

TRRL: Fragments

R67 forum

Re investments

Coming equalizn. of pub. school force. will raise l.v. in present higher tax areas. There now is time to buy house in central city.

Look for new trends that can win w/o huge capt. outlay. E.g., ~~the~~ many shopping centers were mediocre, something new will come that can have niches for many small investors. New ways of getting people to work together.

✓ Highest crime area in U.S. is not Gary, etc., but Dade Cty, Fla! New & rich.

"Thoughts"

Taxes, Land Use Controls, and Intergovernmental Relations

Thoughts to develop.

1. Ec. th. gives much thought to creating framework ~~to~~ to harness self-int. to general good. Profit motive, incentives, etc.

But neglected how to harness local govt. to general good.

2. Just bcs. local govt. is "govt.", easy to assume acts in public int. The law even describes it so -- water law e.g., munic. hold in 'public int.', enjoying special powers, immunities. Munic. has police power.

But munic. ~~can be~~ ~~just~~ can org. of landowners. Often very few, sometimes just one -- Cal. cases. (Leslie, --)

Delegate sovereignty of state to a few --

3. Munic. can also be agency where non-landowners tax owners; or small tax base.

This worked tolerably when human mobility was lower; smaller share of pop. wanted go to school.

Now, non-owners lack enough permanent local interest to sustain org., etc.

4. State & local govt. exempt from anti-trust laws.

Get delegation of powers gives large bloc of owners tools to act in concert, soften coupon.

They can zone out big employers, e.g., or large nos. of small ones. To hold down wages. That is one set of

motives. It is relevant more in smaller cities, where a

govt. controls a whole labor mkt. This may be a

reason for relative decline of small cities. Large metro.

areas, the parts compete for ~~comp~~ indy. In our

present preoccup. w. other aspects, remember this, too.

5. Now, primary atten. is on power of suburbs to keep out costs, esp. school. Treat children as a form of congestion, a pollutant.

also, avoid costs of hosting immigrants.

6. Problem wd. be worse than it is, but for

a. Cultural lag. ~~Old~~ Old attitudes pro growth

b. Existing cities full of people, hard to

remove. ~~Tiger by~~ Riding a tiger.

But central cities not immune. Wrong to focus on suburbs. Cite H. Meier.

✓ i. Low density zoning in central cities, too.

ii. Urban renewal, lower density.

c. Real motives to grow still exist.

Δ political power

Δ l.v. from spillovers

Δ l.v. from spending by people -- their demand for land.

} This last, however, doesn't stop zoning, bec. zoning forces Δ demand, is forced land-cons. Well, one munic. wd. like to get all the demand.

7. Zoning holds down tax base for export.

In Milw., the rich suburbs ~~can't~~ don't need tax base for local use. So can conc. on depressing current values

8. Zoning holds down mkt. value, or at least taxable value, during ripening pd.

Then could seem like good control, prevent premature conversion. Hawaii a model?

But problems.

a. Fails to contain. Leaping.

Vs. Zoning

- b. Equity. Fails to tax Δ . Fails to tax area of higher costs when it is popd. at lower density. This is also inefficient.
- c. Lacks criterion of ripeness.
- d. Can be used as mapy., strangulating device. Thrust is all one way - negative.
- e. Lacks coordn. w. p.w.
- f. Fails to compensate for bldg. tax.
- g. Fails to use ripen's land during ripening.

✓ In ideal model of hold'g action there ~~is~~ zoning & low assmt, you hold an empty reserve, then get opt. dev.

✓ But most land is ripening from something to something. Each year it has a best use, shd. be used. Probly at higher density than zoning allows. Or different.

✓ In low zones, you get C/A devmt., blocking later transfer to mass systems. Zoning ed. conceivably blocks that, but usually doesn't. But that is bcs it allows interim uses. Solution: announce time of reversioning.

How shd. cities expand — sharp edge, or tapered?

Pro the sharp edge,

1. Ricardian Commercialism. The edge requires large capt. to link w. center, shd. be intensive
2. R(MS). Mass system replacing C/A
- ✓ shd. have discrete jump in density.
3. Some prefer edge, as a punter

to city shd. have sharp edge.

But this is controlled by p.w. Zoning not needed.

H: density comes w. p.w.

Or you cd. have transitional zoning w. a time-discretion.

a schedule for devmt. Owner pays tax on risg value in meantime, for equity.

Present philosophy has element of owner knows best when to develop. Not applicable, bcs. leverage over public costs. Owner only knows what is best for him.

✓ If public is to call shots, needs operable criterion of ripeness. Try to supply that. See RIMS

9. Zoning used to suppress asmts. Variances granted —
and negy p.w. Sprawl results.

5. Choice of location

Accept market choice, in perfect world. (Paraphr. LPPT)

Bldg. taxes intercede.

Effects are not simply

incremental on given use, as in #1.

They tip the balance

completely for some. Uses of high i.q. lose out.

But demand for them then moves onto other

land. The uses are not destroyed totally. They just

lose their power to bid for best land, and get scattered.

^{Bldg. taxes not the worst that might be. Activity on one or (over)}
^{Land taxes}

6. Distribution

(Race & class effects)

a. Bldg. tax. Partly redistrib. But

high bldg. / land ratio.

The poor are hurt - they have

→ they are driven to poorer land.

Their ability to compete is weakened, so

7. Aggreg. local effect

Emphasize. (But bldg. tax better than activity)

a. Bldg. taxes

b. Land tax. Highly redistrib.

Reduce service flow from given area.

1 Less intensity

2 Slow renewal.

Maybe a higher service flow in early

years per \$ of capt., but not per unit of land; and in later years, much lower.

3 Deferred improvement in ripening areas - reinforces (2).
But jumpy. By deferring bldg. in ripe areas, causes demand to jump to green areas.

5 Poorer matching of bldg. or use to site. Unrenewal.

6. Distribution. Complex. Bldg. & use taxes drive poor away, & to bad land (over)

Can also view this as forced land consumption. For

munis. of fixed boundaries, this just means lower density. For metropol's, means spreading out. - diffusing demand over wide area.

The forced cons. raises values. - Tempered by ^{public} higher costs.

The value of farmland taken is not great. But

Gain to land is not in the volume sold, but the higher price.

This is joint product of demand plus capt. in ~~infra~~ infrastr.

Forced cap. cons. is greater effect - & resulting L.V.

commerce & ~~trade~~-based taxes are pretty more biased.

- hit rental but not owned property, inc. taxes do.
- hit retail, in prop. to volume
- etc.

→ But "bad land" includes good land made bad by external-effects.
Land tax is redistrib.

B. Indirect effect through shaping munic. incentives.

1. ~~Effect on~~ ~~Effect on~~ Munic. incentives, some relevant ones.

a. Avoiding dilution of base

Keep out costs; pull in taxpayers.

Having a ~~tax~~ local tax^(property), which is redistrib. used for edu. & welfare, sets up tensions. Good schools & h.v., so a partial resolution. But only partial.



Minimize or restrict commons: parks, streets, libs,

musea, etc. — but schools above all. See LRTP.

Crowding existing commons is bad, but forc'g spending on more is worse.

My paper has wrong emphasis on this.

b. Minimizing export of taxes



?

Cut down on indy. commerce, pay'g fed. & state taxes. Max. o-o.c. reside. pay'g local but not fed. taxes.

Where/ city. prop. tax, hold down assd. values, even if neg. mket. values

1a Milw. ~~and~~ 3 tax levels.

If City grows, city gets more taxes.

City faces welfare. City of new bldgs. has few welfare cases.

Thus has less incentive to grow.

iii. Intergovernmental relations

In urban areas the property tax is shared among at least three jurisdictions: municipality, school district, and county. In some states, like Illinois and California, there are numerous overlapping special service districts as well.

Any gain of property tax base that results from constructive administration or policy by one jurisdiction will be shared with others. This minimizes the incentive of any one of them to restrain its short term appetite for revenue in order to build up its long term tax base. Property tax reform therefore must almost certainly involve a focusing of

fiscal responsibility on one body. State governments must take the initiative in developing tax-sharing formulae that reward municipal enterprise--shared school aids based on attendance are an example. It is also worth considering the Lindholm proposal, currently advanced in Oregon, for a statewide land tax. This could be a means of applying pressure to landowners in preemptively incorporated near-in lands to improve their municipal opportunities.

Zoning & the market

Zoning interdicts mkt. density near-in.

Sends demand probing outwards, looking for weak spots in zoning.

The mkt. pressure is steady and consistent — higher density near-in.

Zoning pressure is jumpy. Hi density comes where you can breach the zoning.

Popular ^{Entry} Access to Land via Fiscal Desegregation
Opening, Unlocking,

Land for the Other Half

Land for the Overcrowded

Wider Access to Land

Democratic

Land Availability via F.D.

Land for Unmet Needs via F.D.

^{met}
Unfilled Demand

Unsatisfied

Repulsed

Frustrated

— Thyestes

Rebuffed

Obstructed

Denied

Guinssid

Overcoming land discrimination by

Land for ~~Forth~~ Popular Needs

Democratic Service

Releasing Land to ^{Full service} Meet Demand via F.D.

Releasing Land for Service via F.D.

Land to Serve Denied Demands via F.D.

Thwarted

~~Checked~~

Arrested

Suppressed

~~Hindered~~

Handicapped

Put-up

~~Repressed~~

Restrained

Clipped

Detained

Land for ^{Sup} ~~Repressed~~ Demand via Fiscal Descy.

Releasing ^{Issuing} ~~Liberalizing~~ Land to Serve Demand via F.D.

awaiting the overcrowded of land

~~Majority~~

awaiting crowded people of land

~~The future~~

Popular access to land via

Joe Doakes

opening land to use via by

The ~~over~~ crowded

over contained

The demoway

plebeian

populace

pent up

Shut-in

popular demands are

Opening land by fiscal desegregation

New title:

~~Median Area~~
Land for Life-support via
popular ~~needs~~ use
Fiscal Desegregation

~~at popular prices~~
for popular housing

Add to Forum piece

1. New title. Land use, school taxes, & intergov't. relations.

"Urban expansion - will it ever stop?"

"The Property Tax is a Progressive Tax"

Desegregating tax bases. Fiscal Apartheid

→ ~~the~~ Land for housing ~~by~~ ^{via} fiscal desegregation

2. Tapping seg. tax bases by invasion leads to sprawl —

e.g. Levitt in Loudon Cty.

People are led out by lower L.V. (& farmers resist bcs. people bring higher tax rate.)

3. Sewers,

a. Sewer used to slow growth

b. Random extension causes sprawl.

c. Rich territory carries lean.

4. Subsidies to singles raise L.V.

~~Popular access to land via fiscal decongregation~~

Delivering

Urbaning

Freeing

— Extricating

Releasing

Redeeming

Recovering

Dis-engaging

Dis-encumbering

Unbinding

Loosening

Freeing

Liberating

Unfreezing

2. Munic. response to incentives

o. Enclaves.

a. Modify prop. tax in admin.

Require assmt. Thus make base-diluters pay more
Hartford study.

Heath-tax assmt. Hit subdiv. both apt. & single.
(Countervailing Fed. tax incentives)

Overness bldg, underness land.

Require taxable events, happenings, sacraments

Present-use assmt. Then deferring use. (Tension - this

also reduces rev. from spec. fund)

See D.C. Asses. talks.

On Overness new; also maybe overness slums.

" utilities and mass systems.

Insert (b, 5)

b. Forced cons. of land & cap., by direct controls

Animus: require people to use more tax-base
prop. than they wd. voluntarily.

An expensive, indirect way to get people to pay
more taxes. Might Δ annual cap. cost by \$10 to Δ taxes by

\$1. The lower the t.r., the greater the disparity, so
in some low tax jurisdns. can become absurd. And
low t.r. doesn't remove motive, as motive is to prevent an Δ rev.

1. Zoning.

Low density.

Low ht.; setbacks, too, altho. sometimes
these are subts. not complements.

19 June 1972

TO: Nora Roots, Henry Jarrett, Marion Clawson
FROM: M. Mason Gaffney

Alternative Titles, Chapter by M. Gaffney

(Please indicate your preference and/or suggestions)

1. Popular Access to Land via Fiscal Desegregation
2. Land for Thwarted Demands via Tax Reform
3. Disencumbering Land via Tax Reform
4. Releasing Land to Serve Demand via Tax Reform
5. Tax Reform to Free Land
6. Tax Reform can Free Land to Serve the Overcrowded
7. Fiscal Means to Liberate Land for the Other Half

Mason - I still like your original title
(without a verb in it) best, but if you
are adamant, I favor an adaptation of
#5 (Freeing Land Through Tax Reform)
and Nos 2 + 3 in that order.

Henry

Free

Liberate

Release

Unleash

Emancipate

Unfetter

Disencumber

Redeem

Make available

Supply

Deliver

Disencumbering Land by Fiscal Devolution

Bldg. taxes ~~to~~ favor holding land from early commitment to high C/R . So you hold until land shifts to center of G_1 ring, and C/R falls.

Now enter factor of G_2 , ¹⁰~~15~~ years ahead, with higher C, R , and higher C/R at first. Bldg. taxes discourage waiting for it, bcs. now it would be a shift to higher C/R . So they encourage freezing land in G_1 .

They reduce urgency of bldg. G_2 . They add to gain from bldg. G_2 later.

Intensify gr. falls if $\frac{C}{C+S}$ is based on higher S_2 derived from G_2 -u. As land ripens, S_2 rises, then lowering $\frac{C}{C+S}$.

✓ Here, effect of bldg. tax differs from higher i , because higher i would also ~~affect~~ require land to grow faster to remain green. ~~Local~~ Local bldg. taxes have no such effect, and national bldg. taxes lower i .

Pl. Intergovt. relations hurt housing.

Welfare money mostly state & fed, so cities tolerate old houses.

School " " local, " " fight residences.

There is a lot of state aid to school dists, but not based heavily enough on pop. See Riem for formula.

Zoning

Marion: see pp. 14, 15, 16, 18, 19 where check-marked (✓).

URBAN LAND ADMINISTRATION

by

M.M. Gaffney

for

Politics 41, Dr. McKinley

14 November 1947

Posted at 7:35 P.M.

The lesson: don't disagree with McK. on next paper. When you disagree you are 'dogmatic' & suffer from 'misconceptions'.

Good
This paper shows evidence of considerable reading and serious thought. But its quality is marred by some misconceptions of zoning and by a proneness to dogmatism. I hope you will revise it during the year and submit it next spring in competition for the Reed College-National Municipal League prize.

INTRODUCTORY

Urban land administration deserves attention because the majority of Americans live and work on urban land, and its proper use can greatly improve their real income. At the same time, urban land is so poorly administered by local governments that the waste of national resources represented by idle urban land is a folly comparable in importance to deforestation and soil erosion. Much, perhaps most, of the idleness is the fault of national economic policies beyond the scope of city administration, but a significant portion is due to poor administration by local government. This study aims to describe current practices of land administration, evaluate them, and suggest improvements.

I. STREETS

Practically every city is served by a street system that was thoughtlessly decreed by the "city fathers" when the modern problems of the city were unimagined. At its best this plan may show some recognition of topographic problems and the needs of traffic, commerce, and industry, at its worst it is a maze of "cowpaths". Typically it is a gridiron with no radials and no differentiation of street width. Outwards from the center of the city, the plan of the fathers gives way more and more to the individual plans of the subdividers. After the plan of the fathers, subdivision is the administrative process which locates the streets of the city, and is the dominant process at work today as cities continue to expand. The legislative and administrative process of

laying out the public streets is, for better or worse, in the hands of private individuals, the subdividers. Our streets are laid out under the combined influence of the dead hand of the past and the very live profit motive of the present.

The subdividing process is preliminary to extending urban life over hitherto rural land areas. The subdividor plays the role of urban administrator in assembling an area to be treated as a unit, and deciding where on it the streets shall be placed. After he has made the decisions, the city government then usually builds and maintains the roads which he has decreed.

Of course the subdividor does not give his service to the public free. He is performing an economic service for which a reward is given in the market. Since land must be assembled and streets planned, and since no public body does it, the forces of the market induce individuals to do it. The subdividor, like any producer, gathers his raw materials, processes them, and sells them. His work differs from that of other producers in many ways: his raw material never moves; his "processing" consists of spatial organization of the raw material; he must usually sell his product not only in individual parcels to private customers, but as a whole to the municipality that will build the streets and maintain them; he carries his product for many years, usually, before selling. It is, nonetheless, an economic service which, under the present system, undoubtedly deserves to be rewarded. But this does not mean it is the best way to administer urban land.

The rule of the subdividor is not, indeed, completely ac-

*This freedom
has been
curtailed dur-
ing the last
20 years.*

cepted by any means. Legal tools are available by which cities can pretty effectively determine the layout of their own streets, if they care to use the tools.² Probably the most important is the city's power to reject for recording plats of which it disapproves. This inconveniences the subdividor in that he must build and maintain his own streets,[★] and he must sell his lots with description by "metes and bounds", a cumbersome method, rather than by simple lot number. It does not give complete control, however. Mete and bound description may be acceptable to buyers. Subdividers may build their own streets, especially if they would have to pay for them by special assessments anyway. They may sell the lots to innocent purchasers who will then successfully petition the city to maintain their streets. They may record a plat and then build streets on a different plan. This method of control is obviously not at all satisfactory. It is an administrative back door which must be used when legislation does not provide satisfactory direct controls.

Those cities which have made progress in planning land use have generally used that method of control which depends on persuasion and devotion to an idea more than on legal powers for implementation.³ When dominant economic interests want a street plan followed they can bring to bear social and economic pressures that control land use more effectively than the weak legal pressures that city governments can use, or do use. However the enthusiasm required ^{for} ~~for~~ the success of this kind of control is likely to be generated only in conjunction with a great program of public works. Between outbursts of civic spirit,

★ ... provided the city also refuses to accept his streets as public highways.

the regulating influence of the land market replaces conscious social control in determining the street pattern.

The dominant system of street planning, then, is one of private administration subject to weak, vague and sporadic public controls. In defense of the system it is said that it produces the product when and where it is wanted, just as the free market system does for wheat; that it obviates the cumbersome governmental intermediary between desire and satisfaction. There are reasons for believing that streets are not among the products most effectively produced by private enterprise, however. First, private enterprise cannot produce streets in the right place because streets are not discrete products but rather products whose location is significant mostly in relation to the organic totality of streets. In order to produce such an organism satisfactorily, private enterprise would have to combine its forces so as to submit to some master plan. It would have to become a monopoly, in which case it would either have to be controlled by government anyway, or else would restrict the production of streets. Furthermore, land speculation prevents or delays subdividing in many desirable areas and, after subdivision, prevents utilizing the lots, and therefore the streets serving them. Second, private subdivision effects only the crudest temporal adjustment of supply to demand. "Overproduction" of other products is a point of view more than a fact, but subdivisions are produced in such profusion that if locations were given away we still could not use all that exist.⁴ In boom times subdivisions are platted so freely that a growing city may take generations to

fill them up. Street planning is not a function which private enterprise can perform well.

Streets should be planned by a city planning commission, so they will not only be properly related to each other but also to parks, public works, inter-urban highways, the zoning pattern and every other feature of the city over which the public has control. Possibly it will be wise to leave some sphere for private subdividing, along with some leeway in the plan for unforeseen changes in economic needs. This will serve to placate those who are not satisfied with the pattern of streets enforced by the plan, and leave a scope for the satisfaction of divergent individual desires.

Private landownership will create two administrative problems that the planning commission will be unable to handle satisfactorily, however. First, every improvement will affect land values, taking from some, perhaps, and certainly giving to others. The city plan that is adopted must be superimposed on the pattern of hills and valleys, cliffs and prairies, lakes and streams that compose a city. It is also to be superimposed on a patchwork of privately owned land. It will make fortunes for some and dash hopes for others. Those whose pocketbooks are involved are the leaders of the city. They may be willing to call in an outside expert to tell them where to put their courthouse when sectionalism prevents action,⁵ but to expect them to find a way of agreeing on a comprehensive plan of all the streets and public works of a city is to expect a revolution in popular psychology. If a plan can be pushed through it will be through a coalition of the most powerful interests

affected, and the plan will be primarily intended to raise the land values of the coalition, not to serve the city.*
 Second, the city would have at all times to choose between extending the street system far beyond the population, and forcing lot buyers to meet the prices of speculators on streets already built. It would ^{encounter} ~~meet~~ the same problem that private subdividers solve now by extending the street system, and its solution, whatever it was, would be wrong. Excessive subdivision is not an administrative, but a land tenure, problem. Administrative innovations alone cannot solve that problem completely, nor can they prevent individuals from trying to acquire land value increments from the city.

Cornick's study suggests a pretty good way to stop this if we would really try!

II OTHER PUBLIC LAND

The public has more control over most public land than over streets, but the public administration is not free to manage it as it wishes, either. Obviously it must acquire land that is in a position to serve the subdivisions as they develop according to private plans. Sometimes this compulsion is modified because the public can at great expense change the street plan, or particular streets, of a district which has been improved.⁶ The law limits the administration further in its discretion over land use, for it is allowed to acquire land only for specified purposes, and then to use it for those purposes.⁷ Private citizens can and do bring suits against municipalities who injure their property values in changing the use of public land.⁸ Whether the suit will succeed is one of those legal mysteries that plagues

* Election at large, and reapportionment, will lessen sectionalism and power of minority groups to raid the public works funds.

administrators of every kind. If the court approves the "public purpose" of the change, as it is likely to approve housing veterans on parks, the suit will fail.

Before the city can control the public land at all it must acquire it. Three ways are available: purchase, leasing, and condemnation. Purchase is often used because it is cheaper to pay the exorbitant price of a speculator than to wait upon the clumsy legal process of condemnation,⁹ in which legal fees are expended, time is wasted, and an exorbitant price may finally be fixed anyway. Long term leasing is often prohibited to cities by law, and not generally used.¹⁰ Condemnation is the most useful tool available to the city, despite its faults. In assembling large land units condemnation is a necessity to prevent holdout by a few diehard speculators and sentimentalists.

Condemnation is slow because the condemning authority's decision can be appealed to the courts.¹¹ So numerous are the appeals that courts often appoint special tribunals to handle condemnation cases alone.¹² The procedure is not uniform nor certain and the whole process is dogged by legal confusion and delay.¹³ Frequently ownership of land to be condemned is in doubt due to the faulty title system cities use.¹⁴ Condemnation is so unsatisfactory that a city is wise to coordinate its land purchases with its planning so that the city can purchase well in advance of need in the places where public works are to be constructed.

Beyond the difficulties of acquisition and use restrictions, cities are hindered in managing their land by almost universally inadequate administrative organization. The 5-15% of the average American city which, in addition to streets, the city

owns, is separately controlled by the departments which use or plan to use the land.¹⁵ Most cities have no separate real estate department, nor any effective coordination of real estate activities of the various departments.¹⁶ Coordination is especially lacking with separately organized departments, in this as in other activities. Quasi-independent park boards, which handle much real estate and which are most difficult to coordinate with other departments, pose the greatest problems in land use management, despite the fact that they are usually a leading force in the movement for city planning and good land management.¹⁷ The need for coordinating the use of city owned land has scarcely been recognized.

Some authors write as though the mere discovery that a similar process is used in different departments establishes beyond doubt that a new department should be organized to handle the process forthem.¹⁸ They assume of real estate that just because it is a distinct "materiel" it should be managed by a distinct "materiel department". No writer whom I have consulted has considered the possibility that it may be more efficient for the "purpose" departments to handle their own real estate than to work through a separate real estate department. Despite their inadequate treatment, however, I think these authors reach the correct conclusion. Most purpose departments deal in real estate only occasionally, when they expand, contract, or move, so no great advantage is gained from incorporating land acquisition and management into a purpose department. Indeed, positive harm may come from

making a purpose department become involved in an activity so foreign to its purpose as managing land bought in advance of need. On the other hand considerable advantages are to be had from consolidating real estate handling. The city will not compete against itself in the market. The land the city owns can be channeled to the departments as they need it rather than become permanently distributed to individual departments. Experienced real estate men can take the maximum income from city properties leased to private parties, and acquire land more efficiently.

Some distinction must be drawn between those departments which need land only for offices, and those which use it more extensively and will therefore be habitually expanding their landownership as the city grows. Possibly in some situations it would be better for the public works department to acquire its own easements and rights of way, for example. These land rights are closely associated with the nature of the public works and the department would benefit from being able to handle them itself. In addition, they are not interchangeable with the forms of landownership used by other departments, so the need for coordination is small.

III INFLUENCING PRIVATE USE

The most important aspect of public land use is of course its effect on private land use. Streets and public works obviously play a great role in determining how private land shall be used and are the most effective tool the public

has for this purpose. Streets may be so arranged as to make areas suited best for residences, retail or industrial use. Public works such as docks, underground transportation for retail areas, or industrial appurtenances can practically determine the use of the land affected. But most cities exercise most of their control through a number of less effective means.

Utility regulation is one. If a city really did control its privately owned transportation systems this means of control would in some instances be as important or more important than control of the streets. Private controllers of utilities often manage to arrange lines mainly in order to develop properties in which they are interested rather than to serve the public.¹⁹ Cities, circumscribed as their powers are by law, are usually helpless before the giant holding companies and railroads which hold their franchises.

Building codes, with sanitary and safety regulations, are another control. Unfortunately these are rarely exercised in the interest of the public, but rather for the petty monopolies which are the building industry. Further, they do nothing to alleviate the economic conditions which compel people to live in cheap buildings and at best will drive ^{poor people} ~~them~~ out of town.

Tax exemption is used to favor land uses deemed beneficial. Institutional real estate is exempt from taxes by long standing custom.²⁰ In addition, cities sometimes attract industry with the lure of tax exemption.²¹ Since ~~the~~ industries normally occupy less than 10% of a city area,²² on land of only moderate value,²³ yet support the entire city, it is surprising

that so few cities use tax exemption to attract industry.²⁴ True, industries even now rarely pay as much in taxes as their services cost,²⁵ but since they support all the other land values of the city it cannot be that they are not paying their way. Another use of tax exemption is to encourage residential developments in times of housing shortage. This often takes the form of "tax freezing", a promise by the city not to increase assessments because of improvements for a certain number of years.²⁶

Until very recently it was unthinkable that the power of eminent domain should be used in the United States to aid private builders. Perhaps its use to help public housing in the thirties²⁷ paved the way for the most recent development, which is similar to the "Lex Adickes" which German cities began to use in the first decade of this century.²⁸ Starting with the New York Urban Redevelopment Corporation Law of 1941, nine American states have passed laws permitting a majority of owners in a district to compel the acquiescence of the minority to redevelopment plans.²⁹ So far "Stuyvesant Town" in New York City is the only project to be undertaken with this aid.³⁰

The subdividor is not through administering urban land when he has platted its streets. He, too, administers a control over private use, the restrictive covenant, intended to exclude undesirable buildings, persons, and uses of buildings. Covenants play a more important role today than zoning in excluding non-conforming uses from certain areas.³¹ Even if the function that covenants perform is a good one, zoning is a far better means of administration. If covenants have

a restricted term, they afford incomplete protection. If their term is perpetual it becomes painfully obvious that the system is hopelessly inflexible, for the present generation is allowed to prescribe the use of land that will be used for all the generations that are to follow.

Finally, urban land use is controlled by zoning. Not in command of the powers that could most effectively influence land use, and not satisfied with the powers they did have, cities in the last generation have come to use the very direct control of designating certain areas for certain types of use.³² Industrial, retail, and residential of different grades are the categories usually delineated, and special areas such as scenic waterfronts may get special attention.³³ Usually the highest grade residential is the only area in which all non-conforming uses are forbidden.³⁴ Higher grades of residential building and occupancy are of course allowed in the lower grade areas, and^{usually} in industrial and retail areas "anything goes."³⁵ Usually the zones provide for a retail, industrial, and high class residential development that is beyond all possibility, the excess retail and industrial areas tending to fill in with dwellings too shoddy for residential areas, and the excess high class residential areas to remain idle.³⁶ In the residential areas are^{usually} prescribed minimum lot size, minimum value of improvements, minimum open space surrounding improvement, and maximum occupancy.³⁷ Zoning for a particular use brings with it the possibility of city improvements needed to use land that way, and also appropriate changes in assessment.³⁸

Zoning is enforced throughout a city usually and in some

states may be enforced extraterritorially for from three to five miles.³⁹ Enforcement is difficult, however, for a number of reasons. Where zoning is permitted it is as a "police ordinance", which can only be ultimately enforced by the very cumbersome process of court injunction.⁴⁰ Where numbers of property users wish to combat a zoning ordinance therefore its administration becomes almost 'impossible. To obviate the judicial process most zoned cities appoint a board of adjustment to hear complaints of aggrieved parties and try to settle the matter without recourse to law.⁴¹

This is not quite so futile as you imply.

Zoning, like city planning, is enforced as much by community spirit and pressures as by law.⁴² Cities which go to court must not only put up with judicial expense and delay, but may be told in the end that they have no power to enforce zoning at all.⁴³ Enforcement is weakest of all in condemning obsolete non-conforming structures. City officials who condemn such buildings run a risk that the courts may hold them personally liable for the financial loss to the owners.⁴⁴ When zoning was first established, of course, non-conforming uses had to be tolerated until those non-conforming buildings already standing had depreciated and were destroyed. But the non-conforming use, often due to the zoning, usually was more profitable than a conforming use, so most non-conforming structures have not been allowed to deteriorate, and non-conformity has become a privilege which the owners of those properties will not part with.

Is now fully established that cities can zone.

Faulty as it is, and weak as it is, zoning seems destined to play a major role in the ideas of city planners. I think they are making a mistake. In the absence of city control over streets

and public transportation zoning may be justifiable, to perform functions better performed by central design of the transportation system, but in an ideally planned city private land use would be so completely determined by the nature of public works that zoning would only get in the way. I suspect that zoning in such a situation would be used for certain illegitimate ends which have become confused with the legitimate function it tries to perform in cities today, and only because the illegitimate uses have become confused with the others is zoning regarded as anything more than a stopgap.

The prohibition of nuisances is a legitimate function. Certainly the general interest is served by prohibiting uses that produce noxious physical emanations such as smoke, smells, or noises, that unduly rob their neighbors of light and air, that bring traffic that will do similar damage. But this is as far as it should go. Dwellings should not be prohibited because they will shelter people deemed "undesirable". That is discriminatory class legislation. Even that the lower grade dwellings may harbor criminals is no argument for restricting them from a certain area. If the community produces criminals which the police cannot manage the community is under no obligation to see that they live nearer to the poor than to the rich. If this is correct, then the function of nuisance prohibition is better handled by the courts than by zoning, for it is easy to decide if a given land use does physical harm to its environs. It is probably because the "socially undesirable" sort of nuisance cannot be excluded by court action that zoning was chosen instead for this function. Physical nuisances should be enjoined by judicial application

This is
a mis-
conception.

of the laws against trespass; social nuisances should remain a risk that private builders must take.

The other legitimate function of zoning is to increase the efficient use of streets by separating uses whose traffic will conflict on our present street system. Zoning as generally used at present contributes little or nothing to the solution of the traffic problem, for it not only allows but sometimes almost compels the poor to live in the midst of factories and warehouses either on or close to through streets with fast traffic. One has but to drive through a mixed use area in a large city to see that all parties involved are greatly inconvenienced. Zoning might be used to separate residences from factories and warehouses, and to provide some through streets that were not cluttered with hazards like trucks and children. But ultimately street planning and traffic regulation should determine the location of various use types and the poor should be allowed to live in the areas designated residential instead of being crowded out by bad zoning.

The other functions of zoning are, to my mind, illegitimate. They are functions that were better undone, that are better done by the free market, or that can only be accomplished by national economic reform.

✓ First, implicit in much of the zoning argument is that buildings below certain standards should never be built. Certain standards of safety to surrounding property must of course be observed on the physical nuisance principle, but that is taken care of by building codes and fire and sanitary regulations. When people are so poor that they can

What are the other functions?

I don't understand this!

only afford to live in buildings below the standards of the regulators they will either live in such buildings somewhere or else die or be supported by the government. When such buildings are outlawed they necessarily take one of the last two alternatives. If this restrictive zoning is coordinated with public housing projects it won't result in putting people out of a home, but if public housing is available it won't be necessary to tell people not to live in substandard dwellings at higher rent anyway. In the former case zoning is harmful, in the latter superfluous.

Second, an idea prevails that it is often more profitable to build better houses, with more open space around them, but builders just perversely go ahead and put up crowded tenements anyway because they don't know any better. If such errors of judgment do occur I don't think people will be any less likely to make them as legislators than as private individuals.

*Density and
area limited
was all a
part of zoning*

Third, is the idea that when land is heavily improved to perform some function with a limited demand, that surrounding land has received an injury comparable to a physical nuisance because it can now get a lower reward for performing the same service than it could have before. As a rule, of course, improvement of surrounding land increases the value of a lot, but even if it worsens its competitive position it has not been trespassed upon, and the public interest has been served. Skyscrapers may be criticized for taking light and air from their neighbors, but not for competing with them. It is even

*But that is a
part of the competi-
tion!*

said that heavy improvements on some land are the cause of idle land surrounding. Actually, of course, the heavy improvements are profitable because the surrounding land is held idle, and the surrounding land is idle because the owner is holding it for more than it is worth. The heavy improvements may lower its worth even farther below the owner's demands, but they surely cannot be ^{condemned} ~~held responsible~~ for that.

Fourth, the owners of areas in which the improvements are growing old want to stave off the "blight" they see coming. They are prone to attribute the blight to the individuals who are invading the area or to the owners who rent to them, rather than to the facts that there is a demand for cheap buildings and theirs are becoming cheap as they age. Zoning cannot cure either condition. If productivity were so high that no one had to live or trade in an old run down building, then such buildings would pass out of economic usefulness while relatively new by today's standards, and be replaced with the new ones that were demanded and could be paid for. As long as we do not live in that sort of a world blight is inevitable and zoning cannot stop it. At best it can force buildings to be torn down which the economy is not rich enough to replace with better, or as good, buildings. It can also force land to be held idle instead of improved with cheap buildings. Either course is wasteful and lowers living standards.

*You leave
an exaggerated
notion of
the scope of
going.*

Fifth, it is thought that the harm done to a rich person when a poor person builds next to him is far greater than the harm done to poor persons by forbidding them to do so. Under

the invidious slogan of "prevent the neighborhood from deteriorating" people have fooled themselves into thinking they really benefit the whole community by reserving large areas for uses which only a few can afford. Oddly, this movement has been abetted by some of those whose property is really injured by being kept from its most lucrative present use, because they think they will be better off to sell it to a rich person in ten years than to two poor people today. The result is that those with means to build better houses have a considerable area of land reserved for them alone, while those with less are crowded out into industrial and commercial zones.

Actually the rich are in no danger of having their areas invaded by the poor, until the areas begin to die of old age anyway. It is the rich who, with their higher rent paying ability, drive out the poor from the most desirable locations. Long before zoning was heard of the rich and the poor lived apart.⁴⁵ The only areas that need protection from "invasion by undesirable elements" are those which were erroneously improved for better paying customers than are to be had, and those which are becoming cheaper as they grow old. These are areas into which people of less means should be allowed to go. The idea that the obnoxious poor will drive the rich all around the city if the rich are not protected by zoning is pure mythology. The poor follow the rich in occupying certain areas because the rich are always moving out on the fringe as the city expands, and they abandon their old homes as they grow old. Granted, if one tried to build a gold coast apartment in

*This is not
the function of
zoning.*

the slums he would not get many customers, and one reason would be that the rich people didn't like the neighbors. Similarly, when poor people begin to move into a decaying region they hasten its loss of "class". But they are not the original cause. The poor don't begin to move in until the rich won't exclude them by paying higher rent.

Sixth, zoning is used to keep industries out of some cities and suburbs that don't want them. Where the motive is to avoid the smoke and other physical nuisances emanating from the factory it is laudable, but would be better achieved by strict enforcement of laws against trespass, 7 as mentioned before. Often, however, the motive is to keep out industries who will raise wages by bidding higher for the city's labor, or to keep out the "undesirable elements" who will work in the factory and not vote the right ticket, go to the right church, or live in large enough houses. Zoning for this purpose is indefensible unless one considers the interests of those who wish to keep control of the town more important than those of the incoming factory workers and promoters and the property owners in town who will profit from the development. It is unfortunate if commuters who have moved out in the country to "get away from it all" find themselves in a community with the same elements from whom they have fled, but they should have chosen an area of refuge that was not suited for industrial development. They have no right to demand control over more property than they have invested in, especially when such control reduces the productivity and residential opportunities of many other people.

What
examples
do you
have?

Seventh, some think that unless certain uses such as retail are confined to limited areas they will perversely spread out all over the city. Others think it would be a good idea if some uses were less concentrated, and would use zoning as a tool to make them spread out all over the city. In either case the argument is that while it is more economical for these uses to do what these planners don't want them to do, it is more socially desirable for them to do as the planners wish. However the loss of efficiency will probably far overshadow the gains which the planners think they can determine better than the market mechanism. Many of these planners evidently fix in mind a few things about the workers' lives that could be improved and then are ready to sacrifice all other considerations for them. Actually if industry is forced to decentralize when centralization is more efficient then the marginal product of labor in the industries will be reduced and labor will either accept lower wages or none at all. This is too high a price to pay for the advantage, if it is one, of living in shacks on the outskirts of town instead of in slums ~~at~~ the center. As for the centralization of retail areas, that occurs quite naturally because the market wishes it so, not because zoning compels it. Only roadhouses and neighborhood retail outlets break this rule. The former certainly won't injure a neighborhood any more than heavy road traffic has already, and the latter seem to me ~~A~~

What is
your proof?

both innocuous and convenient.

Eighth, and finally, zoning might be used to provide expansion room for central uses, to avoid the waste of tearing down improvements. However the waste of idle land is just as real as the waste of destroying improvements. It is a matter for delicate economic judgment to decide if it be more wasteful to tear down a ten year old building in the future or to hold the land idle ten years until it is needed for the central use. Such a judgment is better made in the market than in any administrative department.

IV TITLE

Municipalities perform an important service for land owners when they provide a system of title recording or registration. This service means so much to landownership that its ^{partial} withdrawal is used effectively to compel subdividers to comply with city desires.⁷⁶ But, just as recording that does not utilize the convenience of a plat with numbered lots is less convenient than recording that does, so the present system of recording is less convenient than any straightforward system that might be devised if one took a few minutes to figure it out. The city gives the landowner the recording service. An office of public record is established in which all land titles and all liens on land must be recorded in order to be valid. The recording systems used are so complex and indirect that anyone wishing to transfer or mortgage property in land must hire legal specialists to search the title through the involved

47
maze of records the recorder keeps. Title search is a privately financed legal leaf-raking project, an obstacle to business created by administrative inefficiency with the effect, and in part the purpose, of necessitating heavy legal fees.

The legal profession has taken advantage of its opportunity in three different ways. 48 First was the most expensive way in which an individual attorney was consulted for an opinion in regard to each individual recorded transaction. Presently the abstract companies developed, which specialized in land titles and rendered opinions like a private attorney. Finally title companies were organized in cities of good size, and they insured titles after a few days or weeks of investigation. Title administration as it now stands, then, is a combination of public and private enterprise. The public officers create a puzzle which private individuals are paid for solving. The direct expense necessitated runs, according to one authority, into hundreds of millions of dollars yearly. 49 The indirect expense in idle land may be even greater.

A further shortcoming of the present system is that little or nothing is done to clear the title to land when private individuals have allowed it to become cloudy. 50 When a lot is encumbered with a confusion of public and private liens, the whole complicated by debt and tax moratoria, tax sales without guarantee of title, interstate foreclosures, inflation and deflation, and all the battery of irrelevant trivia which the legal profession can bring to bear on almost any problem, it may lie idle for decades while its

ownership is disputed, or when legal fees become so high that active interest in proving ownership lapses. If city land is to be used fully the city must provide a title service that guarantees title to one owner at all times and will assume any financial liabilities which the courts may impose.

This implies an exaggerated effect on the value of land.

The "Torrens system" of title registry is a straightforward means of handling title administration.⁵¹ Under this system all liens on a property are registered on one page of a book, so that no prolonged search is needed. All titles are indefeasible, guaranteed by the state, so that no title insurance is needed, and land will not lie idle because the courts need a few more years to determine who owns it. Those whose liens are disregarded in the process of making title good will be compensated by an indemnity fund.

The Torrens system has not taken strong root in the United States. Seventeen states have made it permissible, but it has not been widely used. The reason, so far as I can determine from the evidence available to me,⁵² is that what the states have made permissible is the Torrens system in name only, not in spirit. Owing largely to the opposition of the title and abstract companies the systems that are offered to individuals are not as convenient as the Torrens system is supposed to be. Some liens are not recorded on the lot's page in the record book. Furthermore it has been made an expensive legal process to have a lot registered under the Torrens system in the first place. The owner must go to court and must pay for a title search under the present system before his lot will be accepted for Torrens registry.

V TAXING URBAN LAND

City administrations have, in fact, a good deal to say about the actual tax to be extracted from property in general, and from particular parcels of property. Legally they should have no discretion in the matter, except, of course, as their budgetary recommendations affect the voters and their representatives. Legally state law ^{has often} ~~set~~ some sort of limit to property taxes, ⁵³ especially after the depression of the thirties. In addition it usually requires that all forms of property be treated equally, or only those forms treated differentially which are specifically authorized to receive such treatment. ⁵⁴ Actually the city administration can exercise considerable discretion over property and therefore land taxation by its control of assessment. When state property taxes were important, local assessment units underassessed, in order to reduce their share in state taxes. ⁵⁵ Now state property taxes are relatively unimportant, and, where they do remain, this administrative discretion over assessment has been shorn of its power by the creation of state equalization boards. ⁵⁶ Now local discretion has turned toward the other pole, and cities are tending to increase their assessed valuations, where politically possible, to prevent state limits on tax rates from drying up their revenues. ⁵⁷

City assessors also use their administrative discretion to discriminate among different kinds of property, thus playing a part in determining the real tax rate on the property. A study of some Chicago assessments of the twenties ⁵⁸ showed that vacant land was assessed at about one half the ratio to market value that improved land was. The more intensive the improvements,

in the assessment covered by this study, the higher was the ratio of assessed to market value. This means that not only ~~were~~ improvements taxed at a higher rate than vacant land, but also that improved land was taxed at a higher rate than vacant land. The assessor, by his own administrative discretion, amended the tax laws of the state and nation to discriminate among kinds of property, to tax some more heavily than others. Among individual parcels of property the inequity was even more striking: the average deviation from uniform assessment was 40%.

In the "devolution of the general property tax"⁵⁹ the administrative discretion of the assessor often changes the de facto law years before the legislatures and courts legalize the change. The gradual exemption of personal property from the general property tax, for example, proceeded and is proceeding faster in fact than in law.⁶⁰ I doubt, however, if the further devolution of the property tax into a tax on land values alone will occur, if it does occur, through administrative discretion. Occasionally a city, as Portland after the single tax agitation,⁶¹ will appease the reformers by assessing improvements lower than land for a time. But the pressures on an assessor are in the other direction. A city administration will want its assessor to put high values on those properties which are able to pay with the least squealing and administrative and legal bother. Improved properties of course, as they bring in an income, are better revenue sources than vacant. If the property tax devolves into a land value tax, then, as many authorities on city planning recommend,⁶² the independent administrative cannot be expected to take the lead. Administration did take the lead in the movement to exempt personal property, because the problem of assessing it was insoluble. It was easily hidden, and snooping

was most impolitic. But in exempting permanent real estate improvements from taxation and shifting the burden to land values, legislation must precede administrative action.

One of the chief barriers to enforcing even such taxes on land as we have now, and of course also to extending them, is the complete ineptitude of city administration in handling tax delinquent property. Much of the fault is with state laws which require municipalities to wait several years before foreclosing on tax delinquent land, and which allow delinquents to reclaim their land for a time even after sale.⁶³ But as much fault lies with urban administration, which does not acquire the land as soon as possible and sell it for whatever price it will bring to those who will use it and pay taxes on it. Some cities have cracked down, and discovered that the greatest advantage of so doing was that the delinquents began to pay up.⁶⁴ But most cities have been very solicitous of the needy delinquent property owners, so that they neither foreclosed readily when taxes ~~were~~ are delinquent, nor sell what property they do acquire at its current market price, to avoid "undermining the market".⁶⁵ In addition, in times of depression city administration will sometimes declare moratoria on taxes,⁶⁶ thus encouraging speculators to hold out at the very time when they are choking the growth of the city by demanding exorbitant prices for building sites.

At the same time that city administration allows some property to go delinquent, it of course encourages and allows those property owners who are so inclined to pay their taxes. Thus administration further amends the tax laws. Those taxpayers who choose to pay their taxes are penalized, while those who choose not to ^{pay} enjoy the benefits of city government and prot-

ection of their property free.

CONCLUSION

City land administration is faulty on two main counts: It does not make it possible to plan land use so that the whole city may be used to its fullest capacity; and it keeps some land from being used for anything at all. Administration is not solely to blame for its failure to cope with either problem. State laws and the accepted system of land tenure are also responsible. But even within the limits set by these "given conditions", administration could do a far better job than it does. The administration of each of the five aspects of land administration surveyed in this paper should be changed.

First, city administration should assert its control over streets and public conveyances. It should stop allowing subdividers to administer the expenditure of public funds by requiring them to finance their own improvements. It should use the powers that are currently being given it to replat idle subdivisions and other areas whose streets are not adapted to the best use of the land. It should employ a planning commission not just to visualize the urban organism of streets and land use but to work with administration in making the vision a reality.

Second, it should establish a real estate department to handle the land owned by the city. The department should acquire land far enough in advance of need so that no project will bog down because land is not available for it. At the same time, it should avoid holding land idle itself, insofar as that is possible. What land it must acquire in advance of need it should lease to private individuals where possible, or devote to some public use requiring

a minimum of improvement. The department should also coordinate the use of land by all the city departments.

Third, city administration should try to get away from the use of zoning controls by using control of the transportation system and of public works instead. But where this is not possible, it should use zoning to separate discordant uses and facilitate traffic. It should avoid using zoning as an instrument of class discrimination. It should avoid wasting land by over-zoning it, and by requiring building standards so high as to make construction unprofitable.

Fourth, it should provide a cheap, quick, and foolproof system of title registration and assurance.

Fifth, it should reform its assessing procedure so that every parcel is assessed equally. It should foreclose ruthlessly on delinquent property and dispose of it at whatever the market offers, as soon as the law permits.

These reforms will make the city more pliable in the hands of city planners and will force more of its land into use. Urban resources will be used more efficiently as a result, and the living standards of urban dwellers improved.

BIBLIOGRAPHY

1. Shurtleff, Flavel; "Carrying Out the City Plan", NY, Survey Associates Inc., 1914
2. "Urban Planning and Land Policies", vol. 2, National Resources Committee, Washington, D.C., 1939, U.S.Govt. Printing Office.
3. James, Harlen, "Land Planning in the United States for the City, State, and Nation", NY, MacMillan, 1926.
4. "American City" magazine, July, 1947.
5. "Proceedings and Addresses of the Oregon Planning Council", University of Oregon, Eugene, 1935.
6. "Land Assembly for Urban Redevelopment", National Housing Agency, Washington, D.C., U.S.Govt. Printing Office. 1945.
7. Weimer and Hoyt, "Principles of Urban Real Estate". (Note--- this book is not in the Reed Library, my references to it are based on some notes from it which I took elsewhere and have here. Hence I am unable to furnish page numbers and publisher.)
8. "Our Cities", National Resources Committee, Washington D.C., 1937.
9. "Progress Report", National Resources Committee, Washington, 1939.
10. "A City Planning Primer", Advisory Committee on Zoning, Dept. of Commerce, Washington, 1928.
11. Simpson, Herbert Doane, "Tax Racket and Reform in Chicago", The Institute for Economic Research, Northwestern University, Chicago, 1930.
12. Howe, Frederic C, "The Modern City and its Problems", C. Scribners' Sons, NY, 1915.
13. Taggart, "Subdivision Accounts", Univerisity of Michigan, School of Business Administration, Ann Arbor, 1930
14. "Regional Survey of New York and its Environs", vol. 2, "Population, Land Values, and Government", Committee on the Regional Plan of New York and Environs, 1929.
15. Simon, "Manchester Made Over", London, King and Son, Ltd, 1936.

Notes.

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66. #2, p. 252.