Lot Splitting and Development Regulation:

The Information Asymmetries and Free Rider Issues Associated with Arizona's Wildcat Development

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Abstract

Arizona is currently facing a land use problem commonly referred to as "wildcat" development. This type of development occurs when parcels of land are split into five or fewer lots and developed without following the state's typical subdivision regulations. This behavior results in a myriad of market failure issues such as the free rider phenomenon, when the general public is taxed to provide basic services such as waste disposal for wildcat property owners, as well as information asymmetry, when wildcat properties are sold to unsuspecting buyers. There are also a number of public health, safety and welfare concerns involved.

Using Bardach's "A Practical Guide for Policy Analysis" (2005), evidence of wildcat development was amassed and criteria selected in order to determine what response, if any, would be appropriate to alleviate the burdens associated with the wildcat problem. The criteria employed included political support, administrative feasibility and public value as defined in Moore's "Creating Public Value" (1995). Using a matrix, four alternatives were measured against these criteria in order to determine the best policy choice.

The resulting policy recommendation for counties facing this problem is to require verifiable disclosure and restrict building in wildcat developments until infrastructure standards have been met. This will allow private title companies to find an entrepreneurial solution to the need for verifiable disclosure statements as well as encourage counties to make use of this improved information-gathering tool for future planning processes.

Introduction

Loopholes in Arizona law allow property owners to split parcels of land into five or fewer lots and sell them without having to adhere to subdivision regulation requirements (Pima County, 1998, p.4). This process is called "lot splitting." In many cases, this process results in residential areas that lack basic infrastructure, that do not adhere to subdivision standards or infrastructure requirements, and that are often plagued by blight and decline (Arizona Association of County Planning Directors & Arizona County Supervisors Association, 1999). The creation of a subdivision through the use of lot splits has come to be

known as "wildcat development," a name that alludes to the uncontrolled nature of urban growth in these development areas.

The prevalence of lot splitting is an important public policy concern given the impacts that occur with this unregulated, unmonitored process. According to the 2000 census, Arizona's population expanded by 40 percent in the last decade, and wildcat areas are a symptom of this explosive growth. Over the past eight years, nearly 17,000 lot split parcels were sold in Pinal County alone (Holcombe, 2005). The spread of these areas and the government's failure to respond reflect an ideological debate as old as the West. This issue pits the freedom of landowners against the duties and authority of government.

Lot splits that result in wildcat developments can cause negative physical and economic consequences not only to individual land owners but also to the general public. Some of the impacts associated with lot splitting are lack of emergency access; provision of utility services; water availability; refuse and wastewater disposal; and public construction, maintenance, and improvements (AACPD & ACSA, 1999). In view of the magnitude of the long-term consequences of lot splitting, a major question for policy makers is what can be done to reduce the burden to society associated with the information asymmetry and free rider issues surrounding the use of lot splitting to create wildcat developments. The technical properties of lot splitting and the resulting urban sprawl make it difficult to collect from the land owner all of the economic costs of wildcat development. Due to the lack of data, it is difficult to measure the extent of the market failure. However, the negative externalities related to lot splitting justifiably raise claims for amelioration through public policy in order to protect the public interest.

For the purpose of this analysis, Eugene Bardach's "A Practical Guide for Policy Analysis: The eightfold path to more effective problem solving" (2005) will be used to frame the policy discussion, analysis process and procedure. This analysis will use evidence from the literature and collected in interviews to identify the problems associated with lot splitting in Arizona. The scope and depth of lot splitting in unincorporated areas of counties will be discussed along with the dynamics of how the problem affects society in Arizona. Policy alternatives will be identified and compared with the status quo of leaving current trends in lot splitting unchanged. Criteria will be described and used to assess the alternatives' viability and resulting outcomes. An outcome matrix will be used in the analysis to compare alternatives. The tradeoffs between the alternatives will be examined, leading to a policy recommendation for the problem of wildcat development in Arizona. At the core of this analysis is a clear delineation of the criteria developed for judging the different policy alternatives. The proposed criteria decrease the information asymmetry associated with lot splitting, reduce free rider issues, and utilize political and institutional theory to estimate feasibility.

Problem Definition:

The problem, as defined for this analysis, is that too many acres of Arizona land are being developed in an unregulated and unmonitored manner which is detrimental to the citizens' public health, safety and welfare. For example, in fiscal year 1997-1998, the Pima County Administrator's Office and Development Services Department reported that about 16 percent of new single-family and mobile-home building permits issued for unincorporated

Pima County were in unregulated or loosely regulated wildcat subdivisions (AACPD & ACSA, 1999). In 2002, Yavapai County found that more than 2,000 home sites were created through lot splitting and only 200 sites were created as part of the formal subdivision process (McKinnon, 2005).

The findings of a 1999 study, compiled by a workgroup of planners representing all fifteen counties in Arizona, suggested that wildcat developments affect a broad range of both public and private interests (AACPD & ACSA, 1999). The study results indicate many stakeholders are affected by this important public policy issue, including the property buyer, local governments, emergency service providers, utility providers, school districts, water districts, mortgage lenders and the community as a whole. The findings are substantiated in a study conducted by Wassmer (2002), characterizing these concerns as being the symptoms of urban sprawl. Each stakeholder has a unique perspective regarding the implications of the unregulated, unmonitored process of lot splitting and the resulting wildcat development (Wassmer, 2002).

According to the literature review, some of the causal assumptions of the problem center on preventing the practice of lot splitting by amending the statutory definition of "subdivision" to include the splitting of all parcels of land (AACPD & ACSA, 1999). Moore (1998) suggests using entrepreneurial thinking to explore new solutions to public policy concerns. Using Moore's strategy of integrating politics, substance and administration, this analysis will focus on creating public value for Arizona citizens through a solution to the problems associated with wildcat development.

Methodology

The data presented in this policy analysis were collected and assembled from a broad array of sources. A literature review of scholarly journals, research articles, reports, newspaper articles, impact surveys, state statutes, and personal interviews provided the basis for determining our recommendations. A tour of lot splitting problems in Pinal County hosted by a county supervisor and an active citizen organization provided opportunities to understand the problem from the elected official and the landowner's perspective. Historical background information provided a cultural context to the issue and helped to define the problem as being a conflict of American values. Research articles and "best practice" reports such as *Growing Smarter Plus* further expanded knowledge from a policy perspective. A review of the current Arizona State Statues suggested the lack of tools necessary to adequately address issues surrounding lot splitting. Personal interviews with a land developer, county planners, county supervisors, legislators, land owners, and representatives from the Association of County Supervisors provided perspectives from the many stakeholders.

Private Property in America

There is a set of cultural symbols regarding property that are central to the American character, yet Americans seem to be of two minds on property rights and land. Jacobs (1999) suggests that in a broad sense we all agree on principles of land use in that we want land to be

used well. Americans do not want land to be degraded nor do we want land uses to burden the public with wasteful investments or costs such as roads, sewers, or water lines.

Americans seem to agree on the goals of land use. We want land use to be rational, efficient and equitable. According to Jacobs (1999) the problem stems from not agreeing on the definition of these terms nor specific measures to implement the goals. Our disagreement focuses on the interpretation of American history, our understanding of the human motivations and behaviors that drive economics of land use, and the very nature or philosophy of land use. Promoters of a strong private property perspective view landowners as stewards (Jacobs, 1999). This interpretation suggests that owners will want to be responsible managers of their land because they will personally benefit, resulting in social interest. Critics argue that landowners make decisions that are economically and socially sensible from their own perspective but are not judged to benefit the broader public. For example, landowners want to buy low and sell high. From this perspective, landowners make decisions that take into account neither the broader public interest nor a more expansive economic calculation. Garrett Hardin (1968) referred to this as the "tragedy of the commons." Jacobs (1999) points out that all of the factors –history, economics and philosophy– are further complicated by the particulars of our governance and democratic structures. These four factors make the politics of land contentious, and underlying all four is the fact that land is unique. As a fixed resource, land represents the major source of wealth, status and security for its owners. Landuse planning is a wealth-creating and wealth-distributing process.

According to Yoram Barzel, a professor of economics at the University of Washington, property rights carry two distinct meanings in the economic literature (1997). One meaning is essentially the ability to enjoy a piece of property and is designated as an *economic* property right. The other meaning, much older and more prevalent, is what the state assigns to a person, which Barzel designates as a *legal* property right. What people ultimately seek, argues Professor Barzel, "are economic rights, whereas legal rights are the means to achieve the end" (Barzel, 1997, p. 3). This concept affects the issue of lot splitting in a profound way.

Frank Popper (1978) suggested that land is primarily a social weapon. It is a means by which its possessors protect their economic, political and other interests. It may be the most tangible and primitive form of power. Americans seem to want both private property and limits on private property. Jacobs (1999) argues that as Americans we want freedom on our property and restrictions on others people's property. What we want regarding property is security of our financial investment, clarity of the rules for land use, and certainty regarding how future changes will affect our security. As technology and social values change, the balance point between individual and social rights in property will continually be renegotiated (Jacobs, 1999). The ongoing conflict of American values regarding property rights and land use is clearly represented in the issue of lot splitting in Arizona.

Arizona's Legal History

Before 2000, Arizona law was silent about disclosure requirements and the regulation of lot splits. The real estate and property laws only covered "land divided for sale into six or more lots" (Arizona Revised Statues, 32-2101). In 1998, the Arizona legislature adopted the Growing Smarter Act, which represented the first statewide attempt to monitor and regulate

growth. The Act utilizes the "smart growth" approach of planning and zoning, which entails balancing economic interests with impacts on the environment and quality of life (Heffernon & Melnick, 2001, p.1). This Act requires cities and counties to develop and regularly review long-term development plans. Local governments are also required to conform all zoning actions to information contained in the plans.

Two years later, the State Legislature approved the Growing Smarter Plus Act. For the first time in Arizona history, counties were given limited authority over lot splits. Before 2000, local governments had no planning or zoning authority over these land sales. Counties are now allowed but not required to approve lot splits in unincorporated areas (Heffernon & Melnick, 2001, p.2). The counties are also allowed to adopt ordinances, often referred to as "minor land ordinances" (See Appendix A). These ordinances can prohibit the issuance of building permits in unregulated development areas until the county's minimum zoning requirements are met. However, the new law requires the counties to approve a lot split as long as a disclosure affidavit is provided (ARS 11-809). The disclosure affidavit must include information on legal and physical access, as well as information on necessary utility easements. None of the information in the affidavit must be verified through a title report or engineering study, and sellers are allowed to answer "unknown" to many of the questions contained in the affidavit (See Appendix B). It should also be noted that the county is only allowed 30 days to act on a lot split before it is automatically approved (ARS 11-809). Thus, the quality and quantity of the information provided varies greatly between transactions. In addition, buyers of property in lot split areas may not be aware that they are required to meet minimum zoning requirements until it comes time for them to build on their property – and that can be several years after the property was originally purchased.

Another provision of the Growing Smarter Plus Act prohibits a person from using the lot split process to avoid the state's subdivision laws (ARS 11-809). However, the prohibition has never been tested because the law does not provide any guidance on how one would prove a person engaged in lot split activity was trying to avoid subdivision regulation. The Act also allows cities and counties to limit extensions of their water, sewer and street improvements as long as they outline these limits in their general or comprehensive plans (ARS 11-826 and ARS 9-461.08). However, property owners within wildcat subdivisions often place political pressure on the city and county to provide them with needed services, regardless of the limitations stated in the general plan (Pima County, 1998, p.7).

Two issues surrounding the state's attempt to monitor and plan for growth have exacerbated the current problems associated with lot splitting. First, local governments have been forced to comply with the provisions of the two planning Acts without additional funding. Developing a general or comprehensive plan can cost local governments up to \$200,000 and require additional ongoing expenditures (Heffernon & Melnick, 2001, p.5). Thus, counties and cities have dedicated a large portion of their planning and zoning resources to developing these plans, leaving fewer resources available for other priorities, such as developing minor land ordinances. A review of all county ordinances revealed that of Arizona's fifteen counties, four have not yet developed a minor land ordinance, and those that do have an ordinance adopted it within the last year – nearly four years after the adoption of Growing Smarter Plus (Appendix C).

Another issue that must be recognized is the mismatch of policy solutions to problems. Requiring a person engaged in lot splitting activity to compile an unverified disclosure

affidavit does not address the information asymmetries nor does it eliminate the free rider problem. For example, the seller of the land can simply reply "unknown" to the questions posed on the disclosure affidavit and subvert the attempt to improve information sharing between buyers, sellers and local governments.

Disclosure affidavits were first developed as protection against future liability in a real estate transaction, and are better defined as a tool of the financial sector, not an effective planning tool. The disclosure is unverified and does not include information on future needs, such as whether or not there is an adequate long-term water source or the adequacy of the physical and legal access to the property. Even if local governments had the resources to review and track lot splits, it would be nearly impossible for them to know which areas would become wildcat subdivisions and which ones would remain undeveloped. In addition, because the information contained in a disclosure affidavit is not specific, potential buyers of the property may not have access to enough data to make an informed decision.

Evidence

Lot splitting has become a common practice in Arizona. For example, in 1997 Pima County granted permits for 3,729 new residential units. Of these, 1,525, or 41%, of the permits issued were in unregulated development areas (Pima County, 1998, p.22). The practice of lot splitting has many detrimental effects on numerous stakeholders, including the individuals that purchase split lots as well as the general citizenry and governmental jurisdictions in the surrounding area. This is due in large part to the information asymmetry associated with these types of real estate transactions due to a lack of regulatory oversight.

In order for a competitive marketplace to function properly, buyers and sellers must have all of the information needed to enter into a transaction or exchange. Information asymmetry occurs when effected parties to a transaction have unequal or different information (Kraft and Furlong, 2004, p.76). Lack of verifiable disclosure affidavits as well as a lack of information about water availability and future costs for infrastructure improvement represent just a few examples of information asymmetries experienced by buyers of lot split parcels. In addition, local governments don't have the resources to track lot splits and determine which ones will result in wildcat subdivisions. According to a 1998 report from Pima County, "unregulated lot splitting occurs on such a large scale that the cumulative result is the creation of residential communities with little if any basic infrastructure or services" (Pima County, 1998, p.6). Hence, local governments lack the needed information to effectively plan for these developments.

Information asymmetry occurs in a market when the seller has more knowledge going into the transaction than the buyer, or vice versa. This is possible in lot splitting situations because the normal subdivision laws that ensure flood risk disclosure and an adequate water supply, legal access to the property, and other infrastructure considerations such as electrical power hookups and sewer connections are not in place to protect the buyer.

Sellers of lot split parcels are not required to perform a land-use study to determine if the property is in a flood plain. As a result "the purchaser is unaware if the property is encumbered by a flood hazard and what is the extent and nature of the flood hazard" (Pima County, 1998, p11). The unregulated development of property often comes without access to water. When water is provided, the lot split developer can install a substandard system, which

may not fail until after the developer has moved on, leaving the costs of renovations with the lot owners (Pima County, 1998, p.11). When water access is not provided, owners must haul water to their homes or drill a well. Lot buyers may find the water table is deeper than they were told at the time they purchased their property, assuming they were made aware that they did not have a water supply. Wells that pump less than 35 gallons per minute are not monitored by local, county, or state agencies (Yavapai County General Plan, 2003, p.54). The unregulated pumping of ground water in concentrated areas also leads to potentially rapid drops in the water table, often referred to as an island effect, in the surrounding area (Jacobs and Megdal, 2004, p108). Often, there is not a sufficient water supply for the number of residents in the area, or there are too many homes hooked up to a single well (Pima County, 1998, p.11).

Further complicating the water issue is the fact that wildcat subdivisions are likely not connected to a sewer system. Over time, poorly maintained or constructed septic tanks can leak into the surrounding water table, polluting the only source of water for these homes (Jacobs and Megdal, 2004, p108). Again, the high concentration of septic systems increases the likelihood that contamination may occur. Even if property owners maintain their septic equipment properly, a neighbor that is not as diligent can pollute the water supply of many lots (Jacobs and Megdal, 2004, p108).

Homes in wildcat subdivisions in unincorporated areas are not likely to be provided with refuse collection. If this is not made clear during the real estate transaction, a lot buyer may find that they have little or no recourse. If refuse collection is not available in the area, the landowner will have to make regular trips to a local landfill, as well as possibly burn what combustible refuse they produce (AACPD & ACSA, 1999, p.10)

Lot split parcels also may not provide for legal access to the buyer's property (Pima County, 1998, p.9). This happens when a property does not have a legal right-of-way. The road an individual uses for access may actually be located on another's property. Due to the lack of development planning enforcement, road easements and right-of-ways may differ in width along the length of the road, resulting in areas that may be quite narrow (Pima County, 1998, p.9).

Often roads are damaged by erosion during heavy rains due to poor or inadequate engineering (Pima County, 1998, p.10). Counties are not allowed to pave privately owned roads in unincorporated areas (Holcombe, 2005), which leaves them vulnerable to erosion and a health risk due to the high amount of dust created by traffic (AACPD & ACSA, 1999, p.9). Further, emergency response vehicles may have difficulty finding the home due to poor roads, inadequate signage and poorly numbered addresses (Pima County, 1998, p.12).

Wildcat development has negative impacts on other citizens and local governmental jurisdictions as well. Lot splits create problems for planners because allowing unrestricted development hinders the enforcement of minimum development standards (AACPD & ACSA, 1999, p.15). Wildcat areas lack adequate infrastructure such as water, sewer and roads. When roadways are taken over by a county for maintenance and improvement, the taxpayers of that county bear the costs (Pima County, 1998, p.11). Because the roadways often do not meet construction standards, they are more hazardous than roads in planned development areas, which leads to increased tort liability for the county (Pima County, 1998, p.11).

Property owners can become free riders when they receive the benefits of a commonly provided good or service, such as a road or a water system, without having to pay an equal share for that good or service to be provided. Many times, the owners of lot split parcels are afforded the opportunity to receive benefits from the local government without having to pay for these benefits. For example, many times the buyers of lot split parcels do not reclassify their land for residential development and pay property taxes based on a much lower assessment ratio due to the fact that some types of property, such as grazing land, impose a much lower marginal cost on the local government (Pima County, 1998, p.15). Thus, these owners of lot split property are not paying their fair share.

Another example of the free rider problem can be illustrated by a local government's obligation to invest in street improvements and water infrastructure so as to ensure public health and safety. While these expenses are normally part of the cost of development within regular subdivisions and paid for by the future owners of the property within that subdivision, in the case of wildcat development, these costs are often borne by all taxpayers in the area.

The unrestricted nature of wildcat development makes it impossible for governments to recover the costs of providing services through taxation (AACPD & ACSA, 1999, p.15). Residents in lot split developments pay the same county property tax rate as traditional developments. However, wildcat areas are dominated by mobile homes, which have a significantly lower property valuation (Robichaux, 2005). In Pima County, the Improved Full Cash Value per section averages \$38.5 million in regulated development areas, but only \$8.1 million in unregulated development areas (Pima County, 1998, p.15). This leads to a loss of revenue for counties because the development occurring in wildcat areas is not as valuable as regulated, permanent housing. Counties may also fail to tax all parcels due to unrecorded land deeds, and under-tax developed areas as grazing land instead of taxing them as residential development (Pima County, 1998, p.15).

Criteria

As Bardach (2005) suggests, in order to assess the complex and uncertain scenarios for the basic alternatives combined with their variants, an outcomes matrix is used in this analysis. An overview of all the information is displayed and projected outcomes are given a symbolic descriptor. The information in the criteria columns project how the alternative will affect the value being measured and in what dimension the change will occur.

Based on the evidence of wildcat development and the resulting negative effects for Arizona counties, a number of criteria have been selected in order to weigh various policy alternatives to this problem and maximize the public value outcome. The criteria selected were intended to do just that, with elements taken from Moore's "Creating Public Value: Strategic Management in Government," Bardach's "A Practical Guide for Public Policy: The eightfold path to more effective problem solving," and from the above stated problem definition of wildcat development itself. The overarching criteria employed in this analysis include the three points of Moore's strategic triangle: political support, administrative feasibility and public value (22). Political support is defined as whether or not a particular policy alternative, given implementation, would find a majority of the population's support, including pervasive groups such as interest groups, elected officials and the voting public at large. Administrative or operational feasibility is defined as whether the infrastructure and

resources already in place within a given county could withstand enforcing the newly implemented policy alternative. The third criterion, public value, is defined in terms of the wildcat development policy problem and the specific information asymmetry and free rider issues we are trying to manage. Public value, therefore, is measured in terms of protecting private property rights, protecting Arizona tax payer rights, improving public health and safety, and protecting individual property owner rights. Each of these elements of public value intrinsically incorporates the criteria of political and administrative feasibility. In addition, these elements also measure Bardach's evaluative and practical criteria, including efficiency, equity, freedom, values, legality, political acceptability and robustness (Bardach, 2005, p.26-33).

Given these elements, our measurement for public value was given four times the weight of the other criteria—political support and administrative feasibility (see Table 1). This was important to do, because, while political and administrative feasibility measures determine whether an alternative can be implemented successfully, public value determines whether an alternative can solve the wildcat development problem of free rider and information asymmetry issues while also balancing the interests of private property and individual owner rights with those of tax payers and the county. These interests and issues are the paramount reason for undergoing the analysis in the first place and therefore warrant a higher degree of weight than the other criteria.

Alternatives

Of course, without viable alternative policies, there would be no need for analysis based on these well-defined criteria. In this analysis, four alternative policies have been selected, which we will title alternatives one through four. Alternative one (A1) upholds the status quo, and, by not changing any aspect of the current policy, allows a continuation of the minor land ordinance implementation. Given that this process allows for proper processing and cataloguing, then the information being gathered by the counties may be adequate to aid future planning activities. This alternative is concerning, though, as it does nothing to alleviate concerns over an adequate water supply, air pollution, construction within floodplains and fissures. While these concerns are significant, A1 will most likely be deemed the most appropriate alternative by developers in the county, who typically support little to no regulation.

Alternative two (A2) requires sellers of lot split property to provide prospective buyers with a verifiable disclosure packet as opposed to the limiting disclosure affidavits now in use. These more inclusive disclosure packets would contain information on whether or not the property is located within the county's service area and would outline minimum infrastructure standards and requirements that become the responsibility of the new property owner. This requirement prevents sellers from answering "unknown" on the current property disclosure form regarding questions of access to and availability of resources. This change in policy would allow buyers of wildcat developments to be notified of the required improvements and future financial obligations for the property, alleviating information asymmetry problems. Additionally, this alternative could provide a starting point for requiring buyers to make the infrastructure improvements necessary so as to reduce the free rider problem. Verifiable disclosure will most likely be supported by the real estate industry and questioned by

developers and private property advocates who will see it as another attempt to increase the cost of construction and impede property owners. It will also create additional administrative work for counties as they would be required to develop disclosure procedures and begin tracking information on lot splits.

Alternative three (A3) imposes impact fees on the buyers of lot split parcels reflecting the minimum costs of necessary infrastructure improvements in order to protect the health and safety of residents as well as the county bottom line. This alternative includes a stipulation for decreasing the amount of impact fee paid by a lot split purchaser along the magnitude of proposed improvements made by the owner, including water source, sewer/septic system, waste and wastewater removal, and road infrastructure. The result would limit private property rights by mandating a minimum level of development for each parcel, internalizing costs currently shared with all taxpayers. Supporters argue that this method would ensure the general taxpayer is not burdened with paying for infrastructure improvements on someone else's home. In this scenario, counties would need to develop standards and impact fee levels for varying development types and intensities.

The final alternative, alternative four (A4), includes amending existing state law so that counties have the ability to establish improvement districts in wildcat development areas that have reached a specified size measured by number of lots. The revenues collected through these district property taxes would then be used to fund the needed infrastructure improvements and services in the development area. In order to form an improvement district, 51 percent of the landowners in the wildcat development would need to consent by affirmed signature and the County Board of Supervisors would need a supermajority vote in favor. While the imposition of new taxes is politically unpopular in Arizona, the real estate and large development companies may support this alternative if it is seen to equalize costs of development. On the other hand, homebuilders and property rights groups will oppose the tax because they would then become responsible for the full costs of development. Administration of this alternative would be quite simple as counties already have capacity and experience in collecting taxes and administering improvement districts.

The above alternatives were each weighed against the aforementioned criteria and given scores of -1, 0 or +1 in each category. A score of "-1" means the alternative does not meet the criteria, while "0" reflects a neutral response to the criteria and "+1" reveals an alternative that does meet the criteria as previously defined. The scores for each alternative were then added across the criteria for a total score, allowing for comparability (Table 1). A maximum total score would equal six, while a minimum total score would equal negative six.

According to our purely numerical analysis, policy alternatives two (A2) and four (A4) appear to come the closest to satisfying all of the selected criteria (Figure 1), but we also want to evaluate and confront the tradeoffs latent in these alternatives to be sure they accurately represent our goals in alleviating the problems associated with wildcat development.

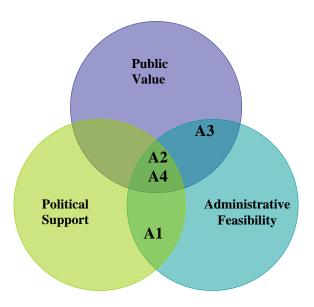
Table 1: Performance of Alternatives against Criteria

		Maximize	Maximize	Public Value			
				Information Asymmetry		Free Rider	
Totals	Alternatives	Political	Administrative	Protect Private	Protect Individual	Improve Public	Protect Arizona
		Support	Feasibility	Property	Property	Health	Tax Payer
				Rights	Owners	and Safety	Rights
0	A1	+1	+1	+1	-1	-1	-1
4	A2	+1	+1	0	+1	0	+1
0	A3	-1	0	-1	+/-1	+1	+1
4	A4	+1	+1	0	0	+1	+1

A1: Do nothing

A2: Require verifiable disclosure
A3: Impose impact fees on buyers
A4: Allow counties to establish improvement districts

Figure 1



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Tradeoffs

In considering the tradeoffs between the policy alternatives, a few common themes become apparent. At issue are the rights of private landowners versus government control. By analyzing the problem of wildcat development through the lens of a market failure that is caused by information asymmetry and free rider issues, it becomes clear that government intervention of some type, in varying degrees of intensity, is necessary to protect the public value we place on our community, quality of life and environment.

When action is taken to correct information asymmetry, it is necessary to impose fair disclosure regulations to protect prospective buyers. Landowners may view this as an infringement on their right to do as they wish with their property. The rights of individuals come into conflict with the rights of the prospective buyers. It is helpful in addressing the free rider issue to again consider individuals and groups. In this instance, however, regulation correcting free rider issues protects the community as a whole from individuals that are not contributing their fair share to the costs associated with wildcat development. In the following section, we will discuss the four alternatives from our matrix in more detail:

A1: Do nothing.

This allows current trends to continue. The expected outcome is that lot split developments will increase or decrease in number based on the market. Property owners who wish to split their parcels into smaller lots will be able to continue to do so under current laws. However, unregulated wells will continue to operate and be built. Housing units will be developed in areas with insufficient ground water, and the risk of pollutants spoiling the water table due to faulty or too many septic systems will not be abated. Roads will be insufficient, poorly planned and hazardous to drive. County governments will continue to lose revenue due to lower assessed home values and the use of inaccurate valuation rates. Taxpayers may still be required to pay for the infrastructure improvements that are normally paid by developers in regulated developments, and the tax burden to bring the lot split areas up to a reasonable level of code compliance will be absorbed by the surrounding area.

A2: Require verifiable disclosure.

The expected outcome of requiring verifiable disclosure affidavits and the establishment of infrastructure standards and requirements is decreased information asymmetry and a reduction in free rider costs to taxpayers. Landowners still have the right to split their parcels, but buyers will be protected from a lack of information. The reduction of information asymmetry may lead to less demand for split lots, reducing the ability of landowners to profit from their real estate investments. However, reducing the demand for such development will lead to a decrease in the negative environmental and community impacts associated with it. Requiring the property owner to meet minimum infrastructure requirements may also reduce the incidence of poorly constructed roadways and inadequate water supplies.

By requiring split lot buyers to improve their parcels by guaranteeing a basic level of infrastructure before a building permit can be issued, the free rider issue is addressed in that the individual lot owners will bare the costs of improvement rather than taxpayers. Internalizing these costs to the buyer may lead to a decrease in demand for this type of development, leading to a reduction in negative environmental and community impacts.

Increasing the private costs of improvement for the sake of reducing the social costs can be seen as regressive because those who may least be able to afford housing will lose buying power in the market.

A3: Impose impact fees on buyers.

The expected outcome of imposing impact fees on lot buyers would be an immediate recovery of infrastructure costs as opposed to assessing fees at the time of residential development. This will lead to funding for water, sewer and road improvement from the onset of development, rather than waiting for individual owners to put housing on their parcels. Again, the free rider issue is addressed by recovering the social costs of development. Compliance with a minimum level of infrastructure and land improvement will ensure adequate access to the property and will reduce the incidence of poor water supply and lack of solid waste disposal. Requiring a minimum level of infrastructure and land improvement will protect the long term value of the land. However, individual property owners will be required to pay more for developing their property. It is unclear if these costs would be greater than, equal to, or less than the costs of regulated development. Currently, a developer wanting to develop a large subdivision pays roughly \$33,000 per lot in order to meet all of the requirements imposed by state and local governments (Personal interview with Mark Borushko, President, MB Group Construction Management and Administrative Services on Friday Sept 30, 2005, by Sherry Haskins, Jamie Hogue, and Jess Koldoff). Many of these requirements are not included in the purchase price of lot split parcels and are not paid by the buyer of the property. Instead, the costs are shifted to local taxpayers when the city or county takes on the responsibility of providing necessary infrastructure improvements.

The implementation of impact fees is a contentious political topic that is still being debated for regulated development. Counties would face significant up-front investments. Counties would also be required to develop a system of tracking lot split developments and integrating that information with their planning and zoning process, including development of long-term capital improvement plans.

A4: Allow counties to establish improvement districts.

The expected outcome of allowing the establishment of improvement districts is the reduction of costs associated with infrastructure improvement on general taxpayers. The collection of improvement district revenues would decrease the dependence on county general revenues. Some residents will likely not be willing to increase their tax burden, and property owners may view the tax as an infringement on their right to purchase land in unregulated areas. The creation of improvement districts and the construction of infrastructure improvements will reduce the risks to public health and safety.

Infrastructure improvements will increase the value of the homes in those areas for tax purposes, which will lead to an increase in revenue to the counties. The free rider issue is addressed by imposing taxes. However, establishing improvement districts and assessing new taxes will require public and political support.

Policy Recommendation

By itself, lot splitting does not appear to be the policy problem. According to former state legislator and current Yavapai County Supervisor Carol Springer, "Lot splitting has traditionally benefited some people a life style they would not be able to afford otherwise – and are willing to make the compromise of doing without the developed infrastructure of maintained roads, sewers and public utilities to have a piece of rural property" (Personal interview with Carol Springer, Yavapai County Supervisor, Thursday Nov. 10, 2005, by Sherry Haskins). Many lot splits are purchased for investment or recreational purposes and are not developed. In other cases, a family may decide to divide a large parcel of land among family members without intending to develop the land. In cases such as these, the current disclosure requirements would be adequate.

Local governments need additional tools that address the specific planning and zoning issues that arise when a lot split results in a wildcat subdivision. Strengthening the disclosure affidavit so that it is verifiable and provides the information needed by the potential buyer as well as county planning and zoning departments is critical. The sellers of these parcels should no longer be allowed to answer "unknown" to any of the items on the affidavit.

A reasonable solution to eliminating this information asymmetry already exists in the private market. If public policy makers require that the information contained in disclosure affidavits be verifiable, title companies will create an entrepreneurial market to provide that service. Title companies already perform all of the detailed research and verification that must be completed when subdividing land or selling existing developments. The resources already exist in these companies to create a new, less costly and less intensive product for those wanting to sell their properties through the lot split process. Providing the incentive that encourages an existing market to adapt to a new opportunity is the type of entrepreneurial public policy solution Moore encourages when exploring new ways of creating public value (1995, p.299).

Improving the quality of the information contained in the disclosure affidavit will eliminate the information asymmetry faced by future property owners. Potential property buyers will be informed of the likelihood of future investments in the property and will be notified that they will not be able to obtain required building permits unless a minimum level of infrastructure improvement is completed.

As suggested in alternative two (A2), local governments should also be allowed to withhold building permits until a lot split parcel meets a minimum level of compliance with zoning ordinances. Allowing each county to base permit decisions on compliance with their own zoning ordinances will ensure that local needs are being met. In areas of the state where lot splitting is not creating wildcat subdivisions and the associated free rider issues, the building permits can be issued with little or no inconvenience to the lot purchaser. In other areas, such as Pima, Pinal and Yavapai Counties, where the problem of wildcat development is negatively affecting public value, the restriction on issuing building permits can be used as a tool by the local governments to ensure that lot split owners internalize some of the costs associated with developing their land. Tying the issuance of building permits to a minimum level of infrastructure development will minimize the free rider issue that currently saddles Arizona taxpayers. In most cases, general tax revenue will no longer be used to provide basic infrastructure improvements for wildcat developments.

The only remaining barrier to success is local governments' ability to capture and utilize the data that is contained in the disclosure affidavits. According to Moore, public managers must be capable of innovating and capitalizing on the resources and information available to them (1995, p.232). The current weakness in counties' inabilities to capture information on lot split sales and the resulting wildcat developments illustrates an opportunity for innovation. If the level of information requested in the disclosure affidavits is increased, as suggested above, it could be used to greatly improve planning processes. Thus, counties must find a way to capitalize on the new information that will be provided, in order to improve their own abilities to plan and deploy their resources to deal with future growth.

Conclusion

The prevalence of wildcat development, coupled with the state's unprecedented growth, will continue to pose public policy challenges in Arizona's future. Sandie Smith, Pinal County Supervisor, recently stated that "the results of the last few years points to the fact that counties do not have the tools to completely deal with these (lot) splits" (Personal interview conducted November 2, 2005, by Sherry Haskins).

Action must be taken to minimize the information asymmetries and free rider issues associated with wildcat development. In order to address this issue, public policy makers must first realize that "politics is the gatekeeper of the lot splitting problem in Arizona" (Personal interview with Craig Sullivan, Director of Arizona County Supervisor's Association, November 2, 2005, conducted by Sherry Haskins). A solution must balance the interests of private property rights with government's need to protect the health and safety of residents as well as the interests of individual property owners with the community at large. A solution must also be operationally obtainable from the perspective of both property owners and government officials. A balanced approach that incorporates improved disclosure requirements with the ability of local governments to limit development in areas that lack basic infrastructure adequately addresses the necessary criteria and represents an entrepreneurial solution that creates public value for Arizona.

References

- Arizona Association of County Planning Directors and Arizona County Supervisors Association. (1999). *Impacts of Wildcat Lot splitting in Unincorporated Arizona Counties*.
- Arizona Revised Statutes. (2005). 47th Legislature. Retrieved on November 15, 2005 from: http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp.
- Bardach, E. (2005). A Practical Guide for Policy Analysis: The eightfold path to more effective problem solving. New York: Chatham House Publishers.
- Barzel, Y. (1997). *Economic Analysis of Property Rights* (2nd ed.). New York: Cambridge University Press.
- Hardin, G. (1968). The tragedy of the commons. Science. 162, 1243-1248.
- Heffernon & Melnick, R. (2001) Issue Brief Growth Management and Open Space Protection in Arizona: Current Tools and Progress. Morrison Institute for Public Policy, Arizona State University
- Holcombe, C. "Pinal County near Record for Lot Splits", *The Arizona Republic*. August 8, 2005.
- Jacobs, H. (1999). Fighting over land: America's legacy...America's future? *Journal of the American Planning Association*, 65(2), 141-149.
- Jacobs, K. & Megdal, S. (2004). Water supply and management beyond the active management areas. In B. G. Colby, et al, *Arizona's water future: Challenges and opportunities (pp. 95-113)*. Background report for Eighty-fifth Arizona town hall, October 31-November 4, 2004. Retrieved November 14, 2005 from: http://www.azrangelands.org/AZWATER/publications/townhall/TownHall.pdf.
- Kraft, M. and Furlong, S. (2004). *Public Policy: Politics, analysis, and alternatives*. Washington, DC: CQ Press.
- McKinnon, S. "Developers Cash in on Weak Water Laws," The Arizona Republic. June 27, 2005.
- Moore, M. (1995). *Creating Public Value: Strategic Management in Government*, Cambridge: Harvard University Press.
- Pima County, Arizona. (1998). *Wildcat Subdivision Study*. County Administrator's Office. Retrieved September 15, 2005 from: http://www.pima.gov/cmo/sdcp/reports/d11/001WIL.PDF
- Popper, F. (1978). What's the hidden factor in land use regulation? *Urban Land*, 37(11), 4-6.
- Robichaux, M. (2005). "Some parts of Arizona resemble the wild west", *Real EstateJournal.com*. Retrieved November 14, 2005 from http://www.realestatejournal.com/buysell/regionalnews/20010214-robichaux.html.
- Wassmer, R. (2002). An Economic Perspective on Urban Sprawl: With an Application to the American West and a Test of the Efficacy of Urban Growth Boundaries. California State University, Department of Public Policy and Administration and California Institute for County Government. Retrieved October 29, 2005 from: http://www.csus.edu/indiv/w/wassmerr.
- Yavapai County General Plan (2003). pages 53-55. Retrieved October 14, 2005 from http://www.co.yavapai.az.us/departments/Dev/DevHome.asp.

Appendix A: Pima County Minor Lands Division Ordinance

Chapter 18 of the Pima County Code is hereby amended by adopting a new chapter, 18.70, "Minor Lands Division" to read as follows:

CHAPTER 18.70

MINOR LANDS DIVISION

Sections:

18.70.010 Purpose

18.70.020 Definitions

18.70.030 Permit Required

18.70.040 Applicability

18.70.050 General Requirements

18.70.060 Procedures

18.70.070 Exceptions

18.70.080 Violations, Penalties, & Enforcement

18.70.010 Purpose

The purpose of this Chapter is to protect the public health, safety, and welfare by providing for the review of all land divisions, unless otherwise excepted by this Chapter, in order to determine whether the resulting lots, parcels, or fractional interests meet or provide for the following:

- A. Minimum applicable zoning requirements.
- B. Legal access.
- C. Physical access.
- D. Reservation of utility easements on the lots, parcels, or fractional interests being created.

18.70.020 Definitions

- A. Applicant: Owner or owner's authorized agent of land subject to this Chapter.
- B. Minimum applicable county zoning requirements: The minimum acreage and dimensions of the resulting lot, parcel or fractional interest as required by the Pima County Zoning Code.
- C. Legal access: A right of legal ingress and egress to and between the lots, parcels, or fractional interests being created.
- D. Lot: Refer to section 18.03.020L.3.
- E. Physical access: Access that is traversable by a two-wheel drive passenger motor vehicle.
- F. Subdivision: Refer to section 18.69.020A.14.a.

18.70.030 Permit Required

- A. No land may be divided into five or fewer lots, parcels, or fractional interests, any of which is ten acres or smaller, unless a land division permit has been issued by Pima County.
- B. Payment of an applicable land division fee in accordance with the adopted fee schedule is required as a condition of obtaining a land division permit.

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18.70.040 Applicability

A. The provisions of this Chapter apply to all land divisions of a parcel into five or fewer lots, parcels, or fractional interests, any of which is ten acres or smaller in size, unless otherwise excepted by this Chapter.

- B. County issuance of a land division permit under this ordinance is not a representation that the division complies with state laws or county ordinances regarding the subdivision of land. C. It is unlawful for a person, or group of persons acting in concert, to attempt to avoid the provisions of this Chapter or other county ordinances and state subdivision laws by dividing a parcel of land into six or more lots, parcels, or fractional interests or to sell or lease six or more lots, parcels, or fractional interests, by using a series of owners or conveyances.
- D. Failure to obtain a land division permit prior to dividing land into lots, parcels, or fractional interests shall be a violation of this Code.

18.70.050 General Requirements.

- A. No parcel of land may be divided into five or fewer lots, parcels, or fractional interests without complying with this Chapter and obtaining a land division permit, unless otherwise excepted by this Chapter.
- B. All improvements to and development of land divided pursuant to this Chapter must comply with all other applicable Pima County Code provisions.
- C. A building, or use permit shall not be issued for development on any lot, parcel, or fractional interest that does not comply with the provisions of this Chapter.
- D. A land division application that does not comply with one or more of the items listed in section 18.70.060A may still have a permit issued if the applicant signs and records an acknowledgment that no building or use permit will be issued until the lot, parcel or fractional interest meets the minimum zoning requirements, has legal access, physical access, and has reserved utility easements.
- E. The granting or issuance of any certificate, permit, registration or other approval pursuant to this Chapter requires compliance with all other applicable laws and Pima County Code provisions.

18.70.060 Procedures

- A. Submittal of Application. The applicant must submit a properly completed and filled out land division application and any required supporting documentation for staff review as set forth below.
- 1. An application applies to all land divisions described in Section 18.70.040A and requires:
- a. All of the following:
- 1. A complete land division application and a survey sealed by a registered land surveyor showing the property boundary lines, the locations of existing structures, legal access, average cross slope, lot area, lot width, and utility easements for each lot, parcel, or fractional interest being created. The
- Co8-03-11 4 applicant may substitute an ALTA survey for the purposes of meeting this requirement at its discretion;
- 2. A standard preliminary title report demonstrating that there is legal access to each lot, parcel, or fractional interest being created from a public right-of-way;
- 3. A statement from a registered professional engineer or a licensed surveyor stating that the resulting lots, parcels, or fractional interests being created will have physical access that is located within the boundaries of the legal access;
- 4. Identification of all topographic, hydrologic or other site constraints, requirements or limitations that must be addressed as a condition of the eventual issuance of a building or use permit, including, but not limited to, identifying all areas for each lot, parcel, or fractional

interest being created that lie within the hillside development overlay zone or regulatory floodplain as defined by the Federal Emergency Management Agency (FEMA) or by Pima County. For Section 18.70.060, there shall be no requirement for independent studies; or

b. A signed written acknowledgment from the property owner that has been recorded with the Pima County Recorder's Office and acknowledges that no building permit or use permit will be issued until the lot, parcel, or fractional interest meets the minimum zoning requirements, has legal access, will have physical access from a public right of way, and has reserved utility easements.

B. Review of Application

- 1. Applications shall be reviewed in 30 days pursuant to an application checklist. The thirty-day time period shall start once the application is determined to be complete by the Development Services Director or the Development Services Director's designee.
- 2. Upon review, staff will issue a land division permit or return the application to the applicant as an incomplete submittal.
- 3. A complete application that is not reviewed within the thirty-day time period shall be deemed approved.

18.70.070 Exceptions

The following are excepted from the requirements of this Chapter:

- A. Creation or realignment of a public right-of-way by a public agency;
- B. Creation or realignment of a conservation easement, public easement, private easement, or any other easement as recognized by Pima County;
- C. Creation or realignment of a special assessment district;
- D. Sale, lease, transfer or development of space within an apartment, industrial or commercial building;
- E. Compliance with a court order to divide the land;
- F. Cemetery lots:
- G. Subdivisions created under the authority of A.R.S. Titles 11 and 32, and Chapter 18.69 of the Pima County Zoning Code;
- H. Division of land within a commercial or industrial zoning district;

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- I. Division of land within the Transitional (TR) and Multiple Use (MU) zoning district, if used solely for nonresidential purposes;
- J. Division of land for sale, lease, or exchange between adjacent property owners, if the sale, lease or exchange does not create additional lots, parcels or fractional interests of sufficient size and configuration that would require a building or use permit under the Pima County Zoning Code.

18.70.080 Violations, Penalties, and Enforcement

A. The enforcement of this chapter and conditions of the land division permit shall be in accordance with Chapter 18.95 (Compliance and Enforcement).

B. Penalties

A violation of this Chapter shall result in the assessment of civil penalties in an amount provided by Section 18.95.040. Payment of a civil penalty shall not relieve any person from the requirement to comply with the terms of this Chapter.

SECTION 3: That Ordinance Number 1997-46 for fees for various services of the Pima County Development Services Department is hereby amended as follows:

Paul Christensen, Sherry Haskins, Jamie Hogue and Jess Koldoff 1. Land Division Permits. a. Application \$150 per lot, parcel, or fractional interest created. **Appendix B: Affidavit of Disclosure** Pursuant to A.R.S. §33-422 (seller(s)) being duly sworn, hereby make this affidavit of disclosure relating to the real property situated in the unincorporated area of: _____, County, State of Arizona, located at: and legally described as: (Legal description attached hereto as exhibit "A") 1. There is is not....legal access to the property, as defined in A.R.S. § 11-809..(unknown) 2. There | is | is not....physical access to the property. (unknown) Explain:

3. There is is not a statement from a licensed surveyor or engineer available stating whether the property has physical access that is traversable by a two-wheel drive passenger motor vehicle.

4. The legal and physical access to the property is is notthe same unknown not applicable.
Explain:
If access to the parcel is not traversable by emergency vehicles, the county and emergency service providers may not be held liable for any damages resulting from the inability to traverse the access to provide needed services.
5. The road(s) is/arepublicly maintainedprivately maintainednot maintainednot applicable. If applicable, thereisis nota recorded road maintenance agreement.
If the roads are not publicly maintained, it is the responsibility of the property owner(s) to maintain the roads and roads that are not improved to county standards and accepted for maintenance are not the county's responsibility.
6. A portion or all of the property is in a floodplain, it may be subject to floodplain regulation.
7. The following services are currently provided to the property: \(\subseteq \text{water} \subseteq \text{sewer} \subseteq \) electric \(\subseteq \text{natural gas} \subseteq \text{single party telephone} \subseteq \text{cable television services}.
8. The property is served by a private well a shared well no well. If served by a shared well, the shared well is is nota public water system, as defined by the safe drinking water act (42 United States Code § 300f).
9. The propertydoes havedoes not have an on-site wastewater treatment facility (i.e., standard septic or alternative system to treat and dispose of wastewater)unknown. If applicable: a) The propertywillwill not require installation of an on-site wastewater treatment facility; b) The on-site wastewater treatment facilityhashas not been inspected.
10. The property ☐has been ☐has not been subject to a percolation test. ☐unknown.
11. The propertydoesdoes notmeet the minimum applicable county zoning requirements of the applicable zoning designation.
12. The sale of the propertydoesdoes notmeet the requirements of A.R.S. § 11-809 regarding land divisions. If those requirements are not met, the property owner may not be

able to obtain a building permit. The seller or property owner shall disclose each of the deficiencies to the buyer. Explain: 13. The property is is not located in the clear zone of a military airport or ancillary military facility, as defined in A.R.S. § 28-8461. (Maps are available at the state real estate department's web site.) 14. The property is is not located in the high noise or accident potential zone of a military airport or ancillary military facility, as defined in A.R.S. § 28-8461. (Maps are available at the state real estate department's web site.) 15. Notice: If the property is located within the territory in the vicinity of a military airport or ancillary military facility the property is required to comply with sound attenuation standards as prescribed by A.R.S. § 28-2482. (Maps are available at the state real estate department's web site.) 16. The property is is not located under military restricted airspace unknown. (Maps are available at the state real estate department's web site.) This affidavit of disclosure supersedes any previously recorded affidavit of disclosure. I certify under penalty of perjury that the information contained in this affidavit is true, complete and correct according to my best belief and knowledge. Dated this (date) day of (year) by: Seller's name (print): Signature: Seller's name (print): ______ Signature: _____ State of Arizona ss. County of ______) Subscribed and sworn before me this (date) day of (year), by

Paul Christensen, Sherry Haskins, Jamie Hogue and Jess Koldoff

Notary public	
My commission expires:	
(date)	
Buyer(s) hereby acknowledges receipt of (year)	f a copy of this affidavit of disclosure this (date) day
Buyer's name (print):	_ Signature:
Buyer's name (print):	Signature:

Appendix C: County Adoption of Minor Land Ordinances

County	Minor Land Ordinance	Year Adopted
Apache	Yes	2005
Cochise	Yes (variation)	2004
Coconino	Yes	2004
Gila	No	
Graham	Yes	
Greenlee	No	
La Paz	Yes	2004
Maricopa	Yes	2001
Mohave	Yes	
Navajo	No	
Pima	Yes	2005
Pinal	No	
Santa Cruz	Yes (variation)	1979
Yavapai	Yes (variation)	2002
Yuma	Yes	2004 (draft)