A Modern Disaster: Agricultural Land, Urban Growth, and the Need for a Federally Organized Comprehensive Land Use Planning Model

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INTRODUCTION

America is currently facing an imminent disaster which the vast majority of its citizens are entirely unaware of. This disaster has nothing to do with militant terrorist organizations. It does not involve an impending worldwide shortage of fossil fuels, or the potential development of nu-
clear weapons in hostile nations. No, this disaster looms much closer to home: America is presently facing an impending shortage of productive agricultural land. For many years, governments at every level have allowed unplanned, rapid-fire, speculative development to occur virtually unrestrained in every region of this country. This development is occurring almost exclusively on productive agricultural land. The result: America’s most productive agricultural land is quickly being replaced with strip malls, apartment complexes, and shopping centers; in other words, suburban sprawl. This widespread conversion of agricultural land is pervasive, and it is a disaster that is swiftly reaching a crescendo.

The citizens of this nation are currently experiencing a very different state of affairs than our forefathers were accustomed to. At the time of this country’s founding, Thomas Jefferson envisioned America as a nation built of small communities, each organized around subsistence farming. Agriculture was to be the cornerstone of the nation’s economy. Jefferson’s vision is quite obviously archaic in comparison to modern corporate America. Yet, most contemporary Americans would likely scoff at the notion that the country is now facing an imminent shortage of agricultural land. However, this is the situation the nation now faces. At current rates, all of America’s productive agricultural land will be gone in a little over two hundred years. The agricultural land of this country has quite literally become endangered.

Moreover, the rate at which this nation’s productive agricultural land is developed and converted to other uses continues to increase, due to a wide variety of factors. Much of America’s most productive agricultural land is located in immediate proximity to urban areas. Thus, as urban areas continue their natural expansion, this prime agricultural land is situated directly in the path of encroaching development. In addition, the market for development has operated for years in such a way that the long term consequences of land conversion are not properly accounted for. This is because the demand for development continues to escalate at a rate that exceeds the ability of localities to plan for the resulting growth. Rather than adjust their land use planning schemes to effectively balance competing interests, the majority of states have simply allowed the market to dictate the pace and manner of development. Expansion thus occurs in an unplanned, scattered fashion, and productive agricultural land is frequently replaced with suburban sprawl. Governments on both a national and state level have long been aware of this phenomenon, yet have not come close to reaching a solution to it. Sprawl and agglomeration threaten to devour the most productive agricultural land in America, and as of today there exists no settled strategy to stem the tide.

Yet, this is not a problem that is inherently incapable of solution. The federal government and state and local governments possess all of
the powers and land use planning tools necessary to accomplish the task, but have not fashioned a proper remedy. The answer lies in organization and implementation. The efforts of governments at all levels must be coordinated to assist in the development and implementation of a comprehensive land use planning model. The rapid nationwide conversion of prime agricultural land can only be effectively managed by a comprehensive land use planning model that is flexible enough to allow development and preservation to complement one another, and also sufficiently elastic that it can be adapted to suit the unique needs of each state. While productive agricultural land is being converted to suburban sprawl in every state, no single scheme is capable of uniformly solving the problem. Rather, states need a model that can be altered as needed to account for the differences amongst localities while still reaching the same end result. Thus, the goal of this Article is to lay the groundwork for the development of a model that incorporates various land use planning tools in a way that will allow localities to properly balance competing interests to ensure that development occurs in an intelligent, well-planned manner.

Part II of this Article provides detailed statistical evidence showing that productive agricultural land is being developed and converted to suburban sprawl in every state and locality in America. Part II also demonstrates that, because of market pressures and the general location of America’s most productive agricultural land, the rate at which agricultural land is being developed and converted to other uses continues to escalate. In addition, Part II provides an account of the problems resulting from this phenomenon, as well as a description of the benefits of agricultural land, economic and otherwise. Part III discusses land use planning programs implemented by federal, state, and local governments, concluding that the measures currently being utilized are insufficient to adequately balance the competing interests of development and agricultural land preservation. Part IV considers the legal implications of a comprehensive land use planning model, with particular emphasis placed on Fifth Amendment “takings” challenges to the implementation of land use restrictions such as agricultural zoning. Finally, Part V provides suggestions for the development of a comprehensive land use planning model. Part V proposes a framework to coordinate the respective efforts and capabilities of the federal government, state governments, local governments, and even private organizations to assist with the implementation of a land use planning scheme designed to preserve America’s productive and valuable agricultural land while ensuring that development proceeds in an intelligent fashion. In addition to suggesting a framework for governmental organization, Part V provides a detailed example of the manner in which various land use planning tools can be deployed as part of a comprehensive land use planning scheme that can
be adapted to account for differences among states and localities while achieving uniform results.

I. THE CORRELATION BETWEEN THE DEVELOPMENT OF PRODUCTIVE AGRICULTURAL LAND AND SUBURBAN SPRAWL

Urban expansion is irrevocably changing the landscape of America. While the migration of America's populace to urban areas—and the growth of urban areas—has been a dominant social trend for decades, the rate of urbanization has increased dramatically in recent years. Between 1982 and 1997 the population of the United States grew by seventeen percent, but the amount of urbanized land in America increased by forty-seven percent.¹ Current estimates place the amount of land being developed in America each year at two million acres.² Most of this land is productive agricultural land; conservative estimates place the amount of productive agricultural land developed each year at approximately one million acres.³ Currently, two acres of productive agricultural land are developed and converted to other uses each minute.⁴ At this rate, all of the agricultural land in America will be exhausted by the year 2225.⁵ However, this land will likely be lost much sooner because the rate at which agricultural land is being developed and converted to other uses continues to increase. Agricultural land was developed fifty-one percent faster during the 1990s than during the 1980s.⁶ The highest rate of loss is attributable to the most productive land; the rate of conversion for prime agricultural land between 1992 and 1997 was thirty percent higher than for non-prime agricultural land.⁷ Moreover, this escalation is unlikely to slow because the majority of America's most productive farmland is directly in the path of development. Eighty-six percent of the


³ See David L. Szlanfucht, How to Save America's Depleting Supply of Farmland, 4 DRAKE J. AGRIC. L. 333, 336 (1999). However, some studies have found the average annual loss of agricultural land to other uses to be much higher. For example, Luther Tweeten estimates that agricultural land in America is converted to other uses at a rate of four million acres annually. Luther Tweeten, Food Security and Farmland Preservation, 3 DRAKE J. AGRIC. L. 237, 240 (1998) (discussing average annual loss of agricultural land between 1945 and 1992).

⁴ See Tweeten, supra note 3, at 240.

⁵ Major National Findings, supra note 1.

⁶ Major National Findings, supra note 1.

⁷ Id.
fruits and vegetables and sixty-three percent of the dairy products produced in the United States are produced on agricultural land located immediately contiguous to urban areas. In fact, fewer than one-fifth of rural counties in North America now have a significant economic dependence on farming. Therefore, the majority of America’s prime agricultural land is perfectly situated for development. As urban areas expand, America’s most productive agricultural land will continue to be converted to other uses.

Moreover, the rate at which agricultural land in areas adjacent to urban centers is developed will continue to increase as a function of the market. Many American consumers desire to build homes on large lots, which are often unavailable (at least at an affordable price) in metropolitan areas. In addition, “the high cost of housing in major cities and coastal environments” drives many people to search for homes in outlying areas. Therefore, consumers create an escalating demand for the development of land contiguous to urban areas. Because America’s most productive agricultural land is located near urban areas, this land provides the supply. Therefore, developers naturally focus on the productive agricultural land surrounding America’s urban centers as they respond to consumer demand. Developers also have a more basic reason to develop and convert agricultural land to other uses: farmland is particularly attractive because it is flat and well-drained, and therefore easily converted to commercial, industrial, or residential purposes.

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8 Id.
10 See, e.g., Mark W. Cordes, Agricultural Zoning: Impacts and Future Directions, 22 N. Ill. U. L. Rev. 419, 441 (2002) (noting that suburban sprawl exists because it “is what a significant number of consumers want”); Major National Findings, supra note 1 (“[S]ince 1994, 10+ acre housing lots have accounted for 55 percent of the land developed.”).
11 Levy & Melliar-Smith, supra note 2, at 15.
12 There are many other factors that contribute to consumers’ demand for the development of agricultural land. For example, telecommunications have had an increasing impact in recent years. Developments in telecommunications are “releasing households from location constraints related to maximum acceptable time and distance.” Keller, supra note 9. Because people are not nearly as bound by location as they were in the past, people consider a wider range of options when making housing choices, and more frequently choose to live further away from city centers. Id.
13 See, e.g., Szlafnuch, supra note 3, at 334 (discussing trend of developers replacing productive farmland with urban sprawl); Guadalupe T. Luna, “Agricultural Underdogs” and International Agreements: The Legal Context of Agricultural Workers Within the Rural Economy, 26 N.M. L. Rev. 9, 51 (1996) (noting underlying rationale for developers’ attraction to rural areas).
Chicago journalist Robert Heuer points out, “historically, planners’ bread and butter has been planting subdivisions on farmland.”

The significant effect of normal market pressures on the pace of development is exacerbated by the fact that local governments in outlying areas either ignore the fact that agricultural land is being developed and converted to other uses or even encourage such development. For example, local governments often promote land development as an economic policy because they believe that development will increase the tax base. Quite often, these pressures combine to produce land development and conversion at a greater pace than local governments can reasonably plan for. Before a local government realizes what is occurring and implements a proper land use planning scheme to deal with the development, the conversion of the locality’s agricultural land to other uses is already well under way. Thus, the development and conversion of agricultural land often proceeds solely as a function of the market. The result is that land development in such areas is frequently accomplished in a scatter-shot, unplanned manner. In other words, America’s most productive agricultural land, situated in close proximity to large urban centers, is being replaced with suburban sprawl.

“Traditional rural communities lying within 65 to 120 kilometers of the metropolitan fringe show a strong propensity to expand . . . [creating] quite possibly the final wave of spatial development of large urban centers before urban agglomeration occurs.”

Productive agricultural land is being developed and converted to other uses at an increasing rate in nearly every state in America. For example, Atlanta has been referred to as “the most sprawl-threatened region in America.”

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15 See Cordes, supra note 10, at 442 (discussing governmental subsidization of scattered development, “especially in terms of roads”); Levy & Melliar-Smith, supra note 2, at 17 (“Cash-strapped local governments must, therefore, rely on sales taxes and other revenues from commercial development to fund their operations. This leads to a competition for development, often at the expense of prime agricultural land . . . .”). This frequently occurs in spite of the fact that fiscal costs due to service provision demands actually outweigh revenue generation on developed land. See infra at notes 35-40 and accompanying text.
16 See, e.g., Szlanfucht, supra note 3, at 341 (noting that development is often typified by “high demand, low costs, and the absence of developmental oversight by local governments.”).
17 See id.; Cordes, supra note 10, at 441-42.
18 According to Cordes, while the concept of suburban sprawl is appalling to most Americans in the abstract, the market does not permit this problem to self-correct. See Cordes, supra note 10, at 441-42 (“[C]onsumer preferences . . . fail to consider the broader social costs of their actions and thus leads to an inefficient allocation of resources . . . . the market, as reflected in consumer choices, fails to consider all the costs and benefits in a transaction; they are external to the decisionmaking process.”).
19 Keller, supra note 9 (noting that the current trend in many urban areas is “emptiness at the center and growth on the edges”)
20 See Major National Findings, supra note 1.
gion in the United States,” based on the fact that the area surrounding the city loses an average of 2,000 acres of agricultural land to other uses each month.\textsuperscript{21} Texas is currently the most sprawl-threatened state in the nation,\textsuperscript{22} having had 332,800 acres of prime agricultural land developed and converted to other uses between 1992 and 1997 (a forty-two percent increase from the previous five years).\textsuperscript{23} Even less populous states are not immune to this phenomenon. For example, 17,800 acres of prime agricultural land were developed and converted to other uses in Utah between 1992 and 1997 (a forty-eight percent increase from the previous five years).\textsuperscript{24}

The negative consequences of such rapid-fire, unplanned development and conversion of prime agricultural land are numerous. For one, America’s most productive agricultural land is no longer available to provide valuable resources necessary for the country’s general welfare. Another equally obvious consequence is that the natural beauty and open space that once existed is now obliterated. The widespread expansion of public services necessary to support the newly developed land, such as sewer systems and roads, not only promotes additional conversion and sprawl\textsuperscript{25} but also frequently destroys entire ecosystems and contributes to rising levels of pollution.\textsuperscript{26} Additionally, the subdivisions and strip malls that typify suburban sprawl often leave behind blight and poverty in inner cities as much of the populace drifts towards the urban fringe.\textsuperscript{27} Nor is such development beneficial for many of the communities in which agricultural land is being converted to other uses. For example, market and governmental forces exert such pressure in favor of develop-
ment that agricultural land is often converted to residential use before the necessary infrastructure is in place.\textsuperscript{28} Thus, many homebuyers moving to such areas are rewarded with "soaring property tax rates" imposed by local governments to cover the costs of necessary public services.\textsuperscript{29} Such consequences turn the arguments in favor of development on their respective heads and beg the question: when does development, especially development accomplished in an unplanned manner, become a detriment to society?

Even if one ignores the many negative consequences of suburban sprawl and urban agglomeration, agricultural land merits strong protection from a land use planning perspective because of the numerous benefits it provides. America's agricultural land "provide[s] much of the nation's food and fiber and has a significant impact on the U.S. economy."\textsuperscript{30} Preserving America's prime agricultural land generally results in reduced prices for produce; when America is not reliant on foreign produce, the prices of foreign produce are driven down, resulting in the competitive pricing of both local and imported goods.\textsuperscript{31} Thus, agricultural land provides a tremendous benefit to the nation's welfare,\textsuperscript{32} a benefit that decreases corresponding to the increasing rate at which agricultural land is developed and converted.

In addition, and contrary to popular belief, protecting agricultural land rather than allowing it to be developed and converted to other uses can be economically beneficial to localities as well. As discussed previously, the market generally sets a trend in favor of increased development and conversion.\textsuperscript{33} However, the market for land development is inefficient because many of the actors (consumers, developers, and local

\textsuperscript{28} See James Poradek, Putting the Use Back in Metropolitan Land-use Planning: Private Enforcement of Urban Sprawl Control Laws, 81 MINN. L. REV. 1343, 1349 (1997).

\textsuperscript{29} Szlanfucht, supra note 3, at 341.


\textsuperscript{31} See, e.g., Anthony R. Arcaro, Avoiding Constitutional Challenges to Farmland Preservation Legislation, 24 GONZ. L. REV. 475, 495 (1988–89) ("Cheaper local produce helps keep down the cost of imported farm products.").

\textsuperscript{32} While agricultural land protection measures on the national level have largely been unsuccessful to date, see infra notes 44–84 and accompanying text (discussing failure of agricultural land protection measures imposed by federal government), the federal government has recognized the importance of agricultural land to the nation's welfare for many years. For example, the preamble to the Agriculture and Food Act of 1981 states that "the maintenance of the family farm system of agriculture is essential to the social well being of the Nation" and that farming is "essential to . . . the competitive production of adequate supplies of food and fiber." Pub. L. No. 97-98 § 1608 91 Stat. 1213, 1347 (codified as amended at 7 U.S.C. § 2266 (1994)).

\textsuperscript{33} See Cordes, supra note 10, at 441 (discussing consistent market trend in favor of development).
governments) suffer from an information deficiency.\textsuperscript{34} The market for agricultural land conversion often places so much pressure in favor of development on these actors that they cannot properly weigh all of the costs and benefits.\textsuperscript{35} Thus, development frequently proceeds in an ad hoc and unplanned fashion. As a result, most state and local governments are unaware of and discount the extent to which agricultural land contributes to the economy.

Agricultural land actually helps subsidize local governments because the land provides greater revenue in the form of property taxes than it costs in terms of public services.\textsuperscript{36} For example, studies have demonstrated that agricultural land requires only $0.21 to $0.75 in public services for every dollar it generates in property tax revenues.\textsuperscript{37} In comparison, residential land requires $1.05 to $1.67 in public services for every dollar generated in property tax revenues.\textsuperscript{38} Thus, while "farmland protection is fiscally responsible . . . residential growth does not pay its own way."\textsuperscript{39} Moreover, while commercial and industrial land uses generally provide more in tax revenue than they demand in public services,\textsuperscript{40} they also result in suburban sprawl because they "encourage residential growth and development, whereas farms do not."\textsuperscript{41} In addition, commercial farms provide good investment opportunities, supply jobs, raise a large amount of income, and contribute to the tax base—all while demanding few public services expenditures by local governments. Given these benefits, seldom considered because of market pressures, state and local governments should recognize that "promoting local agriculture is a form of economic development."\textsuperscript{42} Accordingly, state and local governments should include agricultural land preservation as a ubiquitous component of their land use planning schemes.

In summary, current statistics demonstrate that America’s prime agricultural land is being developed and converted to other uses at an increasing rate nationwide. The conversion of this nation’s most productive agricultural land into suburban sprawl and urban agglomeration is unlikely to dissipate, for the majority of agricultural land is directly in the path of development and current market pressures favor

\begin{footnotesize}
\begin{enumerate}
\item See, e.g., \textit{id.} at 441–42 (discussing inefficiency in market for development).
\item See \textit{id.}
\item See \textit{Sean F. Nolan Cozota Solloway, Note and Comment, Preserving Our Heritage: Tools to Cultivate Agricultural Preservation in New York State, 17 PACE L. REV. 591, 640 (1997); Holly L. Thomas, DU\textsc{ct}\textsc{ess County Planning Dep’t, TECH MEMO: THE ECONOMIC BENEFITS OF LAND CONSERVATION} 1 (1991).}
\item \textit{HOLDING OUR GROUND, supra note 14, at 55.}
\item \textit{Id.}
\item \textit{Id.}
\item \textit{Id.}
\item See Szlanfucht, \textit{supra} note 3, at 339.
\item \textit{HOLDING OUR GROUND, supra note 14, at 17 (emphasis added).}
\end{enumerate}
\end{footnotesize}
development and conversion. Yet, America's agricultural land is a valuable resource that provides a benefit, a benefit that is non-renewable once the land is developed and converted. Accordingly, a comprehensive land use planning model is needed, one that adequately accounts for the need to preserve this valuable resource while still allowing development to occur in a controlled fashion. The fact that agricultural land continues to be converted at increasing rates demonstrates that current preservation measures are failing. If a viable solution is not discovered soon, "the last crop produced on much of the nation's prime farmland will be asphalt." \(^{43}\)

II. A MODEL OF INEFFECTIVENESS: FEDERAL AND STATE LAND USE PLANNING SCHEMES

As the preceding Section demonstrates, America is in dire need of a solution to the increasing development and conversion of prime agricultural land. The programs enacted to date have not successfully addressed this problem, for productive agricultural land is being developed and converted to other uses in an unplanned and unintelligent manner at increasing rates nationwide. Indeed, it is widely recognized that most programs, while developed ostensibly to protect agricultural land, have proven ineffective. \(^{44}\) A land use planning model that includes the preservation of agricultural land as a major component and is still comprehensive enough to account for the factors that contribute to agricultural land conversion in various localities is needed. In devising such a plan, it is appropriate to first consider the actions that have already been taken by both national and state governments. While no government has enacted a comprehensive land use planning scheme capable of solving this problem, the failings of previously enacted plans should inform any discussion of the proper way to engage in comprehensive land use planning. Progress can never be made when the mistakes of the past are not considered and addressed. Accordingly, this Section examines actions to protect agricultural land taken by national and state governments, respectively.

A. Federal Protection for Agricultural Land

The federal government has been passing legislation dealing with agricultural land for many years. For example, during the New Deal the federal government passed a wide array of agricultural legislation—legislation providing for, among other things, widespread subsidy programs,

\(^{43}\) Solloway, supra note 36, at 595.

\(^{44}\) See, e.g., Szlanfucht, supra note 3, at 335 ("[M]any of the enacted programs to protect farmland have proven to be largely ineffective.").
rehabilitation loans, and government land purchases.\textsuperscript{45} However, the escalating trends of agricultural land conversion and suburban sprawl have stimulated a growing national awareness of the problems associated with these trends in recent years. This awareness has forced the federal government to pay increased attention to the problems by passing legislation purporting to address these important land use issues.\textsuperscript{46} As early as 1975, the Committee on Land Use for the United States Department of Agriculture ("USDA") recommended that the federal government take steps to maximize the retention of agricultural land.\textsuperscript{47} In the years since, the federal government has passed legislation enacting many programs supposedly designed to stimulate the protection and preservation of agricultural land.\textsuperscript{48} However, the federal government has traditionally viewed land use matters in general—and land use planning schemes in particular—as matters of local concern.\textsuperscript{49} Accordingly, the approach taken by the federal government has largely been one of abstention, whereby specific programs are designed to incentivize the private sector to protect agricultural land. However, these incentive programs are not deployed as any sort of comprehensive land use planning strategy.\textsuperscript{50} In fact, most federal programs enacted to date have been "little more than token attempts at farmland protection."\textsuperscript{51} In contrast, over ninety federal spending programs have a significant effect on the location and cost of private development, but do surprisingly little to regulate or supervise the industry’s impact on agricultural land. For example, the federal highway program increases access to outlying areas and thus promotes suburban sprawl. The federal government has, in effect, helped "subsidize[ ] the

\textsuperscript{45} Todd A. Wildermuth, National Land Use Planning in America, Briefly, 26 J. LAND, RESOURCES, & ENVTL. L. 73, 74–75 (2005).

\textsuperscript{46} This Section deals only with legislation purportedly designed to directly protect and preserve agricultural land, and thus does not discuss other federal programs that impact agricultural land, such as federal subsidy programs. It should be noted that federal subsidy programs suffer from the same failings as the rest of the federal legislation, for they are not deployed as part of a coordinated national land use program. \textit{Id.} at 80.

\textsuperscript{47} \textit{Holding Our Ground, supra} note 14, at 75.

\textsuperscript{48} This section is in no way meant to be a comprehensive list of federal legislation relating to agricultural land and suburban sprawl. While Congress has frequently passed legislation that purports to address the depletion of agricultural lands, few of the enacted programs have been successful. \textit{See Holding Our Ground, supra} note 14, at 76. Therefore, this section will only address the more significant legislative programs. For a more comprehensive discussion of federal legislation dealing with this issue, \textit{see} Levy & Melliar-Smith, \textit{supra} note 2, at 15–18; \textit{Holding Our Ground, supra} note 14, at 75–85.

\textsuperscript{49} The federal government has come remarkably close to adopting a national land use planning program on two separate occasions: during the New Deal and again during the 1970s. \textit{See} Wildermuth, \textit{supra} note 45, at 75–78. Both times, the proposed program failed miserably. \textit{Id.} Wildermuth describes the federal government's current strategy with regard to land use planning as "piecemeal." \textit{Id.} at 73.

\textsuperscript{50} \textit{See, e.g.}, \textit{Holding Our Ground, supra} note 14, at 75 ("[T]he federal government has nothing close to a coherent strategy to protect farmland.").

\textsuperscript{51} \textit{Id.} at 76.
conversion of millions of acres in farmland over the past fifty years" due to the surprisingly few steps that it has taken to coordinate its various programs. While the vast majority of federal legislation has done little to curtail the rapid development of agricultural land, several programs are worth noting, though more for their failings than for their successes.

In 1981, Congress passed the Farmland Protection Policy Act ("FPPA") after a study of the nation's agricultural lands demonstrated that a large amount of productive agricultural land had been developed and converted to other uses between 1967 and 1977. The goal of the FPPA was to reduce federal contribution to agricultural land depletion by forcing federal agencies to coordinate their administration of federal programs with agricultural land preservation policies and programs administered by state and local governments. Under the FPPA, a federal agency is required to submit a Farmland Conversion Rating Form to the Natural Resources Conservation Service whenever a federally funded project will contribute to farmland conversion. These reports serve as the basis for a yearly presentation that the USDA gives to Congress regarding "the impacts of federal programs and projects on farmland conversion." However, this reporting scheme serves as little more than an information-gathering vehicle for Congress. Because the FPPA does not require that federal agencies actually take any action to minimize the impact of federal programs on the conversion of agricultural land, federal agencies may proceed to administer their programs as they like. Accordingly, the only real benefit of the reporting requirement is transparency, which amounts to little more than a "bland acknowledgement of concern, setting forth a very limited role for the federal government" in land use planning.

However, the FPPA does contain one distinct benefit: the creation of a land evaluation and site assessment ("LESA") system. The LESA is a statistical rating system that attempts to objectively rate the quality

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52 Id.
54 See Holding Our Ground, supra note 14, at 76.
55 Id. at 76-77.
56 Id. at 77.
57 Id.
58 Id.
59 Id.
60 Szlanfucht, supra note 3, at 334.
and productivity of agricultural land on a numerical basis. The objective of the LESA system is to gather data that will assist state and local governments in identifying prime agricultural land for preservation. However, the federal LESA system suffers from a serious shortcoming in that the rating of agricultural land is generally lowered (and thus deemed less worthy of protection) as surrounding developmental pressures increase. Thus, under the federal LESA system, the rating of America’s most productive farmland — the vast majority of which is located near large urban areas — is artificially deflated. For example, highly productive agricultural land in areas such as California’s Central Valley receives a low rating under the federal LESA system despite being some of the most productive agricultural land in the entire United States. Despite its failings, however, the federal LESA system has been used as a land use planning mechanism in a majority of states; by 1996, the system was being used in over thirty states.

Following its initial attempt to preserve agricultural land with the FPPA, Congress enacted the 1985 Farm Bill a few years later. This legislation was designed to promote the preservation of agricultural land by providing an incentive for private landowners to establish conservation easements on their land. The Bill accomplished this through a debt-reduction-for-easement provision that empowered the Farm Service Agency (“FSA”) “to reduce the debt obligation of farmers who donate a conservation easement on their nonproductive land to the agency.” However, the program was almost a complete failure, as virtually no landowners chose to enroll with the FSA. While over 66,000 agricultural landowners had contacted the agency to attempt to have their debt reduced as of 1989, only approximately 400 actually expressed a desire to be considered for the program.

Congress has also passed several acts designed to either grant or lend federal funds to states for use in protecting agricultural lands. For example, in 1990 Congress passed the Farms for the Future Act (“FFA”). The FFA enacted a “purchase of development rights” (“PDR”) program, whereby the federal government would lend federal money to states to be used to purchase the development rights on pri-

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61 See HOLDING OUR GROUND, supra note 14, at 77.
62 See, e.g., id. at 77–81 (describing federal LESA system and its uses).
63 Id. at 80.
64 Id. at 81.
65 Id.
67 See HOLDING OUR GROUND, supra note 14, at 81.
68 Id.
69 Id.
vately-owned agricultural land.\textsuperscript{71} Under the FFA, the federal government allocated up to ten million dollars in federal money per year to be lent to states willing to match half of the federal funds.\textsuperscript{72} The FFA was replaced six years later when Congress upped the ante by passing the Federal Agricultural Improvement and Reform Act of 1996 ("FAIR").\textsuperscript{73} FAIR replaced the lending approach of the FFA by simply allocating federal grant money for states with dedicated farmland preservation programs to purchase conservation easements on privately owned agricultural land.\textsuperscript{74} The program, known as the Farmland Protection Program, allocated thirty-five million dollars in federal grant money to be used to purchase such easements.\textsuperscript{75} However, the program had very limited success and was shortly repealed.\textsuperscript{76} FAIR was then replaced by the Farm Security and Rural Investment Act of 2002\textsuperscript{77} ("FSRIA"), which does little more than update FAIR and signal a return to the fund-matching nature of the FSA.\textsuperscript{78} Under the FSRIA, the Secretary of Agriculture is authorized "to purchase land or conservation easements for the purpose of protecting topsoil by limiting nonagricultural uses of the land."\textsuperscript{79} The purchases are accomplished by the USDA partnering with state and local governments as well as nongovernmental organizations to provide up to half of the fair market value for such easements.\textsuperscript{80} Thus, as with the FSA, the FSRIA only requires the federal government to provide half of the funds for conservation easements.

Two major flaws exist regarding the legislation described above, all of which was supposedly designed to increase the preservation of productive agricultural land. First, the federal government has done remarkably little to ensure that its legislative programs function as part of a comprehensive land use planning program designed to preserve agricultural land. Instead, the federal government has passed legislation that functions in isolation and merely provides incentives for private landowners to refrain from developing their agricultural land.\textsuperscript{81} These incentive schemes usually contain only one "tool" to do the job, such as a

\begin{footnotesize}
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\item \textsuperscript{71} See \textit{Holding Our Ground}, supra note 14, at 82. PDR programs are discussed in further depth \textit{infra} at notes 146-49 and accompanying text.
\item \textsuperscript{72} Id.
\item \textsuperscript{74} Szlanfucht, supra note 3, at 335.
\item \textsuperscript{75} Id.
\item \textsuperscript{76} Id. (stating that FAIR contained "minor but encouraging efforts . . . to preserve farmland.").
\item \textsuperscript{78} See Levy & Melliar-Smith, supra note 2, at 16.
\item \textsuperscript{79} Id.
\item \textsuperscript{80} Id.
\item \textsuperscript{81} See supra notes 48-51 and accompanying text.
\end{itemize}
\end{footnotesize}
A MODERN DISASTER

PDR program or a fund-matching program designed to stimulate the purchase of conservation easements. Such schemes are woefully inadequate to combat the pervasive market pressures to develop agricultural land that exist on a state and local level. Because "states, and particularly local governments . . . implement[ ] the majority of land use controls,"82 simply providing funding is not sufficient in localities that do not approach land use planning in a deliberate and reasoned manner. The trend in favor of development is so prevalent that simply placing conservation easements on land in a haphazard manner may do little good. While "the federal funding role for farmland preservation is likely to expand . . . as the squeeze on farmland resources continues,"83 Congress' funding programs would be much more successful in preserving productive agricultural land if they were deployed as merely one part of a comprehensive land use planning model.

Second, most of the federal legislation enacted to date employs the most expensive land use planning tools, which are unlikely to prevent America's most productive agricultural land from being converted to other uses. The FFA, FAIR, and FSRIA all employ either PDR or conservation easement programs, and they all use federal funds, either exclusively or in combination with state funds, to purchase development rights from private landowners.84 The problem with such legislative schemes is that a high percentage of the most productive agricultural land in the country is located near urban areas, and is likely to have a high fair market value. Therefore, funds used to purchase development rights to such land do not go very far. Moreover, landowners in such areas may be reluctant to sell the development rights to their land once the fair market value reaches a certain point. For example, if a landowner is given the choice to sell his land outright at $50,000 per acre, or sell only the development rights at $25,000 per acre, the decision may be a foregone conclusion. The bottom line is that when only these limited land use planning tools are employed, very little is actually accomplished in the way of protecting America's most productive agricultural land. To the extent these tools are deployed, Congress needs to take steps to ensure that their impact is maximized. Again, if these programs were implemented as part of a comprehensive land use planning model, Congress' funds would go much further. Otherwise, the impact of federal legislation will continue to be minimal.

82 See Levy & Melliar-Smith, supra note 2, at 15.
83 HOLDING OUR GROUND, supra note 14, at 83.
84 See supra notes 71–80 and accompanying text.
B. STATE AND LOCAL PROTECTION FOR AGRICULTURAL LAND

Nearly all substantive programs designed to protect agricultural land are implemented at a state or local level.\textsuperscript{85} Certainly, the federal government still has an important role to play in effective land use planning, particularly from an organizational perspective. However, state and local governments necessarily implement many land use planning measures because some land use planning "tools" are not readily available to the federal government.\textsuperscript{86} As the conversion of agricultural land has become an increasingly relevant issue in recent years, more and more state and local governments have begun implementing various programs designed to protect their productive agricultural land.\textsuperscript{87} In fact, every state currently has in place some form of legislation designed to protect and preserve agricultural land, although the level of protection varies widely from state to state.\textsuperscript{88}

While every state has implemented some sort of program designed to protect agricultural land, "[m]ost states have not done a good job of coordinating these techniques into a strategic package,"\textsuperscript{89} which helps explain the increasing rate of farmland conversion. Even Oregon's land use planning program, widely hailed as "the most successful in the nation and imitated by several states,"\textsuperscript{90} has not been entirely successful. Oregon's agricultural land continues to be converted at increasing rates despite the fact that for many years Oregon had the most comprehensive land use planning model in the nation.\textsuperscript{91} Therefore, while farmland conversion has been recognized as a concern in every state, there currently exists no universally recognized solution to the problem. This Section discusses a variety of land use planning techniques implemented by state and local governments and addresses both the positive and negative aspects of each technique. The Section also discusses Oregon's land use planning model in depth by pointing out the various techniques used by Oregon on both a state and local level and addressing the problems Ore-

\textsuperscript{85} See, e.g., Szlanfuch, supra note 3, at 335 ("As a result of both Congress' apparent inability to preserve farmland and current prevailing national sentiment, the difficult task of preserving farmland has been left primarily to the state legislatures and local governments.").

\textsuperscript{86} For example, zoning schemes are frequently deployed in efforts to balance the need to develop land with the need to preserve it. Because zoning schemes do not lend themselves particularly well to oversight on a national level, they are necessarily implemented by state and local governments. See Holding Our Ground, supra note 14, at 105-28 (describing various zoning schemes and the role state and local governments play in their implementation).

\textsuperscript{87} See Szlanfuch, supra note 3, at 355.

\textsuperscript{88} See Holding Our Ground, supra note 14, at 88-89. See also Cordes, supra note 10, at 420 ("All levels of government have perceived farmland preservation as an important societal goal . . . ").

\textsuperscript{89} Holding Our Ground, supra note 14, at 88.

\textsuperscript{90} Szlanfuch, supra note 3, at 352.

\textsuperscript{91} See Major National Findings, supra note 1; infra notes 152-80 and accompanying text.
Oregon has encountered in administering its comprehensive land use planning scheme.

1. Land Use Planning “Tools” for State and Local Governments

State and local governments currently utilize a wide variety of land use planning techniques to protect and preserve agricultural land. To begin with, every state now offers a favorable property tax program designed to tax land according to its value as agricultural land, rather than its fair market value. For example, agricultural land in Utah is taxed “according to its use value” under the Farmland Assessment Act (“FAA”). The FAA was enacted because, as is the case in many states, “urban growth was encroaching on rural areas and . . . if farmland was taxed at market value, farmers . . . would find it difficult to continue to devote their property to low-profit farming operations.” This problem is typical of the situation facing agricultural land in many states. Agricultural land located near urban areas is likely to have a much higher fair market value than agricultural land in rural localities. If agricultural land in urban localities is taxed at its fair market value rather than according to its current use, the taxes are likely to be exponentially higher. When this occurs, agricultural land owners may be forced to sell their land to developers simply because, as a result of the tax scheme, it is not financially efficient to continue to use the land for agricultural production.

While property tax programs designed to benefit owners of agricultural land do decrease developmental pressure, they are easily manipulated when not employed with other land use planning techniques as part of a comprehensive plan to protect agricultural land. It is not uncommon for developers to purchase agricultural land, maintain it for a period of time as agricultural land to benefit from the favorable tax scheme, and then develop and convert it to other uses. For example, in Utah the FAA permits landowners a tax deduction for agricultural use when a parcel of land is five acres or larger and meets the other requirements in the act regarding agricultural production. In Board of Equalization of Salt Lake County v. Utah State Tax Comm’n ex rel. Judd, the Utah Supreme Court considered the application of the FAA to a parcel of agricultural land that had been subdivided for development and sale, yet maintained

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92 HOLDING OUR GROUND, supra note 14, at 88.
95 County Bd. Of Equalization Wasatch County, 2000 UT 57, ¶ 10, 6 P.3d at 562.
96 HOLDING OUR GROUND, supra note 14, at 87.
97 Id.
99 846 P.2d 1292 (Utah 1993).
as agricultural land until development began in order to qualify for the tax exemption.\footnote{Id. at 1296–97.} Though the court noted that such a use did "not comport" with the intent of the statute and stated that the FAA effectively created a "tax loophole" for developers, the court allowed the tax deduction because it technically comported with the statute.\footnote{Id.}

Every state has also enacted some form of a "right-to-farm" law, which helps protect agricultural landowners operating in areas contiguous to urban or suburban areas from private nuisance suits.\footnote{Id. at 90–91.} Right-to-farm laws protect agricultural landowners by limiting the circumstances under which neighboring landowners can bring a cause of action based on nuisance.\footnote{Id. at 88–90.} For example, an agricultural landowner may need to fertilize his fields in the spring. Fertilization frequently causes unpleasant odors, which neighboring landowners may want to prevent. However, in localities with right-to-farm laws, the neighboring landowners would likely be unable to bring a nuisance suit to enjoin the agricultural landowner from fertilizing. Thus, right-to-farm laws have the effect of sparing agricultural landowners from incurring certain litigation expenses.

While favorable tax schemes and right-to-farm laws are employed by every state in America,\footnote{Id. at 88–90.} other land use planning tools are not as pervasive. The extent to which agricultural land is protected and the variety of tools that are employed greatly varies from state to state. Perhaps the most important land use planning tool is the agricultural zoning scheme, along with its many variants and complementary programs. Every state already utilizes some form of zoning scheme to classify various categories of land and define the uses to which a parcel of land may be put in each category. For example, land may be zoned for commercial, residential, or agricultural use, with these categories further divided into subcategories to delineate various uses allowed within each category. In general, agricultural zoning schemes "impose[ ] restrictions on

\footnote{Developers' manipulation of tax schemes intended to benefit agricultural land is becoming an increasingly common method of keeping the cost of property low pending sale for development. See \textit{Holding Our Ground}, supra note 14, at 87. For another clear example of a farmland tax program being manipulated, see \textit{SKS Property v. Multnomah County Assessor}, No. TC-MD 021135C, 2003 WL 22319429 (Or. Tax Magis. Div. 2003). In \textit{SKS Property}, the plaintiff grew vegetables on a six-acre parcel of property until the property sold in order to qualify for a special assessment only available for agricultural land. \textit{Id.} at *1. The court upheld the special assessment under the terms of the statute at issue. \textit{Id.} at *4. The lesson from these cases is that courts are often constrained to interpret these types of statutes literally, even when the application of the statute is clearly counter to its purpose. When tax schemes that are supposed to benefit agricultural land are not implemented as part of a greater plan to protect and preserve agricultural land, the result is frequently the creation of a tax loophole for developers and increasing developmental pressure.}

\footnote{Holding Our Ground, supra note 14, at 88–90.}

\footnote{Id. at 90–91.}

\footnote{Id. at 88–90.}
the amount and type of development” that may occur within the zone, thereby preventing the land from being converted to other uses.\textsuperscript{105} Agricultural zoning schemes have become the “most widely used means by which municipalities restrict development and preserve farmland,”\textsuperscript{106} and are now “the foundation of most farmland preservation efforts.”\textsuperscript{107} As of 1997, twenty-six states utilized agricultural zoning in some form.\textsuperscript{108}

In general, there are two major types of agricultural zoning schemes: exclusive and non-exclusive agricultural zoning, the latter being the most popular.\textsuperscript{109} An exclusive agricultural zoning scheme typically “prohibits any use of the land other than agricultural,” although “compatible or accessory buildings” are usually allowed.\textsuperscript{110} Because exclusive agricultural zoning schemes are so restrictive, they are usually used only when “farming is the dominant land use, the farmland is in large contiguous blocks, and there are few nonfarm dwellings or other nonfarm buildings in the area.”\textsuperscript{111} Exclusive agricultural zoning “avoids the problem of leapfrog and buckshot development,” or suburban sprawl, because it is usually applied to large areas of land.\textsuperscript{112} Thus, exclusive agricultural zoning schemes are highly effective land use control devices when it comes to simply preserving productive agricultural land. However, because exclusive agricultural zoning schemes are so restrictive, they also run a high risk of provoking litigation, particularly Fifth Amendment “ takings” challenges,\textsuperscript{113} when applied to areas with any sort of non-agricultural development already in place. Few states have used exclusive agricultural zoning schemes, although Hawaii, Oregon, and

\begin{footnotes}
\item[105] Szlanfucht, supra note 3, at 348.
\item[106] Id.; see also Holding Our Ground, supra note 14, at 106 (“Agricultural zoning is the most common land-use technique for limiting the development of farmland.”); Jerome E. Rose, Farmland Preservation Policy and Programs, 24 Nat. Resources J. 591, 600 (1984) (discussing prevalence of agricultural zoning to protect farmland).
\item[107] Cordes, supra note 10, at 422.
\item[108] See Holding Our Ground, supra note 14, at 88.
\item[109] Cordes, supra note 10, at 423.
\item[110] Id. at 423. In Oregon, where exclusive agricultural zoning is used extensively, accessory uses are often protected as fiercely as primary agricultural lands. For example, in Eugene Sand & Gravel v. Lane County, 74 P.3d 1085 (Or. Ct. App. 2003), the Oregon Court of Appeals upheld the county’s consideration of a farm stand as an accessory use in denying the defendant’s rezoning request in an exclusive farm use area. Id. at 1092. The court held that the farm stand was an “agricultural use,” and therefore it was proper for the county to consider the effects of rezoning, including increased traffic, dust, and lost resources, on the farm stand. Id. at 1086.
\item[111] Holding Our Ground, supra note 14, at 115.
\item[112] Id.
\item[113] Takings challenges are discussed at length in relation to land use planning tools infra at notes 183-216 and accompanying text.
\end{footnotes}
Wisconsin have successfully introduced them as part of their state land use planning models.\textsuperscript{114}

In contrast with exclusive agricultural zoning schemes, non-exclusive agricultural zoning schemes allow land within the zoned area to be used for non-agricultural purposes, though agricultural use is usually encouraged and stimulated by the particular structure of the scheme.\textsuperscript{115} When properly used, non-exclusive agricultural zoning schemes are extremely effective in balancing competing interests, particularly between development and preservation. These schemes, because of their flexibility, are used much more widely than exclusive agricultural zoning schemes.

Non-exclusive agricultural zoning schemes are implemented in a variety of ways. For example, many state and local governments preserve agricultural land by implementing large minimum lot size restrictions.\textsuperscript{116} These restrictions are usually tailored to correspond to the minimum size of parcels of agricultural land in the area.\textsuperscript{117} This is a particularly popular technique because the size restrictions can be changed gradually as needed to allow development to proceed in an orderly and planned fashion.\textsuperscript{118} Another approach often utilized in non-exclusive agricultural zones is to allow more intense development of land based on the size of the parcel. This is usually accomplished by the implementation of a “sliding-scale” agricultural zone, “which decreases the dwellings per acre as the acreage goes up.”\textsuperscript{119} For example, a sliding-scale zone might permit one dwelling for the first five acres, two for the first twenty, and so on. The effect is to “permit [ ] eater residential development for smaller parcels,”\textsuperscript{120} which are more likely to have passed into the residential or commercial land market due to their size and decreased profitability. Another form of area-based allocation is the fixed-area allocation, which is a simple allocation of building rights according to acreage.\textsuperscript{121} For example, in a zone which allowed one dwelling per twenty-five acres, a landowner who owned one hundred acres could build four dwellings.

Non-exclusive agricultural zoning schemes frequently employ buffer zones to concentrate development in certain areas within the broader agricultural zone. This is often accomplished through “cluster
zoning," which "establishes overall density restrictions . . . but permits small lot 'clustering' of actual development on the property."¹²² For example, in an agricultural zone with a twenty-five acre minimum lot size, a landowner with one hundred acres would be entitled to four dwellings, but the owner would be permitted to "cluster" them in a corner of the property and preserve the rest of the property as open agricultural space. Often utilized in suburban settings, critics contend that cluster zoning can lead to conflicts with non-farming neighbors, fragmentation of farmland, and an atmosphere of impermanence.¹²³ A more popular approach is to simply create a transitional buffer zone between areas zoned for agricultural and residential or commercial use. Though zoned for agricultural use, a buffer zone typically has a smaller minimum lot size requirement, such as five or ten acres. Buffer zones have the advantage of allowing planning for future development while still preserving prime agricultural land because development can proceed outside the agricultural zone and eventually proceed to the buffer zone when the locality deems it appropriate.

A distinction must be drawn between a buffer zone implemented within an agricultural zoning scheme and an urban growth boundary ("UGB"). A UGB is, "in essence, a line drawn beyond which development will be prohibited, thus directing growth pressure inward instead of sprawling out."¹²⁴ In comparison to a transitional buffer zone, a UGB simply establishes a set boundary between agriculturally zoned land and land zoned for other uses. UGBs are most often imposed on land immediately contiguous to developed land, thus preserving the undeveloped areas beyond. Because of this, UGB areas tend to experience a great deal of market pressure from the abutting urban land. As a result, local governments may feel heightened pressure to grant variances to allow parcels of land within the agricultural zone to be used for other purposes, and eventually to rezone the agricultural land entirely.

Agricultural zoning has become the most common land use planning tool used to protect agricultural land because it offers "several distinct advantages"¹²⁵ over other land use control devices. Because zoning in general is "a familiar and widely used land use control mechanism,"¹²⁶ most people recognize and understand zoning on some level, which is likely to lead to greater acceptance. In addition, agricultural zoning schemes "restrict[ ] a landowner's own decision to convert the property to more intensive uses, thus avoiding the limitations of voluntary pro-

¹²² Id. at 423–24.
¹²³ Holding Our Ground, supra note 14, at 122-23.
¹²⁴ Cordes, supra note 10, at 424. See also Holding Our Ground, supra note 14, at 133–44 (providing a comprehensive discussion of UGBs).
¹²⁵ Cordes, supra note 10, at 422.
¹²⁶ Id.
grams” such as conservation easements. Agricultural zoning schemes are also less expensive from the government’s perspective compared to other land use control devices because the cost of preservation is placed on individual landowners. By eliminating development opportunities and restricting land to agricultural use, agricultural zoning “shift[s] the cost of farmland preservation from society as a whole to landowners themselves.” Thus, agricultural zoning defuses, to an extent, the most prevalent factor influencing the conversion of productive agricultural land: market demand.

Agricultural zoning is particularly effective in defusing market pressures that tend to build up when a locality is successful in zoning a large area of land for agricultural use. With agricultural zoning, localities can preserve their most productive land, creating a “critical mass” to “keep individual farmers from becoming isolated islands in a sea of residential neighborhoods.” This helps “limit land speculation, which drives up the fair market value of farm and ranch land,” and also helps reinforce the concept of “agriculture as a long-term, economically viable activity, instead of an interim land use.” When a large amount of agricultural land is preserved, agricultural zoning “keep[s] land prices down and reduce[s] the pressure to sell for the higher development value.” In addition, landowners are less likely to find themselves embroiled in nuisance suits, for they are less likely to be surrounded “by neighbors who are offended by noxious farm odors and chemical spraying.” A properly implemented agricultural zoning scheme also “helps promote orderly growth by preventing sprawl into rural areas.” In short, agricultural zoning schemes can be an extremely effective land use planning tool in protecting agricultural land, promoting organized development, and preventing uncontrolled sprawl.

127 Id. Voluntary land use preservation tools are discussed in further depth infra at notes 146–51 and accompanying text.

128 For example, PDR programs use taxpayer money to purchase development rights from owners of agricultural land. See, e.g., Szlanfucht, supra note 3, at 345–48 (discussing PDR programs). These programs are discussed in further depth infra at notes 145–48 and accompanying text.

129 See Cordes, supra note 10, at 435.

130 See, e.g., id. at 445 (agricultural zoning schemes are “able to quickly preserve large tracts of contiguous land for farming, creating an assurance of insulation and stability for [the] future”).


132 Id.

133 Szlanfucht, supra note 3, at 348.

134 Id.

135 See Farmland Information, supra note 131.
Despite their many advantages, agricultural zoning schemes are not without their problems. Agricultural zoning is not a permanent measure to preserve farmland because rezonings can occur by a vote of the local legislature. Because the character and disposition of localities are never a constant, land that is zoned for agricultural use may be rezoned once citizens who want to sell their land at a higher developmental value garner enough support to prompt a rezoning. This is especially problematic given that those who have their land zoned for agricultural use often perceive as unfair the placement of societal preservation costs on a few landowners. Agricultural zoning may remove equity and credit values from the land because land zoned for agricultural use is likely to be less valuable than developable land, reducing the amount of equity against which landowners may borrow. Landowners who hold the majority of their wealth in their land may "view their land as both a retirement fund and an insurance policy." In addition, because much of the country’s productive agricultural land is located on the urban fringe, landowners in such areas may not see agricultural zoning as a guarantee against suburban sprawl and eventual conversion. Thus, many agricultural landowners resent agricultural zoning because it infringes on their ability to sell their land at its highest value, and believe that “if most of the benefits from preservation go to society as a whole, then the cost of preservation should be placed on society as well.” Because landowners frequently dispute the fairness and validity of agricultural zoning, agricultural zoning schemes often provoke legal challenges.

In addition, when agricultural zoning schemes are not properly implemented, they may actually lead to heightened developmental pressures and increased suburban sprawl. For example, if a locality with a large amount of land zoned for agricultural use consistently grants variances that allow intensive development, the effectiveness of the agricultural zoning scheme is sacrificed. Also, many localities employ agricultural zones that permit residential development on smaller parcels of land. Such agricultural zoning schemes are easily manipulated to create large blocks of agricultural “estates,” which are nothing more than residential land on which agricultural production is done only to the ex-

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136 Cordes, supra note 10, at 349.
137 See, e.g., Cordes, supra note 10 at 435–39 (discussing economic impact of agricultural zoning on those whose land is zoned for agricultural use).
138 See Szlanfucht, supra note 3, at 348–49; Farmland Information, supra note 130.
139 HOLDING OUR GROUND, supra note 14, at 109.
140 Id.
141 Cordes, supra note 10, at 435.
142 Id. at 422.
143 See, e.g., Farmland Information, supra note 131 ("Many towns and counties have agricultural/residential zoning that allows construction of houses on lots of one to five acres.").
tent necessary to meet the minimum required by the zoning scheme.\textsuperscript{144} Thus, developers can easily accomplish an end-run around an agricultural zoning scheme that is not implemented in a comprehensive, well-planned manner. Such ineffective agricultural zoning schemes "often hasten the decline of agriculture by allowing residences to consume far more land than necessary,"\textsuperscript{145} leading to leapfrog development and enhanced suburban sprawl.

Whereas non-voluntary agricultural zoning schemes place the costs of preservation on individual landowners, other land use planning tools place the burden directly on taxpayers. For example, PDR programs use tax proceeds to purchase development rights directly from agricultural landowners.\textsuperscript{146} Closely related to PDR programs are transfer of development rights ("TDR") programs, which transfer developable land to landowners in exchange for the development rights on landowners' agricultural land.\textsuperscript{147} Conservation easements work in a very similar manner—the owner of the agricultural land grants an easement to allow agricultural production to continue. Conservation easements can either be bought with tax funds, as with PDR or TDR programs, or donated by agricultural landowners. These land use planning tools avoid the pressures which agricultural zoning schemes are subject to because the permitted use of the land cannot be changed by a simple rezoning. Rather, the development rights to the land must be bought from their holder, usually the state or federal government.\textsuperscript{148} However, because these programs are voluntary, they do not produce the same results as agricultural zoning schemes. Donated conservation easements, for example, are only implemented at the whim of private landowners. PDR, TDR, and purchased conservation easement programs are very expensive, and as a result have little impact on preserving productive agricultural land when they are not implemented as part of a larger land use planning scheme. When voluntary programs are implemented to purchase development rights on productive agricultural land, the funds are not likely to stretch

\textsuperscript{144} See, e.g., \textit{Holding Our Ground}, supra note 14, at 129 (discussing the agricultural zoning scheme in Oregon's Willamette Valley, which has allowed hundreds of "hobby farms" to replace large blocks of productive agricultural land). \textit{See also} Farmland Information, supra note 131 (noting how the agricultural zoning schemes in Wyoming and Colorado have allowed "the creation of hundreds of 35-acre 'ranchettes'"); Paul Snyder, \textit{How Does a Small, Agricultural County Manage Growth?} at http://www.law.du.edu/rmlui/HotTopics (discussing adoption of thirty-five acre lot size in Colorado).

\textsuperscript{145} Farmland Information, supra note 131.

\textsuperscript{146} See Szlanfucht, supra note 3, at 345.

\textsuperscript{147} Id. at 346.

\textsuperscript{148} See supra notes 70–80 and accompanying text (discussing federal legislation permitting federal funds, either alone or in combination with state funds, to be used to purchase development rights to agricultural land).
very far because most productive agricultural land is located on the urban fringe and therefore likely to have a high fair market value.

The role of non-governmental actors should not be overlooked in considering the effectiveness of voluntary programs. There are a variety of non-governmental entities, such as land trusts, that operate outside of the formal governmental structure and use private funds to purchase the development rights to agricultural land or even to purchase the land outright.\textsuperscript{149} These private organizations typically work at a local level, although national organizations such as the Nature Conservancy are organized for the same purpose.\textsuperscript{150} Such organizations frequently intervene when land use planning measures are not adequately protecting and preserving agricultural land.\textsuperscript{151} Unfortunately, their efforts are organized only according to their internal plans, and not as part of a comprehensive government effort. As a result, these organizations function in an ad hoc manner, much like the federal government. If land use planning had any sort of direction on a national level, the efforts of these organizations would be far more effective because they could organize their work in a manner that complemented a national plan.

In summary, many different land use planning tools are available to help states protect and preserve their valuable agricultural land. However, these tools are rarely successful when employed in isolation. Rather, each tool has its respective strengths and weaknesses. Therefore, the most effective way to balance the competing interests between development and preservation is to deploy these tools in a manner that allows them to complement one another. The increasing rates of agricultural land conversion can be explained, at least in part, by states’ general failure to implement a comprehensive land use planning model that accomplishes this synergistic effect. However, several states have attempted to do exactly that, though not with resounding success. The following Section examines Oregon’s comprehensive land use planning model, which incorporates a variety of the land use planning tools discussed above.

2. \textit{Oregon: An (Almost) Effective Statewide Land Use Planning Model}

The statewide land use planning program in place in Oregon,\textsuperscript{152} designed to protect and preserve agricultural land, has been credited as the

\textsuperscript{149} See Wildermuth, \textit{supra} note 45, at 79–80.

\textsuperscript{150} Nature Conservancy, \textit{About Us: About the Nature Conversancy, at} http://www.nature.org/aboutus.

\textsuperscript{151} Id.

\textsuperscript{152} Oregon’s 2004 voter initiative, known as Measure 37, codified as Or. Rev. Stat. § 197.352 (2005), dramatically altered the application of the state’s land use planning scheme. \textit{See infra} notes 172–79 and accompanying text.
most comprehensive model in the nation. As a result, several states have recently enacted similar programs. However, studies have shown that productive agricultural land continues to be developed and converted to other uses in Oregon at increasing rates, despite the existence of the comprehensive model. Therefore, while the Oregon plan serves as an example of the manner in which various land use planning tools can be used to complement one another, it is also a lesson in the intricacies and pratfalls inherent in balancing the need for development with the goal of agricultural preservation.

In 1973, Oregon implemented a state-wide land use planning program featuring a farmland protection program. Oregon’s program set out certain statewide land use planning goals, including the protection of agricultural land, and empowered the state government to periodically review each county’s comprehensive land use planning program to ensure that it complied with state goals. Under the program, each county in Oregon is required to identify its prime agricultural lands, designate them in its comprehensive plan, and zone them for exclusive farm use (“EFU”). These EFU zones allow only agricultural production and accessory uses. In EFU zones, agricultural land benefits from property tax deferrals and right-to-farm laws protect the land from nuisance suits. In addition to the mandatory EFU zones, many counties in Oregon have created UGBs and buffer zones designed to direct residential and commercial development inward and prevent suburban sprawl from claiming intermediate agricultural land.

In addition to the program, the Oregon Legislature also created a Land Use Board of Appeals (“LUBA”), a three-judge panel that decides all land use cases. While LUBA decisions are binding, parties have the ability to appeal to the state courts. Oregon courts have held that citizens are entitled to a private right of action with regard to land use issues, and have construed standing broadly, allowing anyone who participates in a local proceeding and asserts a position on the merits to appeal an adverse decision. Finally, the Oregon Supreme Court has
held that zoning decisions are not entitled to presumptive validity, which effectively shifts the burden of proof in cases challenging zoning decisions to local governments and requires the local governments to justify land use decisions in light of the comprehensive land use planning program.\footnote{164 See Fasano v. Board of County Comm’rs, 507 P.2d 23, 29 (Or. 1973) (en banc), overruled on other grounds by Neuburger v. City of Portland, 607 P.2d 722 (Or. 1980).}

While Oregon has shown great foresight by enacting a statewide land use planning program to address agricultural land conversion, the program has its deficiencies. As discussed above, prime agricultural land continues to be converted at increasing rates in Oregon. This may indicate that the state is not managing its growth in a way that strikes a proper balance between development and agricultural land protection. It has been suggested that the increased rates of conversion are a result of the program being implemented too slowly.\footnote{165 See Holding Our Ground, supra note 14, at 129.} However, given the thirty years Oregon has had to fine-tune the program, it now seems safe to conclude that systemic problems, such as those detailed below, are endemic to the program.

Oregon’s statewide adoption of land use planning goals, while laudable, is insufficient to establish the infrastructure necessary to control development. Under the current program, each county must comply with statewide goals, but the comprehensive land use plan varies by county. Oregon’s program would be far more efficient if this structure was reversed and Oregon adopted a flexible, comprehensive statewide plan instead. Oregon could then provide each county with an established framework to help implement statewide goals. The implementation of the state plan could be tailored to each county’s needs while ensuring consistency with Oregon’s goal, thereby balancing development with protection.

Oregon’s land use plan has also proven disappointingly incapable of responding to ordinary market pressures. The UGBs and buffer zones employed by many counties in Oregon have actually increased suburban sprawl and the conversion of productive agricultural land because of the widespread prevalence of “hobby farms.”\footnote{166 Id.} For example, over 350,000 acres of land are zoned for rural residential—with three to five acre minimum lot sizes—in the Willamette Valley, arguably Oregon’s most productive agricultural region.\footnote{167 Id.} As discussed above, zoning schemes that allow such development promote suburban sprawl as the land becomes more developed.\footnote{168 See supra Part II.} In addition, Oregon’s UGB’s and buffer zones have...
shown a great tendency to increase housing prices within their boundaries. As the development of land and house prices increase, suburban sprawl and leapfrog development are encouraged because the market exerts pressure to expand outward to EFU zones. Thus, the allowance of "hobby farms" seriously endangers productive agricultural land.

The deficiencies of Oregon's land use planning scheme have also been exacerbated by the passage of a voter's initiative known as Measure 37 in 2004. Measure 37 is a regulatory takings law designed to accomplish an end-run around Oregon's land use planning scheme and to frustrate many of its provisions. The initiative passed in large part because of the widespread public perception that Oregon's land use planning scheme was heavy-handed and inconsistent. Under Measure 37, the government is required to either compensate property owners for reductions in the fair market value of their property due to land use restrictions or forgo applying the land use restriction to the affected parcel. Thus, the initiative reverses the effect of Oregon's land use planning scheme and guts most of its major provisions, preventing the government from enforcing them. The implementation of the initiative was delayed due to court battles for a time following its passage, but the Oregon Supreme court ultimately upheld it against a state constitutional challenge in February of 2006. Measure 37 is only now beginning to take effect, and while its long term impact is still unknown, many Oregon citizens already view it as a complete disaster because of the unpredictability in development that it creates. Nonetheless, similar proposals were on the ballot in several other states in 2006.

In conclusion, Oregon set a standard by being the first state to adopt a statewide program designed to protect agricultural land. Yet, the mixed success of the program and the deficiencies identified above demonstrate that even Oregon's plan has its failings. Moreover, the statewide revolt to the plan represented by the passage of Measure 37, an initiative that passed by a sixty-one percent margin, demonstrates the dangers of a land use planning scheme that suffers from problems in

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169 See Szlanfucht, supra note 3, at 442.
170 Holding Our Ground, supra note 14, at 129. This pressure is necessarily focused outward rather than inward to urban areas because urban areas are already developed.
171 See id.
174 Id. at 12.
175 MacPherson v. Dep't of Admin. Servs., 130 P.3d 308, 311 (Or. 2006).
176 See Ring, supra note 173, at 13.
177 Id. at 12.
178 See Ring, supra note 173, at 12–13.
179 Id.
180 Id. at 12.
implementation. For these reasons, Oregon’s land use program should inform the development of a comprehensive land use planning scheme, but should be viewed as a building block rather than as a standard for protecting agricultural land.

III. LAND USE REGULATIONS AND CONSTITUTIONAL “TAKINGS” CHALLENGES

Care must be taken in developing a comprehensive land use planning model to ensure that the model meets established legal standards. When governments implement land use planning schemes, “they are influencing land values and the potential wealth of landowners.”¹¹⁸¹ Land use planning tools, particularly non-voluntary land use planning tools such as agricultural zoning schemes, frequently provoke legal challenges because they have such an influence on the private sector.¹¹⁸² The legal implications of land use planning schemes, therefore, must be taken into account when considering a comprehensive land use planning program. The following discussion addresses the most important legal consideration, the Fifth Amendment “takings” challenge, with particular emphasis placed on this legal doctrine’s application to non-voluntary agricultural zoning schemes.

Zoning in general has long been recognized as an acceptable use of governmental “police power” under the Tenth Amendment.¹¹⁸³ The United States Supreme Court first addressed the validity of zoning schemes in the landmark case of Euclid, Ohio v. Ambler Realty Co.¹¹⁸⁴ In Euclid, the court held that zoning schemes are an acceptable use of police power if they are “asserted for the public welfare,”¹¹⁸⁵ in other words, “to achieve a clearly defined public purpose.”¹¹⁸⁶ Applied to agricultural zoning, this constitutional test is met if the legislation enabling the zoning scheme declares the protection of agricultural lands to be an important public goal¹¹⁸⁷ and the agricultural zoning scheme is implemented in a manner consistent with the enabling legislation.¹¹⁸⁸ In addition, it is advisable for states to take the additional step of employing agricultural

¹¹⁸¹ Holding Our Ground, supra note 14, at 107.
¹¹⁸² See Cordes, supra note 10, at 422.
¹¹⁸³ U.S. Const. amend. X.
¹¹⁸⁴ 272 U.S. 365 (1926).
¹¹⁸⁵ Id. at 387.
¹¹⁸⁶ Holding Our Ground, supra note 14, at 107.
¹¹⁸⁷ See id.; Cordes, supra note 10, at 425.
¹¹⁸⁸ Szlanfucht, supra note 3, at 349.
zoning pursuant to a "carefully drafted comprehensive plan," rather than on an ad hoc basis.\textsuperscript{189}

While these initial legal constraints must be considered by states adopting agricultural zoning schemes, the "primary and most significant"\textsuperscript{190} legal challenges to zoning schemes are Fifth Amendment takings challenges.\textsuperscript{192} Takings challenges may also be based on state constitutions, though Fifth Amendment challenges are more common.\textsuperscript{193} These challenges are common "because of the significant economic impact that agricultural zoning can have on land values as compared to alternative uses."\textsuperscript{194} In the "takings" area, a depressed property value is almost invariably the result of an agricultural zoning scheme. Therefore, states should take special precautions when drafting comprehensive land use planning models that involve agricultural zoning schemes to ensure compliance with the applicable legal standards, particularly those set forth in the Supreme Court's recent decision in \textit{Palazzolo v. Rhode Island}.\textsuperscript{195}

The current doctrine, known as the "regulatory taking" doctrine, first defined in \textit{Pennsylvania Coal Co. v. Mahon},\textsuperscript{196} "recognizes that in very limited situations the economic impact of a land use regulation might be so severe as to constitute an unconstitutional taking of property."\textsuperscript{197} When this occurs, the government may not apply the land use regulation to the land at issue without compensating the landowner for the taking. The tests for the takings doctrine are derived from two major
Supreme Court cases: *Lucas v. South Carolina Coastal Council* and *Penn Central Transportation Co. v. New York City.*

A court may find a land use regulation to be an unconstitutional taking of property under either of two separate tests. First, a land use regulation may be an unconstitutional taking of property under *Lucas* if it deprives a landowner of all economically viable use of the property—in other words, if it is a complete taking. Second, a land use regulation may amount to a taking even where it does not deprive the landowner of all economically viable use of his property if the regulation meets the *Penn Central* test. Under the *Penn Central* test, a court conducts a multi-factored inquiry into the application of a land use regulation to a parcel of property, focusing on “the character of the government action, its economic impact, and the degree of interference with investment-backed expectations.” Thus, the analysis applied to a takings claim when a land use restriction is challenged is a two-step process: (1) whether the regulation deprives the land of all economically viable use; and (2) if not, whether the regulation still qualifies as a taking under the *Penn Central* factors. Though the Supreme Court has never applied this analysis to an agricultural zoning scheme, “a significant number of lower courts have... with the vast majority of cases holding that the restriction was not a taking.” Lower courts have consistently held that agricultural zoning is not a taking under the *Lucas* test where “the land is suitable for agricultural use and is economically viable.” Lower courts have also regularly held that agricultural zoning is not a taking under the *Penn Central* test. Most courts that have struck down an agricultural
zoning scheme have done so because the scheme was applied to land unsuitable for farming.\textsuperscript{206}

While \textit{Lucas} and \textit{Penn Central} provide the framework for takings challenges, the Court’s opinion in \textit{Palazzolo} “has the potential of significantly impacting regulatory takings analysis,” including agricultural zoning, because “the Court’s analysis is applicable to a broad array of land use restrictions.”\textsuperscript{207} \textit{Palazzolo} involved a “wetlands regulation which had been in place when the claimant acquired the property and had the effect of prohibiting all development except the possible building of a house on several uplands acres.”\textsuperscript{208} Prior to \textit{Palazzolo}, lower federal courts consistently held that landowners with notice of a land use restriction at the time the property was purchased were precluded from maintaining a takings claim.\textsuperscript{209} However, the Court expanded its takings jurisprudence in \textit{Palazzolo} by holding that prior notice of a restriction does not preclude a takings claim.\textsuperscript{210} The Court concluded that the plaintiff had not been deprived of all economically viable use of the property under the \textit{Lucas} test, but remanded the case for a determination of whether the \textit{Penn Central} test had been met.\textsuperscript{211} Thus, under \textit{Palazzolo} a landowner may establish that a taking has occurred under \textit{Penn Central} even if the land use restriction at issue was in effect at the time the landowner purchased the property and the regulation does not deprive the landowner of all economically viable use of his property.

Although \textit{Palazzolo} altered the regulatory takings landscape, this change will likely not affect states that are administering their land use planning schemes appropriately. \textit{Palazzolo} affirmed the principle that even minimal economic viability is enough to avoid a categorical taking under \textit{Lucas}.\textsuperscript{212} Thus, agriculturally zoned land meets the \textit{Lucas} test as

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\textit{Gardner}, 593 A.2d at 261 (holding plaintiff’s takings claim failed \textit{Penn Central} test because restriction did not interfere with plaintiff’s investment-backed expectations).
\textsuperscript{206} See, e.g., Pettee v. County of Dekalb, 376 N.E. 2d 720, 725 (Ill. App. Ct. 1978) (holding agricultural zoning restrictions resulted in taking because zoned property was unsuitable for farming); Semja v. County of Boone, 339 N.E. 2d 452, 455 (Ill. App. Ct. 1975) (same). An overarching theme in takings jurisprudence, however, is that land use regulations do not amount to a taking simply because they “involve [ ] substantial economic burden on the landowner.” \textit{Cordes}, supra note 10, at 429. \textit{See also Gardner}, 593 A.2d at 259–260 (“[I]mpairment of the marketability of land alone does not effect a taking . . . [and] restrictions on uses do not necessarily result in takings although they reduce income or profits.”) (citations omitted).
\textsuperscript{207} \textit{Cordes}, supra note 10, at 429.
\textsuperscript{208} \textit{Id}.
\textsuperscript{209} See, e.g., \textit{Good v. United States}, 189 F.3d 1355, 1361–62 (Fed. Cir. 1999) (holding that such notice negated investment based expectations); \textit{Leonard}, 666 N.E. 2d at 1303 (holding that where plaintiff had purchased property subject to flood-plains restrictions, she could not complain of right she never had).
\textsuperscript{210} \textit{Palazzolo}, 533 U.S. at 625–29.
\textsuperscript{211} \textit{Id} at 629–30.
\textsuperscript{212} \textit{Id} at 630–31.
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long as the land to which the zoning scheme applies is actually suitable for agricultural use, as lower federal courts have long held. Under Palazzolo, any zoning scheme that is actually and suitably designed to protect agricultural land should meet the Lucas test.

The open question in the aftermath of Palazzolo involves the application of the Penn Central factors to land use regulations. While prior notice of a land use restriction no longer precludes a takings claim, Justice O'Connor indicated in a concurring opinion that notice is a relevant factor for courts to consider in addressing the third Penn Central factor, which Penn Central labeled as the most important factor in the analysis: the degree to which a land use restriction interferes with a landowner's reasonable investment backed expectations. Therefore, a landowner who purchases a parcel of property zoned for agricultural use is still unlikely to mount a successful takings challenge under Penn Central because his investment backed expectations will necessarily be set by the zoning in place at the time of purchase. However, an agricultural zoning scheme that is applied to land that was previously zoned for other uses may be in danger. For example, if a state decided to apply an agricultural zoning scheme to a large block of land that had been zoned for commercial use, the landowners' investment backed expectations would likely be diminished. Even in such a situation, however, the concept of "regulatory risk" recognized in Lucas suggests that another of the Penn Central factors, such as the character of the governmental action, may be necessary for a court to hold that the Penn Central test has been met.

To be safe, state and local governments should identify currently productive agricultural land to which to apply agricultural zoning, rather than attempt to convert land zoned for other uses to agricultural production. In general, if an agricultural zoning scheme is implemented as part of a comprehensive land use plan, is rationally based on accurate information regarding the composition of a locality's lands, and is applied systematically rather than in isolated instances, it is unlikely that a takings challenge to an agricultural zoning scheme will be successful under Palazzolo. While takings claims will continue to be a legitimate concern for state and local governments, properly conceived and implemented comprehensive land use planning schemes would be upheld under current takings jurisprudence.

213 See supra note 203–06 and accompanying text (discussing lower federal courts' application of the Lucas test to agricultural zoning schemes).
215 Palazzolo, 533 U.S. at 626; id. at 638–45 (Stevens, J., concurring in part and dissenting in part); id. at 654 n.3 (Ginsburg, J., dissenting); id. at 654 (Breyer, J., dissenting).
216 Lucas, 505 U.S. at 1027 (1992) ("[T]he property owner [must] necessarily expect[ ] the uses of his property to be restricted, from time to time.").
IV. SUGGESTIONS FOR A COMPREHENSIVE LAND USE PLANNING MODEL

Land use planning is a complex and multi-faceted task. The widespread development and conversion of productive agricultural land is the result of many variables, each of which may be more or less influential in any given state or locality. Land use planning to balance development and agricultural land preservation will not be the same in every situation. Even if the exact same scheme were implemented everywhere, the results would vary wildly; while conversion rates would decrease in some localities, they would likely increase in others. Therefore, a properly conceived land use planning model must be flexible enough to account for differences among states and localities, yet capable of producing predictable and similar results. This can only be accomplished by incorporating various land use planning tools and allowing them to be adjusted to suit the individual character and composition of each state. In this manner, land use planning tools can be deployed in a complementary fashion. The final goal of this Article is to suggest a comprehensive land use planning model that incorporates a variety of land use planning tools in this manner, thus creating a model that is capable of addressing agricultural land conversion in any state or locality.

To begin with, a comprehensive land use planning model needs to be comprehensive. As discussed in Part IV, states must be aware of the legal implications of land use regulations, and ensure that land use planning meets established legal standards. To accomplish this, states need to draft enabling legislation indicating that the establishment and maintenance of a proper balance between development and agricultural land protection is an important state goal. In addition, states need to ensure that the land use planning scheme is consistently implemented in a manner that comports with this goal. Arbitrary variations from the overarching goal run the risk of being challenged as inconsistent with the state’s goal. Ad hoc applications of land use planning regulations to individual parcels of property are at particular risk for legal challenge. In addition, if a land use planning scheme is not implemented properly, there is a risk that opponents of the plan can mount an attack on the

217 See supra notes 181-216 and accompanying text (discussing legal restraints on land use planning measures).
218 See supra notes 187-88 and accompanying text (discussing need for state enabling legislation).
219 See supra notes 188-90 and accompanying text (discussing proper implementation of land use planning regulations).
220 See supra notes 183-90 and accompanying text.
221 See supra notes 189-90 and accompanying text (highlighting the increased risk of takings challenges when land use regulations are not employed as part of a comprehensive plan).
legislation through a voter initiative, as with Measure 37 in Oregon.\textsuperscript{222} In short, states need to impose land use regulations as part of a well-planned, strategic package—a comprehensive package in which each land use planning tool is utilized in a manner consistent with the state’s goal.

A necessary prerequisite to establishing a comprehensive land use planning model is an intensive information-gathering process to determine the character and composition of each state’s lands. A land use planning model cannot be applied comprehensively if states have insufficient information about their own physical makeup.\textsuperscript{223} To this end, detailed surveys and statistical analyses are needed. Initially, the federal government should assist in the effort by updating the LESA information gathering system and making it available to every state. The federal LESA system needs to be reworked so that the value of agricultural land is not discounted to account for increased developmental pressure. Because the majority of the productive agricultural land in America is located on the urban fringe, developmental pressures are likely to be higher on such land. By discounting for these pressures, the federal LESA system ensures that the value of much of the prime agricultural land is artificially deflated, and thus deemed less worthy of protection.\textsuperscript{224} Instead, the federal LESA system should simply rate agricultural land based on its productive value, and make this information available to states. If this were done, states could better identify their most productive agricultural land, regardless of location, and deploy their comprehensive land use planning packages in a manner well suited to protect it.

Second, states must have access to comprehensive state-specific land use information. For example, states would benefit from information regarding existing land use, growth trends, developmental pressures, and desired changes in land use. This is another area where the federal government can assist in the effort. To date, the federal government has enacted very limited legislation to assist in the protection of agricultural land, providing funding for the implementation of a very narrow class of voluntary land use planning tools.\textsuperscript{225} The federal government can provide a greater benefit to states by using federal funds to assist states in

\textsuperscript{222} See supra note 172-79 and accompanying text.

\textsuperscript{223} Information gathering is not only a commonsense initial step to the adoption of a comprehensive land use planning model, but is necessary to meet established legal standards. If a land use planning regulation is imposed improperly on land that is not suited for the restriction, the regulation runs a high risk of being struck down upon legal challenge. See supra notes 204-16 and accompanying text (discussing necessity of imposing a land use regulation only on land that is well-suited for the regulation).

\textsuperscript{224} See supra notes 60-65 and accompanying text (discussing federal LESA system).

\textsuperscript{225} See supra notes 70-80 and accompanying text (discussing federal legislation to provide states with federal funds for PDR programs and conservation easements).
establishing comprehensive land use planning models. The federal government could help accomplish this by providing funds, either alone or in combination with state funds, to be used for statewide information gathering processes. Information gathering should be organized from a top-down, national level, and should be accomplished in a manner to ensure that states are provided with truly accurate and helpful land use information. The conversion of agricultural land on a state level is a problem facing the nation as a whole, and Congress needs to address the problem by enacting legislation that provides states with substantive support rather than simply leaving land use planning to state and local governments. In the absence of federal assistance, states need to provide their own funding to gather all-inclusive information regarding the composition and uses of their lands.

In addition to funding the information gathering process, the federal government should take additional steps to ensure that its programs complement comprehensive land use planning on a state level. The federal government should also fund the development of a comprehensive land use planning model that can be implemented in every state, identifying key areas of federal involvement and which programs should be left to state and local governments. The federal government would thereby ensure that its programs properly complement state land use planning regulations. In addition, the development of such a model would align the goals of federal and state governments. For example, the federal government has enacted a variety of programs that fund, at least partially, states' PDR and conservation easement programs. If the federal government developed a model for comprehensive land use planning, it could enact legislation that builds on that model, rather than leaving states to use federal programs arbitrarily. Moreover, the federal government could then provide states with an incentive to adopt its model by tying funding efforts to the model, as it has done with highway programs. States adopting the comprehensive land use planning model would then receive federal funding to assist with the implementation of various land use planning tools.

At the very least, the federal government needs to give states an incentive to adopt comprehensive land use planning models that curb unplanned development. The federal government should adopt uniform standards for land use planning that states must meet in order to receive federal funding. Thus, federal funding—for example, for PDR programs—would only be provided to states with land use planning models

226 See id.
meeting the minimum standards established by the federal government.227

These proposals necessarily suggest a large role for the federal government in land use planning. Major national land use planning initiatives have been proposed twice before, and both times have proven unsuccessful. First, the USDA was reorganized during the New Deal in a manner that allowed land use information to be fed to the USDA from the bottom up—that is, from the county level.228 Planning communities were organized in each community to gather information on the composition of each locality by developing maps of existing land use.229 "Once existing land use was mapped, the local committees discussed desired changes in land use and translated those changes onto a second county map."230 This information was then transmitted to the USDA, which was to organize its actions in accordance with the land use plans of the localities.231 While this program seemed well-suited to harmonize local and national interests, it proved too complex to manage due to the difficulty inherent in "creat[ing] a coherent national policy simply by adding up the wishes of individual counties."

Second, national land use planning reemerged during the 1960s and 1970s as "a response to rapid urban growth and the disappearance of open space," the same motivating factors that are once again relevant at the dawn of the twenty-first century.233 Senator Henry Jackson proposed the National Land Use Policy Bill, which contained "a simple program of data collection and agency coordination" at the federal level.234 Under the program, "[t]he federal government would give states money to gather data, classify land, and write a plan for coordinating state land use decisions. Once each state had its affairs in order, federal agencies could simply reference the states' plans and determine how federal investments should be allocated."235 The plan ultimately failed in large part due to simple politics. President Nixon proposed a competing bill, eventually combined with Jackson's bill, which contained an incentive scheme whereby states would only receive federal funds if they exercised certain

227 The federal government came closest to doing this with FAIR, which provided federal funding to states with dedicated farmland preservation programs. See supra notes 73-76 and accompanying text.
228 Wildermuth, supra note 45, at 75.
229 Id.
230 Id.
231 Id.
232 Id. at 76.
233 Id. at 77.
234 Id.
235 Id. at 77–78.
land use powers at the state rather than the local level. The joint bill appeared before Congress several times, but was never passed.

While the model suggested in this Article does propose a large role for the federal government, it does not necessarily amount to national land use planning. Rather, the proposed model calls for nationally organized land use planning, with the federal government providing a blueprint rather than a set of orders. The information gathering process proposed here avoids the failures of the New Deal national land use planning proposals because it is structured as a pyramid rather than a siphon. Instead of attempting to create a national land use policy by referencing the sum total of community policies, the plan proposed here calls for a nationally organized information gathering process to provide localities with information necessary to implement responsible land use planning decisions. It also avoids the failures of the national land use planning initiatives of the 1970s because it does more than simply reference states’ land use plans in determining proper federal expenditures. Instead, the model proposed here calls for a coherent national land use planning policy with the goal of preserving valuable and productive agricultural land while allowing development to proceed in an intelligent and organized fashion. In furtherance of this goal, a land use planning model can be developed by the federal government and provided for states to implement. States could then implement the land use planning model in a manner best suited to their particular needs, identified in the first step of nationally organized information gathering. In addition, by organizing land use planning on a national level, the federal government would be better equipped to implement federal programs in a manner complementary to state land use planning schemes. It could also ensure that a wide variety of federal legislation, such as highway funding and home mortgage programs, would be implemented consistently with land use policy.

While the federal government certainly has a large and important role to play in land use planning, most land use planning tools are properly implemented on a state and local level. Thus, the remainder of this Section discusses the manner in which a variety of land use planning tools can be effectively deployed in a complementary manner by state

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236 Id. at 78.
237 Id.
238 Nor is this Article the only modern proposal for federal land use planning. For example, Bruce Babbitt, former Secretary of the Interior in the Clinton administration, recently published a volume advocating for national land use planning. BRUCE BABBITT, CITIES IN THE WILDERNESS: A NEW VISION OF LAND USE IN AMERICA (Island Press 2005). According to Mr. Babbitt, "[t]he notion that land use is a local matter has come to dominate the political rhetoric of our age," though this notion is outdated. Id. at 5. For another recent publication addressing national land use planning, see ROGER C. KENNEDY, WILDFIRE AND AMERICANS: HOW TO SAVE LIVES, PROPERTY, AND YOUR TAX DOLLARS (Hill & Wang 2006).
and local governments as part of a comprehensive land use planning model. However, essential to this suggested model is sufficient funding, coordination, and planning development by the federal government. Because the manner in which a comprehensive land use planning program operates will obviously be different in each locality, the following merely outlines, in broad strokes, suggestions for how various land use planning tools can be utilized as part of a comprehensive model.

To begin with, a carefully planned statewide zoning strategy should be the backbone of any land use planning program. The purpose of the initial information gathering step is to clearly identify the location of various categories of land. Once this is accomplished, states can apply a zoning scheme to classify these categories and define the uses which are allowed in each category. Agricultural zoning should be deployed to the furthest extent allowable under the law because it is such an effective method of preserving productive agricultural land.\textsuperscript{239} States should apply exclusive agricultural zoning schemes to all large blocks of readily identifiable agricultural land. Exclusive agricultural zoning schemes are the least expensive way for states to preserve large areas of productive agricultural land, and are very effective at preventing suburban sprawl from gradually diminishing the productivity of the area.\textsuperscript{240} In addition, states can generally avoid legal challenges by limiting the application of exclusive agricultural zoning schemes to large blocks of land that are currently well-suited to agricultural production and where market pressures have not yet begun to mount.\textsuperscript{241} This type of agricultural zoning has proven effective in Oregon, and other states should follow its lead.\textsuperscript{242}

In addition to exclusive agricultural zoning, states should apply non-exclusive agricultural zoning schemes to smaller blocks of productive agricultural land that are currently well-suited for agricultural use.\textsuperscript{243} Because of the flexibility that non-exclusive agricultural zoning schemes offer, they are more likely to be effective at balancing competing interests in smaller areas of agricultural land, which are more likely to be

\textsuperscript{239} See supra notes 104–135 and accompanying text (discussing types of agricultural zoning and their corresponding benefits).

\textsuperscript{240} See supra notes 110–14 and accompanying text (discussing exclusive agricultural zoning schemes).

\textsuperscript{241} Id.

\textsuperscript{242} See supra notes 157–59 and accompanying text (discussing Oregon's use of EFU zones).

\textsuperscript{243} This is not to suggest that all land which is capable of agricultural production should be designated for agricultural use. In surveying the composition of their land, states will no doubt identify agriculturally productive land that is, for example, broken up into small parcels, located in between an urban or suburban area and larger blocks of agricultural land, and currently subject to intense market pressure to develop. It would not be inappropriate for states to set such areas of land aside as future growth zones or buffer zones.
subject to market pressures. Within these areas, state and local governments should implement their non-exclusive agricultural zoning schemes in a variety of ways, depending on the particular needs of the locality. Where feasible, the government should set the largest minimum lot size possible for these areas to prevent the manipulation of the agricultural zoning scheme to create agricultural estates and hobby farms. For example, if the smallest parcel of land in a certain block of agricultural land is twenty acres, the minimum lot size should be set at twenty acres.

Where agricultural land has already been divided into smaller parcels, sliding-scale zones should be used, with the highest possible barrier to development imposed on the land. For example, if agricultural land in a given area is broken down into parcels averaging between ten and eighty acres, the locality should begin the sliding-scale zone at ten acres to prevent the parcels from being divided into smaller pieces. In addition, state and local governments should employ buffer zones and UGBs to set agricultural land apart from urban and suburban development, but carefully monitor their progress to ensure that problems such as those occurring in Oregon do not surface. Cluster zoning should be imposed only when clearly necessary, because cluster zoning allows small portions of agricultural land to be developed intensively. This practice frequently creates subdivisions in the corner of larger agricultural units that then exert developmental pressure on the rest of the land. However, cluster zoning is effective at preserving a large piece of productive agricultural land, and should be utilized if the continued viability of the agricultural portion of the parcel can be guaranteed. If cluster zoning cannot be utilized in this manner, state and local governments can implement fixed area allocations, imposing the largest possible minimum lot size. Wherever possible, state and local governments should establish UGBs between all land zoned for agricultural use and land zoned for other uses, to force growth inward rather than outward. When this is not feasible due to established development, traditional buffer zones should be employed, again with the largest minimum lot size possible.

State governments should also adopt programs to benefit agricultural land located within their agricultural zones. Tax incentive programs are a necessity to prevent the value of agricultural land being driven up as development begins to encroach on the agricultural bound-

244 See supra notes 115–23 and accompanying text (discussing non-exclusive agricultural zoning schemes).
245 Id.
246 See supra notes 122–25 and accompanying text (discussing buffer zones and UGBs); See also supra notes 166–71 (discussing the problems associated with UGBs and buffer zones in Oregon).
247 See supra notes 122–25 and accompanying text (discussing cluster zoning)
ary and exert market pressures. In addition, state governments should draft their tax incentive legislation very strictly to prevent developers from taking advantage of favorable tax schemes while preparing land for subdivision and development. This is particularly important in buffer zones and non-exclusive agricultural zones employing sliding-scale or cluster zoning methods, where more development opportunities exist. In addition, state governments should ensure that right-to-farm laws are in place to protect agricultural landowners from litigation. These laws are particularly necessary in buffer zones and non-exclusive agricultural zones employing sliding-scale or cluster zoning methods, where productive agricultural land is located in closer proximity to residential areas or other development.

Although agricultural zoning is a necessary component of any comprehensive land use planning model, zoning alone is an insufficient means of adequately defusing market pressures that naturally build up. As applied to agricultural land that directly abuts urban or suburban development, agricultural zoning may not be an effective land use planning tool. There may be extensive development interspersed with agricultural land in such areas, making application of an agricultural zoning scheme less feasible. This is a particularly important area of focus for state and local governments enacting comprehensive land use planning schemes because much of the productive agricultural land in America is located near urban areas.

While agricultural zoning should be utilized to some extent, other voluntary land use planning tools may be more effective in preserving agricultural land in such situations. States should encourage owners of agricultural land to donate conservation easements. Conservation easements are effective in preserving agricultural production, and do not entail a heavy financial burden on state and local governments. States can encourage the donation of conservation easements through incentive programs, such as favorable tax schemes and deductions. In addition, states should employ PDR and TDR programs to secure development rights on productive agricultural land. While these programs are the

248 See supra notes 92–101 and accompanying text (discussing tax incentive programs).
249 See id. (discussing potential problems with tax incentive programs).
250 See supra notes 102–03 (discussing right-to-farm laws).
251 See supra notes 136–45 and accompanying text (discussing limitations of agricultural zoning schemes).
252 See supra notes 146–49 and accompanying text (discussing voluntary PDR, TDR, and conservation easement programs).
253 See supra note 148 and accompanying text (discussing conservation easement programs).
most expensive land use planning tools, they are extremely effective in preserving productive agricultural land.²⁵⁴

States should take advantage of federal funding for these programs to the fullest extent possible, and carefully apply the funds to land which other land use planning tools are unlikely to preserve. The federal government can assist in states’ efforts by increasing funding for these programs and monitoring states’ use of the funds to ensure that federal programs are having the maximum impact. States should also use state funds to implement these programs, strategically employing these programs to purchase development rights to more endangered agricultural land. Finally, governments at both the federal and state level should coordinate their land use planning efforts with those of private organizations such as land trusts. Such organizations frequently use private funds to purchase development rights to agricultural land, and to date, have done so outside of any organized governmental framework.²⁵⁵ By co-opting the efforts of such organizations, governments can maximize the impact of private funds and ensure that private efforts complement the comprehensive land use plan.

In summary, land use planning tools cannot be deployed in isolation, for they are only truly effective when implemented in a complementary fashion as part of a comprehensive land use planning package. Each level of government has a role in promoting intelligent land use planning. The federal government can provide individual states with structure and funding to implement their land use planning schemes. State governments are suitable instruments for implementing comprehensive land use planning, but must be given incentives to contribute to a broad national goal. While state governments should be encouraged to adopt comprehensive land use planning strategies, land use planning tools must be implemented on a local level, with state governments providing the necessary oversight. Each piece of the puzzle must be complementary: the federal government must ensure that its legislation complements state and local programs, and state governments must ensure that each land use planning tool is deployed in a complementary fashion. This is accomplished through the adoption of a comprehensive land use planning model that is capable of adequately balancing market pressures that favor development with the need to preserve valuable agricultural land.

CONCLUSION

Productive agricultural land is being developed and converted to suburban sprawl in every state in America at increasing rates. America

²⁵⁴ See supra notes 140–44 and accompanying text (discussing voluntary PDR, TDR, and conservation easement programs).
²⁵⁵ See Wildermuth, supra note 45, at 146–49.
cannot afford to postpone formulating a solution to this problem. A program capable of reversing the trend needs to be developed and implemented now. To date, no thoroughly comprehensive plan exists to effect the necessary change. While the federal government and state and local governments have recently begun to address this problem, their respective efforts are not coordinated and have not been successful. A comprehensive land use planning model capable of responding to the many variables inherent in land use planning is necessary. This Article represents an attempt to lay the groundwork necessary for such a model. Thus, it suggests a framework for the development of a comprehensive land use planning strategy, a strategy that is flexible enough to adapt to the different composition of each state. This model involves both the federal government and state and local governments, and attempts to coordinate their respective capacities in a complementary manner. It also provides an example of the manner in which a variety of land use planning tools may be deployed in a complementary fashion. By employing a wide variety of land use planning tools, this model allows each individual land use planning tool to play to its own strengths while also accounting for other tools' weaknesses. In addition, this model considers the legal framework in which land use planning schemes operate, and should survive legal challenge if properly implemented. By taking all of these factors into consideration, this Article lays the foundation for a comprehensive land use planning model capable of adequately balancing the competing interests between development and agricultural land preservation. The development of such a model would prevent America's productive agricultural land from being developed in a haphazard fashion while allowing necessary development to occur in an intelligent, organized manner.