most formidable of all competitors. Japanese companies do not plan or design for their local market but rather for the larger world markets. They realize that they must export to survive. Japan has even developed an expertise in the exporting of entire plants, amortized by the revenues generated in the marketing of products to mature economies. Currently, a Japanese builder is constructing a petrochemical plant in Algeria. When completed, the plant is scheduled to have 90 percent of its output marketed back in Japan by the builder, but it will be able to shift that output into Europe if it is economically attractive to do so.

In our planning and in our government relations, we should press for changes in U.S. laws and regulations that unnecessarily tie our hands in the international marketplace. Historically, our laws and regulations affecting international commerce are grounded in the belief that the U.S. is a closed, fully integrated and totally self-sufficient marketplace. That time has long passed. We assumed that production, financing and marketing would be accommodated within national boundaries. We even use our tax law to restrict ourselves. Income taxes on Americans living abroad place American firms at a severe competitive disadvantage and ultimately impact on our ability to export American manufactured goods. Devices which restrict this nation's and its industries' efforts to respond to a changing world market will reinforce the concept of protectionism and not be in our long term interest.

To improve and maintain a favorable balance of payments position in the world economy, U.S. law and regulations need to increasingly reflect not only changing conditions in the international marketplace; they also must reflect a positive approach to new and aggressive marketing efforts by both industrialized and developing competitors.

Tariffs, import quotas, export limitations and paperwork requirements — all exact a price in the final cost of doing business on an international scale where home-grown codes of operation place the businessman at a disadvantage. Saudi Arabia's Finance Minister has cryptically observed, "We will continue to favor the low bidder."

Current trends are affecting our planning decisions — as they relate to investments in research and development and human resources management.

Research and development dollars are affected as much by internationalism as by domestic consideration. It may, for instance, make more business sense to develop products to serve new markets in other countries than to develop them for a home market. Poland, a nation with essentially no golf courses, is a leading exporter of golf carts.

Meanwhile, human resources management is responding to demographic changes in the U.S. — such as the increase in the number of working women and the rise in two-income families, and has already identified pressures to change work schedules and career patterns. But we must recognize the introduction of the German concept of labor representation on Boards of Directors has already occurred with Chrysler. And when will the Japanese concept on life-time employment be adopted?

Other corporate functions are having to adjust their orientation from domestic to international. The backbone of every legal operation, for instance — whether a corporate legal staff or an outside firm — will increasingly be its competence in the international regulatory arena. Private firms and corporations will seek out those who not only have private sector experience, but those whose resumes carry the right acronyms — ICC, FCC, FTC, and SEC. Future law school graduates can be expected to be or to become multilingual, as well as multi-disciplined, and will probably be well equipped to work on international legal considerations in both private and public sectors.

Similarly, our treasury, tax, investor and promotional operations will also be increasing their international orientation. Today's investors in corporations are located around the world, and our promotional activities for attracting new investment must demonstrate strengths in the world marketplace.

The inescapable fact is that as businessmen our strategies for the 80s must recognize the world wide significance of our operations. The keys to success, and even survival, are accurate anticipation and timely adaptation to change. World maps are changing, and we're working to a faster clock and shorter calendar.

We have the opportunity to plan and operate across national borders; to help new nations and young people, who are the hope for our future; to achieve new aspirations; to respond to complex new ideas and values; and to demonstrate anew that business and societies can be allies in the pursuit of both progress and good. Doing all of this is going to be a challenge in our constantly changing new world, but best of all, it should be fun.

Is Zoning Obsolete?

FREE URBAN LAND MARKETS

By WALTER BLOCK, Senior Economist, The Fraser Institute

Delivered to The Building Owners and Managers Association, Vancouver, British Columbia, Canada, May 23, 1980

In the view of most concerned professionals, zoning legislation is a necessary bulwark against chaos in urban land use. Without zoning, it is contended, external diseconomies will abound: pickle works will come to rest cheek-by-jowl with single family homes; glue factories beside country clubs; and oil refineries in close proximity to restaurants. Moreover, it is feared that rapacious land developers will erect, profit from, and then abandon buildings, placing undue strain on the capacities of municipal services. Further, the unzoned city will be one of haphazard construction, falling property values, instability, disregard for neighborhood "character," irrational allocation of property — and a haven for unscrupulous speculators.

Zoning is the attempt to suppress these supposed market defects by legislatively prohibiting incompatible uses of
land. Under this ordinance, the pickle factory would be prohibited from residential neighborhoods, and required to locate itself in a special industrial area, reserved for that kind of operation. There, surrounded by similar uses, it would presumably do little harm.

The zoning idea has a certain appeal. What, after all, could be more simple and obvious? If land usage seems imperfect, all that is needed is the enactment of a set of laws compelling proper behaviour. Arguments for zoning are so widely made and frequently accepted, that even those who otherwise appreciate the merits of the competitive market system have felt constrained to make an exception in this instance. In view of this state of affairs, and given the serious drawbacks in zoning which are continually making themselves felt, I think it is time to take a cold, clear, and hard look at the case for zoning legislation — and then reject it.

Non-zoning in Houston

Confronting the charge that zoning is all that stands between a viable urban environment and chaos, the authors point to “Exhibit A,” the City of Houston — which has never enacted such legislation in its entire history: The very existence of a large North American city (an area in excess of five hundred square miles and a population of 1.6 million) which can function normally and continue to grow without zoning is a major piece of evidence against the traditional view that zoning supposedly protects against chaos.

Divergent tastes

The Fraser Institute has recently published a book on this subject: Zoning: Its Costs & Relevance for the 1980s. In it several empirical land use studies in Pittsburgh, Boston, Rochester, Houston, and Vancouver are cited. These trace the effects of “incompatible uses” on property values. They report that the overwhelming preponderance of evidence “cast(s) serious doubt upon . . . the presence of uniform external diseconomies.” (Such as a pickle factory next door to — Hotel.) The reality appears to be that either there are few significant interdependencies and externalities in urban property markets or that “One man’s meat is another man’s poison.” One and the same phenomenon, such as the presence of industry or commerce in an otherwise residential neighborhood, is interpreted in a positive way by some people and in a negative way by others.

The market process

This is no accident! For market mechanisms exist which naturally eliminate any such externalities that would arise from the proverbial glue factory on the corner of Granville and Burrard. In a system based on private property rights, the laws of nuisance would prevent the dispersion of invasive odors, or dust particles. But the market mechanism functions even without this protection. Quite simply, land prices in the residential or business neighborhoods are too expensive for the glue factory; they effectively prohibit any but the most valuable, concentrated uses — such as large hotels, office buildings or high rise residential dwellings.

This view is supported by Roscoe H. Jones, Houston’s Director of City Planning, and one of the authors of the Fraser Institute study: (The market) in Houston, he says, “has tended to create a reasonably well-ordered pattern. Because of private ‘marketplace zoning,’ we find no filling stations at the end of cul-de-sacs; ship channel industries are, naturally, located along the Ship Channel, and so on.”

Urban density

The natural proclivities of the market can also be utilized to banish the spectre of the “hit and run” land developer who is said to leave an excessive population in his wake, swamping municipal services.

A developer who tried to pack too many people into an office building would have difficulty finding mortgage assistance. Lenders would realize that such compressed conditions would overload services, resulting in tenant dissatisfaction, lower rents, and the possibility of mortgage default. It is of course true that builders and lenders can make mistakes, and that some overcrowded structures might be built. But the inexorable forces of profit and loss would ensure that such errors were few in number. Zoners are likewise subject to miscalculation; the problem is that there are no automatic bankruptcy procedures to weed out bureaucrats with poor judgment. One of the most persuasive arguments against zoning is the fact that it institutionalizes errors. In effect, planners do not have the incentives to ‘get it right,’ nor do they suffer the consequences of ‘getting it wrong.’ The competitive system thus can obviate the need for building height restrictions, set back requirements, floor space ratios, and other bureaucratic measures which artificially attempt to limit density.

Undue strain on public services

Let us compare the outlooks of the businessman and the bureaucrat with regard to urban density. When the excavation for a new office building is begun, the merchants in the neighborhood roll up their sleeves in gleeful anticipation of the new customers and additional profits likely to come their way. Their first thoughts are concerned with physical expansion, adding extra shifts, providing more services. The contrast with the bureaucratic orientation is stark indeed. At the prospect of new building, their tendency is to ponder the “strain” additional hordes of people will place on public services. And their answer is to place dozens of zoning restrictions on the new builders instead of encouraging coordinated expansion.

A useful comparison is the case of Houston. Here the practice is not to hem in the private market with a bewildering array of complex zoning restrictions, but rather to cooperate with the land developer by forecasting the growth patterns in order that the city government may supply the necessary municipal facilities and services at the right time, at the right size, and at the right place. We must realize that zoning is only one weapon in the planning arsenal: even were these restrictions scrapped in their entirety, the public authorities would still exercise great control over land use patterns through (1) provision of infrastructure and amenities, such as parks, water mains, sewer placements, and the layout of freeway and major arterial streets; and (2) direct land use controls concerning building heights, setback, floor space ratios, etc., but applied uniformly to an entire city, and not differentially to districts within its boundaries. This does indeed undercut much of the case for zoning. But in the interest of creating further discussion, one might even question whether government has a comparative advantage, vis-a-vis the market, in the creation of such products and controls. The public official, after all, has no communication from the deity indicating the optimal location for a park or sewer line. Without a market-created price system, it is extremely difficult for him to rationally allocate resources. Moreover, no profit or loss
automatically accrues to him as a spur in decision making. He risks none of his own money, and can earn no honest profit from correct choices.

**Declining property values**

There are few things feared more by the average urban property owner than declining residential values. This is understandable, for much of the real savings of the typical Canadian is tied up in a single family house. Perhaps this is the single most important explanation for the high regard which many citizens hold zoning legislation — it is supposed to protect property values.

But the view that zoning is the best guarantee of stability is inconsistent with the evidence: neighbourhood stability is endangered by the rezoning process, and this is a crucial aspect of zoning by-laws. How can we have stability, if the law is constantly changing?

Even the maintenance of single family neighborhoods by zoning statutes, is questionable: by keeping land and buildings in the same use over time, zoning can promote neighborhood decay and speed the demise of the single family neighborhood. Zoning is a rigid control, and is likely to fracture during times of change in consumer tastes, neighborhood demographic structure, urban growth, and transportation and building technologies.

Of far greater reliability may be the system of deed restrictions, or restrictive covenants, as practiced in Houston, whereby the property owner may contract with his neighbors concerning the uses to which land may subsequently be put. Alternatively, land developers may require, as a condition of sale, that all purchasers agree to continued land usage, either for a stipulated (long) period of time or until a majority vote of such buyers overturns the agreement.

Ultimately, of course, there can be no absolute guarantee against declining property values. A fall in the price of wood, an increase in the market rate of interest, the sale of Crown lands, technological improvements in prefabrication methods can all lower housing prices. One might perhaps contract with an insurance company for the preservation of home values, but the cost of the premium payments would have to be subtracted, thus defeating the plan.

Value preservation is a will o’ the wisp, for price is a manifestation of the worth placed on an item not by one person, but by two groups: potential sellers and potential buyers of items like the one in question. Not only can’t we be sure of the value an owner will place on his home in the future; it is even less possible to assess the worth a future hypothetical buyer will give it. It is clear, moreover, that which is owned is the physical house, and not its value. For while the owner has a right to collect damages from the boy who breaks a window with a ball, he has no such right with respect to the man who invented prefabricated housing — even though the latter might well have been responsible for a greater drop in the value of his house than the former.

While citizens have a clear and obvious right to have their homes protected from physical damage, this does not apply to the value of their property. Yet this is precisely what zoning seeks to preserve. Zoning cannot preserve land values — and this would be an improper goal even if it could.

**Uniformity**

Another shortcoming associated with zoning is the uniformity it creates. And this is not surprising: to divide all building into residential, commercial, and industrial, as the early enactments did, and then to impose these three categories upon the entire pattern of future construction, is hardly likely to foster architectural innovation.

This rigidity soon became evident, and an effort was made to become more “flexible.” The zoning codes added variances, exceptions, mixed-use zones, performance zoning systems, land use contracts, and development permits, and Planned Unit Developments (PUDs) (any excess building in one parcel is to be offset by a reduction in another, within the planning district).

In one respect these reforms were a plus, for the system became less rigid. But this change ushered in a new crop of problems. For one thing, the system became even more complex. Literally dozens of districts have been defined; what may and may not be done with each is subject to a bewildering and growing number of regulations. The days of three district zoning with two or three pages of regulations have long since passed. Today’s ordinances are continually growing to accommodate more detailed regulations of use, lot size, building height and bulk; more reasons for granting variances, bonuses, and special exceptions; and much more complicated procedures for appeals and reviews. Things have come to such a pass that no self-respecting set of zoning regulations dare appear in a tome of less than 500 pages.

A system with so many complications, exceptions and changes could no longer be governed by any clear set of rules or principles. The procedure instead became one of “judging each case on its merits” in an ad hoc manner.

Although this might appear to some as fair and judicious, the flaws in it are grave. First, it is a clear retreat from the idea of zoning itself. According to this philosophy, urban planners were assumed to have enough wisdom to forecast, at least in broad brush strokes, the future spatial organization of the city. But the very need to grant numerous exceptions, as a continuing institutionalized process, has belied this claim. Ability to incorporate the needs of a changing future is simply incompatible with patchwork changes as reality confronts the master plan. It is akin to claiming the ability to forecast inflation for the next five years — and then changing the prognostication each week.

**The rule of law**

Secondly, as Nobel Laureates and Fraser Institute authors Milton Friedman and Friedrich Hayek have so eloquently shown, “judging each case on its merits” is the absence of lawfulness — not its presence. Each has demonstrated (the former in his analysis of “rules not authorities” in monetary policy; the latter in his work on the “rule of law”) that to consider matters on a “case by case” basis is to color the judicial process with stultifying arbitrariness.

The proper scope of government, in this view, is to set down the rules of the game, clearly, and before the contest begins — and then not to continually alter them in the midst of the fray. Under these conditions, the individual is free to pursue his lawful ends, secure in the reasonable knowledge that the government powers will not suddenly be used to frustrate him — and at every turn. But a zoning system, especially a “flexible” or “reformed” one, can change the uses to which a land parcel may be put at any time. It is thus clearly destructive of these ends.

**Graft**

Thirdly, zoning complexity and changeability have
spawned graft and corruption. The reason for this is easy to discern: a less restrictive variance may be worth millions of dollars to the land developer. Be the bureaucrat ever so interpreted as opposing private zoning. Indeed, it is impossible for any rational land developer to act in any other way. He must, if he is to function at all, decide to place the garage here, the house there, and the backyard elsewhere. How else could he conceivably operate? But this is all that is meant by private zoning.

The case is an exact parallel to the planning debate. As has been said many times before, people must plan if they are to act rationally. The debate, then, is not between planning and nonplanning. It is between central planning, on the part of the government, and individual planning, as coordinated through the marketplace. Similarly the real issue here is not the choice between zoning and non-zoning; it is between private and governmental zoning. What has been criticized above is government zoning, not the private variety.

What is private zoning? The most well-known example is, of course, Houston’s system of deed restrictions. Private zoning also takes place every time a glue factory is priced out of a residential neighborhood, or whenever the gas station locates on a major thoroughfare, not in a side street. But it also includes such prosaic activities as the individual’s arrangement of household furniture, the office’s placement of desks and room dividers, the factory’s disposition of machines and guardrails, and the shopping mall’s apportionment of its tenants.

The same process is at work in shopping centers and malls. Since the various tenants are contractually unrelated to one another, the situation is closely analogous to governmental zoning. Private entrepreneurs, however, are judged, in their profit and loss accounts, by how well they promote positive externalities and repress negative ones. And, in fact, it is difficult to imagine two “incompatible” tenants adjacent to each other in a shopping mall. Any inclination toward such mal-zoning tends to be rigidly suppressed by the market.

I conclude that zoning is obsolete for the 1980s, and that Canadian society will be far better off with greater reliance on free urban land markets, and less dependence on governmental zoning, and other forms of centralized land use planning schemes.

Thank you for your kind attention.

Computer Security and Privacy

A SYSTEMS APPROACH IS NEEDED

By MICHAEL J. KELIHER, Vice President, U.S. Marketing and Services Division, Honeywell Information Systems Inc.

Delivered at the Computer Security and Privacy Symposium, Phoenix, Arizona, April 15, 1980

THANK YOU, Jerry. Good morning, ladies and gentlemen. I hope, Jerry, when I’ve concluded my remarks that you’re just as enthusiastic as you were before I started.

Before I get into the body of my remarks, I’d like to make a couple of personal observations. This meeting has grown from small beginnings and we all owe a debt of gratitude — both personal and professional — to Jerry Lobel, who started this out a number of years ago and has made it a personal project as well as a Honeywell-sponsored professional symposium. It’s interesting to note that it has grown into one of the leading gatherings in the world on the subject.

Security is often thought of as a mundane subject — important, but not often on the minds of senior people in business, in the professions and in government. Businessmen, after all, are excited by orders. Scientists by breakthroughs in research and by advances in the state of the art. Politicians in getting reelected. But security is nevertheless an increasingly important subject — as is privacy. These things, more and more, touch every aspect of our personal and professional lives.

Security doesn’t have to be an enormously expensive or complicated thing. It has to be a little forethought and a little attention paid at the proper time. The investment in security, while not large in terms of money necessarily, is pretty large in terms of intellectual application to the problem.

For example, the use of identification badges requires some thought. I have a tendency to lose badges — I’m always going to visit a company and I put a badge on and calmly walk out the door with the badge. I have a whole drawer full of badges at home that I keep meaning to send back to various places from which I have unintentionally stolen them. So the badge system has always struck me as something that might well protect the premises and the property of the people I visit, but it is very easy to steal a badge. Security, therefore, is only as good as bad as the time and the level of talent and the thought process that are applied to it.

Another example: In the year 55 A.D. the Emperor Nero taught the world one of the primary lessons about security systems. Nero was an ambitious sort of fellow. You remember him being played by Peter Ustinov. I always wondered whether Nero looked like Peter Ustinov. He was very ambitious, even by the standards applied to Roman emperors. He was also known for his somewhat indecent