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Pay or Waive: An Economic Assessment of Property Owner Compensation Laws in the U.S.

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ABSTRACT

Land-use regulations are contentious everywhere because of their potential negative effects on private property values. In recent years, "pay or waive" compensation legislation has been passed in a number of U.S. states, requiring governments to compensate property owners for losses due to land-use regulations or grant exemptions from the regulations in lieu of compensation. We provide an overview of the compensation statutes in six U.S. states, discuss the economic issues raised by the statutes, and examine the effects of the statutes in practice. Although these laws require that "just compensation" be estimated accurately and consistently, measuring the effects of land-use regulations on property values is extremely challenging in practice. We find that rather than providing relief to property owners unfairly burdened by land-use regulations, the compensation statutes appear primarily to discourage local governments from developing and implementing land-use regulations.

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Introduction

The traditional rationale for land-use planning – and its associated land-use regulations – is to minimize the potential negative externalities of unfettered land development. For example, zoning restrictions are typically used to separate incompatible uses of land (e.g., residential housing and factories), promote environmental quality (e.g., clean water or wildlife habitat), and foster economies of scale (e.g., for infrastructure). Such regulations have long been opposed by property rights advocates in the U.S., who have sought protections for landowners under the "takings clause" of the Fifth Amendment to the Constitution. However, property rights advocates have consistently been disappointed by the U.S. Supreme Court, which, in a series of rulings, has applied the Fifth Amendment only to *categorical* takings—the physical invasion of property by the government or actions that result in the total loss of a property's market value. Ultimately, the court has taken the position, as suggested by Justice John Paul Stevens in *Tahoe* v. *Tahoe* (2002), that any further protections against regulatory takings should occur through legislative rule making.

Thus, in recent years, advocates for stronger property rights protections in the U.S. have taken their fight to the state level by seeking legislation to protect landowners from government restrictions on the use of their property. In fact, since 1992, some form of legislation challenging or relaxing restrictions on property rights has been introduced in every state and has passed in 26 states (Jacobs 2003). The majority of this legislation consists of "assessment" or "look-before-

¹ The takings clause reads, "nor shall private property be taken for public use, without just compensation."

² The rulings are Lucas v. South Carolina 1992, Palazzolo v. Rhode Island 2001, Penn. Coal v. Mahon 1922, and Tahoe v. Tahoe 2002.

you-leap" statutes, whose impact has been largely symbolic. However, during the early and mid-1990s more substantive "compensation" statutes were adopted in four states (Florida, Louisiana, Mississippi, and Texas) and considered in at least 20 others (Cordes 1997).

Compensation statutes grant a property owner the right to seek compensation when a government action (typically a land-use regulation) has unfairly reduced the market value of his or her property. Typically, such statutes allow governments to settle claims by granting exemptions to property owners (in other words, waiving the regulation) in lieu of financial compensation. In recent years, there has been a proliferation of this type of "pay or waive" compensation legislation through ballot initiatives in the western U.S. Oregon voters passed compensation statutes in 2004 and 2007 after rejecting them in 2000. And in 2006, compensation legislation was passed in Arizona, rejected in California, Idaho, and Washington, and blocked from ballots by courts in Montana and Nevada.

The compensation statutes adopted at the state level have significantly strengthened private property protections beyond those provided by the U.S. Constitution and have redefined categorical takings in a manner that departs significantly from existing case law and legal tradition. In particular, each statute defines compensable actions in ways that go far beyond the constitutional criterion of a total loss of economic value. In fact, the most far-reaching statutes, adopted in Arizona, Florida, and Oregon, consider *any* reduction in the value of a property caused by a land-use regulation to be a compensable taking. As such, these statutes ignore Justice Oliver Wendell Holmes' warning in *Pennsylvania Coal v. Mahon* that "government could

³ These statutes require governments to consider the impact of land-use regulations on private property values but do not restrict a government's authority to impose and enforce such regulations.

hardly go on if to some extent values incident to property could not be diminished without paying for every such change in the general law."

This article examines the economics issues raised by compensation statutes. Although we focus on property owner compensation laws adopted in recent years in the U.S., we also review experiences in other countries. Following a brief review of the economic literature on the effects of land-use regulations, we address three broad questions: 1) How do compensation statutes work? 2) What economic issues are raised by state compensation statutes? and 3) What has been the effect of compensation statutes in practice? We present a summary and conclusions in the final section.

Economic Studies of the Effects of Land-Use Regulations

While a common goal of a land-use planning system is to increase the aggregate value of land, in practice, there is no guarantee that it will have a positive effect on the value of individual properties. From a theoretical perspective, there are three general types of effects that a land-use regulation may have on an individual parcel: restriction, scarcity, and amenity effects (Jaeger 2006). A regulation that restricts the parcel's uses will have a weakly negative effect on its value. Restriction effects may be offset by a weakly positive scarcity effect when the regulation limits the total number of parcels in a given use. The regulation may produce positive and negative amenities arising from both on-site and off-site uses of land. The net effect on an individual parcel's value is, thus, ambiguous.

This ambiguity is reflected in the empirical literature, which has quantified restriction effects (Grout et al. 2011, Ihlanfeldt 2007, Nickerson and Lynch 2001), amenity effects (Mahan et al. 2000, Netusil, 2005), and scarcity effects (Phillips and Goodstein, 2000, Quigley and

Raphael, 2005). In a literature survey, Pogodzinski and Sass (1991) found little agreement on the net effect of municipal zoning. The empirical evidence on the net effect of development restrictions on agricultural lands, which likely produce both restriction and amenity effects on the regulated properties, is also mixed (e.g., Anderson and Weinhold, 2005, Henneberry and Barrows, 1990).

In expensive metropolitan areas, Glaeser and Gyourko (2003) find evidence that land-use controls may be responsible for high housing costs (as opposed to the scarcity of land), although they do not consider amenity benefits from zoning that could offset these costs. Elsewhere, Glaeser et al. (2005) find that development restrictions such as limits on building height in Manhattan are associated with condominium prices that are routinely double the marginal construction cost of bringing new apartments to market, again leading them to suggest that height limits and other land use restrictions give rise to scarcity effects.

How do Compensation Statutes Work?

Compensation laws have been adopted in six U.S. states (Arizona, Florida, Louisiana, Mississippi, Oregon, and Texas) and considered in five others (California, Idaho, Montana, Nevada, Washington).⁴ The compensable actions that are the focus of the laws are state and local land-use regulations, but exemptions are often granted for laws affecting health and safety. The intent is to compensate landowners for the reduction in market value caused directly by the land-use regulations; however, governments may waive or modify regulations as an alternative

⁴ The enacted statutes are: Arizona's 2006 "Private Property Rights Protection Act"; Florida's 1995 "Bert J. Harris, Jr., Private Property Rights Protection Act"; Louisiana's 1995 "Right to Farm and Forest Law"; Mississippi's 1995 "Mississippi Agricultural and Forestry Activity Act"; Oregon's 2004 "Measure 37"; Oregon's 2007 "Measure 49"; and Texas' 1995 "Private Real Property Rights Preservation Act."

to monetary payments. Some of these laws apply only to regulations enacted after adoption of the compensation law, while others are retroactive and can apply to regulations implemented decades earlier, as long as the claimant has maintained ownership during the intervening period. The statutes vary widely in their requirements for demonstrating a reduction in a claimant's property value. In this section, we will compare and contrast the features of compensation statutes in different states (see Table 1), focusing first on state laws that have been enacted, and then commenting briefly on those that were proposed recently but not adopted.

Compensable government actions

Compensable actions are broadly defined under the Oregon, Arizona, and Florida statutes. Under Oregon's Measure 37 (2004), later amended by Measure 49 (2007), as well as Arizona's "Private Property Rights Protection Act" (2006), compensable government actions are any land-use regulations that restrict the use of private property such that its fair market value is reduced. Land-use regulation is defined as any statute, rule, ordinance or law that directly regulates the use or division of land or accepted farming or forest practices. In Oregon, this includes comprehensive land-use plans, zoning ordinances, and regional planning goals, which are an important feature of the statewide land-use planning program.

Under the Florida statute, a landowner may seek financial compensation or other relief when a "specific action of a governmental entity has inordinately burdened an existing use of real property." An existing use is defined to include current *and proposed* uses of the property. To demonstrate that a government action has "inordinately burdened" him, the property owner

⁵ The compensation statutes do not apply to regulations that *indirectly* affect the value of property (e.g., by allowing an incompatible use on a neighboring property).

⁶ "Real property" means land and includes any appurtenances and improvements to the land. Thus, restrictions on the type of development, such as building height limits, are compensable under the Florida statute.

must show that he is either (1) "permanently unable to attain the reasonable, investment-backed expectation for the existing use of the real property," or (2) "left with existing or vested uses that are unreasonable such that the property owner bears permanently a disproportionate share of a burden imposed for the good of the public, which in fairness should be borne by the public at large." This inordinate burden criterion is expansive. Under condition (1), it can be argued that virtually any new land-use regulation that restricts a potential use of a property imposes an "inordinate burden" upon the landowner given the broad definition of an "existing use." In fact, Echeverria and Hansen-Young (2008) find that no Florida court has rejected a claim on the grounds that it failed to meet the inordinate burden criterion.

The Louisiana, Mississippi, and Texas compensation statutes are more limited in scope. The statutes in Louisiana and Mississippi apply only to regulations that restrict forestry or agricultural activities. In Texas, many actions taken by municipalities, as well as actions "reasonably taken" to comply with state or federal laws, are exempt from the statute (Echeverria and Hansen-Young, 2008). Unlike the Arizona, Florida, and Oregon statutes, the Louisiana, Mississippi, and Texas statutes require claimants to establish more substantial diminutions of value than *any* diminution in value. More specifically, a landowner is entitled to seek compensation if a land-use law causes a diminution in value of more than 20 percent in Louisiana, 40 percent in Mississippi, and 25 percent in Texas.

Applicability and timing

With the exception of Oregon's Measure 37, all of the compensation statutes apply to new regulations (i.e., enacted after adoption of the statute). Oregon's Measure 37 applied retroactively to existing land-use regulations, provided the claimant owned the property at the

time the regulation was enacted. Oregon's statewide land-use planning program was adopted in 1973 and implemented over the ensuing decade; many Measure 37 claimants had owned property since before this period. Measure 49 applies to new regulations, and also establishes rules for resolving existing Measure 37 claims.

All of the compensation statutes equate just compensation with the diminution in a property's fair market value resulting from the enactment of a land-use regulation. The Arizona and Florida statutes measure the reduction in value as of the date of enactment of the land use regulation. Oregon's Measure 37 measures diminution in value as of the date a claim is filed, and Measure 49 compares the fair market value of a property one year before and one year after the land-use regulation's enactment date. In Arizona, Florida, Oregon, and Texas, claims must be filed within a certain time period (ranging from 6 months to 5 years) following enactment of the regulation. There is no such requirement under the Louisiana and Mississippi statutes.

Burden of proof

Some of the statutes require claimants to demonstrate reduction in value, while others shift the burden of proof onto the government. Under the Florida statute, the claimant must submit an appraisal that demonstrates a reduction in the fair market value of the property. Under the Louisiana, Mississippi, and Texas statutes, claimants are required to submit appraisals that demonstrate that a *substantial* reduction in value has occurred.⁷

⁷ If the claim proceeds to court, the costs of litigation may be awarded to the prevailing party.

Oregon's Measure 37 did not prescribe any specific method for determining reduction in value. ⁸ In fact, confusion among claimants, local governments, and courts about how to measure reduction in value was part of the reason Measure 49 was adopted. Under Measure 49, prior Measure 37 claims are resolved in one of two ways. The first option allows the claimant to create no more than three parcels, lots, or dwellings. The claimant does not have the burden of demonstrating a diminution in fair market value, but must show that the creation of the parcel, lot, or dwelling is prohibited by a land-use regulation. Under the second option, the claimant must submit an appraisal that demonstrates a reduction in fair market value, which is defined as the difference in the fair market value of the property one year before and one year after enactment of the land-use regulation, plus interest compounded to the present.

Under Arizona's statute, the burden of proof is shifted entirely to the government. The property owner must file a claim for compensation, but need not follow any particular procedure for determining the amount of the compensation. If the government does not award compensation and the land-use regulation remains in effect, the claimant has a cause of action to seek compensation in court and is entitled to recover costs—including attorney fees—from the government if he prevails. This effectively gives claimants the right to seek compensation with little if any downside risk.

Resolution of claims

⁸ It did state that the reduction in value was to be measured on the date the written demand for compensation was submitted. However, the implications for long-standing land-use regulations were unclear.

Under all of the statutes, compensation is to equal the loss of fair market value caused by the government action. None of the statutes creates a funding mechanism for paying claims. However, in all states the government has the option of modifying, removing, or waiving the land-use regulation rather than paying compensation. Under Oregon's Measure 37, there was uncertainty about whether waiving a regulation meant that the government had to permit all uses that were allowed prior to enactment of the regulation. This raised the possibility that the value of the waiver could greatly exceed the magnitude of the loss experienced by the property owner. Oregon's Measure 37, there was uncertainty about whether waiving a regulation meant that the government had to permit all uses

Under Florida's statute, the government is required to make a settlement offer, which may be a combination of modifications to the land-use regulation and financial compensation. If the claimant declines the settlement offer, then the claim is settled in court and a jury determines the amount of compensation.

Compensation laws proposed in other states

In addition to the law adopted in Arizona, compensation laws were considered in five other Western states (California, Idaho, Montana, Nevada, and Washington) in 2006.¹¹ The ballot initiatives rejected by voters in Idaho and Washington and blocked by the courts in Montana and Nevada closely resembled Oregon's Measure 37. All of these proposed statutes applied to both the enforcement of existing regulations and the enactment of new regulations,

(NV), and Initiative 933 (WA).

⁹ For retrospective claims resolved under Oregon's Measure 49, claimants also receive interest on this amount compounded to the present.

¹⁰ It is important that waivers be transferable to new property owners. Otherwise, the claimant would lose the benefits of the waiver if the property were sold. The proponents of Oregon's Measure 37 overlooked this issue when they wrote the text of the ballot initiative. The transferability of waivers was clarified by Measure 49.

¹¹ These compensation statutes were: Proposition 90 (CA), Proposition 2 (ID), Initiative 154 (MT), Question 2

and outlined similar procedures for the demonstration of reduction in value and the resolution of claims. The law proposed in Washington, however, dramatically expanded the scope of compensable government actions by defining private property to include not only land, but any interest in land, buildings, crops, livestock, and mineral and water rights. Moreover, an owner who purchased his property *after* the enactment of the regulation in question was eligible to seek just compensation.

The statute proposed (and ultimately rejected) in California primarily concerned the taking of property for public uses (eminent domain) and thus said little about regulatory takings. However, it did declare the "damage" of private property (defined to include decreases in permissible housing densities, or downzoning) to be a compensable government action. Had the proposition passed, the implementation of this provision would have required judicial clarification.

What Economic Issues are Raised by Compensation Statutes?

Compensation statutes raise a basic economic question: How should the change in the fair market value of an individual parcel resulting from the enactment of a land-use regulation be determined? Ideally, one would compare the value of a property with and without the regulation. However, the latter value is unobservable once the regulation has been adopted. Thus, observability is the central challenge to determining the change in fair market value. Another challenge relates to the compensation mechanism itself. The prospect of compensation, whether financial or in the form of an exemption from the land-use regulation, represents a benefit that will be capitalized into property values. This means that the level of compensation, or the value of an exemption, and the fair market value of a property are determined simultaneously. This

section will consider the economic challenges of implementing compensation statutes that arise from these problems of observability and simultaneity.

Fair market value

A primary goal of the statutes is to compensate property owners for reductions in fair market value. Fair market value is defined as the price that willing and well-informed sellers and buyers would agree on for an exchange of property. Under perfect competition and risk neutrality, this price will be the sum of all the future expected incomes generated by the property discounted back to the present. Underlying the future income stream are expectations about a host of variables, including input and output prices, development patterns, amenities and externalities, government investments and policies (including future land-use regulations), and regional demographics (Alig and Plantinga 2004, Plantinga et al., 2002). It is important to note that in addition to the income generated by the current use of the land, the fair market value reflects the income from potential future uses and the value of having the option to use the land in these ways. Regulations that prohibit certain uses of land can be thought of as eliminating options, which reduces the property's current value.

Observability

All of the compensation statutes require estimation of the reduction in fair market value that results from the enactment of land-use regulations. The fact that once the regulation is

Formally, $PV_{t=0} = \sum_{t=0}^{\infty} \frac{I_t}{(1+r)^t}$, where $PV_{t=0}$ is the present value of the property in time period zero, I_t is the expected income in time period t, and r is the discount rate. When expected income is constant ($I_t = I$ for all t), the equation simplifies to $PV = \frac{I}{r}$.

enacted one cannot observe what a given property would sell for had the regulation *not* been enacted presents an obvious measurement challenge. Estimation of the change in market value is particularly challenging when the statute applies retroactively to regulations that have been in effect for long periods of time.¹³

Current values of regulated versus unregulated properties

One approach to measuring reduction in value is to compare the current value of the regulated property to the current value of a similar property that is not subject to the regulation, with the difference in value interpreted as the effect of the regulation. This approach assumes that the unregulated property's value provides a valid counterfactual for the regulated property's value. This method, which often identifies substantial differences in value (Grout et al. 2011), became the standard practice under Oregon's Measure 37 (see, for example, Martin and Shriver, 2006). However, this approach ignores the fact that when land-use regulations are introduced, there is a shift in the supply and demand for property. Furthermore, over time, the regulation may interact with other variables that determine property values, including public investments in roads and amenities such as parks..

To illustrate this point, let's consider a hypothetical example of two properties that are identical except that for the last ten years Property A has been subject to a regulation restricting its development while Property B has not. If the current value of Property A is \$1,000 and the current value of Property B is \$2,000, one might draw the conclusion that the regulation caused a \$1,000 diminution in Property A's value. However, let's also assume that had the land-use

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¹³ However, the estimation of fair market value can be difficult even for new regulations because of the likelihood that the market will anticipate the effects of future regulations and government actions, such as the granting of waivers. This issue is discussed in detail later.

regulation *not* been enacted 10 years ago, there would have been a larger supply of developable land and fewer people would have moved to the region because the lack of land-use planning led to urban sprawl. In this case, the increase in the supply of land coupled with the reduction in demand would have actually resulted in lower property prices. Assume that in this counterfactual world (i.e., without the land-use regulation), the value of both Property A and Property B would be \$1,200. This means that enactment of the land-use regulation diminished the value of Property A by \$200 (from \$1,200 to \$1,000) but raised the value of Property B by \$800 (from \$1,200 to \$2,000).

Differences in current property values versus causal effects

It is important to avoid confusing the current price differential between regulated and unregulated properties with the *causal effect* of the land-use regulation on a property's value. Particularly when a regulation has been in place for a significant amount of time, estimates of diminution in value that are based on comparisons of regulated and unregulated properties are likely to be misleading. In fact, in the earlier hypothetical example, most of the disparity between the values of Property A and Property B was due to an increase in Property B's value rather than a decrease in Property A's value. And while it is true that if Property A were exempted from the land-use regulation its value would rise by \$1,000, this change in Property A's value reflects the value of an *individual* exemption, which is clearly not a reliable proxy for the effect of the land-use regulation (Jaeger 2006).

Burden on governments and courts

Due to the inherent difficulty of measuring reduction in value, the compensation statutes place an enormous burden on governments and courts to make this determination. Oregon's Measure 49 tries to reduce this burden by specifying a method for measuring the reduction in

value: the comparison of a parcel's market price one year before and one year after enactment of the regulation. Implicitly, Measure 49 aims to minimize other factors that could confound measurement of the regulation's effect. That is, it assumes that other determinants of property value (e.g., shifts in demand due to population increases) are unlikely to have changed significantly during the two-year time period.

Market Anticipation of the Effects of Land-Use Regulations

Even when applied to new regulations, the "before-and-after" comparison of property values may fail to accurately measure the effects of land-use regulations if these effects are anticipated by the market. In this case, it becomes difficult to identify the true "before value." To illustrate, consider a property that earns an annual income of \$100 in perpetuity. If the discount rate is 5%, then this property would sell for \$2,000 in a competitive market. If a land-use regulation reduces the property's annual income to \$50 by restricting the property's use, the price would fall to \$1,000, resulting in a loss of \$1,000.¹⁴ However, the timing and amount of the change in the property's price depends on how the market anticipates the effects of the regulation (see Figure 1). If there is no anticipation, then the price changes from \$2,000 to \$1,000 the moment the regulation is enacted. However, if the market anticipates the regulation's effect on the annual income stream, then the property's price will decline gradually prior to enactment. ¹⁵

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¹⁴ Although there is ample evidence of positive effects of land-use regulations on property values (see studies cited earlier), we focus primarily on cases involving negative effects since these trigger the compensation statutes. ¹⁵ For example, if the regulation's effects are perfectly anticipated, the property value would be \$1,102 two years before enactment (the present value of the income stream \$100, \$100, \$50, \$50, ...) and \$1,052 one year before enactment (the present value of the income stream \$100, \$50, \$50, ...).

In practice, there is likely to be uncertainty about whether a new regulation will be enacted and, if it is, what effect it will have on future property values. This means that market transactions occurring before the enactment of a regulation are unlikely to give an accurate measure of the counterfactual property value. Moreover, when the regulation's effects are anticipated perfectly, the property price before enactment will already reflect the effects of the regulation and, therefore, suggest that it had little or no effect. Measuring the "before" value at an earlier time is one way to better capture the effect of the regulation, but this also increases the likelihood that any changes in property values are due to factors other than the regulation.

How well the market anticipates the effects of land-use regulations will depend on the transparency of regulatory agencies and how clearly their long-term land-use planning objectives are expressed. In most jurisdictions, the enactment of a new regulation is a long process that includes public input, and is thus likely to be anticipated to some degree. In Oregon, for example, although the legislation authorizing statewide land-use planning was passed in 1973, the system was not fully implemented until nearly a decade later.

Anticipation of compensation and waivers

Thus far, we have not addressed the effects of compensation and waivers themselves on property values. If the market anticipates the enactment of a new regulation and an accompanying reduction in property value, it may also anticipate landowners receiving compensation or waivers (in lieu of compensation). Anticipation of such financial compensation or the benefits of a waiver will alter the expected future income stream and thus affect the value of a property *prior* to the enactment of a regulation. This unintended consequence of the

compensation statute complicates the use of market prices to determine the effects of the regulation on property value.

Returning to our earlier example, suppose that the effect of an impending regulation on property value is known to be a \$1,000 reduction and that the owners of properties subject to the regulation will be compensated accordingly when the regulation is enacted. If the market anticipates this compensation, then the market value of such a property will remain at \$2,000 before the enactment of the regulation because the future compensation is capitalized into the property price. After enactment, the price will drop to \$1,000 due to the effects of the regulation. In this case, the before-and-after approach produces an accurate measure of the effects of the regulation.

Although anticipation of compensation mitigates the observability problem, anticipation of waivers exacerbates it. If waivers are granted to every owner whose property declines in value due to a regulation, then there will be no change in value following enactment, provided that waivers are transferable to new owners. However, in this case, there is no basis for granting waivers because no property owner will be able to demonstrate a diminution in value. The anticipation of waivers results in a simultaneity problem. Changes in property values and the decision to grant waivers are determined simultaneously, a problem that is not even acknowledged, let alone addressed, in the compensation statutes.

However, in practice, only some property owners are likely to receive waivers, which can have the perverse effect of giving these property owners a windfall. For example, under the Louisiana, Mississippi, and Texas statutes, only those owners that are able to demonstrate a

compensation statutes.

¹⁶ We assume that compensation is paid to those who owned property prior to the enactment of the regulation and that those who buy the property afterward are not eligible for compensation. This is a common feature of all of the

sufficiently large loss in value are eligible for waivers. Under the Oregon statutes, only those property owners who owned the property prior to the enactment of the regulation can receive waivers, and property owners that have been compensated (as well as those who buy property from them) are ineligible for waivers. Thus, these statutes create two types of property owners: those who remain subject to the regulation and those who do not. If the regulation makes unrestricted property scarcer, then property owners that are granted waivers receive a windfall in the form of higher property values. In addition, these newly-unrestricted properties may impose negative external costs on neighboring properties that continue to be subject to the regulation. In fact, following the passage of Oregon's Measure 37, there was concern among property owners that waivers granted on neighboring properties would reduce their property values). In an apparent effort to prevent additional claims by neighbors of claimants, the Arizona and Oregon statutes state that waivers, or other modifications of land-use regulations, are not themselves compensable government actions.

Uncertainty

Uncertainty about both the effects of a new regulation and the granting of compensation and waivers further complicates the measurement of reduction in value. If there is a positive probability that some property owners will not receive any relief under the statute, then property values are likely to fall prior to enactment of the regulation. In this case, the "before" price is not a valid measure of the property value without the regulation since it reflects anticipated negative effects of the regulation.

Uncertainty about the resolution of claims may also have the unintended effect of hindering sales of properties, and thus reduce the information available to evaluate claims.

Although an owner may be indifferent between receiving compensation or a waiver (assuming

the regulation has no scarcity effects), the value of the property to prospective buyers depends on whether the seller is awarded compensation (leaving the regulation in place) or granted a waiver (removing the regulation). Since buyers are unlikely to pay the higher price (i.e., the price with the waiver) prior to knowing the property's regulatory status, owners will want to resolve claims prior to selling. However, this means there will be a paucity of comparable sales data with which to evaluate claims at precisely the time they are needed. This is another example of a simultaneity problem that may arise under the compensation statutes.

What have been the Effects of Compensation Statutes in Practice?

This section examines experience with the compensation statutes in Oregon, Florida, and Arizona, and briefly discusses the issue of property owner compensation in other countries.

Experience in Oregon

As discussed earlier, under Oregon's Measure 37, most claimants measured the reduction in value as the current price differential between properties subject to the land-use regulation and similar lands not subject to the regulation. However, rather than answer the question of how much a regulation has reduced a property's value, this approach indicates how much more a property would be worth if the regulation in question were removed from (only) the claimant's property. This is the value of an individual waiver, not the diminution in value caused by enactment of the land-use regulation.

For example, a claim submitted to Clackamas County in December 2004 by Charles Hoff sought \$9.6 million in just compensation for loss of value caused by development restrictions on a 53-acre property bordering Portland's urban growth boundary. The claimant wished to subdivide the property, which was allowed by the zoning in place at the time of its purchase in

1977. However, in 1979, the County rezoned the property for exclusive farm use, which requires a minimum lot size of 80 acres. In his claim, Mr. Hoff stated that he had been offered over \$10 million for his property if the zoning could be changed to accommodate a 2-acre subdivision (Martin and Shriver, 2006). The key point here is that the \$10 million market value if a waiver were granted is due (in part or in full) to the fact that there are thousands of other, similar properties outside the urban growth boundary that were also subject to the development restrictions. Thus, if the regulation had not been introduced, Mr. Hoff would be competing with these other landowners to attract a developer. ¹⁷

In evaluating Measure 37 claims, some courts also appear to have confused the notion of a reduction in value with the value of an exemption. In Fred Hall v. Multnomah County, Oregon, the plaintiff sued for damages related to regulations that restricted his land to rural uses (e.g., agriculture, forestry). Mr. Hall's desired use of his property was to develop a high density residential area with 65 to 70 lots. The court found that the plaintiff failed to demonstrate that the regulation had reduced the fair market value of his property. The court sought an appraisal showing: "... the market value of the property as-is in 2005, and secondly the market value of the property without the minimum 160-acre lot size [in 2005]." That is, the court wished to compare the current value of the property to what the property would be worth if the regulations in question were removed *from this particular property* (i.e., rather than had the regulations never been enacted in the first place). Ultimately, Mr. Hall's claim failed not because the appraiser was asking the wrong question but because the court found the appraisal work to be inadequate. However, in most cases, Measure 37 claims were judged to be valid even though

¹⁷ By contrast, Portland's regional Metro Council government took a "before-and-after" approach to evaluating Measure 37 claims and rejected all such claims for lack of evidence of a reduction in value.

they measured the value of an individual exemption. Indeed, in many cases, county governments simply assumed the property would be worth more if a waiver were given, and accepted the claim without an appraisal.

As for compensation, the evidence suggests that property owners in Oregon are rarely paid for reductions in value due to land-use regulations. Although the statutes emphasize compensating property owners, there are few cases in which payments have actually been made. In fact, in all but one Measure 37 claim, the government responded by waiving regulations rather than paying compensation (Echeverria and Hansen-Young, 2008). There appear to be two main reasons for this. First, compensation would have to come from scarce public funds. Second, because the effect of an existing regulation on property value cannot be observed, determining the exact size of the effect is likely to be contentious. Moreover, engaging in a protracted court battle to determine just compensation is likely to be unattractive to a local government, particularly when the claimant is entitled to reimbursement for attorney fees incurred to collect compensation.

Experience in Florida

Echeverria and Hansen-Young (2008) provide an in-depth analysis of the Florida statute, and find that an important consequence of the statute has been to alter the behavior of property owners and governments. For example, a Florida developer filed a \$38 million claim in response to a voter-approved restriction on the height of new ocean-front development. In fact, the developer had filed building plans with the city a few days before the enactment of the regulation, suggesting a pre-emptive effort to avoid the regulation's impacts. The developer was successful in obtaining a waiver from the city, which feared the developer had a valid claim. In another case, a developer filed an application to develop two 15-story buildings in anticipation of

voters approving a referendum reducing allowable building height from 15 to 5 stories. The restriction was enacted, and when the City denied the developer's application, the developer filed suit and prevailed in obtaining permits to construct the 15-story buildings.

Just as developers appear to understand the value of waivers, so too are governments aware of the potential liability associated with adopting new regulations. The number of lawsuits filed under the Florida statute has been relatively limited since its adoption in 1995. However, the evidence suggests there has been widespread use of the statute to threaten litigation in order to influence regulatory decision making. Some communities have responded by deciding against the adoption of new regulations, while others have relaxed or withdrawn existing regulations.

Experience in Arizona

In Arizona, governments have also taken steps to reduce their liability, adopting a number of strategies to avoid exposure to compensation claims, including asking property owners affected by a new land-use regulation to sign waivers indemnifying the government from future claims for compensation and establishing review committees to assess potential claims and risks associated with land-use planning (Stephenson and Lane, 2008). Although there has been very little litigation under the Arizona statute, it is not clear how many communities have decided not to adopt new land-use regulations in order to avoid liability.

Experience in Other Countries

Recent experience in other countries is quite different from the experience in the U.S.

Although there appears to be universal concern about the negative effects of land-use regulations on property values, the actions taken in the U.S. since the 1990s have been much more

aggressive than in other countries. A symposium on the "takings" issue concluded that the issue has not drawn much attention in eleven high-income democratic countries (nine of which are EU members)¹⁸ (Alterman 2006). Indeed, in these countries it is common to exempt most land-use regulations from compensation requirements (Mandelker 2007).

In France, for example, land-use planning is founded on a principle that is the opposite of "takings": that is, no compensation has to be paid for the restriction of development rights resulting from urban regulations (Renard 2006). In other words, landowners do not have "vested rights" to develop in France. However, once a building permit has been granted, cancellation of the permit due to changes in regulations could afford the landowner the possibility of claiming compensation (Renard 2006).

In the U.K., owners of land have no legal right to compensation for financial loss caused by designations of land in a development plan. In addition, landowners have no right to compensation for any restrictions or conditions related to land-use planning (Purdue 2006). Similar to France, rights to compensation in the U.K. generally relate to the revocation or modification of previously-issued building permits. In practice, revocations of permits and other circumstances under which compensation rights exist in the U.K. are extremely rare (Purdue 2006).

In other countries, such as Canada and Poland, property rights are minimally protected and there is little legal basis for compensation for regulatory takings (Schwartz and Bueckert 2006; Gdesz 2006). However, there is more recognition than in the U.S. statutes that land-use regulations and other government actions can increase as well as decrease property values, and

¹⁸ The symposium considered case studies in Canada, the United Kingdom, France, The Netherlands, Sweden, Finland, Germany, Austria, Greece, Poland, and Israel.

that a "fair" doctrine toward landowners should encompass both windfall gains and losses (Madelker 2007; Purdue 2006). German law differentiates between the advantages and disadvantages of planning decisions that apply to a single property owner. In such cases, the process for settling payments deducts any increase in the property's value from the amount of any compensation awarded as a result of a separate government action that caused a decline in the property's value (Schmidt-Eichstaedt 2006). However, German law does not provide a general mechanism for addressing disparities when planning decisions are advantageous to some landowners and disadvantageous to others (Schmidt-Eichstaedt 2006).

Summary and Conclusions

Land-use regulations are contentious everywhere because of their potential negative effects on private property values. To address these concerns, "pay or waive" compensation laws have been adopted or proposed in a number of U.S. states in recent years. These laws are based on the assumption that "just compensation" can be estimated accurately and consistently. We have shown, however, that measuring the effects of land-use regulations on property values is extremely challenging in practice, all the more so because of the ways that the compensation statutes themselves affect property prices.

Under the compensation statutes, two methods have been used to measure reductions in property value due to land-use regulations. The "individual exemption" approach measures the increase in a property's value when it is exempt from the regulation. This approach assumes that all other properties remain subject to the regulation, inflating the estimate of reduction in value. The value of an individual exemption is a deeply flawed measure, which fails to indicate even the sign of the true effect of the land-use regulation on a property's value.

In contrast to the "individual exemption" approach, the "before-and-after" approach compares a property's value just before and just after the land-use regulation is introduced. However, this may also be an unreliable approach if land-use regulations are anticipated prior to going into effect. In fact, if market prices adjust before enactment of the regulation, this approach may capture only a small fraction of the regulation's effects. Indeed, in the presence of a compensation statute, market prices will also reflect expected compensation or waivers.

Although expected compensation could offset the effects of anticipated reductions in value on market prices, the prospect of waivers could either raise or lower market prices prior to enactment of a regulation. Moreover, estimates of market prices "after" the regulation is enacted may be even more difficult to measure with waivers because there may be scant market data to evaluate claims if potential buyers and sellers are waiting for claims to be resolved. The nature and extent of these measurement challenges severely limit the ability of states to implement compensation statutes fairly, accurately, and consistently.

We have also shown that compensation statutes may have significant unintended consequences. First, granting waivers in lieu of compensation can create windfalls for those receiving them. And when exempted landowners develop their lands, these exemptions have the potential to create significant negative externalities for non-exempted property owners in close proximity. Second, compensation statutes can alter the behavior of both governments and individuals. These laws are likely to limit governments' willingness to regulate land uses even when they would generate positive overall effects, in part because of uncertainty about the government's financial liability when enacting regulations.

Government actions create both winners and losers. Compensation statutes are asymmetric because they hold governments financially liable for (perceived or real) losses but

provide no direct and equivalent mechanisms when government action creates windfall gains for property owners. In fact, there can be perverse outcomes where property owners experience a windfall but are also eligible for relief under the statutes. Surprisingly, the debate in the United States about compensation statutes has not addressed this asymmetry. However, it has been a prominent feature of deliberations in other countries (Madelker 2007; Purdue 2006).

Given the challenges of implementing the compensation statutes and the fact that none of them dedicate public funds for compensation, it should come as no surprise that actual compensation for regulatory takings has been rare in the United States. In fact, the evidence suggests that the primary effect of the compensation statutes has simply been to discourage local governments from developing and implementing land-use regulations. Thus, it is far from clear that the statutes have achieved their objective of providing relief to property owners unfairly burdened by land-use regulations.

Even if the great majority of property owners are better off under a land-use planning system, observed disparities between differentially regulated properties are often viewed as evidence of the planning system's negative effects on property values. Continued population growth will likely increase the need for land-use regulations in order to balance human demands for urban development and environmental protection. And this will ensure continued tensions between private and public interests in land in the future. Based on recent experience, future opposition to land-use regulations will sometimes take the form of "pay or waive" compensation legislation.

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Figure 1. Property value before and after enactment (in time t_R) of a land-use regulation

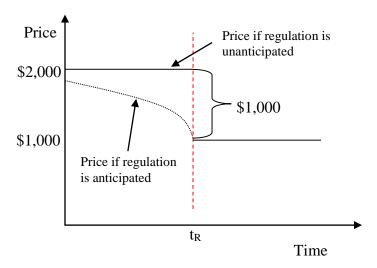


Table 1. Summary of Property Owner Compensation Statutes in U.S. States

	Florida	Oregon's Measure 37	Oregon's Measure 49	Arizona	Texas*		
Definition of compensable govt. actions	Restriction of the property's fair m	Restriction producing diminution in FMV greater than 25%					
Measure of just compensation	Equal to reduction in FMV as of the date of the govt. action in question	Equal to reduction in FMV as of the date claim is filed	Equal to difference in FMV one year before and after govt. action in question	Equal to reduction in FMV as of the date of the govt. action in question	Equal to reduction in FMV as of the date of the govt. action in question		
Burden of proof	Claimant must submit a valid appraisal	No specific method stipulated	Claimant must submit valid before and after appraisals	No specific method stipulated	No specific method stipulated		
Options in lieu of compensation	Modification, removal, or non-enforcement of the government action in question. Oregon's Measure 49 requires that the value of the waiver or modification not exceed the reduction in FMV						
Applicability	New land use restrictions	New restrictions and existing restrictions	New restrictions, existing M37 claims	New restrictions	New restrictions (scope is more limited than in other states)		
Litigation liability	Prevailing party awarded expenses	Prevailing claimant awarded expenses	Prevailing claimant awarded expenses	Prevailing claimant awarded expenses	Prevailing party awarded fees		

^{*} The statutes in Mississippi and Louisiana are similar except that they apply only to farm and forest activities.

Sources: See footnote 4.