (what process must the government go through before it can lawfully deprive a person of life, liberty, or property) and a substantive component, meaning that regardless of the adequacy of the process, the state cannot deprive a person of life, liberty, or property for an arbitrary reason. When local ordinances burden, diminish or entirely wipe out the value of a company's oil and gas lease — which is property protected by the constitution — companies have argued that the ordinances violate their substantive due process rights. Property (land or mineral interests) is not a fundament right, so an ordinance burdening property generally must only bear a rational relationship to a legitimate government interest to satisfy due process.

It is important to note that the framework for addressing substantive due process claims is not always consistent and has lent itself to some confusion in the courts. Federal courts are not all in agreement regarding the standard to apply to different property interests, and state courts similarly take varying views. In addition, *executive* action is reviewed under a different standard than *legislative* actions and must generally be "abusive," "shock the conscience" or sufficiently egregious to violate constitu-

^{128.} Ohio Rev. Code Ann. § 1509.06(A)(11)(b).

^{129.} Ohio Att'y. Gen. Opinion, supra note 88.

^{130.} Id.

^{131.} Hyde Park Co. v. Santa Fe City Council, 226 F.3d 1207, 1210 (10th Cir. 2000); Daniels v. Williams, 474 U.S. 327, 331 (1986).

^{132.} See Alex Ritchie, Creatures of Circumstance: Conflicts Over Local Government Regulation of Oil and Gas, 60 RMMLF-INST. (2014) at 11-42.

^{133.} Dias v. City & Cty. of Denver, 567 F.3d 1169, 1181 (10th Cir. 2009); see also Nectow v. City of Cambridge, 277 U.S. 183, 188 (1928) ("The governmental power to interfere by zoning regulations with the general rights of the land owner by restricting the character of his use, is not unlimited, and, other questions aside, such restriction cannot be imposed if it does not bear a substantial relation to the public health, safety, morals, or general welfare.").

tional norms.¹³⁴ Because local government (county, city, or town) ordinances and regulations are legislative in nature, this section of the article focuses on the due process requirements for legislative acts and potential outcomes local governments should be aware of when making efforts to regulate oil and gas development.

The Due Process clause of the U.S. Constitution provides minimum mandatory protections applicable to all, but similar clauses found in state constitutions may be interpreted as providing even greater limits on government intrusion. States have taken a variety of approaches to analyzing substantive due process challenges brought under both the federal Due Process clause and state counterparts. Some states look carefully (but still with deference to the local government's conclusions) at the benefits a local regulation creates in relation to its lawful purpose as compared to the burdens and costs on the aggrieved party's rights. For example, a Texas court applying a state counterpart to the federal Due Process clause looked at the costs and benefits of legislation to determine whether the "actual, real-world effect" of the law on the aggrieved party "could not arguably be rationally related to, or is so burdensome as to be oppressive in light of, the governmental interest." 135

In Patel v. Texas Dep't of Licensing & Regulation, a state licensing scheme required eyebrow threaders to obtain a cosmetology license which required 750 hours of training that, the threaders argued, "had no rational connection to reasonable safety and sanitation requirements, which the State says are the interests underlying its licensing of threaders." The Texas Supreme Court agreed, stating that

[T]he admittedly unrelated 320 required training hours, combined with the fact that threader trainees have to pay for the training and at the same time lose the opportunity to make money actively practicing their trade, leads us to conclude that the Threaders have met their high burden of proving that, as applied to them, the requirement of 750 hours of training to become licensed is not just unreasonable or harsh, but it is so oppressive that it violates [the due process clause of the state constitution]. 137

Although occurring in the context of burdensome licensing requirements, the *Patel* decision illustrates that local government regulations that burden oil and gas operators with "oppressive" requirements may not survive review, depending on the governmental interest at stake and the strength of the relation between the ordinance and the governmental

^{134.} Chesney, R. Old Wine or New: The Shocks-the-Conscience Standard and the Distinction between Legislative and Executive Action. 50 Syracuse L. Rev. 981 (2000).

^{135.} Patel v. Tex. Dep't of Licensing & Reg., 469 S.W.3d 69, 87 (Tex. 2015).

^{136.} Id. at 88.

^{137.} Id. at 90.

interest. Banning hydraulic fracturing entirely may serve the ends of protecting road infrastructure, but the resulting infringement on oil and gas owner's property rights may violate the dormant commerce clause because such an action may entirely wipe out property rights, where less onerous measures may serve equally to protect the roads. Less burdensome restrictions are more likely to be considered rationally related to the government's legitimate need to maintain transportation infrastructure.

With respect to zoning ordinances, Illinois courts have applied an eight factor test that includes a review of the gain to the public in relation to the burden to the property owner within the context of existing property uses nearby.¹³⁸ Other states take a more deferential view of local government control over property rights.¹³⁹

Oil and gas companies have raised substantive due process challenges to local regulations, but most of these claims have settled or been resolved on other grounds. However, in *Swepi, LP v. Mora Cty.*, ¹⁴⁰ the court found that the oil and gas association had standing to bring a substantive due process claim challenging a local ordinance banning drilling by corporations because the "the claim centers around deprivation of its property – its [oil and gas] leases – for an arbitrary reason – because it is a corporation." ¹⁴¹ The court nevertheless found no substantive due process violation because property is not a fundamental right, and the county had a rational basis for banning corporations, but not individuals, from hydrocarbon extraction; that is, only corporations typically engage in drilling.

For purposes of substantive due process challenges, evidence regarding the burden to the oil and gas driller or property owner in relation to existing local land use approaches and the benefits to be gained by the ordinance are likely to be relevant. Local planners attempting to enact ordinances to manage the impacts of oil and gas to local roads (a legitimate government purpose) arguably have a myriad of approaches available to them that would survive any substantive due process challenge. However, planners should give consideration so that the means by which a local ordinance accomplishes a legitimate government purpose is rea-

^{138.} Twigg v. Cty. of Will, 627 N.E.2d 742 (III. App. Ct. 1994) (finding unconstitutional a local zoning ordinance that prohibited a landowner from building two residences on a 5-acre parcel).

^{139.} See e.g., Bonner v. City of Brighton, 848 N.W.2d 380, 393 (Mich. 2014) (rejecting due process challenge to local ordinance that allowed destruction of unsafe structures without providing property owner the opportunity to repair).; Cormier v. Cty. of San Luis Obispo, 207 Cal. Rptr. 880 (Ct. App. 1984).

^{140.} See Swepi, supra note 50.

^{141.} Id. at 1153.

sonable in relation to the burdens it imposes on property owners or other recognized rights of citizens or companies.

F. SUPREMACY CLAUSE

The oil and gas operators in *Swepi* succeeded on their claim that the local county ordinance violated the Supremacy Clause of the U.S. Constitution by declaring that corporations would not have federal constitutional rights. The court ruled that these sections of the ordinance were invalid as conflicting with the established decisions of the U.S. Supreme Court interpreting the U.S. Constitution, noting that a local ordinance cannot strip corporations of their federal constitutional rights.

G. 42 U.S.C. § 1983

The vehicle through which oil and gas operators are likely to assert a cause of action for local government violations of constitutional rights and federal law is 42 U.S.C. § 1983.¹⁴² Section 1983 provides that any person whose federal or constitutional rights (such as the right not to be deprived of property without due process) are violated by persons acting "under color of [law]" is liable to the injured party. Section 1983 applies to local legislative bodies such as town councils and zoning boards, and local governments are not immune from suit.¹⁴³ Local ordinances can be invalidated and local governments may be required to pay attorney's fees.

IV. A POLICY TOOLKIT FOR LOCAL PLANNERS

Dale Krane has called the "degree and types of discretionary authority possessed by local governments [the] 'toolkit' with which local officials may act to satisfy local needs." Unfortunately, many local planners in rural, underfunded communities — precisely the places where oil and gas development often takes place across the nation — do not have access to such a toolkit, but are forced to creatively develop one as they go, some with more success or "buy-in" from operators than others. The approaches discussed in this article are broad; the specifics must be determined by local planners addressing local needs which will vary across communities. For example, while impacts may be addressed through the requirement that an operator obtain a drilling permit, the precise terms of that permit will vary. The permit may prescribe certain routes that must be avoided or taken, may impose an impact fee that will be delegated to road repair, may require a pre-well construction road analysis, an in-kind grant of road construction materials to the locality, or any

^{142.} See Ritchie, supra note 132.

^{143.} Id.

^{144.} See Krane, supra note 29.

number of requirements. Moreover, the approaches discussed here are targeted to addressing impacts to transportation infrastructure; other types of impacts may best be served by the utilization of other tools at a local government's disposal (e.g., noise or dust mitigation, ecosystem protections, etc.).

Figure 1 sets forth a survey of some regulatory approaches identified in this article, along with potential challenges depending on the approach selected, that local governments and attorneys could use to quickly assess potential options to addressing impacts to transportation infrastructure. The box at the top of the Figure indicates that the local government must first have been delegated power by the state legislature in order to act. Although determining the extent of this power is a critical first step, most local governments have been delegated some form of power by the state, so the next step shown on the Figure concerns whether the local government will exercise its zoning power or its police powers. As illustrated, the use of the zoning power entails local land use controls that a local government can implement, such as to prohibit oil and gas development next to a school or residential district.

The other pathway available to local governments is the exercise of the police power. This can take the form of mandatory and legally binding ordinances that would be imposed on operators, or voluntary agreements that the operators would enter into with the local government. Approaches colored in orange are more likely to be vulnerable to the potential legal challenges correspondingly indicated in orange to the right under the heading "Potential Challenges." The "agreements" pathway is colored green because voluntary agreements are less likely to be the subject of legal challenges than mandatory ordinances. However, the specific examples of agreements are shown half in orange because while they are less likely to be challenged given the input the oil and gas operator has into the process, they are not immune from the selected potential challenges; local governments should therefore assure even voluntary agreements are legally defensible. This is especially true where the local government may require the execution of a 'voluntary' agreement in order to obtain a drilling or other essential permit. The framework represented by Figure 1 is intended to assist localities in developing defensible strategies that support the maintenance of transportation infrastructure and the efficient allocation of scarce resources.

^{145.} Zoning power and police powers, as noted above, can be interlinked, but for purposes of Figure 1 they are considered separately because zoning has traditionally been one of the fundamental powers of a local government and would be limited primarily to land use decisions.

V. Conclusion

As many studies have now made apparent, whether and how much road degradation occurs in a community from an influx of hydraulic fracturing is dependent on many factors. These include the number, weight, and types of trucks, but also the road design, road age, other road uses, local maintenance approaches, season, weather, and geographic location (roads subject to a freeze-thaw cycle can experience significantly more damage than roads in more temperate climates). Accordingly, there is no single approach (regulatory, market driven, voluntary, or otherwise) that will adequately address all the problems experienced across the country. Rather, a number of potential approaches to draw from is needed, one that is flexible and from which local planners can adapt to suit unique local circumstances. In the transportation context, oil and gas operators and local planners have the same goal: transportation infrastructure that performs with adequate safety. Some of the approaches outlined in this article can be instrumental in supporting improved local decision making and assisting local governments better understand which approaches maymost benefit their communities. Understanding the legal authority for local government action, and the potential legal challenges to selected regulatory approaches, can better position local planners to promote and defend the responsible development of oil and gas resources.

