

# **Land Use Conflicts on the Urban Fringe: Causes and Potential Resolution**

**Jim Hite**

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## Introduction

Increasingly, stories are popping up in the popular media about problems of urban sprawl, odors of hog farms, of chemical use in and dust from farming operations, and of the loss of prime agricultural land. For perhaps understandable reasons, the popular media tend to treat each of these sets of problems in isolation. People in the news business tend to treat stories on a one-at-a-time basis. In reality, however, the stories in the press deal with a family of symptoms with origins rooted in the process of economic change and development that we commonly call *globalization*.

Understanding that process and how it gives rise to a set of conflicts over land use at the rural-urban fringe is the goal of this paper. We will see that the problems the media are reporting on the rural-urban fringe are the predictable, if not inevitable, results of powerful economic forces. Those forces may be harnessed and managed, but they probably cannot be subdued.

I will paint with a broad brush. My goal is not so much to explain everything in detail as it is to provide an overall framework which might be useful in understanding the stresses and conflicts and why they are occurring.

The outline of the paper is as follows: We begin with a brief section defining the main terms. We will then examine globalization in history, its causes and its consequences for urban land uses. We will then turn to an examination of what the major players in the conflicts at the urban fringe might want, and consider the set of deals that might resolve those conflicts.

## Definition of Terms

Three critical terms must be defined: globalization, rural, and urban. I refer to these as *terms*, not words, because I wish to use them to denote broad concepts. Hence, each of the terms requires definition in more than a few words.

**Globalization:** The word is familiar to readers of the popular press, and like most terms in popular usage, it is seldom precisely defined. I use globalization to mean an on-going process by which markets grow and expand into a network that reaches around the world. In that sense, globalization is not new. The process was fairly well developed in the ancient world and has evolved almost steadily since about 1400. But huge drops in transport and communication costs have taken place in the last quarter of the twentieth century, and that has allowed the globalization process to move rapidly in our time.

Globalization has to do with overcoming distance. Distance still matters in markets, but it matters much, much less today than it did even 25 years ago. Huge blocks of market information move at the speed of light and at very low costs to any place on the globe. Few places are able to isolate themselves from the impacts of economic change anywhere in the world. While governments may try to erect barriers that hold change at arm's length, the costs are so great that few can sustain the effort.

It is a truism in economics that the specialization of labor is limited by the extent of the market. Put simply, this means that an isolated family is forced to be self-sufficient, producing everything it uses itself. As families become less isolated, it makes sense for each family to specialize in what it does most efficiently, trading with other families to acquire other things it needs. If transport and communications costs are very high, a family might do well by being among the most efficient producers of widgets in the locality where it lives. But as those transport and communications costs fall, that family will face increased competition from widget makers in other

places, and unless it is among the most efficient producers in the new, expanded market, it will be forced into a new line of work. In a truly global economy, the family will survive in the widget business only if it is one of the most efficient producers of widgets on earth. So when we speak of globalization here, we are talking about a process that leaves only the globally most efficient producers standing.

**Urban and Rural:** These two terms can and must be treated together because they deal with one single geographic concept. Urban and rural are labels applied to different parts of space based upon its uses. Rural is that space which is not urban. We can define an urban area as being one where the land uses from customary and traditional *urban* activities produce higher returns than from traditional and customary *rural* activities.

Among the customary and traditional urban activities are commerce and industry, e.g., wholesale and retail sales, banking, insurance and financial services, professional services, cultural and artistic endeavors, and public administration. Customary and traditional rural activities focus upon primary industries such as farming, forestry, and mining. Manufacturing is not a land use confined solely to either urban or rural places. Traditionally and customarily, manufacturing of various sorts are found in both urban and rural areas, although rural manufacturing traditionally was limited to activities such as grain and lumber milling, blacksmithing and forging, ore processing and some small scale food processing.

The urban fringe, therefore, is the frontier in space where the returns to land from traditional and customary urban land uses are roughly equal to the returns from traditional and customary rural land uses. In theory, such a frontier should always exist, although its exact location on the ground may not be easily fixed. In times of major economic change, that frontier will be very fluid as changing market conditions cause changes in the returns to land at any given place. Hence, rapid globalization of the sort occurring in the late twentieth century must inevitably produce land-use conflicts at the urban fringe.

## Globalization and Urban Form

Just how does globalization produce land-use conflicts at the urban fringe? It does so in two ways. The first we shall label macro impacts and the second micro impacts.

**Macro Impacts:** The macro impacts of globalization were alluded to above in the discussion of widget making. The decline in transport and communications costs that integrates markets on a global scale destroys cozy local markets heretofore buffered from outside competition by distance. The chain of events runs something like this:

If the price consumers pay for a product includes the cost of moving all the ingredients of that product to the consumer, a decline in transport cost will allow the consumer to draw supply from a greater distance without paying any more for the product. So there is an increase in the supply of the product on the market. If that increase is not absorbed by the market, the price will fall, and that fall will trigger a decrease in the returns to land in the old supply area.

It is possible under fairly plausible assumptions that the relative decline in price will be greater than the relative decline in the quantity supplied, particularly for many of the commodities produced by traditional rural primary industries. In any case, the decline in price will almost certainly threaten the survival of existing marginal producers. If the product is produced using extensive land inputs, as is the case with agriculture and forestry, the end result will surely mean a shift in land use throughout much of the supply area.

A decline in the price of food products in cities is tantamount to a decrease in the cost of living in urban areas. Other things more or less constant, that will attract people from rural to urban areas until the increased demand for urban space drives up the price of that space sufficiently to offset the decline in food prices. Some of that increased demand for space will cause

more intensive urban land use (i.e., cause urban buildings to rise higher). Some of the increased demand will lead to more extensive urban land use (i.e., the urban area spreads out and takes over land previously used for rural purposes).

So globalization, or at least, the underlying declines in transport and communications costs that push forward the globalization process, almost inevitably leads to what is called urban sprawl. It will generally cause urban centers of almost all sorts to establish new, expanded frontiers that encompass what heretofore was rural space. It did so in Rome, as one can see in the ruins of sets of walls, each newer one surrounding an older one. It did so in the fifteenth century when the urban activities of seaports of Spain and The Netherlands overflowed the old city walls and expanded outward into the adjacent countryside. It has been happening rapidly in America since the end of World War II.

Micro Impacts: The macro impacts concern the general shift of land use from rural to urban accompanying globalization. The micro impacts are those associated with the specifics of this shift. In the case of contemporary globalization, the micro impacts, flowing from the dramatic declines in transport costs and communications costs, favor horizontal over vertical expansion of urban space. In short, it creates an environment favorable for urban sprawl.

If most employment opportunities are in urban areas, and if workers must actually show up at the work site to do their jobs, workers must live close enough to urban centers to be within some reasonable commuting range. That commuting range depends upon transport costs (including time costs). So a decline in transport costs will increase the commuting range and allow urban workers to live further and further away from their work site. In post-World War II America, declining transport costs facilitated the so-called flight to the suburbs. In late twentieth century America, declining transport costs have led to the infiltration into rural spaces of housing for urban workers, resulting in mixed land uses where farmers and suburbanites are near neighbors.

Yet we are dealing with more than just a decline in transport costs. We have also had the communications revolution that creates the possibilities some workers can do their work at their places of residence without appearing on a daily schedule at a central work site. Indeed, modern telecommunications may make possible a cottage industry in some types of work. These electronic cottage workers can select a residence site without regard to distance to the work site. Climate, natural beauty, cultural attractions, and access to a communications node thus become dominant factors in choosing a residence site. Factors such as natural and cultural amenities become dominant in such selection. Rural places with abundant natural amenities are candidates for colonization by urban workers in their electronic cottages.

The infiltration of urban uses into open space in rural areas made much of that open space potentially developable for housing and ancillary uses. Even if not all the space would be needed for housing, the possibility of selling it for development increased the market value of the land above its use value in traditional and customary rural land uses. When that happens, holders of such land are discouraged from making permanent fixed investments in the land that might increase productivity in traditional rural uses but add no market value for potential future urban uses. Examples would include both construction and maintenance of things like soil and water conservation structures, fences and corrals, barns and silos, as well as certain types of highly specialized machinery and equipment. Failure to make needed fixed capital investments of this sort will cause an additional competitive burden to fall on rural producers already being pressured by macro impacts described above.

The inevitable result of this process is to crowd out many traditional rural land uses, particularly those aimed at producing a standardized commodity which must be cost competitive in global markets. There may be opportunities for some types of specialized agriculture to survive and prosper on land impacted by urban price pressures, but it will need to produce returns to land that are competitive with use of that land for residential purposes. There are two types of such agriculture – intensive enterprises such as hog

or poultry farms, or a market garden agriculture producing a premium product for local market niches. Almost certainly, it will be a slimmed-down agriculture employing only a relatively small part of the local population. Commodity-based agriculture production will be forced into relatively remote enclaves where urban factors have little or no impact upon local land prices.

### Rational Responses to Urban Encroachment

If globalization, or at least the forces giving rise to the latest wave of globalization, leads to urban sprawl and the crowding out of traditional rural land uses, what response would one expect from rational agents operating at the rural-urban fringe? The key to answering this question is the word *rational*. By definition, we cannot predict irrational behavior. Assuming, however, that agents are rational, we can sketch out in broad terms the kind of responses that are likely to occur.

**Agricultural Interests:** Let us begin by focusing upon economic agents operating in agricultural production – farmers and their suppliers. If these agricultural producers are landowners, they stand to gain considerable wealth from the escalation of land prices. To realize that wealth, however, they must sell the land and either exit agriculture or move operations elsewhere. If they continue to farm the land, they will experience higher opportunity costs in using that land.

Assuming that farmers own the land free and clear, those higher opportunity costs are paper costs in the form of interest forgone on the money that could have been earned from selling out and investing the proceeds. If they prefer not to move their operations or lack the required skills to move into other occupations, they may continue to farm the land for some time. Hence, land use conversion from agriculture to urban use is likely to be gradual, pending the retirement or death of the operator(s). Sooner or later, however, the land will move into an estate. Estate taxes will come due and

require liquidity. If there are multiple heirs, the probability becomes quite high that the land will be sold for urban use since that will maximize the value of the estate.

It is perfectly rational for agricultural producers enriched by urban encroachment to remain in agriculture for a while because their other non-land capital assets (machinery, buildings, fences, and skills) have higher use-value in farming than they have on the market. It is also perfectly rational that they would seek public policies that would allow them to realize some of the capital gains from appreciation of land values while continuing to produce agricultural products. Usually, the first policy objective is some sort of preferential treatment for agricultural land in property tax administration.

These producers can legitimately marshal environmental arguments for tax breaks in return for their keeping land agriculture. Agriculture may not be friendly to all environmental values, but it does serve to protect open space and provide other amenity values of importance to the community. Agricultural land uses also make little demand on local public services. While a scatter-gun pattern of urban development tends to raise the cost of providing local public services, the cost of providing local government services will be minimized if land-use conversion occurs in a systematic and orderly way. Property tax breaks may shift the tax burden in poorly understood ways, but, on balance, they buffer urban sprawl and make it more manageable.

Such preferential tax treatment seldom is sufficient to stop farm land from being swallowed for urban uses. Rational farmland owners who need to buy time to use up fixed assets, therefore, might also argue for public purchase of their *development* rights. Ideally, these farmland owners would prefer to *lease* these development rights for some set time period since that gives them access to ready cash while preserving long-term options to develop the land. Such a goal, however, is vastly more costly to the public purse, and it is likely to be achievable only as part of a broad community compact with other actors at the urban fringe.

**Suburban Residents:** By far, the most numerous and politically powerful set of actors on the urban fringe are suburban residents. Presumably, these residents chose housing sites on the rural-urban fringe because of the presence of open space, and they will rationally seek to protect some of the open space amenities. They may be open to a deal to protect open space, but they will want to achieve their goal at the lowest possible cost. And they are likely to try to impose some conditions on traditional uses.

In the first place, suburban residents are unlikely to willingly tolerate any smells or other forms of pollution resulting from intensive animal agriculture. They will also be concerned about dust and chemical drift from agricultural operations. In the best of all worlds, these suburban residents would rationally prefer a pastoral agriculture with picturesque, well-kept farmsteads, or relatively mature forests. If they are asked to pay higher taxes in order to retard or prevent conversion of farm or forest land to urban uses, they will rationally insist upon some say in what type of agriculture or forestry is practiced.

**Tradesmen and Service Providers:** The local business community, which might conveniently be thought of as the Chamber of Commerce, consists primarily of merchants and service providers and is usually diverse, but it is apt to rationally have a common economic interest in growth and development. Almost all parts of that community stands to benefit from growth of population and income in the area, and, with a few individual exceptions, can rationally be expected to be cool, if not hostile, to any measures to reduce the supply of developable land. The exceptions are those land speculators who think that they will have a corner on the limited supply of such land.

Real estate developers and attorneys who make a living off of transactions are apt to be among the most stubborn foes of any effort to restrict land-use conversion. Bankers, too, may have strong reasons to worry about such efforts, especially if they might have the effect of reducing the market value of land they hold as collateral. Even if some of these actors may also be

rural residents with a desire to maintain open spaces, there will be strong economic pressures for them to seek to impede any deal that significantly reduces the rate of conversion of land from rural to urban uses.

Many of the players in the Chamber of Commerce have reasons to be political active and to have developed political influence. That influence might rationally be used to block the sort of public policies and programs desired by agricultural interests. If the sort of economic actors traditional found in local chambers of commerce have sufficient influence to veto any deal (as they well might), they will have to be given something they desire before any deal can be consummated.

Central Cities Interests: There is at least one other powerful set of interests which might help shape a deal to control land-use conversion on the urban fringe. This set is made up of the taxpayers and stakeholders in central cities. These interests, including many of the same types of actors as are common in local suburban chambers of commerce, will have rational interests in fostering as much growth within existing urban boundaries as possible, since such growth will tend to maximize central city property values and generate tax revenue for city treasuries. In states like South Carolina, where municipalities are greatly constrained in annexation powers, there is a strong rational interest on the part of the municipalities in fostering infill land uses inside their borders rather than horizontal sprawl.

Within the political context of some (but not all) states, these central city interests have strong representation in state legislatures. If the interests are united and determined, they have a high probability of achieving their political goals. They may well be able to counter effectively the probable opposition to a deal coming from the trade and service interests of the urban fringe.

But that is not a certainty. Much depends upon the balance of political power in individual states. It is a certainty, however, that if the horizontal expansion of cities continues and population and businesses move to the

suburbs, the political power of central city interests will erode. Hence, the best chance for getting a deal to moderate, if not halt, urban encroachment on rural land occurs early in the process. The odds for success on a deal almost surely go down with time.

### Are There Any Win-Win Deals?

The discussion above presumes the way to solve land-use conflicts on the urban fringe is with some sort of deal involving the major economic actors present in the places where urban uses are infiltrating rural space. Conflict resolution is about finding opportunities for a deal, or compact, wherein all parties give and take, but are better off than they would have been in the absence of a deal.

Is such a deal possible with regard to the land-use conflicts arising at the urban fringe as a result of the latest round of globalization?

It is easy enough to see the shape of a deal between traditional rural land users such as farmers and timber growers, the new suburban residents and central city interests. Such a deal would involve, at a minimum, extending a preferential tax treatment for farm and forest land. It might even extend to public purchase in perpetuity or through a term lease of the development rights on some open land, although the price for such a deal may well be restrictions on intensive animal agriculture and certain agronomic practices. There is very little evidence that suburban residents are willing to pay substantially higher taxes just to preserve local agricultural land uses. Kentucky studies have shown that such reluctance to pay extends even to protecting such scenic landscapes as the horse farms of the Bluegrass. Thus, any deal would perhaps need to show that it could be financed out of the savings from reductions in cost of providing local government public services. That might be doable.

One of the most difficult problems in consummating such a deal is securing the agreement of the powerful interests of the chambers of commerce. The

potential economic rewards from growth for these interests are so alluring that there is almost no incentive for accepting any deal that slows the conversion of land from rural to urban uses. It might be possible to convince some in the trade and service sectors that controlled growth will save them tax money over the long run. It might be possible to convince some real estate developers that maintaining open space will increase residential property values and thus the earnings of such developers. But it seems unlikely that all of the diverse interests of a typical local chamber of commerce will see any deal that restricts growth as a rational win.

The other group that will be worried about such a deal are creditors holding mortgages on rural land. These creditors, whether local or in the central cities, will be concerned that no deal cause the value of the collateral they hold to fall below the market value of the unpaid balance of their loans against the land. If rural landowners have borrowed against land based on its potential urban use value, and a deal is struck to limit conversion of that land to urban uses, the market value of that land could well decline below the unpaid balance on the loan. In that case, banks and other creditors might find their own balance sheets threatened. Nevertheless, it should be possible to structure a deal that will protect the interests of creditors, providing creditor interests are consulted and brought into any negotiation.

If the assessment above is reasonable, the impediments to striking a deal that resolves the land-use conflicts at the urban fringe are formidable. There does not seem to be much chance of a win-win deal. At least some set of interested parties is likely to feel like losers from any deal. That does not mean a deal cannot be struck, but it will probably have to be enacted over very vigorous political opposition. Thus, unless central city urban interests are aroused and activated, the likelihood of a deal is not good.

Absent strong support from central city interests, successful deal-making will require some sophisticated politics. Such politics are conceivable only if there are politically canny leaders who make achieving a deal a high priority. In some cases, it may be possible with adroit political leadership to achieve a deal by dividing the probable opponents and enticing support

from some potential opponents with side deals. Preferential tax treatment for farmland, for example, is highly desirable for some real estate speculators and thus generally supported by the real estate industry

### Summary and Conclusions

The land-use conflicts at the rural-urban fringe which pop up frequently these days in political controversies are the probable, if not inevitable, result of declining transport and communications costs and the historic processes of globalization of a market economy. The forces of globalization are so powerful, and the overall benefits of globalization so enormous to so many people, that it is probably neither possible nor wise to subdue them.

Trying to protect rural land uses against an encroaching urban frontier is a bit like trying to protect beaches from a relentless ocean: ultimately futile, Yet short-run measure that buy time for the depreciation of fixed assets can often make economic sense. Economic actors are almost never able to make instantaneous and smooth adjustments to changing markets. If they cannot stop a process, they still may be able, to their advantage, to slow it down and exercise a measure of control over it. Hence, a strategy of buying time by buffering incentives for land conversion may be the only feasible option open to those who have an interest in maintaining traditional rural land uses.

Such a strategy, of necessity, requires a political deal of some sort. Deals are always *quid pro quo* arrangements. But if agricultural interests are willing to make some concessions to suburban residents with regard to restrictions on such things as hog farms, it seems probable a deal can be made between farmers and suburbanites. A farmer/householder coalition, however, may not be sufficient to enforce a deal, especially, as seems likely, if the deal is opposed by the various interests usually represented in the local chamber of commerce, and by creditors holding liens against rural land. Strong support from politically powerful central city interests may also be required. Absent such central city support, moving to deals that go beyond some preferential tax treatment for farm land is likely to be a very difficult

challenge requiring a high degree of political sophistication for any chance of success.

That is not to say that such deals may not be achieved. There are examples of very bold deals in Oregon's Willamette Valley and in New York State's Agricultural Districts. Yet the prospects for achieving such deals in many other states are probably not very good. The longer the wait to achieve a deal, the less the prospects for success. The latest surge in globalization has clearly not been exhausted, and so the urban need for space will almost certainly continue to grow. Because transport and communications costs are falling, there will continue to be a tendency for those space needs to be met at the urban fringe. The conflicts are apt to intensify over the next decade, not dissipate.