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Tree Preservation Ordinances: Sacrificing Private Timber Rights on the Diminutive Altar of Public Benefit

by Brian E. Daughdrill* and Kathryn M. Zickert**

I. INTRODUCTION

Georgia is a state dominated by its forests and forest industries. Forests have defined the state since it was settled in the 1730s. Early settlers of the state enjoyed both the bounty provided by Georgia's forests and the use of those forests as they cleared land and built homes. Early forest products, in addition to lumber, included naval stores, "a tar-like substance which was used to caulk the seams of wood ships;" and live oak “knees,” curved portions of the tree used as deck supports in wooden ship building. Indeed, Revolutionary War hero Nathaniel Greene, who had vast holdings on Cumberland Island, first pursued the sale of live oak knees found in Georgia. Commercial logging began in the 1880s after Georgia recovered from the ravages of the Civil War.

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2. See id. (citing V. Wood, Live Oaking Southern, Timber for Tall Ships (1981)). Of historical interest is the fact the live oak used to construct the U.S.S. Constitution was sawn from Georgia live oak trees. See id.
Admittedly, forest-related industries have not always been sensitive to the environmental impact of timber harvesting. Indiscriminate logging left mountains denuded and subject to wild fires fed by the plethora of logging debris. By the late 1930s even the Piedmont was deforested, and “one could ride for 40 miles without seeing a pine tree.”

Once-clear trout streams, such as the Oconee, Altamaha, and the Ocmulgee, ran red with silt as the “deep rich, dark topsoil,” described a century earlier by William Bartram, eroded.

Deliberate reforestation began in the 1890s with early efforts by farmers to replant wild pine seedlings, and in 1929 the University of Georgia opened one of the first state nurseries for longleaf, loblolly, and slash pine seedlings. The growing number of private timberland owners found a new market for their timber in 1936 when Union Bag Corporation (later renamed Union Camp) located a kraft paper mill in Savannah and, today, that market and related markets have become Georgia’s leading industry.

Indeed, forestry is the state’s largest industry. While industry-owned forests attract the most attention, seventy-two percent of the over 23.6 million acres of commercial forest land in Georgia is owned by 695,000 farmers and other nonindustrial private forest landowners. Twenty-four percent of the total manufacturing output in the state is in forest or forest-related industries, resulting in over $19 billion in direct contributions to Georgia’s economy in 1999. Twenty-three percent of all Georgia workers are employed in the forest industry. Forests cover the state with deciduous and evergreen trees about evenly distributed and loblolly pine as the most abundant conifer. Every county in the state, including urban counties, is significantly benefitted by the forest industry in some respect. Of the 159 counties in Georgia, 38 are now considered urban because they encompass the eight largest metropolitan centers.

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3. Id.
5. See id.
6. See id.
7. See Ben Jackson, Forestry on a Budget (last modified May 1998) <http://www.for.../index.php3?docID=49&docHistory%5B%5D=68docHistory%5B%5D=2>.
9. See Jackson, Forestry on a Budget, supra note 7.
10. “Deciduous” refers to trees which shed all of their foliage at least annually. Note that magnolias, with their distinctive broad leaves, are not deciduous but, like conifers, are categorized as evergreen.
12. See id.
areas; however, 4 million acres of commercial forest land exists even within these urban areas.

However, these same counties, to whom forestry as an industry is inescapably essential, represent perhaps the biggest threat to the continued viability of the industry. These counties and municipalities impose limitations upon development and compel conservation of private timber resources through the enactment of “tree protection ordinances.” Although ostensibly designed to ameliorate air-quality problems and erosion, or to serve aesthetic concerns, in reality these ordinances threaten the very essence of the timber industry. Unlike most conservation efforts, these tree ordinances are a patchwork of often-inconsistent legislative efforts by various counties and municipalities bereft of any state-established procedures or guidelines, much less any regard for the state’s largest industry. Development in urban areas ironically has reduced the influence of the timber industry at a time when developers and foresters most need to cooperate. Only a cooperative effort will foster legislation that will protect the environment and allow the maximum sustainable yield from development and timber harvesting. Unfortunately, most local legislation reflects a disregard for the integral relationship between development and forest resources, as well as a disregard for the economic consequences of the legislation upon those industries.

Particularly problematic in the passage of these ordinances is the disregard, or perhaps ignorance, of the fact that standing timber is a form of discrete, severable real property. It “may be owned and possessed by one person, while the soil belongs to another.” Conveyances of . . . timber are treated as deeds, are to be executed with the same formality, and may be recorded as such[, and] in fact, have all the

13. “Commercial forest land” refers to land held predominantly for the production of timber. Commercial forest land does not include such things as a wooded five-acre homesite.
15. Other conservation efforts, both of natural and historic resources, such as the Historic Preservation Statute, Official Code of Georgia Annotated (“O.C.G.A.”) §§ 44-10-21 to -31 (1981 & Supp. 2000), and the Control of Soil Erosion and Sedimentation Act, O.C.G.A. § 12-7-1 to -18 (1996 & Supp. 2000), are statutory and controlled by state enabling legislation. No similar specific enabling statute exists for tree ordinances. Of particular interest is that forestry management, including harvesting, is specifically excluded from the Control of Soil Erosion and Sedimentation Act. O.C.G.A. § 12-7-17(5).
16. See Hutchins v. King, 68 U.S. 53, 59 (1863); see also Laird v. United States, 115 F. Supp. 931, 933 (W.D. Wis. 1953) (stating a timber owner owns so much of the dirt underlying the trees as is necessary to support the timber).
incidents of ordinary deeds to realty.”\textsuperscript{18} It is only when timber is severed from land that it becomes personal property.\textsuperscript{19}

Traditional judicial analysis has long required constitutional scrutiny of the impact upon real property of zoning and similar land use regulations, but these courts have not afforded the same scrutiny to the impact of similar regulations upon timber rights in Georgia.\textsuperscript{20} Had zoning consideration been applied to tree ordinances, undoubtedly many would fail. To be valid, zoning ordinances must “serve some public purpose, . . . [be] reasonably necessary for the accomplishment of the purpose, and . . . not [be] unduly oppressive upon the persons regulated.”\textsuperscript{21} If a zoning ordinance actually appropriates property to the state instead of “merely” preventing “the owner from making a use which interferes with paramount rights of the public,” then it is unconstitutional.\textsuperscript{22}

Zoning rises to the level of an unconstitutional, uncompensated taking when the ordinance destroys the economic value of a parcel of land.\textsuperscript{23} At the point a zoning ordinance destroys all economic value of the entire parcel, it has become unduly oppressive and is said to be an invalid exercise of police power.\textsuperscript{24} In contrast, tree protection ordinances by definition destroy the economic value of every tree rendered unharvestable by the ordinance. No one would deny a taking had occurred if a local authority were randomly to pick twenty-five percent of the lots platted in a subdivision and forbid the developer from using the lots in any fashion. Yet, due to the severable nature of standing timber, tree protection ordinances have this precise effect.

In enacting those tree ordinances, local authorities should look beyond the judicial carte blanche customarily given legislative decisions. The traditional judicial complacency with statutory enactments should yield to the “regulatory takings” analysis judicially developed in the Twentieth

\textsuperscript{18}  Id. (emphasis added).
\textsuperscript{19}  68 U.S. at 56.
\textsuperscript{22}  Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 417 (1922) (Brandeis, J., dissenting).
\textsuperscript{23}  The destruction of all economic value is one federal standard for a regulatory taking. See, e.g., Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1015 (1992). Note that Georgia employs the significant detriment test. See Parking Ass’n v. City of Atlanta, 264 Ga. 764, 765, 450 S.E.2d 200, 202 (1994) (stating a zoning ordinance’s validity will be rebutted upon a showing that the zoning presents “a significant detriment to the landowner and is insubstantially related to the public health, safety, morality and welfare.”); see also Pope v. City of Atlanta, 242 Ga. 331, 334, 249 S.E.2d 16, 19 (1986).
\textsuperscript{24}  See Eide v. Sarasota County, 908 F.2d 716, 721 (1990).
Century to reflect the increasingly regulatory environment within which land owners today find themselves operating. Section II of this Article will trace the evolution of the Fifth Amendment uncompensated takings jurisprudence from its pre-incorporation status in *Barron v. Mayor of Baltimore* to the regulatory takings analysis developed in the Twentieth Century. Section III will define exactions and expound upon the "roughly proportionate" requirement announced by the Supreme Court in *Dolan v. City of Tigard*.

Section IV will review tree ordinances as a regulatory taking under the analysis propounded by the Supreme Court in *Pennsylvania Coal Co. v. Mahon*, with particular focus on the impact of a resource's "severability" on the takings analysis. Section V will analyze and compare several tree ordinances in effect in Georgia and offer suggestions that would minimize the takings effect of those ordinances.

II. HISTORY OF TAKING ANALYSIS

The Fifth Amendment of the United States Constitution, as well as virtually duplicative language in the Georgia Constitution, provides that private property shall not be taken for public use without just compensation. Some fifty years after that amendment was adopted as part of the Bill of Rights, the United States Supreme Court held that the Fifth Amendment did not apply to states and that the ruination of a commercial wharf by the City of Baltimore via sediment deposited by city-diverted streams was not compensable under the Fifth Amendment. It was not until the passage of the Fourteenth Amendment in 1868 that states, and their "creatures" such as municipal corporations and counties, became equally obligated to provide fair compensation to owners of private property damaged or destroyed in the name of public interest.

In adjudicating takings claims, the courts, while still deferential to legislative enactments, have been more mindful of legislative abuse of the protection afforded by the Fifth Amendment. "When this seemingly
absolute protection is found to be qualified by the police power, the natural tendency of human nature is to extend the qualification more and more until at last private property disappears.\textsuperscript{32}

The Twentieth Century saw increasing friction between private landowners, whose property was restricted in the name of public welfare, and governing authorities dancing to avoid the need for just compensation. "Taking" came to mean more than just the actual physical possession of once-private land. Prior to Pennsylvania Coal Co., most courts recognized only categorical takings—those that result in "direct appropriation" or "practical ouster," i.e. the absolute destruction of our prohibition to use property.\textsuperscript{33} Justice Holmes initiated the renaissance away from such severe requirements in 1922 in Pennsylvania Coal Co. when he wrote, "While property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking."\textsuperscript{34} Alarmed at what he perceived to be unconstitutional legislative encroachments upon private property interests, Justice Holmes stated: "We are in danger of forgetting that a strong public desire to improve the public condition is not enough to warrant achieving the desire by a shorter cut than the constitutional way of paying for the change."\textsuperscript{35}

In 1978, in Penn Central Transportation Co. v. City of New York ("Penn Central"),\textsuperscript{36} in what has come to be known as the "primer" on regulatory takings cases, Penn Central appealed New York City's refusal to approve its plans to construct a fifty-story office building over Grand Central Station.\textsuperscript{37} Citing the "historic significance" of Grand Central Station, the City's Preservation Commission disapproved the addition despite the fact that the original facility was designed and constructed for just this sort of later addition.\textsuperscript{38} The United States Supreme Court refused to find a taking because Penn Central was not denied an economic return from the Terminal—it was merely regulated in its right to develop the air rights.\textsuperscript{39} However, the Court took particular pains

\begin{itemize}
\item \textsuperscript{32} 260 U.S. at 415.
\item \textsuperscript{33} 505 U.S. at 1014 (reviewing Pennsylvania Coal Co.).
\item \textsuperscript{34} 260 U.S. at 415.
\item \textsuperscript{35} Id. at 416.
\item \textsuperscript{36} 438 U.S. 104 (1978).
\item \textsuperscript{37} Id. at 117.
\item \textsuperscript{38} Id.
\item \textsuperscript{39} Id. at 138. The argument may be made that because "air rights" were severable and transferable, the Court did consider the issue of severability when it held that "[t]aking jurisprudence does not divide a single parcel into discrete segments and attempt to determine whether rights in a particular segment have been entirely abrogated." Id. at 130. The author notes, however, that the Court retreated from this position in Lucas wherein the Court commented that it was not clear to which property interest the
to "review the factors that have shaped the jurisprudence of the Fifth Amendment."40 The Court noted its own historical difficulty in trying to define a "taking," stating that there is no "set formula for determining when justice and fairness" require compensation.41 Describing the type of scrutiny as "essentially [an] ad hoc . . . factual inquiry," the Court identified several relevant factors to be considered: (1) the economic impact of the regulation; (2) the extent to which the regulation interferes with "distinct investment-backed expectations;" and (3) whether the regulations compel a "physical invasion."42 The Court noted previous cases upholding land-use regulations that destroyed or adversely affected real property interests but wrote that when there are "government actions that may be characterized as acquisitions of resources to permit or facilitate uniquely public functions," those actions have "often been held to constitute takings."43

Shortly after Penn Central, in Agins v. City of Tiburon,44 the Court again addressed a takings claim within the context of evaluating a city's denial of a rezoning petition, holding that zoning regulations must substantially advance legitimate state interests to survive a takings challenge.45 The Court upheld a city ordinance that limited development because it "neither prevent[ed] the best use of [the property] . . . nor extinguish[ed] a fundamental attribute of ownership."46 Following Agins the Supreme Court very quickly addressed whether a temporary taking requires compensation in First English Evangelical Lutheran Church v. County of Los Angeles.47 The Court held that temporary takings are not different in kind from permanent takings and also require compensation.48 At issue was whether Los Angeles County was required to compensate an owner for lost use of its property during the interim between the enactment of an ordinance and its subsequent invalidation.49 The Court held that "[n]othing in the Just Compensa-
tion Clause suggests that ‘takings’ must be permanent and irrevoca-
ble,” and that it was the “owner’s loss, not the taker’s gain, which is
the measure of the value of the property taken.” The Court stated
that its decision did not mean the property owner could compel the
government to exercise eminent domain, but once a court determines a
taking has occurred, the government must amend the regulation,
withdraw the regulation, or exercise eminent domain. However, when
the government’s activities have already worked a taking of all use of
the property, “no subsequent action by the government can relieve it of
the duty to provide compensation for the period during which the taking
was effective.”

In 1992 in *Lucas v. South Carolina Coastal Council*, the Supreme
Court addressed a South Carolina ordinance that completely proscribed
any construction on beachfront property on Isle of Palms. After Lucas
purchased two beachfront residential lots in 1986, South Carolina
enacted its 1988 Beachfront Management Act, which barred Lucas
from constructing any permanent structure on his property. The Act
was designed to protect South Carolina’s coastal property from erosion
because it became aggravated by development.

The Court noted this case fell into what previous takings analysis had
identified as one of two types of injury warranting categorical treat-
ment—those enactments in which regulations deny all economic benefit
or productive use. However, of particular relevance is the Court’s
continuing acknowledgment that governmental action does not necessarily
need to obliterate all of a property owner’s interests to merit
constitutional scrutiny: “[T]he rhetorical force of our ‘deprivation of all
economically feasible use’ rule is greater than its precision, since the rule
does not make clear the ‘property interest’ against which the loss of
value is to be measured.” When no productive or economically

(Brennan, J., dissenting)).
51. *Id.* at 319 (quoting United States v. Causby, 328 U.S. 256, 261 (1946)).
52. *Id.* at 321.
53. *Id.*
55. *Id.*
56. *Id.* at 1008.
57. *Id.* at 1015, 1031-32.
58. *Id.* at 1016 n.7. (“When, for example, a regulation requires a developer to leave
90% of a rural tract in its natural state, it is unclear whether we would analyze the
situation as one in which the owner has been deprived of all economically beneficial use
of the burdened portion of the tract, or as one in which the owner has suffered a mere
diminution in value of the tract as a whole . . . . The answer . . . may lie in how the
owner’s reasonable expectations have been shaped by the State’s law of property.”).
beneficial use of land is permitted, it is "less realistic to indulge [the] usual assumption that the legislature is simply 'adjusting the benefits and burdens of economic life.'"^{59} Writing for the majority, Justice Scalia stated that when land is required to be left substantially in its natural state, there is a "heightened risk that private property is being pressed into some form of public service under the guise of mitigating serious public harm."^{60}

Noncategorical takings cases, i.e. those cases in which the landowner is not compelled to suffer a physical invasion or when economic value has not been totally destroyed, have given the Court ample opportunity to expound upon the nature of the "ad hoc, factual inquiry" required by the Court in *Penn Central*.^{61} As used by the Court in *Agins*, regulations affecting private property interests must "substantially advance legitimate state interests" to survive a takings challenge.^{62} This standard was further developed in *Nollan v. California Coastal Commission*,^{63} when Justice Scalia wrote that use restrictions must be "reasonably necessary to the effectuation of a substantial government purpose."^{64} This "verbal formulation"^{65} is not that the "State 'could rationally have decided'" standard from Equal Protection and substantive Due Process jurisprudence.^{66}

The Court attempted to clarify this issue in *Dolan v. City of Tigard*^{67} by stating that regulations must be "roughly proportionate" to the impact caused by the proposed land use.^{68} In *Dolan* a property store owner protested the City of Tigard's right to require the dedication of a portion of her property as a pedestrian and bike path as a condition precedent to the issuance of a building permit to allow her to expand her store. When Dolan sought to expand her hardware store from 9700 square feet to 17,600 square feet and pave a 39-space parking lot, the City of Tigard required her to maintain, as a public greenway, the flood

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59. *Id.* at 1017 (citing *Penn Central Transp. Co.*, 438 U.S. at 124).
60. *Id.* at 1018 (criticizing Justice Blackmun's dissent wherein he suggested that Lucas had not been deprived of all economic benefit because he "still can enjoy other attributes of ownership, such as the right to exclude others . . . . Petitioner can picnic, swim, camp in a tent, or live on the property in a movable trailer." *Id.* at 1044 (Blackmun, J., dissenting)).
61. 438 U.S. at 123.
62. 447 U.S. at 260.
64. *Id.* at 834 (quoting *Penn Central*, 438 U.S. at 127).
65. *Id.* at 836 n.3.
66. *Id.* (quoting Minnesota v. Clover Leaf Creamery Co., 449 U.S. 456, 466 (1981)).
68. *Id.* at 391.
plain along a creek that bordered her property and, further, to dedicate a strip of her land for a pedestrian and bike path as defined in the City's Master Plan. The City's development code already required the landowner to maintain fifteen percent of her property as open space. The City's Land Use Board of Appeals found the extra dedication requirement "reasonably related" to the impact caused by the larger building and additional impervious surface of a parking lot. Both the Oregon Court of Appeals and the Oregon Supreme Court affirmed, and the Supreme Court granted certiorari.

In reversing the state courts, the Supreme Court noted that "had the city simply required petitioner to dedicate a strip of land . . . rather than conditioning the grant of her permit to redevelop her property on such a dedication, a taking would have occurred." The Court thus reaffirmed its previous direction in Pennsylvania Coal, stating that "[a] strong public desire to improve the public condition [will not] warrant achieving the desire by a shorter cut than the constitutional way of paying for the change." In Dolan the Court expressly rejected the alleged reasonable relationship to a public purpose, instead holding that exactions imposed as a condition of the permitting process must bear a "rough proportionality" to the impact caused by the development. The local authority is not required to make a "precise mathematical calculation" but must make some sort of "individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development." Finally, the local authority must make "some effort to quantify its findings in support of the dedication . . . beyond the conclusory statement that [the exaction] could offset some of the [impact of development]." Because the City of Tigard made no effort of this sort to quantify findings showing rough proportionality, the Court reversed and remanded the case.

After nearly a century of judicial distillation, takings claims essentially have been classified into either the categorical or noncategorical varieties. When governmental action compels physical invasion or, through regulation, destroys all economic value, the Court has not
hesitated to find a categorical taking. Noncategorical regulatory takings, the more problematic classification, require an ad hoc factual inquiry into the investment backed expectations, the nature of the government action, and the economic impact of the regulation. Tree protection ordinances fall into the noncategorical classification requiring closer review.

III. TREE ORDINANCES AS EXACTIONS

A. Law

In determining what type of judicial review is applicable to tree ordinances, the courts must first determine how to classify these regulations. According to the court in *City of Annapolis v. Waterman*, local authorities that regulate development do so through a variety of regulatory tools including conditions, reservations, and dedications. Conditions, potentially the least demanding of the regulatory methods, "merely limit[] the method in which a property owner may thereafter use the property." Conditions not equating to exactions are normally reviewed under the regulatory takings analysis: "(1) whether . . . a public purpose exists, and, if so, (2) whether the regulation deprives the property owner of all viable economic use of the entire property at issue."

More burdensome on developers and more likely to trigger the "exaction analysis" are conditions that mandate reservations or dedications. Reservations are the "setting aside of specified land for a specific public purpose." These reservations include "greenbelts" and subdivision parks. They do not require conveyance to the government but do restrict the right of the developer to use the reserved land for any purpose other than the restricted purpose. In contrast, dedications ordinarily require the conveyance of an interest in the land to the government for the general public. Streets and utility extensions are typical dedications; once installed, the developer turns ownership, control, and operation over to the government. Of critical importance in determining whether a dedication or a reservation exists is determining

77. 745 A.2d 1000 (Md. 2000).
78. *Id.* at 1008, 1010-11.
79. *Id.* at 1011-12 (emphasis added).
80. *Id.* at 1012.
81. *Id.* at 1011 (citing 83 AM. JUR. 2D Zoning and Planning § 563 (1983)).
82. *Id.*
83. *Id.* at 1010.
for whom the land is conveyed. When the required conveyance, for
instance, is to a homeowner's association for the subdivision, this kind
of conveyance is said to be private. "[T]here is no such thing as a
dedication between [the developer] and individuals. The public must be
a party to every dedication." When the dedication or reservation is for the public at large, as
opposed to benefitting only those residing within the development, or
when an "in lieu" fee is imposed as an alternative, there is an exaction
generally governed by the standards discussed by the Supreme Court in
Dolan.

Because timber is discrete, severable real property, ordinances that
proscribe its harvest cannot be reviewed as conditions that merely
regulate the method by which the timber owner may use her timber. Those ordinances forbid any use but the "public" use, and they require
the landowner to reserve or dedicate "a resource, a forest, as a condition
precedent to receiving a permit to improve or subdivide her property." Reforestation requirements "are . . . an exaction, or a condition
precedent, imposed on the landowner."

Assuming arguendo that an "essential nexus" even exists between
the prohibition or restriction on the exercise of timber rights and the
impact caused by developing a parcel of property, the Supreme Court
held in Dolan v. City of Tigard, that the local authority must still
demonstrate "rough proportionality" between the exaction and the needs
caused by the particular development. "Rough proportionality" is an
express rejection of "reasonable relationship," which describes the
minimal level of scrutiny under Equal Protection analysis.

The Court's holding in Dolan opened the door for conditions, imposed
as a prerequisite to permit issuance, to be reviewed under the judicial
takings analysis already applicable to outright dedications. Of prime
import is the Court's requiring local authorities to make "individualized
determination[s] that the required dedication is related both in nature

84. Id. at 1011.
85. Id. (citing Jackson v. Gastonia, 98 S.E.2d 444, 447 (1957)).
86. Id. at 1012.
87. Stacy P. Silber, Afforestation Under Maryland's Forest Conservation Act and
Selected County Codes: Viability of this Land Use Regulation Pre- and Post-Dolan v. City
88. Id. at 76.
91. Id. at 389.
92. Id.
and extent to the impact of the proposed development.93

B. Analysis and Application

The problem facing local authorities with their tree ordinances is, somewhat understandably, that in the interest of administrative efficiency these ordinances are inevitably drafted to apply “across the board.” Indeed, because these blanket requirements rarely relate to a scientific analysis of the cause and effect of development, the “Achilles’ heel of the [tree protection ordinance] remains its application of uniform standards to all land developers regardless of the specific impact that the particular developer causes.”94 Challenges to the requirements of these ordinances should “force the applicable government to reevaluate why the specific thresholds apply equally to subdivisions of all sizes, and why the differing . . . planting requirements [are] adopted for different land classifications.”95 Trees’ discrete, severable nature and tree ordinances’ purpose to benefit the general population of the county or city require local authorities to draft ordinances carefully to provide for individual analysis of the burden imposed by each development rather than the current blanket mandates frequently imposed.

Admittedly, this requirement will increase the administrative burden of local authorities wishing to enact these ordinances, but certainly the research already exists to quantify the atmospheric and aesthetic value of residential forests.96 The existence of the data and the demand of “rough proportionality” by the Court in Dolan at least encourages a case-by-case analysis of each development. It is illogical to assert that a development in a once-open field causes an even remotely similar burden to a development that levels several acres of distinguished live oaks. Yet the across-the-board language of most ordinances requires just this ludicrous result.

Particularly onerous are ordinances that impose punitive replacement standards without any individualized analysis that these standards are required to be roughly proportionate to the burden caused by tree removal.97 Punitive replacement standards ignore the logic that a

93. Id. at 391.
94. Silber, supra note 87, at 79.
95. Id.
96. The University of Georgia Warnell School of Forest Resources’ Dr. Kim Coder published an article, specifically quantifying, in dollar amounts, the value of urban forests per acre in reducing pollution, stemming erosion, reducing heating and cooling costs, and reducing noise pollution. See Dr. Kim Coder, Identified Benefits of Community Trees and Forests, Oct. 1996, available in http://www.forestry.uga.edu/warnell/serv.
mature tree at the end of its growth cycle sequesters less carbon dioxide than a young tree entering its peak growth cycle. Further, punitive ordinances reflect legislative short sightedness by preserving trees nearing the end of their leafy little lives.

For instance, DeKalb County's Tree Protection Ordinance imposes a blanket requirement that any "specimen tree" that is cut must be replaced with one-and-a-half times its diameter in replacement trees without any individualized determination or scientific finding that these replacement requirements are necessary to offset the burden caused by the cutting of the tree. The City of Alpharetta similarly requires that any specimen tree designated to be saved that is then cut must be replaced with twice the density-unit value of the tree removed. In contrast, the Fulton County Tree Preservation Ordinance and its Administrative Guidelines for residential development require a straight-line replacement for specimen trees. For example, if a thirty-inch tree is removed (with a density unit value of 14.7) it must be replaced with trees totaling the same density unit. Further, Fulton County awards double-density credits where a developer reforests once-barren land. Similarly, the Cobb County Tree Preservation and Replacement Ordinance requires only that a minimum density requirement be met. Unlike the logical one-to-one replacement standards required by Fulton and Cobb Counties, DeKalb County and the City of Alpharetta impose their punitive replacement standards without any finding that the requirements are related in nature and extent to the burden caused by cutting the specimen trees.

Perhaps more problematic is an across-the-board refusal at least to count trees located in undisturbed stream buffers toward density requirements. DeKalb County, the only county that has so elected, irrationally counts these trees toward density requirements for

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98. Georgia Power's Project GREEN was based on this carbon-sequestration principal, i.e. that by planting young pine plantations, known to absorb a specified quantity of carbon dioxide per acre, Georgia Power could reduce its overall contribution to air-borne pollution.
100. A "specimen tree" is a hardwood or pine tree larger than thirty inches measured "diameter at breast height," ("DBH") or a smaller tree such as dogwood measuring ten or more inches DBH. Id. § 14-39(g)(8)(b).
101. Id. § 14-39(g)(8)(e).
102. ALPHARETTA, GA., CODE § 19-33 (1998). Density units are a measurement term used by counties to "weigh" the density value of different types of trees.
103. FULTON COUNTY, GA., ORDINANCE §§ 26-396 to -403 (2000).
105. Id. § III(C)(1)(b).
107. Id. § 50-223.
commercial and industrial site development but refuses to allow residential developers the same prerogative and does so without an individualized finding that a particular residential development imposes a heightened burden.\textsuperscript{108} In contrast, neither Cobb nor Fulton County's ordinances forbid the developer from counting trees located within a stream buffer or other undisturbed buffer toward overall density requirements. The City of Marietta expressly authorizes developers to count trees located in undisturbed buffers toward overall site density requirements.\textsuperscript{109}

DeKalb County's ordinance also requires that all trees within the 100-year flood plain be left undisturbed.\textsuperscript{110} Again, there is no provision for individualized determination that development already burdened by the topographical anomalies routinely present near water courses must also be burdened with what is essentially a "super" density requirement. Substantial timber resources may be located within these buffers, and in these cases, requiring a landowner to reserve or dedicate that timber to the public welfare effects a taking to the extent the benefit to the public is outweighed by the cost to the landowner. Going an extra step—prohibiting developers from at least counting the trees rendered unharvestable by the buffer requirements—destroys the one remaining economic value the timber has as a "tree bank" to meet the density requirement for the balance of the property.

Finally, counties may run afoul of the requirement of individualized determination of rough proportionality by imposing blanket buffer requirements for logging operations without regard to the size of the tract or its proximity to heavily traveled thoroughfares. Typically, these requirements provide that if timber is to be harvested, then a certain perimeter buffer of X feet in width must be maintained during harvesting. In this regard, DeKalb County, Fulton County, and Marietta all impose buffers on all land harvested for timber—respectively, 75 feet, 25 feet, and 50 feet. Again, this fact demonstrates the arbitrariness of local governments in selecting "appropriate" numbers.\textsuperscript{111} Fulton County also requires the buffer to be maintained only during the harvesting operation, freeing the tract for development after the harvest as long as the development meets the minimum density requirement.\textsuperscript{112}

\textsuperscript{108} DeKalb, GA., Ordinance § 14-39(g)(10)(d).
\textsuperscript{109} Marietta, GA., Code § 712.08(D)(2)(a) (2000).
\textsuperscript{110} DeKalb, GA., Ordinance § 14-39(g)(10)(d).
\textsuperscript{111} See id. § 14-39(n)(1); see also Fulton County, GA., Admin. Guidelines § III(A)(3)(b); Marietta, GA., Code § 712.08(D)(2)(a).
\textsuperscript{112} Fulton County, GA., Admin. Guidelines § III(A)(3)(b). In contrast, DeKalb's Code requires that the buffer be maintained undisturbed for five years after a tract is
The imposition of blanket buffers during the logging operation cannot, by definition, be based on "rough proportionality." At the very least, if buffers must be imposed, they should be tied to some independent standard that reflects the burden caused by the land use. While perhaps seeming insignificant, it is easy to calculate that even a twenty-five foot buffer on the perimeter of a fifty-acre tract reserves over three and one-half acres of timber for the public welfare. A seventy-five foot buffer, as imposed by DeKalb County, requires the landowner to reserve almost eleven acres of timber, almost a twenty-five percent exaction. Landowners who have maintained this property or timber growers who planted these trees twenty or more years ago with the full expectation they would harvest the boundary of their property now find themselves having tied up significant resources in timber they can no longer harvest.

Because the tree ordinances impose these restrictions for a public purpose (i.e., no one purports to argue the atmospheric improvements benefit only the land burdened), what might otherwise be categorized as a mere "condition" rises to the level of dedication. The discrete, severable nature of trees leaves no other viable economic use for trees so restricted. As a dedication, or exaction, these ordinances require the local authority to make some "individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development" to pass constitutional muster.

harvested, effectively preventing any development of a tract so harvested. DeKalb, Ga., ordinance § 14-39(n)(6).

113. For mathematical calculations, a 50-acre tract has a perimeter of approximately 6356 linear feet (regardless of its shape). The author logged a 50-acre tract of 20-year-old plantation pine in 1996 with a value of over $2100 per acre in pine timber alone. A 75-foot buffer then would require the dedication of $23,000 out of the total timber value of the tract of $105,000. Of critical importance in this analogy is that this timber was planted in the early 1970s and "investment-backed expectations" were that all 50 acres would be harvested. Buffer requirements like this discourage replanting in the buffer of commercial timberland because there is no incentive to spend the $80 to $100 per acre to site-prep and replant land that will be unharvestable because of the buffers.

114. See Cobb County, Ga., Code § 50-219(a)(3) (stating the ordinance is intended to "provide benefits to all the citizens of the community"); see also DeKalb, Ga., ordinance § 14-39(a)(2) (stating the legislature "hereby finds that the preservation of existing trees is a public purpose"); Fulton County, Ga., ordinance § I(I)(B) (1999) (stating the ordinance "benefits ... Fulton County citizens").

115. Id.
IV. COMMERCIAL IMPRACTICABILITY AS GROUNDS FOR A TAKINGS CLAIM

Although drafted half a century after Justice Holmes recognized a taking in *Pennsylvania Coal Co. v. Mahon*, the opinion reached by the Court in *Penn Central Transportation Co. v. City of New York* ("Penn Central") more artfully defined why the challenged statute in *Pennsylvania Coal Co.* effected a taking. In *Penn Central* the Court listed "interfer[ence] with distinct investment-backed expectations" as a significant factor in takings jurisprudence. Justice Holmes earlier stated a statute that makes it "commercially impracticable to mine certain coal has very nearly the same effect for constitutional purposes as appropriating or destroying it." Critical to his opinion was the fact that coal, like timber in the present instance, is a distinct estate in land. In *Pennsylvania Coal Co.*, the Kohler Act, purportedly as a "legitimate exercise of police power," "abolish[ed] what is recognized in Pennsylvania as an estate in land—, a very valuable estate." Justice Holmes stated, "the right to coal consists in the right to mine it." What makes the right to mine coal valuable is that it can be exercised with profit.

The coal mining company acquired its subsurface mineral rights by an 1878 deed. In May of 1921 the Pennsylvania legislature enacted the Kohler Act, which forbade mining of coal if it would cause the subsidence of any structure used as a home. The owner of the single home above the company's coal vein brought a suit in equity to enjoin the Pennsylvania Coal Company from mining under his house. The coal company argued that the surface owner purchased the land subject to the express terms of the deed reserving the mineral rights to the coal company, and that the Kohler Act, as applied, acted to divest the company of pre-existing property rights. On its ultimate review by the United States Supreme Court, the right to mine was upheld. The Court ruled that by rendering coal mining commercially impractical, the Pennsylvania legislature had effected a taking without just compensation.
The courts in *Keystone Bituminous Coal Ass'n v. DeBenedictis* ("*Keystone*")\(^\text{128}\) and *Hodel v. Virginia Surface Mining & Reclamation Ass'n*,\(^\text{127}\) clarified what constitutes commercial impracticality.

In *Keystone* coal companies challenged the Pennsylvania Subsidence Act,\(^\text{128}\) which required in-site maintenance of fifty percent of the coal beneath surface structures to prevent subsidence. The "zone of impact" to which the act applied was defined as a rectangular area determined by projecting a fifteen degree angle downward from the surface to the coal seam beginning fifteen feet on each side of a structure.\(^\text{129}\) As applied to Keystone's coal rights, this regulation required leaving only two percent of the total volume of coal in the seam for support.\(^\text{130}\) Of preeminent importance to the Court was the conspicuous absence of a "record in this case to support a finding, similar to . . . *Pennsylvania Coal*, that the Subsidence Act [made] it impossible for petitioners to profitably engage in their business, or that there has been undue interference with their investment-backed expectations."\(^\text{131}\) Particularly influential on the Court was the fact that either of the two "full extraction" coal mining techniques employed by Keystone\(^\text{132}\) routinely left "considerable amounts" of coal still in the ground in comparison to the two percent of the total coal required to be maintained to satisfy the regulation.\(^\text{133}\)

In *Hodel* a district court in Virginia found that the Surface Mining Control and Reclamation Act\(^\text{134}\) effected a taking because it "expressly prohibits mining in certain locations and 'clearly prevent[s] a person from mining his own land.'"\(^\text{135}\) The Supreme Court reversed on ripeness grounds because the specific provision held unconstitutional had not yet taken effect and because no property was identified for evaluation as to whether the Act would render mining commercially impractical.\(^\text{136}\)

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129. 480 U.S. at 477 n.7.
130. Id. at 496.
131. Id. at 485 (emphasis added).
132. The "room" and "pillar" method. See id. at 475 n.4.
133. Id.
135. 452 U.S. at 294 (quoting Virginia Surface Mining & Reclamation Ass'n v. Andrus, 983 F. Supp. 425, 441 (W.D. Vir. 1981)).
136. Id. at 294-95.
More recently, in *Florida Rock Industries, Inc. v. United States* ("Florida Rock").\(^{137}\) the United States Court of Appeals for the Federal Circuit reviewed the Army Corps of Engineers' refusal to grant a permit, under the Clean Water Act,\(^ {138}\) to Florida Rock Industries to mine limestone that lay beneath a tract of wetlands.\(^ {139}\) The company purchased a 1560 acre tract in 1972 specifically for the limestone beneath the predominantly wetland property. Preliminary mining operations began in 1972 but were suspended in 1974 because of a slump in the construction industry.\(^ {140}\)

When the company reopened mining in 1978, regulations enacted pursuant to Section 404 of the Clean Water Act required a permit from the Army Corps of Engineers to dredge "waters of the United States, including wetlands."\(^ {141}\) Because no permit was acquired by Florida Rock, the Corps issued a cease and desist order against the company. The company complied and then sought a permit. Because the Corps indicated to the company that it would only issue a permit for three years of mining at a time, the company sought a permit to mine the limestone under ninety-eight acres of its property.\(^ {142}\) The Corps denied the permit on grounds that the proposed mining would "cause irremediable loss of an ecologically valuable wetland parcel and would create undesirable water turbidity."\(^ {143}\) The company then initiated what became a fifteen-year legal battle.\(^ {144}\)

Primarily at issue was the question of whether the residual, nonmining value of the property prevented a finding of an uncompensated taking. The district court held that a partial deprivation resulting from a regulatory imposition that deprives the owner of a substantial, but not complete, economic value was still a taking that deserved just compensation.\(^ {145}\) The Federal Circuit Court of Appeals reversed and remanded because the district court failed to consider comparable sales in determining whether all economic value had been taken.\(^ {146}\) Importantly, however, the court of appeals specifically held that "[n]othing in the language of the Fifth Amendment compels a court to find a taking only

\(^{137}\) 18 F.3d 1560 (Fed. Cir. 1994) [hereinafter Florida Rock IV].


\(^{139}\) *Florida Rock IV*, 18 F.3d at 1562.

\(^{140}\) Id.

\(^{141}\) *Florida Rock Indus., Inc. v. United States*, 45 Fed. Cl. 21, 25 (1999) [hereinafter Florida Rock V].

\(^{142}\) Id.

\(^{143}\) *Florida Rock IV*, 18 F.3d at 1563.

\(^{144}\) *Florida Rock V*, 45 Fed. Cl. at 25.

\(^{145}\) Id. at 23.

\(^{146}\) *Florida Rock IV*, 18 F.3d at 1573.
when the Government divests the total ownership of the property; the Fifth Amendment prohibits the uncompensated taking of private property without reference to the owner’s remaining property interests.\textsuperscript{147} The court noted that in cases of physical occupation (a “categorical” takings analysis) even diminutive physical occupation merited compensation and stated that “[l]ogically, the amount of just compensation should be proportional to the value of the interest taken as compared to the total value of the property.”\textsuperscript{148} Finally, the court emphasized that a proper regulatory takings analysis is “a classic exercise of judicial balancing of competing values.”\textsuperscript{149}

On remand the district court again found a compensable partial taking had occurred, holding that “[t]he notion that the government can take two thirds of your property and not compensate you but must compensate you if it takes 100% has a ring of irrationality, if not unfairness, about it.”\textsuperscript{150} Quoting the Supreme Court in \textit{Armstrong v. United States},\textsuperscript{151} the district court stated: “The Takings Clause is triggered by regulation which forces ‘some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.’”\textsuperscript{152} The court reviewed the actual diminution in value suffered by Florida Rock and found that the company suffered a seventy-three percent loss in value because of the regulation, expressly rejecting the government’s defense that the land alternatively could be used for wildlife observation or hunting by describing those uses as not commercially valuable.\textsuperscript{153}

\textsuperscript{147} \textit{Id.} at 1568.
\textsuperscript{148} \textit{Id.} at 1569.
\textsuperscript{149} \textit{Id.} at 1570 (“The determination that governmental action constitutes a taking is, in essence, a determination that the public at large, rather than a single owner, must bear the burden of an exercise of state power in the public interest.” \textit{Id.} at 1570 n.27 (quoting \textit{Agins}, 447 U.S. at 260).)
\textsuperscript{150} \textit{Florida Rock V}, 45 Fed. Cl. at 23. Chief Judge Smith dismissed outright the notion that a partial taking was not compensable, stating:

If the law said that those injured by tortious conduct could only have their estate compensated if they were killed, but not themselves if they could still breathe, no matter how seriously injured, we would certainly think it odd, if not barbaric. Yet in takings trials, we have the government trying to prove that the patient has a few breaths left, while the plaintiffs seek to prove, often at great expense, that the patient is dead. This all-or-nothing approach seems to ignore the point of the Takings Clause.

\textit{Id.} at 23-24.
\textsuperscript{151} 364 U.S. 40 (1960).
\textsuperscript{152} \textit{Florida Rock V}, 45 Fed. Cl. at 24 (quoting \textit{Armstrong v. United States}, 364 U.S. at 49).
\textsuperscript{153} \textit{Id.} at 36-37.
Like mining rights in *Florida Rock* and *Pennsylvania Coal Co.*, timber rights are a distinct estate. The right to timber, to paraphrase the Court in *Pennsylvania Coal Co.*, is the right to harvest it. Like the coal industry in Pennsylvania, the timber industry is Georgia's leading industry, and like the statute in *Pennsylvania Coal Co.*, tree ordinances that so thoroughly regulate the harvest of timber as to make it commercially impractical are unlawful, uncompensated takings.

Particularly troublesome are tree preservation ordinances that, either intentionally or through oversight, fail to exempt tree harvesting from the rest of the requirements imposed by the ordinance. DeKalb County's ordinance is a good example of just this sort of enactment because it expressly includes tree harvesting within the activities subject to the ordinance. Trees on a harvesting site left to meet the ordinance's requirements must be protected by four-foot orange tree protection fencing, which effectively limits the ability to remove other timber. When specimen trees are so interlocked with a stand of trees that removal of the other trees poses a risk to the specimen tree, the County Arborist can proscribe timbering any of the trees in the stand. Both the City of Alpharetta and the City of Marietta arguably allow timber harvest, but Marietta limits the harvest to fifty percent of trees over six inches in diameter and does not exempt the harvest from the soil compaction and encroachment limitations. Alpharetta exempts horticultural activities, including farms, from the ordinance but, somewhat ambiguously, includes lumber harvesting "incidental to development of the land" and makes no provision exempting timber harvest from tree-save requirements for specimen trees.

The cumulative effect of imposing these development standards on the commercial harvest is to render commercial harvest impractical and unprofitable. Gone are the days when trees were individually felled by hand and dragged out of the forest by oxen. Today machines cut mature trees with pincers similar to giant garden shears, and skidders haul the trees to loading platforms. Mandating tree-save areas and protection zones means these pieces of equipment cannot be used to harvest the timber for fear of inadvertently compacting a protected root zone or damaging a specimen tree. Logging, by any description, is not a "neat"
job, and the imposition of these restrictions renders it commercially impossible.

V. CRAFTING A “BETTER” ORDINANCE

The primary areas of concern raised by the enactment of tree ordinances are best categorized by their effects on commercial timber harvesting and timber harvesting in conjunction with development. The practical problem that counties encounter in trying to pass these ordinances is how to encompass timber harvesting in conjunction with impending development while exempting genuine commercial harvest. DeKalb County makes no pretenses—it sweeps all timber harvest into the regulations applicable to development and, thus, goes too far.

In contrast, Fulton County regulates timber harvest according to a quasi-independent standard—zoning. This regulation reflects the more common sense approach that true commercial timber production most likely occurs on land zoned for agriculture. Fulton County allows timber harvest on nonagricultural land but only allows thinning, not clear-cutting, and critically, Fulton County expressly exempts timber harvesting on agricultural land from the pine specimen tree-save requirements. Apparently, Cobb County has the most liberal provisions, applying its tree ordinance to land-disturbing activity alone.

Of the three counties, Fulton County’s current provisions represent the most sustainable and logical approach. However, one modification, also tied to an independent standard, would improve even Fulton County’s ordinance and give heed to the “investment backed expectations” standard announced by the Court in Penn Central Transportation Co. v. City of New York. Specifically, it would behoove even Fulton County to allow an exemption for the clear-cut and pine specimen tree-save requirements, regardless of zoning, for any property designated as timber “conservation” property for ad valorem tax purposes. Property owners who dedicate their land to conservation demonstrate an independently verifiable “genuineness” to their timber management and

161. Id. § III(A)(3).
163. Conservation designation is a program by which a property owner covenants with a county that her land lying in the county will not “change” use for a 10-year period in return for a 25 percent reduction in county ad valorem taxes. If the owner breaches the covenant, she is liable for the entire amount of the reduction. This covenant is a clear indication of the use that the property owner intends for her property. Note that although DeKalb County imposes a five-year development ban on harvested property, the above described alternative is an affirmative recognition of conservation efforts rather than the punitive method selected by DeKalb County.
harvesting activities and should be exempt from the particular harvest requirements imposed by the zoning of their property.

Equally important is a provision that tree density requirements be attainable by replanting as opposed to maintenance. Fulton County's ordinance mandates that even clear-cut tracts must meet a fifteen-unit-per-acre-minimum-site density but allows that density to be met by replanting. To address county concerns that developers will cut all significant trees and then replant, a provision similar to that offered by Marietta is more effective and less likely to trigger takings claims. Marietta encourages preservation of specimen trees by awarding additional (double) density credits when specimen trees are saved, thus halving the total practical density required for any lot.

Clearly, timber harvest in conjunction with subsequent development is the primary focus of most tree ordinances. Here, local authorities cannot avoid the individualized determination required by the Court in *Dolan v. City of Tigard* that their exactions must be roughly proportionate to the impact caused by the particular land use. While even the Court did not require "precise mathematical calculations," there must be some effort to tailor the specific requirements to the individual developments. Blanket enactments that require one- and two-times replacement standards are suspect unless there is some determination that this requirement is necessary to offset the impact. It is important to note that nothing in the language of *Dolan* suggested that the exaction had to be roughly proportionate to that necessary to deter the conduct; it specifically must be proportionate to the impact caused by the conduct.

In this regard, Fulton County's ordinance takes the better approach, rewarding reforestation of barren land by doubling the density credits of trees planted on barren land. Quite simply, takings claims do not exist when the governmental entity reaches its goal by rewarding developers rather than penalizing them. Further, a developer, as any good business person who is acutely mindful of cost-benefit analysis, is

165. Marietta, Ga., Code § 712.08(D)(4)(d). Doubling of density credits offsets any additional profit that would be made from cutting the tree and allows the timber harvester the freedom to choose. In addition, when tracts are first harvested, developers would naturally bring pressure on the harvesters to maintain certain trees so that double credit could be fully utilized—the cooperation between the two industries that this article encourages.
167. Id. at 391.
likely to take pains to preserve trees if the economic benefit outweighs the cost.

Blanket buffer requirements also run afoul of takings scrutiny and should, instead, be tailored to the individual tract. Across-the-board buffer requirements for logging operations should yield to buffers imposed based on proximity to heavily traveled thoroughfares and residential or commercial development. Even assuming there is some logic in imposing these buffers, there is no inherent logic in imposing the exact same buffer on both the road frontage and the back of a tract. A sliding scale should be used based on the size of the road on which the property is located, the overall size of the tract, and the tract’s proximity to other development that rightfully needs to be “screened.” A tract located on a dirt road near only one other house simply does not need the buffer needed by a tract located on a road like Georgia 400.169 Finally, any similar buffer imposed should be released upon completion of the logging operation, and/or the trees located within those buffers should be counted toward overall density requirements for any tracts subsequently developed.

Buffers and no-disturb zones imposed as part of the permitting process for development must also be tailored to the type of development, the size of the lots, the proximity to other development, and the topography of the lots. No provision purporting to prevent the crediting of trees located in buffer zones toward overall site density requirements should ever withstand constitutional muster. The one county that elected to take this route, DeKalb County, further eroded the constitutionality of its provision by exempting commercial and industrial development from the restriction.170 Fulton County and Cobb County have state-imposed stream buffer requirements but neither county prohibits counting trees located in those buffers toward overall site density. This allowance, at least, provides for some individualized tailoring of subdivision lots already burdened by the buffer—individualized tailoring that is not present in the DeKalb ordinance.

VI. CONCLUSION

The enactment of tree ordinances affect uncompensated takings primarily in two ways: (1) by requiring the reservation of discrete, severable real property for a public purpose without individualized determinations that the impact of the use merits the reservation; and (2)

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169. ALPHARETTA, GA., CODE § 19-21. In this regard, the City of Alpharetta arguably most closely approximates this suggestion, maintaining a 120-foot buffer on Georgia 400.

170. DEKALB, GA., ORDINANCE § 14-39(g)(1).
by rendering the commercial harvest of timber impractical. Quite understandably, urban counties do not perceive the impact of forest industries in the same fashion as rural counties, but no county in the state is untouched by the industry. With over four million acres of forest land located in these urban counties, that "touch" remains significant.

As additional counties contemplate the enactment of similar ordinances, cooperation between developers, timber owners, and forest industries is essential to ensure these ordinances meet the needs of all parties involved. As more counties move to implement tree ordinances, a state-level statute, similar to the Historic Preservation Statute,\textsuperscript{171} would guide counties toward a more uniform approach and possibly reflect the needs of the timber industry more fairly without impinging upon the local government's exclusive authority to zone. Any legislation must delineate the manner those ordinances are to be enacted and the individualized determinations necessary to avoid unconstitutional, uncompensated takings.

There is no dispute that urban forests contribute to the communities that embrace them or that forests contribute to valid public interests. But in the race to preserve contributions, authorities must not go too far and impose a burden on timber owners that, "'in all fairness and justice, should be borne by the public as a whole.'"\textsuperscript{172}

\begin{footnotes}
\item[172] Florida Rock V, 45 Fed. Cl. at 24 (quoting Armstrong, 364 U.S. at 49).
\end{footnotes}