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Giving Landowners the Power: A Democratic Approach for Assembling Transmission Corridors

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ABSTRACT

As the United States systemically increases its renewable energy capacity, new approaches for acquiring land corridors are needed to develop electric transmission lines. Extensive transmission line development is needed to connect our cities to our nation’s remote but ample renewable energy resources, such as rural Nebraska’s wind. This will require developers to acquire thousands of acres of land from private landowners across the country. To minimize the risk of landowner opposition, this article provides several innovative land-assembly alternatives to the traditional eminent domain model. Moreover, many projects will cross state lines requiring siting approval from every state that the lines run through. To eliminate the uncertainty involved with meeting each state’s unique siting laws, this article advocates for the adoption of uniform state siting laws.

By following the recommendations of this article, the land acquisition component for developing new transmission lines will become more certain, procedurally efficient, and cost effective. Further, the nation will be in a better position to realize the significant benefits of new transmission lines through: lowered electric rates; improved energy reliability; increased economic development, especially in rural areas; mitigation of climate change effects; conservation of natural resources; and promotion of energy independence, which bolsters national security.

INTRODUCTION

The United States has historically benefitted from interstate collaboration. In the nineteenth century, collaboration on the railroads allowed for a surge in economic activity as goods and ideas traveled...
the country more readily. Now, in the twenty-first century, the nationwide development of renewable energy resources promises to promote a significant increase in economic activity. Moreover, the development of renewable energy resources will reduce fossil fuel dependence, mitigate the effects of climate change, and promote national security.

To implement renewable energy resources in a meaningful way, new high-voltage transmission lines are needed. The development of new transmission lines will allow our nation’s most ample sustainable resources, such as wind and solar, to replace dirty and imported alternatives. Some engineers estimate that seven billion dollars of transmission investment is required over the next seventeen years to properly implement such renewable energy generation. Unfortunately, much of this development is not taking place.

In part, the legal process for acquiring transmission corridors has frustrated development. The current legal process suffers from the following problems: (a) a lack of conformity between state laws for siting transmission and condemning land, (b) landowners’ distrust of government, developers, and one another, and (c) the inability of eminent domain to provide just compensation. Fortunately, solutions are available to address these problems.

First, interstate cooperation should be pursued to create uniform state siting and condemnation laws. Without interstate cooperation,

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disparate state laws will continue to create uncertainty and discourage development. These concepts are discussed further in Part I.B. and D.

Second, earnest public participation efforts can reduce landowner opposition to land assembly projects and encourage voluntary participation. Public participation creates opportunities for landowners to have their concerns addressed before they become divisive issues. These concepts are discussed further in Part II.A.

Third, the use of voting to facilitate collective decision making can minimize problems associated with compensation and holdouts. By providing landowners with the ability to vote, landowners can assess the value of their land and collectively accept or reject offers. This framework also allows a majority of consenting landowners to overcome a dissenting minority and push economically beneficial projects forward. Additionally, voting provides landowners with the ability to determine which land uses benefit the public. These concepts are discussed further in Parts I.A. and II.B.

Fourth, common-ownership structures can reduce transaction costs associated with landowners’ distrust of each other during the land assembly process. Rather than engage in costly administrative and legal techniques, deployed to combat neighbors who are acting in their own self-interest, landowners can use a short-term co-owned corporations to maximize and fairly distribute profits. These concepts are discussed further in Part II.B.

The recommendations of this Article show great promise in creating procedural and cost efficiencies and must be considered by transmission providers. Consistent with the Federal Energy Regulatory Commission (FERC) Order No. 1000 (Order 1000) and the Federal Power Act (FPA), transmission providers should be required to consider these recommendations because they can achieve “just and reasonable” rates for consumers. These concepts are discussed further in Part II.A. and B.

As the energy demands of our nation evolve, it is critical that the regulatory framework also evolves. To encourage transmission development, the United States needs a regulatory framework that minimizes the time, cost, and uncertainty when acquiring land for transmission corridors. Without such a framework, the nation will likely forgo the opportunity to mitigate the effects of climate change and bolster national security. Moreover, the nation will also forgo the opportunity to realize billions of dollars in economic activity and hundreds of thousands of jobs in rural America. The jobs would include high-paying short-term construction jobs, long-term operations jobs and manufacturing work; economic activity would result from demand for local supplies, increased taxes, and indirect business, such as banking. This Article recommends implementing uniform state laws for the development of transmission lines and including landowners in the planning and profits, so that much of the existing uncertainty for assembling land transmission-corridors can be resolved and more development can occur.

I PROBLEMS WITH EMINENT DOMAIN

Widespread development of transmission lines will inevitably impact a large number of landowners. As a consequence, there is a serious risk that many landowners will oppose development.

4 See Silverstein, supra note 2 (“While the [economic and environmental] concerns and the subsequent legal battles are well intended, they oftentimes perpetuate uncertainty. [This uncertainty makes] investors . . . skeptical [and causes them to put] money in alternative investments . . . ”).


7 Hladik, supra note 6, at 14–15; Francis, supra note 6.
Historically, eminent domain has overcome landowner opposition. However, as the United States moves forward with the development of renewable resources, fair treatment of landowners is essential to avoid opposition, which can slow development and increase costs even when eminent domain is available.\(^8\)

Eminent domain is the power of the government to take property from landowners. The federal government’s takings power is limited by the Fifth Amendment, and incorporated against the states through the Fourteenth Amendment.\(^9\) Current eminent domain doctrine provides legislatures and administrative agencies broad condemnation authority, so long as their projects promote a “public use” and the landowners are provided “just compensation.”\(^10\) Many scholars argue that the current eminent domain doctrine places an unfair burden on landowners and has the potential to promote economic waste.\(^11\)

\(^8\) Michael Heller & Rick Hills, Land Assembly Districts, 121 HARV. L. REV. 1465, 1482 (2008) (explaining that landowners “can do much to hasten or delay the pace of a land assembly through litigation, demonstrations, and sheer political muscle.”); see Amanda Loder, Landowners and Towns are Blocking a New Route for Northern Pass, STATE IMPACT (Mar. 12, 2012, 11:52 AM), http://stateimpact.npr.org/new-hampshire/2012/03/12/how-landowners-and-towns-are-blocking-a-new-route-for-northern-pass/ (detailing how landowners opposed to a transmission line refuse to sell, put pressure on neighbors not to sell, and try to pass ordinances to slow and make the project more expensive); Edith Tucker, SPNHF Has P&S Agreements With 4 Landowners to Block Northern Pass, COOS COUNTY DEMOCRAT (Aug. 27, 2012), http://www.newhampshirelakesandmountains.com/Articles-Coos-County-Democrat-c-2012-08-26-156958.113119-SPNHF-has-PandS-agreements-with-4-landowners-to-block-Northern-Pass.html (“[T]he . . . land conservation organization said they believe that the acreage now under agreement lies directly in what they called ‘the obvious intended path’ of the proposed . . . high-voltage direct-current transmission line project.”); see also Stephanie Hemphill, Xcel Ends Agreement on Goodhue Wind, MPR NEWS (July 24, 2013), http://minnesota.publicradio.org/display/web/2013/07/24/wind-problems?refid=0 (explaining that an unpopular wind farm project lost a contract and risks not meeting permit deadlines due to landowner opposition); Paul Kessinger, Large Crowd Shows Up for KCC Hearing, MARYSVILLE ADVOC. (Aug 14, 2013, 4:53 PM), http://www.marysvilleonline.net/articles/2013/08/16/news/doc520be6e28b049596574082.txt (“’My land is not for sale,’ was an oft-used phrase among landowners at the [public] hearing and it drew plenty of applause [to show support for the opposition of the proposed interstate transmission line].”).


\(^11\) E.g., Nathan Burdsal, Note and Comment, Just Compensation and the Seller’s Paradox, 20 BYU J. PUB. L. 79, 81, 86, 89–90 (2005); Heller & Hills, supra note 8, at 1481–82.
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A. Just Compensation

In theory, just compensation should place landowners in the same financial position they would have been in had the taking of their property never occurred.\(^\text{12}\) Currently, compensation is determined by assessing the fair market value (FMV) of the land. FMV is the theoretical market value a willing buyer and willing seller would reach in a voluntarily transaction.\(^\text{13}\) However, condemnation proceedings overlook the fact that landowners are not willing sellers.\(^\text{14}\) As a result, the proceedings ignore landowners’ subjective values that are in excess of FMV.\(^\text{15}\) Additionally, the use of eminent domain creates a risk that the economic benefits of a project will be offset by significant administrative and legal costs.\(^\text{16}\) Due to these deficiencies in the current just compensation model, a better framework is needed.

First, the just compensation model tends to undercompensate landowners because it ignores individuals’ anthropocentric valuations.\(^\text{17}\) In other words, FMV does not account for personal preferences, emotional sentiment, community bonds, or suitability of land for particular uses.\(^\text{18}\) For instance, if a governmental entity condemned a landowner’s generational home and family farm in order to construct a transmission line, the owner’s subjective value may exceed the FMV. This is especially true if the owner found value in the fact that his great-grandfather had built most of the structures, intended to pass the farm to his children, and he himself had strong ties to the community.\(^\text{19}\) Empirical evidence from court proceedings

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\(^{12}\) Burdsal, supra note 11, at 80; see also 26 AM. JUR. 2D Eminent Domain § 271 (2014) (“The compensation to which the owner is entitled is the full and perfect equivalent of the property taken, in combination with compensation for the damage inflicted by the taking.”).

\(^{13}\) Burdsal, supra note 11, at 91.

\(^{14}\) Id. at 91–94.

\(^{15}\) Id. at 83–85, 93–94.

\(^{16}\) Id. at 90.

\(^{17}\) Heller & Hills, supra note 8, at 1479–80.


confirms this tendency of the FMV model to undercompensate landowners.20

As a consequence of the FMV model’s inability to determine the true cost of condemning land, there is a risk that eminent domain proceedings could support projects that, on the whole, destroy economic value.21 Expanding on the family farm example, if one hundred landowners assign an average value of $300,000 to their family farms for a total of $30 million, but an assessor assigns an average FMV of $250,000 for a total of $25 million, there would be a difference in “value” of $5 million. If the farms were then condemned for a transmission project that resulted in a net societal benefit of $27 million, society would realize an economic loss of $3 million and the families in aggregate would realize an economic loss of $5 million. One could argue that the families’ values are illogical, but if those values are genuinely derived from the owners' anthropocentric perceptions, society has truly experienced a loss.22

Second, the current just compensation model also has the potential to create economic waste through legal and administrative costs.23 As noted above, FMV tends to undercompensate landowners. When this occurs, landowners sometimes challenge the compensation award in court, creating legal costs. These costs can be significant and may include greater land valuations and litigation expenses.24 For instance, the City of Garden Grove, California, condemned a property for $640,000 and the landowner challenged the valuation.25 The City lost the challenge and had to pay $1,070,000 for the property and $620,000 in attorney’s fees.26 In cases like this, the economic benefit that a condemning entity hopes to achieve can easily be offset by legal costs and higher land valuations.

In addition to potential legal costs, administrative costs are a guaranteed source of economic waste in every eminent domain proceeding. Administrative costs are incurred through “obtaining

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20 Burdsal, supra note 11, at 84, 90–91.
21 Id. at 86; see also Heller & Hills, supra note 8, at 1481–82.
22 See Burdsal, supra note 11, at 86–87.
23 Id. at 90.
24 Id. at 90–91.
25 Id. (citing Property Rights Victories, ORANGE COUNTY REG., Nov. 26, 2000).
26 Id.
legislative authority, drafting and filing a complaint, serving process, [and] securing a formal appraisal . . . ."\textsuperscript{27} Due to these costs, many scholars believe voluntary market transactions, which lack administrative and legal costs, are more efficient than eminent domain proceedings.\textsuperscript{28}

The goal of just compensation should be to return property owners to a financial position that is truly equal to the position that they would have been if the taking of their property had never occurred. As illustrated above, however, just compensation depends on FMV, which fails to adequately assess the owners’ actual financial position. Because FMV fails to accomplish this goal, the government fails to assess the true cost of projects, which encourages economic waste and burdens landowners. This is especially troubling when taxpayers or ratepayers fund the project. Some scholars believe that the just compensation and public use models should be modified to require experts to more accurately assess values and public need.\textsuperscript{29} Others argue that eminent domain should be discontinued in most circumstances, excluding essential public works projects.\textsuperscript{30} This article follows the latter position and advocates for the use of collective decision making, common ownership, and public participation to maximize voluntary participation and to achieve fairer compensation.

**B. Public Use**

In \textit{Kelo v. City of New London}, the Court found that the term “public use” provides local governments with expansive eminent domain authority.\textsuperscript{31} In \textit{Kelo}, a local government condemned a neighborhood including an unblighted home for the purpose of encouraging economic development.\textsuperscript{32} The Court held that the need for economic development was an appropriate public use.\textsuperscript{33} However, the Court noted that states could impose more stringent public use

\textsuperscript{27} Id. at 90.
\textsuperscript{28} Id. at 88–90 (citing Thomas W. Merrill, \textit{The Economics of Public Use}, 72 \textit{Cornell L. Rev.} 61, 77–78 (1986)).
\textsuperscript{29} Heller & Hills, supra note 8, at 1470–71.
\textsuperscript{30} Id. at 1470–71, 1494.
\textsuperscript{32} Id. at 473–75.
\textsuperscript{33} Id. at 488–90.
requirements. \(^{34}\) Therefore, *Kelo* represents a constitutional floor, which states can exceed.

In response to *Kelo*, most states enacted legislation that defined public use more narrowly. \(^{35}\) In Missouri, for example, the legislature withdrew condemnation authority for projects with the sole purpose of encouraging economic development. \(^{36}\) Other states left intact preexisting law that have the effect of limiting the *Kelo* holding. In Michigan, for example, condemnation authority remains limited to projects that protect public health, safety, and to other instances where “saving elements” are present. \(^{37}\) As a consequence of these independently developed public use requirements, interstate transmission developers face uncertainty and legal costs when attempting to comply with the laws of multiple states. \(^{38}\)

**C. Transmission Projects and the Determination of Need**

As a part of the public use requirement in an eminent domain proceeding, the condemning entity must make a determination of need. \(^{39}\) In *Kelo*, the Court noted that deference should be afforded to a determination of need, relying on the doctrines of federalism and separation of powers. \(^{40}\) The determination of need is a balancing test that weighs the benefits against adverse effects of a project—many states limit their analysis to in-state concerns. \(^{41}\) In-state benefits associated with transmission projects include improved reliability,

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34 *Id.* at 489–90 (citing County of Wayne v. Hathcock, 684 N.W.2d 765 (Mich. 2004)).


36 MO. ANN. STAT. § 523.271(1) (West 2012) (“No condemning authority shall acquire private property through the process of eminent domain for solely economic development purposes.”).

37 Cnty. of Wayne v. Hathcock, 684 N.W.2d 765, 783–84 (Mich. 2004) (expressing a conservative takings rule premised on the state’s police power to protect health and safety. The court noted three factors it called saving elements: (1) eminent domain would be required for assembling the project, (2) the project would be subject to public oversight after being sold, or (3) the project served the public good.).


39 See 26 AM. JUR. 2D Eminent Domain § 33 (2012) (explaining that “the [condemnation entity] must consider all public benefits of the proposed taking against all the burdens and social costs suffered by every affected property owner.”); *Kelo*, 545 U.S. at 483, 488–90.

40 *Kelo*, 545 U.S. at 482–83.

41 Rossi, *supra* note 38, at 1019, 1021.
efficiency, economic development, and the direct provision of power to citizens. The adverse effects analysis is primarily concerned with the local environment and the impact a project will have on fauna, parks and wilderness, watersheds, aesthetics, air quality, farming, and human health. Additionally, economic effects are also considered, such as changes to energy rates. Traditionally, if a project does not directly provide power to citizens, the project will be rejected. An example of this comes from Mississippi, where a transmission project was rejected because it would have brought power generated in Mississippi to consumers in Louisiana.

Some states’ short-sighted laws have stymied society’s ability to take advantage of the benefits from interstate transmission development. The many benefits of interstate transmission include national energy independence, reduced greenhouse gas emissions, conservation of natural resources, and regional economic development.

The transmission siting process also requires a determination of need. This requirement is a historic remnant from the noncompetitive era that protected consumers from paying for unnecessary infrastructure built solely to increase the utilities’ revenues—a problem now mitigated by market competition from unregulated entities, like merchant transmission developers. A determination of need for the siting process typically goes by one of two names, “certificate of need” (CN) or “certificate of public convenience and necessity” (CPCN). The certificates are commonly obtained from local governments and state public utility

42 Id.; Rossi & Brown, supra note 5, at 724.
43 Rossi, supra note 38, at 1021–22.
44 Rossi & Brown, supra note 5, at 721, 726–27.
45 Id. at 725; Rossi, supra note 38, at 1019.
46 Miss. Power & Light Co. v. Conerly, 460 So. 2d 107, 113 (Miss. 1984).
47 Rossi & Brown, supra note 5, at 739–41.
48 Id. at 710-11.
49 Id. at 721.
50 Id. at 728–31.
51 Alexandra B. Klass, Univ. of Minn. Sch. of Law, Takings and Transmission, Presentation at the 14th Annual Conference on Litigating Takings Challenges to Land Use and Environmental Regulation, 3 (Nov. 18, 2011) [hereinafter Klass I]; Alexandra B. Klass, Takings and Transmission, 91 N.C. L. REV. 1079, 1114 n. 220 (2012) [hereinafter Klass II] (expanding upon Klass’ presentation at the 14th Annual Conference on Litigating Takings Challenges to Land Use and Environmental Regulation).
commissions.\textsuperscript{52} Granting authorities tend to limit a determination of need to in-state concerns and some only grant certificates to traditional utilities.\textsuperscript{53}

As a result of the current legal framework, non-utilities and utilities lacking in-state customers may not have access to “the full benefits of siting approval, including the power of eminent domain.”\textsuperscript{54} Lack of eminent domain authority almost halted the Montana Alberta Tie Line, which would have been aborted had it not been for the Montana legislature quickly passing a bill that granted eminent domain authority to transmission developers who comply with siting requirements.\textsuperscript{55} The preservation of antiquated and disparate state laws represents an unnecessary obstacle blocking society from realizing the tremendous benefits of interstate transmission development.\textsuperscript{56}

\textbf{D. Where We Are and Where We Need to Go}

Many scholars and courts believe that voluntary land transactions should be pursued in most situations.\textsuperscript{57} However, this view is frequently rejected because courts often condemn land and many scholars preach that holdouts are unavoidable and impede economic progress.\textsuperscript{58} While eminent domain may be appropriate for essential public works and emergencies,\textsuperscript{59} defaulting to the use of condemnation authority without thoughtful analysis is ill-advised.\textsuperscript{60}

\textsuperscript{52} Klass I, supra note 51, at 3; Klass II, supra note 51, at 1114 n.220.
\textsuperscript{53} See Brown & Rossi supra note 5, at 719–721, 739–40.
\textsuperscript{54} Id. at 720.
\textsuperscript{56} See Brown & Rossi, supra note 5, at 770.
\textsuperscript{57} See Burdsal, supra note 11, at 89–90.
\textsuperscript{58} E.g. Heller & Hills, supra note 8, at 1469 (“Land sits idle in a tragedy of the anticommons—the wasteful underuse caused by too-abundant entitlement holders.”).
\textsuperscript{59} Even the dissenting opinion in \textit{Kelo} recognized traditional doctrine allows “the sovereign [to] transfer private property to private parties, often common carriers, who make the property available for the public’s use—such as with a railroad, a public utility, or a stadium.” \textit{Kelo} v. City of New London, 545 U.S. 469, 498 (2005) (O’Connor, J., dissenting). The public benefits derived from developing more transmission are economic development, reliability, mitigation of climate change, and lower rates. Klass brings up the point that merchant development might blur the line between common carrier and economic development. Klass supra note 51, at 1096–97.
\textsuperscript{60} See Heller & Hills, supra note 8, at 1481–82.
First, frequent use of eminent domain erodes liberty and property rights. Some eminent domain proceedings may even violate the due process clause. Second, indiscriminate granting of condemnation authority can lead to a lack of adequate economic screening and promote projects that destroy economic value. Third, eminent domain proceedings create conflicts of interest where the government must choose between industry and individuals.

FERC, in recognition of the importance of interstate transmission, has taken steps to improve the regulatory climate. However, legal and political developments delay further progress. While some states are in support of the development of interstate transmission, sufficient cooperation between states has not taken place. Without more deliberate and widespread interstate cooperation, the inconsistencies of state public use requirements, siting practices, and

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61 See Lehavi & Licht, supra note 18, at 1716.
62 Under the Natural Gas Act, FERC merely provides a hotline to affected landowners, which appears to provide no meaningful review of complaints. This is a wholly undemocratic process, as FERC employees are not elected. Therefore, if a landowner is unhappy with the result, he cannot remedy the situation by voting for a new official. This raises concerns about accountability and the constitutionality of administrative agencies, especially when one considers the deference given to administrative agencies in cases like *Chevron*. Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 866 (1984).
63 Burdsal, supra note 11, at 86.
64 See Lehavi & Licht, supra note 18, at 1725–26.
other laws will continue to act as a barrier for transmission development.68

Legislatures must adopt uniform eminent domain and siting laws to encourage interstate transmission development. Moreover, as described in Part II, the problems associated with eminent domain can be minimized by encouraging voluntary participation when assembling land using public participation techniques, common ownership structures, and collective decision making. Following these recommendations would ultimately allow landowners and society to benefit from the development of interstate transmission lines.

II
REMEDYING THE DEFICIENCIES OF EMINENT DOMAIN: HOW LAND SHOULD BE ACQUIRED

This article suggests two strong solutions for remedying the deficiencies of eminent domain. The first solution is the widespread adoption of public participation techniques to encourage voluntary participation and limit landowner opposition. The second solution is the adoption of an organizational structure that utilizes collective decision making and common ownership to remedy the subjective valuation and holdout problems.

A. Public Involvement or Private Information: Which Path to Take?

Academic research and real world examples show that the public involvement approach limits holdouts and encourages voluntary participation.69 However, without the aid of condemnation authority, the public involvement approach will likely still produce holdouts.70 Therefore, in instances where eminent domain is unavailable, some might prefer the private information approach.

However, this is not the signal that should be sent to merchant transmission developers as a matter of sound national policy.71 The

68 Disparate state laws represent a barrier to developers by discouraging initiation of research and blocking access to capital. Ultimately, disparate state laws create uncertainty and discourage socially beneficial projects. See Silverstein, supra note 4.
70 Id. at 11, 25.
71 Id. at 3, 26; see Brown & Rossi, supra note 5, at 719–21, 739–40.
use of the private information approach—not telling landowners why land is being assembled—is not well suited for transmission projects because after a few projects landowners will quickly learn to distrust and likely oppose these much needed projects. Therefore, it is the recommendation of this article that developers assemble transmission corridors by engaging with the public. Moreover, eminent domain authority should only be used if the condemning authority demonstrates a good faith effort to engage the public.

Holdouts can cause projects to fail or experience significant delay. Holdouts occur when sellers take advantage of their monopoly power, as the sole possessor of a unique piece of property, and attempt to extract excessive profits from the project.72

In the context of transmission development, holdouts are a problem because the number of landholders that are needed to form a consensus can be great. In the analogous context of assembling a highway corridor, Professor Richard Epstein said:

There are probably, at a guess, a hundred thousand or more landowners from whom you would have to assemble rights of way in order to build [a highway] between Chicago and New Orleans. If you announce that there are only six or eight alternative routes that you could have, each one of which could be blocked by one landowner under the circumstances, that would be a recipe for disaster . . . . It simply cannot be denied that the holdout problem is very, very devastating.73

I. Public Involvement Approach

A good-faith effort to involve the public would reduce the number of landowners who oppose a project. First, providing landowners with ample information mitigates the risk of holdouts caused by fear of a developer behaving opportunistically. Second, an open dialogue allows developers to proactively address landowner concerns.

Studies show that imperfect information causes mutually beneficial deals to break down due to a party’s inability to verify the other party’s claims.74 For landowners, this occurs because they do not

72 Heller & Hills, supra note 8, at 1473.
74 DUKE & BROMLEY, supra note 69, at 3 (“[I]nformation asymmetry is the predominant reason for failure in the land-assembly market . . . .”); see also SEAN M. COLLINS & R. MARK ISAAC, HOLDOUT: EXISTENCE, INFORMATION, AND CONTINGENT CONTRACTING 14–15 (2011) (“[I]t may be difficult in some circumstances for] the buyer
know what share of a developer’s profit they will receive and cannot independently confirm what they are told. For developers, this occurs because they do not know landowners’ subjective valuations. In a 2009 article, Joshua Duke and Daniel Bromley argue that this information asymmetry is the primary obstacle to voluntary transactions. Therefore, providing landowners with more information should reduce holdouts as well as the transaction costs associated with attempting to overcome holdouts.

However, even when developers provide information to the public, imperfect information still persists because the landowner’s subjective values remain private. This creates a strong bargaining position for landowners if eminent domain is not available. One way to close the information gap is to assess the subjective land valuation that each landowner holds. This can be accomplished by looking at the factors that make an individual landowner operate differently than a hypothetical willing seller, such as their duration of occupancy, nature of use, proximity of the land to places-of-interest, and personality. A better solution to this problem is creating a collective decision-making entity, because it aggregates landowners into a single decision-making body.

Earnest engagement with the public allows developers to resolve many potentially divisive issues early on in the planning process. Through the use of the techniques discussed below, developers can identify opponents and resolve conflicts before opposition becomes entrenched. Moreover, developers can gather useful information from the public, such as the location of private cemeteries, to help prevent unnecessary routing delays.

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75 COLLINS & ISAAC, supra note 74, at 14–15.
76 See DUKE & BROMLEY, supra note 69, at 10–11.
77 Id. at 3.
78 See id. at 17; Lehavi & Licht, supra note 18, at 1732–33.
79 DUKE & BROMLEY, supra note 69, at 11.
80 Id. at 25.
82 Id.
Additionally, FERC Orders 890 and 1000 encourage robust public participation. The orders accomplish this by requiring transmission planners to seek comment from customers and stakeholders in regional planning. Though the orders are silent in the context of assembling land for specific transmission lines, the wisdom of the orders should be applied to individual projects. Ultimately, a good-faith public participation approach would likely encourage efficient processes and lower costs. Therefore, transmission providers should adopt the public involvement approach. Below is an analysis of two public involvement case studies that outline successful industry practices and demonstrate the merit of earnestly pursuing public involvement.

a. Western Area Power Administration Case Study

The Western Area Power Administration (WAPA), a federal power-marketing agency under the Department of Energy, is successful at implementing public involvement techniques. WAPA transmits power through 17,000 miles of line but has only utilized eminent domain 4% of the time. This is far better than the 10%...
average for federal agencies. WAPA accomplishes this by keeping stakeholders well informed, and provides them opportunities to be heard in the decision-making process.

WAPA follows the International Association for Public Participation’s (IAPP) level of participation labeled “involve.” This means that the agency “work[s] with [the public] to ensure that . . . concerns . . . are directly reflected in the alternatives developed and provide[s] feedback on how the public influenced the decision.” WAPA believes that each public involvement activity must be tailored to the particulars of a project and finds that working with interested stakeholders leads to more satisfying and productive results. WAPA tailors public participation by identifying (1) the appropriate decision-making process, (2) the objectives for each stage of the process, (3) the information the agency hopes to gain at each stage of the process, (4) the impacted stakeholders, (5) the circumstances that affect selection of public involvement techniques, and (6) the sequencing of public involvement techniques to accomplish needed information exchange.

While the agency customizes the public involvement approach for each leg of a project, the following two-step explanation illustrates the overall process. In step one, WAPA informs the public of the issue(s) and gains information from the public on their view of the issue(s). To facilitate this process, the agency provides the public with information about the nature of the project, the issue(s) that may arise, and how the public can get more information and participate. Next, the agency actively seeks to understand how significant

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88 Id.; see also Shadi Hakimi & Kara M. Kockelman, Right-of-Way Acquisition and Property Condemnation: A Comparison of U.S. State Laws, 44 J. TRANSP. RES. F. 45, 50–52 (2005) (analyzing state condemnation rates; many states have condemnation rates above 10%).

89 WAPA, supra note 87, at 1.

90 Id. at 7 (citing INT’L ASS’N FOR PUB. PARTICIPATION, IAP2 SPECTRUM OF PUBLIC PARTICIPATION (2000)).

91 WAPA, supra note 87, at 1.

92 Id.

93 Public involvement techniques are the various techniques a developer can use to engage the public; there is a wide range of options, from hosting open houses to holding votes. Public Involvement Techniques, U.S. DEP’T OF TRANSP., http://www.planning.dot.gov/publicinvolvement/pi_documents/techniques.asp (last visited Oct. 27, 2014).

94 WAPA, supra note 87, at 2.

95 Id.

96 Id. at 1–2, 8 fig.2.

97 Id. at 8 fig.2.
stakeholders view the issue(s) and their level of interest. Alternatively, for step one, the agency might provide the public with all of the available project options and get feedback on each option. In step two, WAPA takes the gathered information and attempts to make a decision that is both technically and politically feasible. After making its decision, WAPA provides the public with an explanation of its preferred choice and the process for reviewing the decision. The agency then holds itself out for suggestions and reactions to the decision. After considering feedback, the agency announces the final decision. WAPA may carry out this process several times for different aspects or geographic areas of a project.

This process has been very successful in avoiding holdouts on large projects. For the 350-mile-long California-Oregon Transmission Project, WAPA secured easements on 400 parcels, and used eminent domain with only three landowners, a holdout rate of less than 1%. However, for smaller projects, such as the thirty-mile-long Griffith Energy Project, one of the landowners held out, resulting in a holdout rate of over 9%. While WAPA did not eliminate all holdouts, the earnest use of public participation seems to strongly encourage cooperation.

b. Nebraska Public Power District Case Study

The Nebraska Public Power District (NPPD) works diligently to involve the public in the transmission planning process. The Land Manager for NPPD, Alan Beiermann, said using the “personal approach” has allowed the utility to complete projects with voluntary participation rates of 98–100%.

The first phase of NPPD’s public involvement approach is to reach out to regulators, municipalities, community organizations, and

98 Id.
99 Id.
100 Id. at 9 fig.2.
101 Id.
102 Id.
103 Id.
104 Id. at 1.
105 WAPA, supra note 87, at 5.
106 Id.
107 Telephone Interview with Alan Beiermann, Land Manager, and Terry Warth, Manager of Advocacy Group Relation, Nebraska Public Power District (June 25, 2013) [hereinafter NPPD Interview].
industry representatives. The goal of this phase is to raise awareness, educate stakeholders, and address as many concerns as possible before meeting with affected landowners. To win over skeptics at all phases, NPPD communicates the need and purpose of the projects and describes how the utility will be responsible in carrying out its tasks on the ground.

In the second phase of the public involvement approach, NPPD connects with members of the public, implementing the “personal approach.” NPPD’s process involves three rounds of open houses where the public is invited to review information and ask questions about the project. Moreover, NPPD not only provides public notice by placing ads in post offices and newspapers, but the utility also sends personal invitations to all potentially affected landowners recorded with county assessors. For the R-Project transmission line, the utility contacted 3,700 landowners along the prospective 220-mile line. Additionally, NPPD hosts multiple open houses at different geographic locations for the public’s convenience. Through these efforts, NPPD’s open houses have drawn up to 25% of landowners, compared to the 5–10% drawn by other utilities.

In addition to contacting landowners by mail, NPPD takes additional steps to accommodate landowners. If landowners cannot attend an open house, NPPD is happy to communicate with them individually. Moreover, for the South Sioux City Transmission Line, NPPD held morning and afternoon meetings to accommodate

108 Id.
110 NPPD Interview, supra note 107; see Transmission Line Open Houses Scheduled, NEB. PUB. POWER DIST. (Jan. 7, 2013), http://www.nppd.com/2013/transmission-line-open-houses-scheduled/ (“Landowners in the study area have been sent invitations to attend an open house at a location convenient for them.”).
111 NPPD Interview, supra note 107.
112 Id.; see Transmission Line Open Houses Scheduled, supra note 110.
113 NPPD Interview, supra note 107. For example, in the first round of open houses for the R-Project, nearly 600 people attended meetings. This represents 16% of the 3700 people invited; with two more rounds of interviews to go, this number will likely increase. NEB. PUB. POWER DIST., TRANSMISSION LINE OPEN HOUSES SET FOR SEPTEMBER (2013), available at http://www.nppd.com/assets/rproject/august2013.pdf.
114 This could be accomplished through phone calls. There is also a place to submit comments online. NPPD Interview, supra note 107; e.g., Submit Your Comments, NEB. PUB. POWER DIST., http://www.nppd.com/rproject/submit-your-comments/ (last visited Oct. 27, 2014).
residents who work day or night shifts. NPPD’s open houses typically run for six hours, which is longer than the open houses hosted by other utilities.

The three rounds of open houses help NPPD find the best routes for its transmission projects. The utility uses the first round of meetings to discuss the study area broadly. In these meetings, the public gives NPPD information on personal land development, small cemeteries, and other information to help the utility proactively avoid routing problems. After analyzing this information, NPPD develops possible corridors, which the community responds to in the second round of open houses. Then, from the feedback in the second round, NPPD narrows down the possible corridors to a preferred route and alternative route(s), and seeks comment in the third round. After going through a statutorily required public hearing and receiving public comment, NPPD announces a final route.

The third and final phase of the public participation approach occurs after the utility obtains the easements and begins construction. NPPD stays in contact with landowners and local officials to make sure concerns are still being heard and addressed. Because construction may damage surrounding land, it is important that NPPD restores the land to retain credibility for future development and ongoing relationships with the landowners. At the

117 NPPD Interview, supra note 107.
118 Id.
120 NPPD Interview, supra note 107.
121 Id.
122 Id.
123 Id.
124 Id.; see NEB. PUB. POWER DIST., RIGHT-OF-WAY ACTIVITIES (n.d.), available at http://www.nppd.com/assets/hoskins/openhouse2/slide18.pdf (“We strive to build positive, long-term relationships with landowners and tenants[].”); We strive to build positive, long-term relationships with landowners and tenants[]. The agency notes this goal is partly achieved through providing construction damage compensation for property restoration.
125 NPPD Interview, supra note 107.
end of the day, NPPD has the power to exercise eminent domain but uses it sparingly.\textsuperscript{126}

2. Private Information Approach

One study found that adoption of either a private or a public information approach may not actually affect the holdout rate.\textsuperscript{127} If this premise is accepted, one might prefer to adopt the private information approach because it can be more profitable for the developer.\textsuperscript{128} Therefore, merchant transmission developers might prefer the private information approach, since many lack eminent domain authority and are not statutorily required to provide project details to the public like traditional utilities. Below is a case study of one of the biggest private land assemblies in U.S. history.\textsuperscript{129}

\textit{a. Jim Rouse Case Study}

In 1963, real estate developer, Jim Rouse, acquired roughly 15,000 acres in Howard county Maryland without the aid of eminent domain.\textsuperscript{130} Within a few years, the rural area was transformed into the City of Columbia, Maryland, a sizable bedroom-community of Washington D.C.\textsuperscript{131}

To avoid the holdout problem, Rouse kept information private.\textsuperscript{132} He formed several puppet corporations creating the illusion of multiple buyers, each corporation employing a different realtor.\textsuperscript{133} The technique was successful because the community did not know the purpose of the land acquisition.\textsuperscript{134} The community speculated that

\begin{footnotesize}
\textsuperscript{127} COLLINS & ISAAC, supra note 74, at 9.
\textsuperscript{128} Id. at 13, 15.
\textsuperscript{129} See generally STEPHEN Peca, REAL ESTATE DEVELOPMENT AND INVESTMENT: A COMPREHENSIVE APPROACH 48 (Wiley 2009).
\textsuperscript{130} EICHLER & KAPLAN, supra note 81, at 61.
\textsuperscript{132} STEBENNE & MITCHELL, supra note 131, at 57; EICHLER & KAPLAN, supra note 81, at 61.
\textsuperscript{133} EICHLER & KAPLAN, supra note 81, at 61.
\textsuperscript{134} STEBENNE & MITCHELL, supra note 131, at 56.
\end{footnotesize}

the land was being acquired for a number of different reasons—everything from a Russian diplomatic complex to a landfill—making it difficult for landowners to estimate the project’s economic value and extract excessive profits.\(^{135}\)

To gauge landowners’ subjective valuations, offers were individualized based on the personality of the owner and the nature of the property.\(^{136}\) The first piece of property was acquired for $667 per acre,\(^{137}\) and the final average cost of land was $1,450 per acre.\(^{138}\) This rise in price seems to indicate that as public awareness increased so did the price Rouse had to pay to avoid holdouts.\(^{139}\) In the end, five landowners held out a total of 850 acres—a holdout rate of 5.5% for landowners, and 6% for acreage.\(^{140}\)

3. Why Public Information Is Better Suited for Transmission Development

At first blush, the private information approach may appear to be an acceptable avenue for assembling transmission corridors. The approach does not threaten property rights and allows individuals to contract voluntarily. Moreover, it does not create a circumstance where the government must choose between industry and individuals, and thus eliminates the risk of the government using taxpayer dollars to support economically wasteful projects. The private approach may also produce greater returns for merchant transmission developers. Regardless of these positive aspects, the private information approach is ill-suited for transmission development.

The main problem with using the private information approach is that it fails to remedy the holdout problem. While the approach worked for Jim Rouse in Columbia, it would not work well for transmission projects. First, transmission corridors have a distinct geographic footprint (long slender corridors between areas with low population that lead into larger population areas), which allows a

\(^{135}\) Id. at 57.

\(^{136}\) EICHLER & KAPLAN, supra note 81, at 61.

\(^{137}\) $1,000,000 / 1500 acres = $667. Id. at 58.

\(^{138}\) Id. at 61.

\(^{139}\) The cost of public awareness seems to be indicated by final cost per acre being more than twice the cost per acre of the first parcel acquired, $1450/$667 = 217%. The increased price could be attributed to paying for improvements to real property and other unique features, but the increase in cost is likely, at least in-part, from holdout.

\(^{140}\) EICHLER & KAPLAN, supra note 81, at 61.
single landowner to holdout and kill a project. Second, the distinct geographic footprint could tip-off savvy landowners that the project has only one developer. Moreover, as more projects occur nationally, it would become easier to identify these land grabs with transmission projects. Furthermore, the frequent use of the private information approach to fool landowners would likely create opposition and political hostility—as landowner displeasure and public sympathy would likely grow. This could create a significant barrier and block society from receiving the benefits of interstate transmission development.

Therefore, a public participation approach, like the one adopted by NPPD, is a better choice. Several studies support this choice, finding that public participation reduces conflict and produces greater satisfaction for participants. While the public participation approach shows great promise in reducing landowner holdout, coupling it with collective decision making and common ownership will create a new land-assembly framework that can increase voluntary participation and promote procedural and cost efficiencies.

B. Land-Assembly Frameworks that Encourage Landowner Participation

In addition to minimizing holdouts through public involvement, adopting an organizational structure that incorporates collective decision making and common ownership would overcome several shortcomings of eminent domain. The use of collective decision can alleviate problems associated with determining land values, 142 appropriate public uses, 143 and which holdouts should be vetoed. 144 The use of common ownership can eliminate landowner hesitancy to collaborate with other landowners. 145

142 Heller & Hills, supra note 8, at 1470–71, 1498.
143 Id. at 1470–71.
144 Id. at 1469–70.
145 See id. at 1501; Lehavi & Licht, supra note 18, at 1732–34.
Many scholars have attempted to reform eminent domain by redefining “just compensation” and “public use.”\textsuperscript{146} This approach leaves the ultimate decision-making power in the hands of disinterested experts—that is, judges still define what is public use and appraisers still determine what is just compensation.\textsuperscript{147} A better solution might be giving a say to those with the most invested in the community: landholders.\textsuperscript{148}

First, to overcome the problem of denying fair compensation, landowners should be provided an opportunity to vote on what is just compensation. By requiring a majority of landowners to approve a project, the subjective valuations of at least half of the landowners would be represented.\textsuperscript{149} This would also provide landowners an opportunity to capture some of the profits associated with the increased value of the aggregated parcel—an improvement over the FMV model.

Second, providing landowners with the ability to vote would allow the public to approve or reject projects. As members of the community, landowners are in a good position to decide which projects promote public use.\textsuperscript{150} Moreover, landowners could veto holdouts who wish to block socially beneficial development.\textsuperscript{151} By giving landowners a voice in the decision-making process, those with a vested interest in the community would be the ones to decide what happens to it.\textsuperscript{152}

Third, adopting a common-ownership structure, as prescribed by economist Ronald Coase, would minimize transaction costs for landowners by creating a safe way for them to pool their resources.\textsuperscript{153} Transaction costs typically consist of the time and effort landowners spend researching and negotiating to ensure fair treatment.\textsuperscript{154}

\textsuperscript{146} Heller & Hills, \textit{supra} note 8, at 1470–71.
\textsuperscript{147} Id.
\textsuperscript{148} Id.
\textsuperscript{149} Id. at 1498.
\textsuperscript{150} Id. at 1469–70.
\textsuperscript{151} Id. at 1470–71.
\textsuperscript{152} The problem of burdening landowners is largely resolved by giving them the ability to decide which projects promote the public use and the amount of compensation they require. However, in the case of essential public works, compulsory eminent domain should always be an option.
\textsuperscript{153} Lehavi & Licht, \textit{supra} note 18, at 1732 (citing R.H. Coase, \textit{The Nature of the Firm}, 4 \textit{ECONOMICA} 386 (1937)).
\textsuperscript{154} Id.
costs are often inflated when the parties believe others will take advantage of them.\textsuperscript{155} To limit the risk that landowners will use influence to take advantage of each other, profits should be distributed based on an \textit{ex ante} formula that is tied to landowners’ pre-project property values.\textsuperscript{156} Moreover, to limit opportunistic behavior, an organizational framework should minimize management’s discretion to do anything but maximize the buyout price of an aggregated parcel.\textsuperscript{157}

Below, Part II.B.1 discusses a variety of collective decision-making and common-ownership structures. After outlining the governance and procedural components of each structure, Part II.B.2 proposes a new property acquisition framework for transmission development, which borrows from each structure. Part II.B.2 then concludes by analyzing possible legal challenges to this new property form and the legal obligations of transmission providers.

\textbf{1. Existing and Proposed Property Structures}

\textit{a. Land Readjustment}

Land Readjustment (LR) is a property framework, discussed by George Liebmann, which is commonly used in Europe and Asia to redevelop underutilized neighborhoods.\textsuperscript{158} Through this framework, residents in a geographic area agree to privately assemble their land and redevelop their neighborhood.\textsuperscript{159} A distinct feature of LR is that landowners sacrifice a percentage of their original parcels to fund the project.\textsuperscript{160}

Like other collective decision-making frameworks, the advantage of LR is that it cures many of the problems that plague private land-assembly techniques and eminent domain. LR incentivizes landowners to participate in projects by providing them with an opportunity to share in future profits of redevelopment.\textsuperscript{161} LR, as

\begin{footnotesize}
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\item \textsuperscript{155} \textit{Id.} at 1732–33.
\item \textsuperscript{156} \textit{Id.}
\item \textsuperscript{157} \textit{Id.} at 1733–34, 1742–45 (citing O\textsc{l}\textsc{iver} E. \textsc{w}i\textsc{lliamson}, \textsc{t}he \textsc{m}echanisms \of \textsc{g}overnance 378 (1996)).
\item \textsuperscript{158} George W. Liebmann, \textsc{l}and \textsc{r}eadjustment \for \textsc{a}merica: \textsc{a} \propos\textsc{i}al \for \textsc{a} \textsc{statute}, 32 \textsc{urb. law.} 1, 2–3 (2000).
\item \textsuperscript{159} \textit{Id.} at 2.
\item \textsuperscript{160} Michael M. Shultz & Frank Schnidman, \textsc{the} \textsc{p}otential \textsc{a}ppl\textsc{i}cation \of \textsc{l}and \textsc{r}eadjustment \in \textsc{t}he \textsc{u}nited \textsc{s}ates, 22 \textsc{urb. law.} 197, 198 (1990).
\item \textsuperscript{161} Liebmann, \textit{supra} note 158, at 2.
\end{itemize}
\end{footnotesize}
practiced in different countries, operates as either a compulsory or voluntary land-assembly model. In countries where participation is voluntary, dissenters can exclude their property from the project. Additionally, LR reduces the need for project financing because the landowners who participate voluntarily eliminate the carrying cost of holding land while development takes place.

The procedure to initiate an LR requires 25% of landowners—based on individuals or acreage—to petition for a land readjustment district. Once 25% of landowners join the petition, notice is provided to all landowners.

After receiving notice, objectors have sixty days to act. In a voluntary land-assembly framework, the council (generally a municipality, though for transmission projects the council may be a public utility commission) then holds legislative hearings to determine if objections warrant an amendment to, or rejection of, the project. To avoid delay, which is common in eminent domain proceedings, the council’s hearings and decision must take place within a thirty-day period.

If the council approves the LR project, petitioners must then secure a majority of the landowners’ signatures. Once a sufficient majority has signed on, the council must issue a Certificate of Organization,

162 Shultz & Schnidman, supra note 160, at 224–33.
163 Id.
164 Liebmann, supra note 158, at 2.
165 The 25% requirement was originally proposed by the National Association of Real Estate Boards in 1935. Id. at 7–8.
166 Id.
167 Id. at 7.
168 Under a compulsory framework, the project would have to support a public use to satisfy the takings requirement. Moreover, procedural requirements involved with eminent domain might increase the odds of delay and cost.
169 Liebmann, supra note 158, at 8–9.
170 The authority over the placement and construction of power lines has traditionally been with the states. Hempling I, supra note 3, at 17 (quoting Cal. Wilderness Coal. v. U.S. Dep’t of Energy, 631 F.3d 1072 (9th Cir. 2011)).
171 Liebmann, supra note 158, at 8. Legislative hearings are less apt to oppress underfunded and landowners who are uncomfortable with formal judicial proceedings.
172 Id. at 8–9.
173 The type of majority can differ: in Taiwan, only a simple majority is needed; in Japan, a two-thirds majority is required. In the United States, “[o]f the seventeen states specifying participation percentages for creation of soil conservation districts, fourteen specified percentages between 65% and 67%, the extremes being 60% and 75%.” Id. at 9 (citing William Parks, Soil Conservation Districts in Action (1962)).
and give all landowners in the LR boundaries thirty-days’ notice of the organization’s meeting date. At the meeting(s), an unbiased person designated by the council facilitates the election of the governing board. To hold a vote, a quorum of 50% of landowners is typically required; however, one proposed statute requires as little as 10%.176

The board has the same powers as those provided to the boards of business corporations. Generally, the board has the power to perform the actions necessary to effectuate the purposes of the plan, including contracting, bringing lawsuits, issuing bonds, and assessing taxes to help pay for administrative costs.178

The next step of the newly elected board is to create a development plan. The plan must contain a budget, a completion schedule, a description of the basis of profit allocation, and any proposed continuing activities of the district after redevelopment occurs. Moreover, the plan should aim to create a project that is (1) minimally intrusive, both physically and aesthetically, (2) environmentally sensitive, and (3) beneficial at the local, regional, national, and global level.179 The board “may designate an operating officer, who need not be an owner within the district, to carry out the [p]lan of redevelopment.” Often, the natural choice is a developer.181

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174 *Id.* In the context of transmission line development, several meetings may be beneficial if the geography of a project warrants it, particularly in the case of a large transmission project.

175 *Id.* at 10 (explaining that the governing board shall consist of a chairman, secretary, treasurer, and three additional directors).

176 *Id.*

177 *Id.* at 17.

178 *Id.* at 18–20 (noting that there should be no constitutional problems with assessing taxes to provide administrative services).

179 See *id.* at 11. In the context of transmission projects: (1) “minimally intrusive physically and aesthetically” might mean using single poles or longer distances between poles; (2) “environmentally sensitive” might mean not using treated woods and other construction practices; (3) and “beneficial at the local scale” might mean public works to improve drainage and soil quality, job creation, or demand for local supplies. See Jennifer DeWitt, *Transmission Line Project Signs Mitigation Agreement*, QUAD CITY BUS. J. (June 2, 2013, 1:00 PM), http://qctimes.com/business/transmission-line-project-signs-mitigation-agreement/article_8f870190-d6a0-5c3a-a06b-ea55d11d5fd0.html (“Clean Line will avoid the use of treated wood for construction matting and the use of herbicides and fertilizers if requested by a landowner. In addition, Rock Island Clean Line has committed to a provision to use monopole structures, which have a smaller foundation.”).

180 Liebmann, *supra* note 158, at 11.

181 *Id.*
After the board develops the plan, they must provide owners with thirty-days’ notice and an opportunity to respond. Once owners adopt the plan, the council evaluates and approves the plan. The plan is then recorded in the land records.

Concurring landowners can be compensated either by receiving shares in the LR project or in-kind distributions. Landowners who dissent from the plan may receive FMV compensation. To encourage landowners to make their decisions quickly, a landowners’ decision to dissent must be irrevocable. The aim of this procedure is to limit landowners’ ability to “‘[hold] out’ in order to negotiate blackmail payments . . . .”

b. Land Assembly District

The Land Assembly District (LAD) is a property framework, proposed by Heller and Hills, which is similar to an irrigation district or a condominium framework. Through this framework a majority of residents within a geographic area agree to join private land together to create a larger parcel for a new purpose. If adopted by a state legislature, LADs would be a powerful democratic tool to cure the holdout problem.

The advantage of the LAD scheme is that it answers many of the problems inherent in the eminent domain model. The LAD equips landowners with the power to veto a project if the terms do not meet a majority’s approval. Moreover, a majority of landowners can overcome other landowners who wish to block projects that may be socially beneficial. Lastly, the LAD scheme provides developers

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182 Id. at 12.
183 Id.
184 Id.
185 Id. Here, an in-kind distribution would be a smaller but improved piece of land, as payment for the underdeveloped land that the landowner contributed to the project.
186 Id. at 13.
187 Id. at 13–14.
188 Id.
189 See Heller & Hills, supra note 8, at 1471.
190 Id. at 1469–70.
191 See id.
192 Id.
193 Id.
with an avenue to overcome landowners’ monopoly power to extract exorbitant compensation by seeking bids from competing LADs.194

Local residents, a developer, or a community development corporation can initiate an LAD.195 The initiating entity proposes the LAD to a planning agency.196 Generally, the planning agency would be a government entity; for a transmission project, the planning agency could be a state public utility commission.197 The agency then gives notice to potentially affected parties, providing them the opportunity to attend and comment at meetings.198 At the meetings, the agency educates the neighbors “about the potential benefits and costs of an LAD . . . .”199 Landowners then vote to approve or reject the plan. The degree and calculation of the majority could vary by state.200

Once formed, “[t]he LAD would have the power to accept or reject proposals by developers to assemble the land . . . .”201 Also, LADs would have the power to solicit bids from multiple developers.202 LAD governance could be modeled after Business Improvement Districts (BID), including rules on the establishment of the board and selection of the directors.203

The LAD could also have the power of eminent domain and the ability to provide FMV payments to dissenting landowners.204 However, Heller and Hills note that the LAD framework may be best

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194 Id. at 1507–09 (providing that through this process, each LAD would compete to sell its land to the buyer, analogous to the request for proposal process).
195 Id. at 1488.
196 Id. at 1489.
198 Heller & Hills, supra note 8, at 1490–91.
199 Id.
200 Id. at 1491–92. This point is discussed further in Part II.B.2.a.
201 Heller & Hills, supra note 8, at 1495.
202 Id. at 1495–96.
204 There would be few opt-outs because the contingency fee for condemnation lawyers is only paid if they can improve on the LAD’s initial offer. This is unlikely to happen with a LAD.
suited to consolidate fragmented, as opposed to unique, land. To avoid holdouts associated with acquiring unique land, like acquiring the only viable site for an essential public works project, the authors state that eminent domain may be a more appropriate land-assembly framework.

The procedure for selling the LAD is akin to an auction. The LAD invites multiple developers to make bids and drive up the price. If one developer initiates a project and another developer wins the auction, the winning bidder compensates the initiating developer for the administrative costs incurred. After the bidding window closes, landowners vote again to determine if a majority approves the deal. Alternatively, if there is just one developer and multiple sites, the roles could reverse and the LADs would submit bids (with majority approval) to the developer. This is similar to a request for proposal.

To avoid the use of political power to redistribute wealth unfairly, LAD legislation should determine how profits are to be allocated—either by acreage or property value. Upon the sale of the LAD, landowners receive their proceeds based on \textit{ex ante} amount proscribed by the enabling statute. However, because some LADs may fail, legislation should include statutory deadlines to avoid neighborhoods falling into a “nondevelopment limbo.”

c. Special Purpose Development Corporation

The Special Purpose Development Corporation (SPDC) is a property framework, discussed by Amnon Lehavi and Amir Licht, that allows for the creation of short-lived corporations, which

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205 Heller & Hills, \textit{supra} note 8, at 1492–93.
206 \textit{Id.} at 1492–97.
207 \textit{Id.} at 1495–96.
208 \textit{Id.} at 1496.
209 \textit{Id.}
210 \textit{Id.} at 1495–96.
211 \textit{Id.} at 1510 (“Had each proposed site been formed into a LAD, then the City of Detroit could have held an auction in which each LAD competed to sell its land to GMC. The competition for sites would resemble the normal bidding process by which contractors compete to sell goods to cities.”).
212 \textit{Id.} at 1501.
213 \textit{Id.} (“State law should require that the proceeds be distributed according to each landowner’s share of property within the LAD.”).
214 \textit{Id.} at 1496.
provides landowners compensation based on the market price for an aggregated parcel. Through this framework, a governmental entity pools land and creates a special corporation to sell the land to the highest bidder.

The advantage of the SPDC framework is that it promises to provide fair compensation and accomplish development in an expedient manner. SPDCs provide landowners with fairer compensation than the compensation provided by FMV under the current eminent domain system because it does not assume all sellers are willing sellers. Instead, SPDCs allow landowners to share in an increased profit from a higher value of an aggregated parcel and an improved bargaining position that the landowners have as a unified group. SPDCs can also be expedient because common-ownership structures minimize transactional delays and costs stemming from fear of majoritarian abuse. Additionally, SPDCs promote expediency by using eminent domain to cure remaining holdouts. The major drawback to this approach is that it does not seek community input.

The procedure for forming an SPDC starts with a public authority deciding that a project is worth pursuing and incorporating an SPDC. In the transmission context, this would likely be a public utility commission. The public authority then begins to assemble land, offering landowners either the FMV for their land in the form of cash or shares in the SPDC. Due to securities regulations, SPDC’s should provide ample information to landowners, allowing them to make an informed decision about which option to take. SPDCs would likely be public corporations with shares traded in an open market.

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215 Lehavi & Licht, supra note 18, at 1737 (“The government would make the decision about the assembly of land and its use according to its judgment on the socially desirable use of the land.”) The sale price would be market-driven, like emissions trading schemes.

216 Id. at 1742.

217 Id. at 1707.

218 Id.

219 Id. at 1732–34.

220 Id. at 1734–35.

221 Id. at 1734.

222 See HEMPLING II, supra note 197, at 17. See Part II.B.2 for a discussion on the entities that are well suited for implementing transmission development projects.

223 Lehavi & Licht, supra note 18, at 1734–35.

224 Id. at 1745–47.

225 Id. at 1737.
Next, the public authority transfers land to the SPDC and provides concurring landowners with shares in the SPDC. The assembled parcel would likely have a much greater value than the individual properties, and shareholders could realize returns well in excess of their property’s theoretical FMVs. Not only is this because transaction costs related to the holdouts are minimized, but the land will likely be rezoned to a higher and better use. Moreover, shareholders would also benefit from the SPDC’s ability to either create a bidding war among private developers or hire negotiators to extract the greatest price from a single developer.

Once the land sells, the SPDC distributes net proceeds from the sale as dividends to its shareholders. Shareholders receive their share as a percentage of pre-project land value contributed over the aggregate pre-project land value of all contributions. The total shares are comprised of shares held by private parties, for private land contributed, and the government, for public land contributed as well as administrative costs. Once the SPDC distributes net proceeds, the entity dissolves.

Managers’ powers should be limited in governing the SPDC. Lehavi and Licht believe that expansive discretion on the part of management can lead to unnecessarily risky business decisions and the possibility of management abusing its access to financial resources. Since the SPDC’s purpose is simply to sell the aggregated parcel at the highest price in an expedient manner, a Special Purpose Vehicle (SPV) governance model would be appropriate. Under the SPV model, the corporation is “run essentially from the outside by an unrelated trustee [or] administrator . . . .” Moreover, the SPV could have a limited life that matches its

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226 Id. at 1733–35.
227 Id. at 1736–37.
228 Id. at 1735, 1732–33.
229 Heller & Hills, supra note 8, at 1489.
230 Lehavi & Licht, supra note 18, at 1735.
231 Id. at 1735.
232 Id.
233 Id. at 1739.
234 Id. at 1735.
235 Id. at 1740–43.
236 Id. at 1741.
237 Id. at 1742.
238 Id.
obligations. In addition to limiting managerial discretion, the SPV structure would also create “bankruptcy remoteness” for the public authority, protecting the assets of entity overseeing the project from the unlikely bankruptcy of the SPDC.

d. Equity Model Limited Liability Corporation

The Equity Model Limited Liability Corporation (LLC) is a property framework proposed by Ralph J. Basile, a developer, which allows an entity to pool land through private contract. Through this structure, a developer or government entity attempts to pool land and to provide contributing landowners a share in the LLC. The aim of the LLC is to assemble land and minimize carrying costs without the use of eminent domain.

The organizational structure provides a property form that takes advantage of collective decision making without the use of eminent domain. Landowners contribute their land and receive shares in the LLC as limited partners. As limited partners, landowners can receive future cash-flows generated by the project or sell their shares. The developer or another party is the general partner, who prepares the ground lease(s) and negotiates other agreements. The developer constructs and owns any improvements to the land. The application of the LLC model to land assembly may be extremely powerful and useful where eminent domain is not available.

2. A New Property Framework: Transmission Corridor District (TCD)

Each of the land assembly structures discussed above has several strengths and weaknesses, depending on what one wants to

239 Id.
240 Id.
242 Id.
243 Id. at 9–10.
244 Id. at 10–11.
245 Id.
246 Id. at 10–12.
247 Id. at 12.
248 Id.
249 See generally id. at 1–13.
accomplish. Based on the strengths of each structure, this section proposes a new property framework that is specifically tailored for assembling transmission corridors, a Transmission Corridor District (TCD).

Landowners, a developer, or a governmental entity could initiate a TCD proceeding. The initiating party approaches the planning agency to determine if the transmission line promotes reliability, economic development, or public policy (e.g., a renewable energy portfolio standard). In this initial discussion with the planning agency, the initiating entity proposes a study area for the transmission corridor to the planning agency. Alternatively, the planning agency could determine that there is a need for a transmission project and initiate the TCD proceeding on its own.

For TCD proceedings, the planning agency would likely be a public utility commission (PUC). This is necessary because the placement and construction of power lines is almost always under the purview of the states, which then designate siting and approval responsibilities to the PUC or state equivalent. Alternatively, the planning agency could be a federal or regional entity to promote interstate development.

Upon approval from the planning agency, the initiating party and planning agency work together to educate the potentially affected members of the public about the benefits and negative effects of the proposed project. Meetings should be held in convenient jurisdictional and geographical locations after providing at least thirty-days’ notice.

After the first round of meetings, the planning agency compiles the comments and narrows down the study area to potential corridors. The planning agency then creates numerous routes, composed of

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250 See Heller & Hills, supra note 8, at 1489–90.

251 See HEMPLING I, supra note 3, at 16–17 (quoting Cal. Wilderness Coal. v. U.S. Dep’t of Energy, 631 F.3d 1072 (9th Cir. 2011)).

252 Today, FERC currently has backstop siting authority in the rare occurrence that states fail to act within a year and only if the line is in a national interest electric transmission corridor. Federal Power Act, 16 U.S.C. § 824p(b) (2012); see HEMPLING II, supra note 197, at 16; Rossi, supra note 38, at 1033–36.

253 Building on the principles that guided Congress to enact section 216(h) and FERC to write Order 1000, granting additional authority to entities that could preempt state law or implement transmission projects on a regional or interregional level would be the next step. To encourage interstate coordination, Congress might provide additional authority to FERC or to ISOs and RTOs. See HEMPLING II, supra note 197, at 16.
smaller segments that could be joined together in different ways to link the area of energy generation and energy demand. The segments should consist of properties with similar geographic characteristics and regulatory requirements. At the second set of meetings, the planning agency informs each segment individually about their role in the process. In order to move forward as a candidate for the corridor, each segment must obtain signatures of at least 25% of all landowners, based on acreage. Upon receiving the required landowner signatures, the planning agency may proceed with an assessment roll for each participating segment to determine final voting rights. However, in the interest of reducing administrative costs, this step may be skipped and voting rights could be based solely on acreage.

Upon receiving the required signatures, each segment votes to elect a board with a quorum of at least 10% of ownership by acreage. The board acts as the voice for each segment and develops a set of physical, aesthetic, environmental, and compensatory requirements. If there are multiple developers, each developer would place contingent offers on the different segments to create a corridor. If there is just one developer, each segment would submit bids to that developer.

Once the route has been determined and each bid or offer is accepted by at least 50% of landowners, easement rights would be moved into an SPV. Where no assessment roll is taken, a larger majority of landowners by acreage should be sought to ensure a single entity does not control voting on what is fair compensation. The use of an SPV is desirable here to act as a common-ownership entity with limited duration and discretionary powers.

After a majority approves the bids, the SPV gives landowners tradable shares in the corporation and provides the winning developer with the right-of-way to access and to develop the transmission line. If an assessment roll was not carried out earlier, one could be carried out at this point to determine compensatory rights. However, if landowners consent, an assessment roll may be skipped altogether to avoid administrative costs, and instead, compensatory rights could be

\[254\] Acreage is easy to calculate, and at this stage in the process, costs should be limited.

\[255\] Through an assessment roll, all parcels are valued individually (using uniform practices) and landowners later receive proceeds based on their assessed pre-project value divided by the total pre-project value of all property assessed. Liebmann, *supra* note 158, at 10. While FMV would be used in the assessment roll process, the shortcoming of FMV—inability to measure subjective value and distribute the added value of the aggregated parcel—are remedied later in the TCD process.
determined by acreage; this would be most appropriate where land values are homogenous. Dissenting landowners must always be entitled to an FMV payment.\footnote{Just compensation is a taking requirement. U.S. CONST. amend. V. In the case of voluntary transactions, landowners may contract to agreements they see as appropriate.}

The boards of each segment that are not part of the final corridor dissolve. For each segment that is included in the final corridor, the board selects one board member to join a representative group. The representative group carries on as powerful voice for landowners to express their concerns in the future. The representative group is funded by a small portion of predetermined shares allocated for this purpose.
## TCD Timeline

<table>
<thead>
<tr>
<th>Day 0</th>
<th>Day 30</th>
<th>Day 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiating party and planning agency meet.</td>
<td>The planning agency gives thirty-days’ notice to landowners and prepares for meeting.</td>
<td>The first meeting is held to discuss the study area. After 15 days of meeting, thirty-days’ notice is given for the next meeting.</td>
</tr>
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<tr>
<th>Day 105</th>
<th>Day 135</th>
<th>Day 165</th>
</tr>
</thead>
<tbody>
<tr>
<td>The second meeting is held to inform each segment about the project and their ability to voluntarily take part in the project if enough signatures are collected.</td>
<td>If 25% of landowners in a segment sign on, 30-days’ notice is provided for the segment to elect a board. <strong>Optional:</strong> Planning agency initiates assessment roll.</td>
<td>The Board is elected, and meets with the landowners to develop a list of demands and discusses compensation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 195</th>
<th>Day 225</th>
<th>Day 255</th>
<th>Day 285</th>
<th>Day 315</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single Developer</strong></td>
<td>Board develops a bid.</td>
<td>Landowners vote to accept the bid amount.</td>
<td>Developer picks winning segments based on bids offered.</td>
<td>Land, shares, and FMV distributed.</td>
</tr>
<tr>
<td><strong>Multiple Developers</strong></td>
<td>Developers make contingent offers to the different segments.</td>
<td>Landowners vote to accept the highest offer amount.</td>
<td>Land placed in SPV. Shares distributed to consenting owners. FMV distributed to dissenting owners.</td>
<td>SPV distributes dividends.</td>
</tr>
</tbody>
</table>

**Optional:** Planning agency initiates assessment roll.

a. Potential Legal and Pragmatic Problems for a TCD

The implementation of a TCD raises several legal and pragmatic questions, many of which are shared by the frameworks discussed earlier. As luck would have it, the TCD appears to clear the legal and pragmatic hurdles before it.

The first issue is to determine how compensatory and voting rights should be allocated. Rights can correspond to either the land contributed or the number of participating landowners. If rights correspond to each landowner, wealth would be redistributed as each participating landowners could hold different amounts of land with vastly different values. Therefore, rights should be based on the land contributed.

The issue then becomes whether rights should be based on the benefit conferred on the project or based on the loss to the landowner. On the one hand, rights could be based on the benefit conferred on the project. This option is appealing because the uniqueness of an individual property’s uniqueness adds little value to the project value. To accomplish this, rights could be allocated based on acreage as other property attributes add little value to the project. This option is appealing because it makes calculating rights simple and inexpensive. On the other hand, rights could be based on the loss to the landowner. To accomplish this, rights could be allocated based on pre-project property values. This approach will likely be preferred to avoid the redistribution of wealth, as landowners are not only concerned with their acreage but the value of their property’s improvements and uniqueness. Therefore, allocating rights based on property value would minimize landowner opposition.

257 See Lehavi & Licht, supra note 18, at 1743–44 (allowing rights to be distributed equally based simply on landownership would redistribute land much like distributing rights based on acreage).
258 See id.
259 Id. at 1744.
260 Id.
261 See id. at 1744–45 (allowing rights to be distributed equally based simply on landownership would redistribute land much like distributing rights based on acreage).
262 Id. at 1743–44.
263 Id.
264 See id.
265 See id. at 1744.
266 Id.
So, what issues might arise from allocating rights based on property value? In terms of voting rights, the Supreme Court’s “one person, one vote” doctrine stemming from the Equal Protection Clause may be an impediment. However, the Court has created an exception for special districts. Applying rational basis review, the Court has allowed for alternative voting systems when the system was reasonably related to the narrow function of the district. The TCD would have the narrow function of quickly assembling transmission corridors. The TCD’s alternative voting system, which maximizes buyout price and avoids the redistribution of wealth, would likely minimize opposition to development projects. Thus, allowing landowners to vote based on property value, and thereby reducing opposition to projects, would be reasonably related to the narrow function of quickly assembling transmission corridors.

An additional concern tied to voting rights in a TCD is that a group or entity with substantial voting rights might force the majority of landowners to accept a deal of which they do not approve. This might occur because entities like Real Estate Investment Trusts (REITs) hold land solely for investment purposes, and therefore may lack any shared subjective values common to owners who occupy their land. Further, if acreage is used to determine voting rights, unjust results might occur where parties with large amounts of inexpensive acreage force owners of valuable property to accept insufficient offers. In the Business Investment District context, a number of states have limited the ability of powerful entities from dominating decision making.

267 U.S. CONST. amend. XIV, § 1.
269 Avery, 390 U.S. 474.
270 Id. (citing Ball v. James, 451 U.S. 355 (1981); Salyer Land Co. v. Tulare Lake Basin Water Storage Dist., 410 U.S. 719 (1973)).
271 Id. (“The analogy to LADs is easy to draw: landowners’ shares of the proceeds from the LAD’s sale of a neighborhood would be allocated according to each landowner’s share of real estate within the district. Given that the power of LADs would be narrowly drawn to avoid redistribution of wealth, it would be odd to allocate voting power in a way that would facilitate such prohibited redistribution.”).
272 Liebmann suggests that tenants have no right to vote. Liebmann, supra note 158, at 15–16. However, Heller and Hills argue that the lessees should have a voting right equivalent to value of their lease. Heller & Hills, supra note 8, at 1504–07.
274 Heller & Hills, supra note 8, at 1501–02.
through different voting structures. Heller and Hills suggest that a single entity, such as a REIT, should be limited to a maximum voting share of 30%.

Moreover, in most states there is already an existing legal instrument that allows a majority of landowners to compel other landowners to join land. In the context of mineral leasing, a majority of landowners can compel non-consenting landowners to join their land through “forced pooling.”

The second issue is specifying how to limit powerful entities and majorities from redistributing wealth. To minimize this risk, enabling legislation should mandate how neighbors divide proceeds. The use of property value appears to be the best metric for allocating compensatory rights because it would be unfair for those who undertake the greatest financial sacrifice to realize anything but their proportional share of inputs. To accomplish this, an assessment roll should be taken. To address the administrative cost, an assessment roll could take advantage of economies of scale, and with the consent of landowners, something less than a formal assessment could be used. A less than formal assessment could accurately find the average value for each property class in the area and make individual adjustments for important distinctions between properties in the class.

The third issue arises when a landowner does not consent to the collective decision making of the TCD. The TCD must then provide

275 Id. at 1502 n.88 (citing MASS. GEN. LAWS ANN. ch. 400, § 3 (West 2004); N.M. STAT. ANN. § 3-63-6 (LexisNexis 1995); TENN. CODE ANN. § 7-84-511 (2005)).

276 Id. at 1502.

277 Forced pooling legislation has been upheld as constitutional. 38 AM. JUR. 2D Gas and Oil § 180 (2014).


279 Heller & Hills, supra note 8, at 1501.

280 Liebmann, supra note 158, at 10. Where an area has a homogenous physical and industrial landscape, such as large areas of range-land, acreage could be appropriate metric for compensatory rights.

281 Cf. Burdsal, supra note 11, at 90 (noting that bringing down administrative costs can be achieved by adopting less formal procedures).

282 Because a less than formal assessment roll will mostly capture pre-project values, landowners who stand to receive compensation significantly above FMV may be willing to save on administrative costs and increase their compensation further.
the dissenting landowners FMV as a minimum for just compensation. Moreover, it is worth noting that based on the Suitum case, the Court may allow shares in a land assembly project to be used as just compensation for dissenting landowners. However, when landowners do not consent to receiving shares, immediate cash compensation would likely be required. In the abstract, it is hard to imagine many landowners would seek FMV, due to the fact that TCDs promise to provide superior bargaining power and profits from rezoning to a higher and better use.

The fourth issue for a TCD implicates the Due Process Clause. The Due Process Clause requires that no person shall be deprived of property without notice and a meaningful opportunity to be heard. For the notice requirement, Liebmann suggests that notice should be sent by mail and published for owners to see. To satisfy the notice requirement, little else is required. Nonetheless, encouraging public involvement, as described in Part I.A., would encourage voluntary participation and satisfy procedural requirements.

While there may be some unknowns regarding TCDs, the legal restrictions do not appear to be an impediment. The Equal Protection Clause relating to voting rights does not appear to be a barrier to TCDs. The procedural requirements of the Due Process Clause can also easily be satisfied. Given that the legal landscape likely allows for this new property framework, its adoption should seriously be considered.

283 Landowners possess the right to voluntarily sell property and the Constitution provides an equitable mechanism for landowners whose land is condemned. See U.S. Const. amend. V.

284 Liebmann, supra note 158, at 13 (citing Suitum v. Tahoe Reg’l Planning Agency, 520 U.S. 725 (1997)).

285 Liebmann, supra note 158, at 12 (“As recognized below, it is likely, but not certain, that immediate compensation of dissenters in cash is required.”) (citing Babbitt v. Youpee, 519 U.S. 234 (1997); Hodel v. Irving, 481 U.S. 704 (1987)).


287 Liebmann, supra note 158, at 8.

288 Under the Natural Gas Act, 15 U.S.C. §§ 717–717z (2000), landowners’ Fifth Amendment rights to notice and opportunity to be heard in some instances have been reduced to a worthless hotline number. Diamond, supra note 286, at 224.
b. Regulatory Implications of the TCD: FERC Order No. 1000

The Federal Power Act, FERC Order No. 1000 (Order 1000), and other laws, require transmission providers to pursue the least expensive transmission alternative.\(^{289}\) A 2012 industry study noted that land-assembly methods can represent as much as 10% of the cost of a transmission project.\(^{290}\) In comparison to traditional land-assembly methods, voluntary participation is more likely with TCDs and thereby promises to create procedural\(^{291}\) and cost efficiencies.\(^{292}\) Therefore, Order 1000 would seem to place an affirmative obligation on transmission providers to consider the TCD model or any model that achieves similar outcomes.\(^{293}\)

Moreover, Order 1000 forbids the distribution of transmission costs to those who do not receive a benefit from a project without their

\(^{289}\) HEMPLING I, supra note 3, at 8, 14 n.7 (citing FERC Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,051 at ¶ 148, ¶ 155 (2011); 16 U.S.C. § 824d(a) (2012)).


\(^{291}\) Several empirical studies find that the use of public participation techniques reduce conflict and yield increased satisfaction from participants. See DUKE & BROMLEY, supra note 69, at 3; COLLINS & ISAAC, supra note 74, at 14–15; Freeman & Langbein, supra note 85, 66–67, 109-10. By reducing conflict and increasing satisfaction, the process will likely be expedited.

\(^{292}\) Improved procedural efficiencies through the mitigation of administrative process and landowner opposition should lead to cost reductions. Cf. Burdsal, supra note 11, at 90–91; Heller & Hills, supra note 8, at 1482. Moreover, the use of a common ownership structure should reduce other transactions costs related to landowner fear that developers or other landowners will treat them unfairly. See Lehavi & Licht, supra note 18, at 1732–33; DUKE & BROMLEY, supra note 69, at 17.

\(^{293}\) HEMPLING II, supra note 197, at 2 (citing Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,051, ¶ 80); James Heidell & Sandra Ringelstetter Ennis, FERC Order 1000 & Public Policy Transmission Projects, MONDAQ (2012), http://www.mondaq.com/unitedstates/x/168604/Utilities/FERC+Order+1000+Public+Policy+Transmission+Projects (quoting Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,051, ¶ 155-156) (“A public policy benefits analysis will need to incorporate an assessment of whether the transmission construction option is the least costly alternative.”).
consent. Therefore, if costs extend beyond an increase in rates and benefits are limited to receiving power from transmission, then the current eminent domain framework seems to violate Order 1000. The current eminent domain framework tends to undercompensate landowners (a cost) and many landowners do not receive power directly from high voltage long distance transmission lines (an unrealized benefit). However, courts may find indirect benefits from new transmission lines, such as improved regional reliability and energy independence. To remedy this potential problem, transmission providers should at least compensate landowners consistent with the majority of landowners’ subjective valuations of their property.

CONCLUSION

By creating uniform siting and condemnation laws, as well as including landowners in the planning and profits of development, land assembly should no longer act as a roadblock to the development of interstate transmission. Legislatures, transmission providers, and PUCs should seriously consider implementing the recommendations of this article because they show great promise in creating procedural and cost efficiencies, as well as promoting due process rights.

Whether adopted by legislators, transmission providers, or other entities, the findings of this article represent a huge step forward in land-assembly thinking, whereby development would proceed without burdening landowners. Further, in the context of interstate transmission development, the findings of this article should help society realize the benefits of renewable energy, including the promotion of national energy independence, mitigation of climate change effects, and creation of economic opportunities for all Americans, especially in rural America.

294 Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,051, ¶ 586(2).
295 A benefit to landowners besides receiving power might be a reduction in greenhouse gases from renewable projects. However, a court might weigh the climate change benefits against negative local environmental impacts.