

A Critical Look at Urban Transportation

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IOWA ARCHITECT

April/May/June 1972

Editorial

Robert Broshar



Traditionally the architectural profession, ostensibly the designers of our man-made surroundings (or at least in part), has assumed a hands-off attitude in those sectors of public life which actually control the shape of our environment: the political, the sociological and the economic.

It appears this is about to change. Early in 1971, the American Institute of Architects, recognizing the many problems facing our country—rapid population growth, urban decay, highway congestion, industrial pollution, housing inadequacies, money shortage, etc.—committed itself to a national research project to attempt to develop some practical solutions.

The National Policy Task Force of the AIA was created, a blue chip group of leading architectural thinkers and planners of today. Architects Archibald Rogers, FAIA; I. M. Pei, FAIA; and Jaquelin Robertson, AIA; along with William L. Slayton, executive vice president of the AIA, former commissioner of Urban Renewal, HHFA; and Paul N. Ylvisaker, professor of public affairs and urban planning, Princeton University; formed the highly accredited and talented Task Force. A large group of distinguished contributors gave additional expertise in specific fields. The goal: a total re-examination and restructuring of national policies which would enable the nation to overcome the urban growth problems facing it now and provide a viable concept for development in the foreseeable future.

In brief, their first report, released in January of this year, urges three things:

A. That changes be made in the "ground rules" (tax policy, governmental organization, etc.) which

presently shape the development of American communities.

- B. That the nation develop the capacity to build and rebuild at **neighborhood scale**, ensuring open occupancy, environmental integrity and a full range of essential facilities and services.
- C. That federal, state and local governments in partnership set the pace and standards for growth policy through a special impact program affecting 60 of the nation's urban regions and a third of the nation's expected growth between now and the year 2000.

Ho hum—another blue chip committee has filed a report. But wait! There **is** something different about this report. It includes some very specific and realistic ways that these policy changes be set up and implemented and financed.

First and perhaps most important is the idea of directing all future planning at a neighborhood scale which the committee has referred to as a "Growth Unit." A flexible element, the Growth Unit is defined as perhaps 500 to 3,000 families, enough in any case to require an elementary school, day care, community center, convenience shopping, open space and recreational facilities. It would be large enough, too, to encourage the use of new technology and building systems, innovations in public services and, finally, large enough to realize the full economies of unified planning, land purchase and development, and the coordinated design of public spaces, facilities and transportation.

Growth Units of this size provide a scale small enough to be planned and judged as a package. Its application is as valid in Iowa and Nebraska as in the heart of New York City or Los Angeles; in rebuilt or rehabilitated neighborhoods within the cities, or new neighborhoods on undeveloped land. Emphasis would be placed on quality of environment rather than quantity; less affluent standards of individual housing should be considered in favor of higher standards of neighborhood environment, facilities and services. "Much of what is now done in the name of housing 'quality' is translated into grandiose quantitative requirements for floor space, lot sizes and building materials; the results are pernicious, wasteful and ultimately self-defeating, and the result is exclusion—of the poor, the Black, the young and the old families."

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IOWA ARCHITECT

Volume 19 Number 2
April/May/June 1972

The IOWA ARCHITECT is the official publication of the Iowa Chapter, The American Institute of Architects, and is published quarterly.

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Robert C. Broshar, President of Iowa Chapter, AIA, outlines the AIA's sweeping new policies that sharply effect the role of "ARCHITECT" in society today.

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a critical view of urban transportation:

A searching and sensitive documentary entitled "Take Des Moines Please," concerned with Des Moines' particular transportation problems was presented on Iowa Educational Broadcasting Network some months ago.

We would like you to again have the opportunity to experience the impact of that event and consider anew the questions it raises.

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clark house:

The Clark house in Fairfield, Iowa designed by Francis Barry Bryne in 1915 is an excellent historic example of the use of contemporary architecture thought still relevant today.

photo credits:

Edd Soenke, Des Moines Register and Tribune, Urban Transportation.

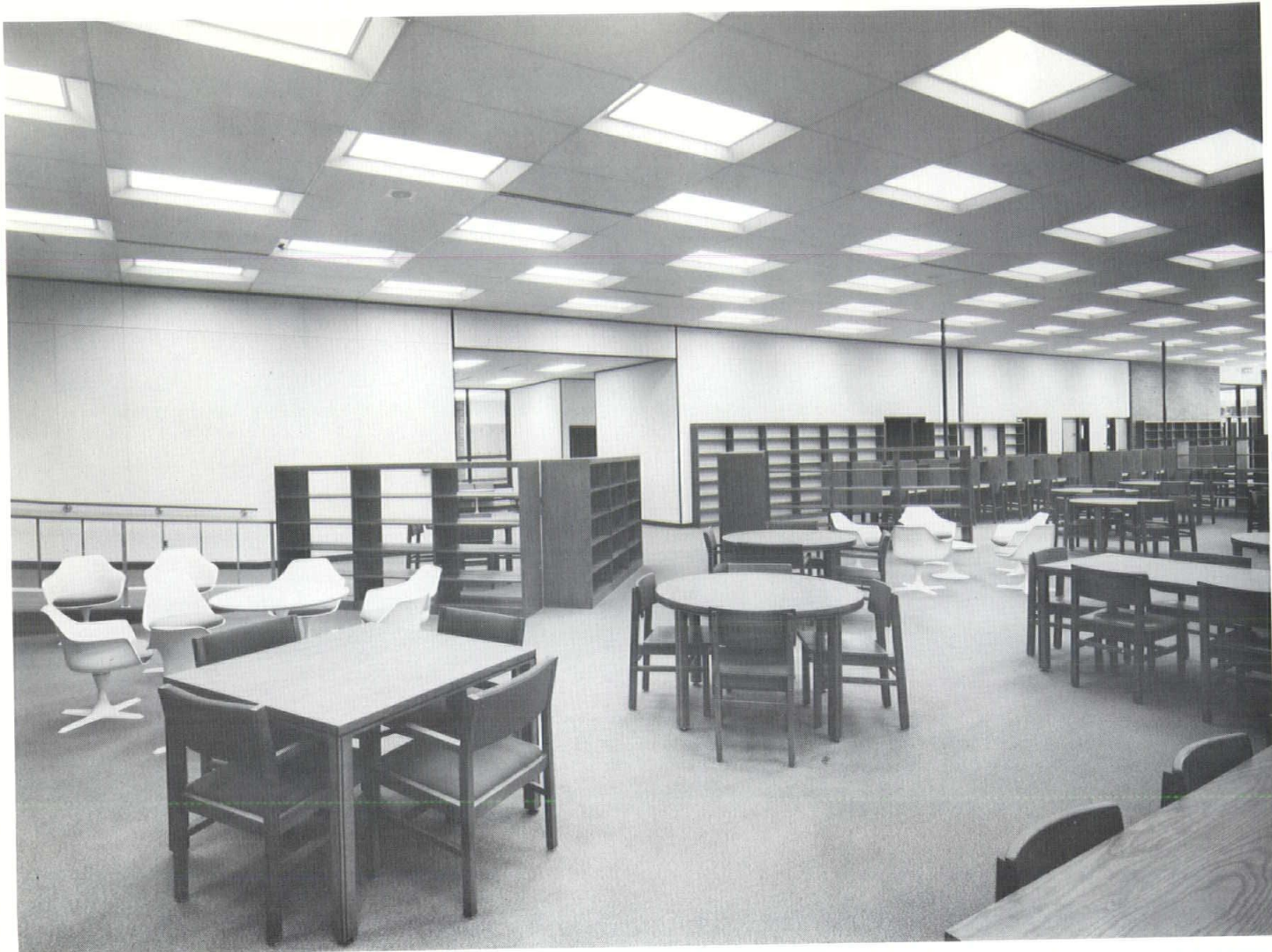
The IOWA ARCHITECT is printed by Garner Publishing Company.

Typography is Helvetica set by Art-O-Type Service.

Cover and text paper is Paloma—Butler Paper Company.

Cover and layout by Young Ideas, Inc.

Annual subscription rate is \$4.00 per year, \$1.00 per single copy. Advertising rates and subscriptions are available through the Office of the Chapter, 621 Savings and Loan Building, Des Moines, Iowa 50309, telephone (515) 244-7502. Appearance of products or services in editorial or advertising copy does not constitute endorsement. Opinions expressed are those of the author and not necessarily those of the Chapter.



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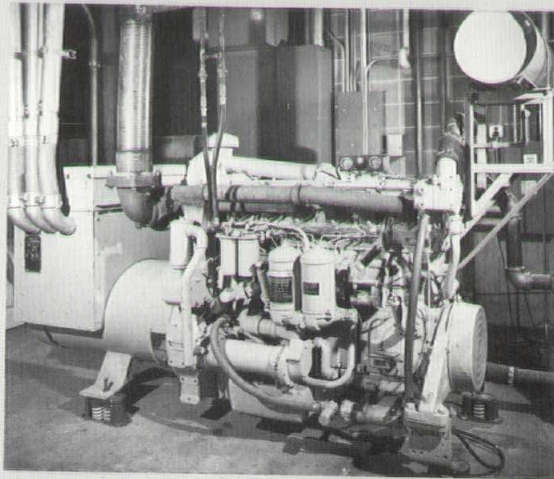
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The real-time computer at the Federal Home Loan Bank, a Federal Reserve Institution, in Des Moines collects and disseminates savings information for more than 641,000 accounts in a six-state area. Accuracy and speed are essential. So is dependability. Yet power outages, even the flicker of a light bulb, can cause unreliable operation: erroneous information might be inserted, computer components may be damaged and costly, non-recoverable time can be lost.

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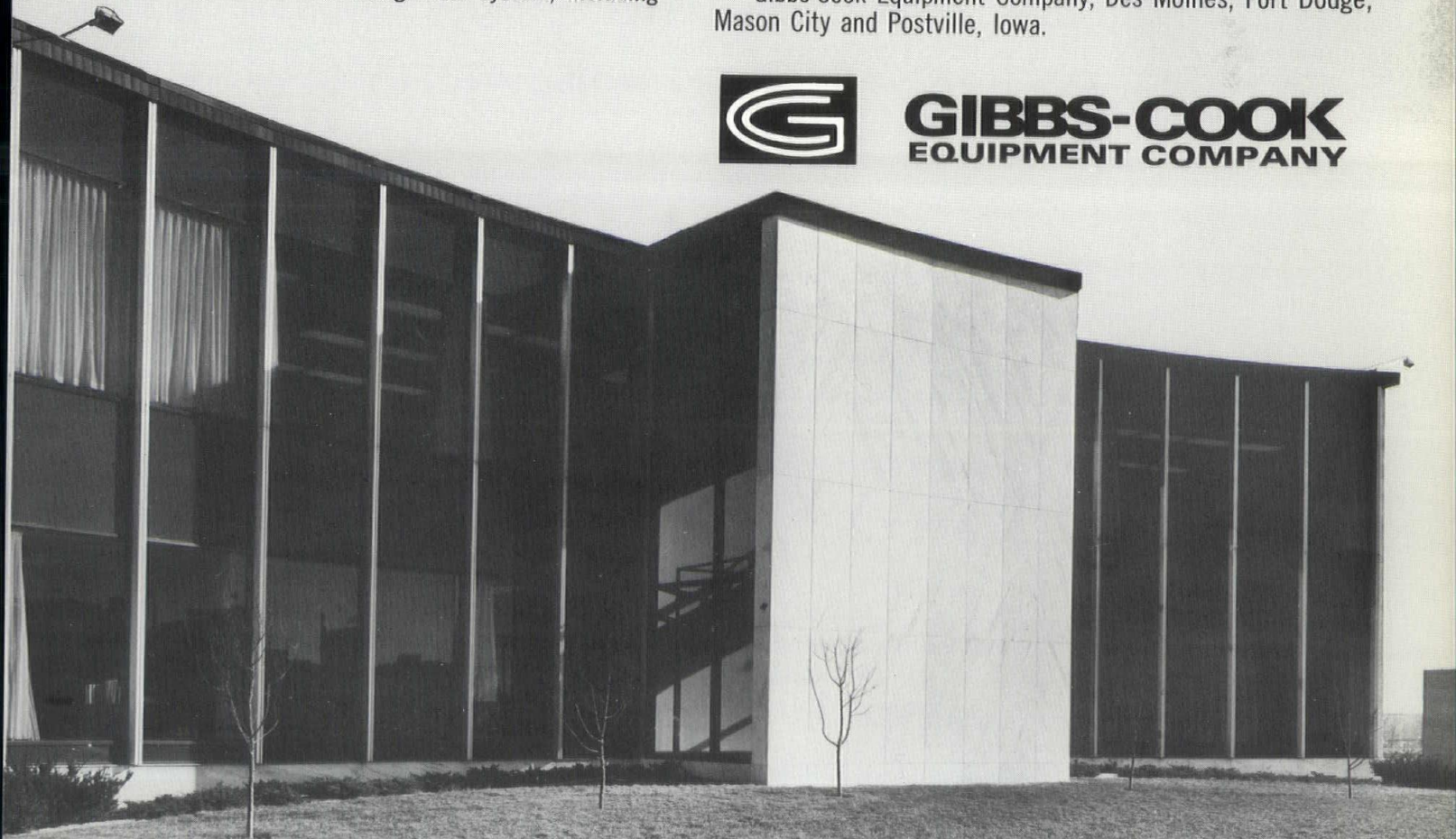
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The Des Moines Situation

Central Iowa Regional Planning Commission

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CIRPC's involvement in transportation planning dates back to 1966, shortly after the agency was formed. At that time, CIRPC was requested to develop a study design for comprehensive land use and transportation planning in the Des Moines Urban Area. During the ensuing five years, an exhaustive analysis of land development needs, demographic and economic projections, and computer modeling of trip behavior was carried out. During 1971, an Initial Metropolitan Land Use Transportation Plan was finalized and is now being reviewed by local officials and citizens in the Transportation Study Area which includes Des Moines, West Des Moines, Urbandale, Clive, Windsor Heights, Pleasant Hill and part of unincorporated Polk County.

Because the location of new streets and highways and the improvement of existing streets and highways determines, to a large extent, how and where an area will develop, a primary part of the transportation planning process is deciding how and where future development should occur. Based on local comprehensive plans, regional and metropolitan goals and policies, projected future and economic growth, and the availability and adequacy of public utilities (water, sewer, electric, gas, etc.), it has been recommended that the future growth of the Des Moines Metropolitan Area take place in a more "balanced" pattern than it has in the past.

Historically, growth in the Des Moines Urban Area has taken place to the north and west due to strong social and physical forces. The "prestige" of the west side stimulated rapid suburban growth and this growth was reinforced by the location of Interstates 35 and 80 which opened vacant land to intense promotion. As a result, the industrial, commercial, and residential development which has taken place during the last 10-15 years is straining public facilities. School taxes are high and water and sewer systems are being stretched to their limits. Future growth should be re-directed and encouraged to the south and east parts of the urban area, centering on the Des Moines Central Business District, in order to "balance" out the growth patterns and to relieve the potential pressure of continuing future growth to the north and west.

Based on a future "redirected, balanced" growth, an initial transportation system for the Des Moines Urban Area was developed.

The amount of travel or "trips" in a given area is

determined by a number of factors. In general, the greater the population, school enrollment, occupied dwelling units, labor force, employment, auto ownership, and retail floor space, the greater the volume of trips on the transportation system.

In Des Moines, the most significant of all factors was the amount of **automobile ownership**. Current automobile ownership is 1.3 to 1.4 cars per household. It is expected that by 1990, auto ownership will have increased to 1.8 cars per household. As auto ownership continues to increase, there will also be an increase in the number of automobile trips. In 1965, average daily trips made in the Des Moines Urban Area numbered 743,633. It is projected that by 1990, an average of 1,426,720 trips will be made daily. This is a 92% increase in trips.

In a nutshell, the reason why the Des Moines area is faced with a major future transportation problem is that **the amount of traffic (trips) in the area will double by 1990.**

The role of bus transit in the Des Moines Transportation System is a minor one. Buses carry only 2.2% of the average weekday person trips, and in spite of cutbacks in unprofitable services and periodic fare adjustments, the number of people riding buses continues to decrease.

Other forms of transportation besides the automobile and the bus are insignificant. Non-motorized travel such as walking or hiking just have no impact in the face of the automobile and its use in the Des Moines area.

In order to determine a suitable transportation system for handling the future automobile-oriented traffic demands of the Des Moines area, five alternate highway and street systems were developed and tested. The results of each testing were evaluated by the CIRPC staff, the transportation consultant, and technical persons from each of the local governments involved. The alternate systems were evaluated on the basis of:

- greatest efficiency (least miles of vehicle travel)
- least amount of traffic deficiency by major routes
- highest average travel speed throughout the system
- the greatest use of existing streets
- least environmental impact and disruption of existing land use
- local cost feasibility

The Initial Metropolitan Transportation Plan is

based upon the greatest practical use of the existing street system without such major widenings as to cause extensive displacement of adjacent uses. Improvements recommended in the plan include 44 miles of new freeway type routes, 71 miles of new major arterials, and 142 miles of widening and resurfacing of existing streets. The total cost of these improvements is in the magnitude of 300 to 410 million dollars.

Although the cost figure may seem astronomical, it should be kept in mind that this figure is a measure of the total expenditure required, if and when the traffic demand on the street and highway system becomes double the present demand. These costs would also be spread over a twenty to thirty year period or even longer.

Throughout the development of this plan, there has been much discussion of policy, environmental impact, and costs. There has been particularly strong opposition to the whole idea of a freeway, as well as objection to the general location of the freeway corridor. This opposition has been based on grounds rarely heard before:

- perpetuating the use of the automobile, now seen by many as the "bain" of modern living
- destroying natural environments
- disrupting social communities

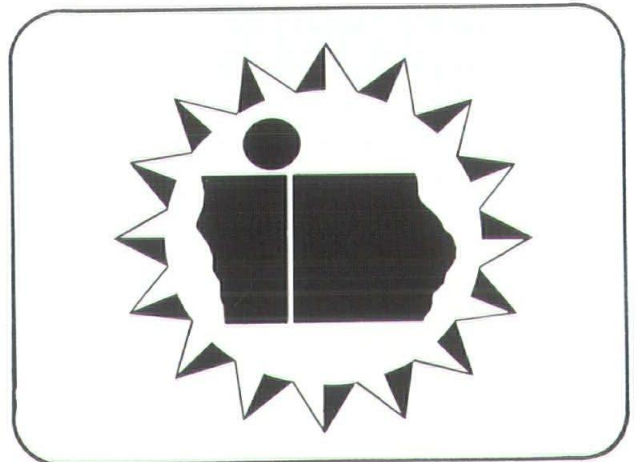
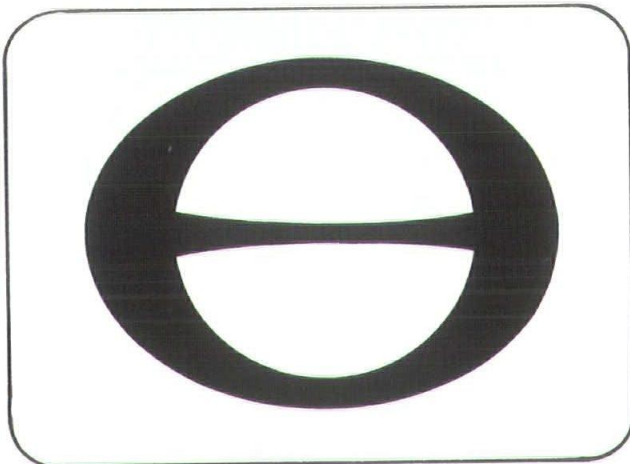
There has also been a growing concern about the fate of public transit in the Des Moines area and many people have seriously questioned its exclusion from the transportation plan.

These questions and concerns about the transportation plan are valid ones. However, they need to be directed not so much at the transportation plan—which is a projection of future street and highway needs based on trends which seemingly will continue—as at the basic cause of transportation dilemmas — the use of the automobile.

A transportation plan can and should change to meet the current needs and desires of the residents it is intended to serve. If, in fact, the residents of the Des Moines area decide that the "costs" of using the automobile are greater than they wish to pay and begin to use and demand public transit, the plan can change to reflect that desire. However, if the use of the automobile continues to increase, there must be streets and highways to serve that increase in order to insure safe and efficient travel.

It should be kept in mind that the Initial Metropolitan Land Use/Transportation Plan is just a "starting point" from which an acceptable plan for handling future transportation needs of the metropolitan area should be developed. As the individual local governments—elected officials and citizens—review the proposed plan, it is hoped that:

1. an Initial Transportation Plan agreeable to the 7 local governments will be developed, and
2. that there is establishment of a continuing planning process to refine, update, and change any transportation plan so that it meets the needs and desires of the residents it is intended to serve.



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Raymond D. Crites, FAIA

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The National AIA Convention this spring will have a moment of special significance to Iowa Chapter members. Raymond D. Crites will be recognized for achievement in design and named a Fellow in the American Institute of Architects.

Fellowship in the AIA is the latest achievement in a distinguished career. Mr. Crites was originally from Illinois but attended Iowa State University where he obtained his degree in architecture. Graduating in 1953 with honors, he had already shown prowess in design by winning the Indiana Limestone Institute competition.

Mr. Crites was first registered to practice in the state of Kentucky where he was a partner in the firm of Crites and Johnson. In 1955, however, he returned to Iowa to pursue graduate studies and join the staff of the Department of Architecture at Iowa State University.

In 1957, after obtaining his Iowa registration, he became a partner in the firm of Crites and Peiffer. Located in Cedar Rapids, this was to be the basis of the firm we know today. Richard D. McConnell became the third partner a year later and by 1961 the firm had become simply Crites and McConnell as it is now.

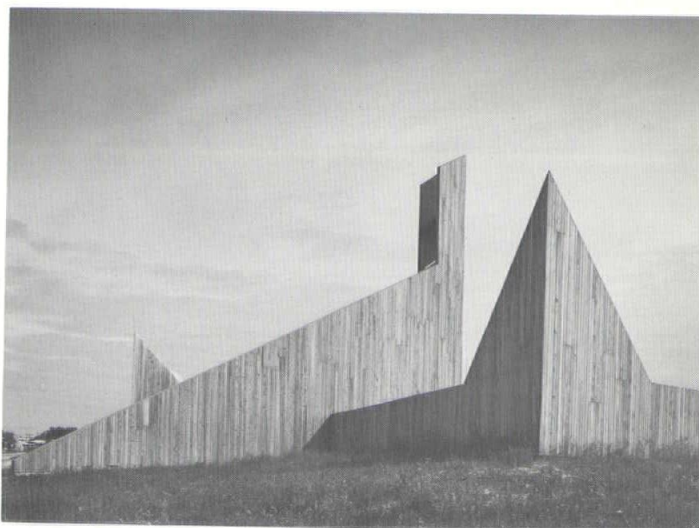
Architectural Forum cited this new firm in an article entitled "New Talent for the Sixties". This forecast proved accurate when in 1962 they received the first of many awards for excellence in design. That particular year saw three Iowa Chapter AIA awards, three **House & Home** awards, and a special citation from the American School Administration.

Life Magazine must have been impressed because the next year they titled him one of the "Ten Outstanding Young Men" in America. Coe College granted him a Honorary Doctor of Fine Arts that same year.

Recognition of Mr. Crite's abilities has kept pace with the years. Some high points of note include; a 1965 National AIA Merit Award for his own residence; an AIA - AAMC First Honor award for the McFarland Clinic; a 1968 National AIA Honor Award for the Covenant Presbyterian Church and last but not least, a second place in the YMCA Handball State Singles meet of 1970. Along the way the firm has picked up an impressive total of twenty-eight Iowa Chapter AIA awards and nine **House & Home** awards.

Mr. Crites' design has continually shown an ability to capture the atmosphere and character of feeling in the overall design of the building. His work expresses the character and function of the building without being ostentatious. Finally we must admire his bold use of a full vocabulary of materials, from wood to concrete.

Congratulations to Raymond D. Crites, FAIA.



Exterior, Covenant Presbyterian Church, Danville, Illinois

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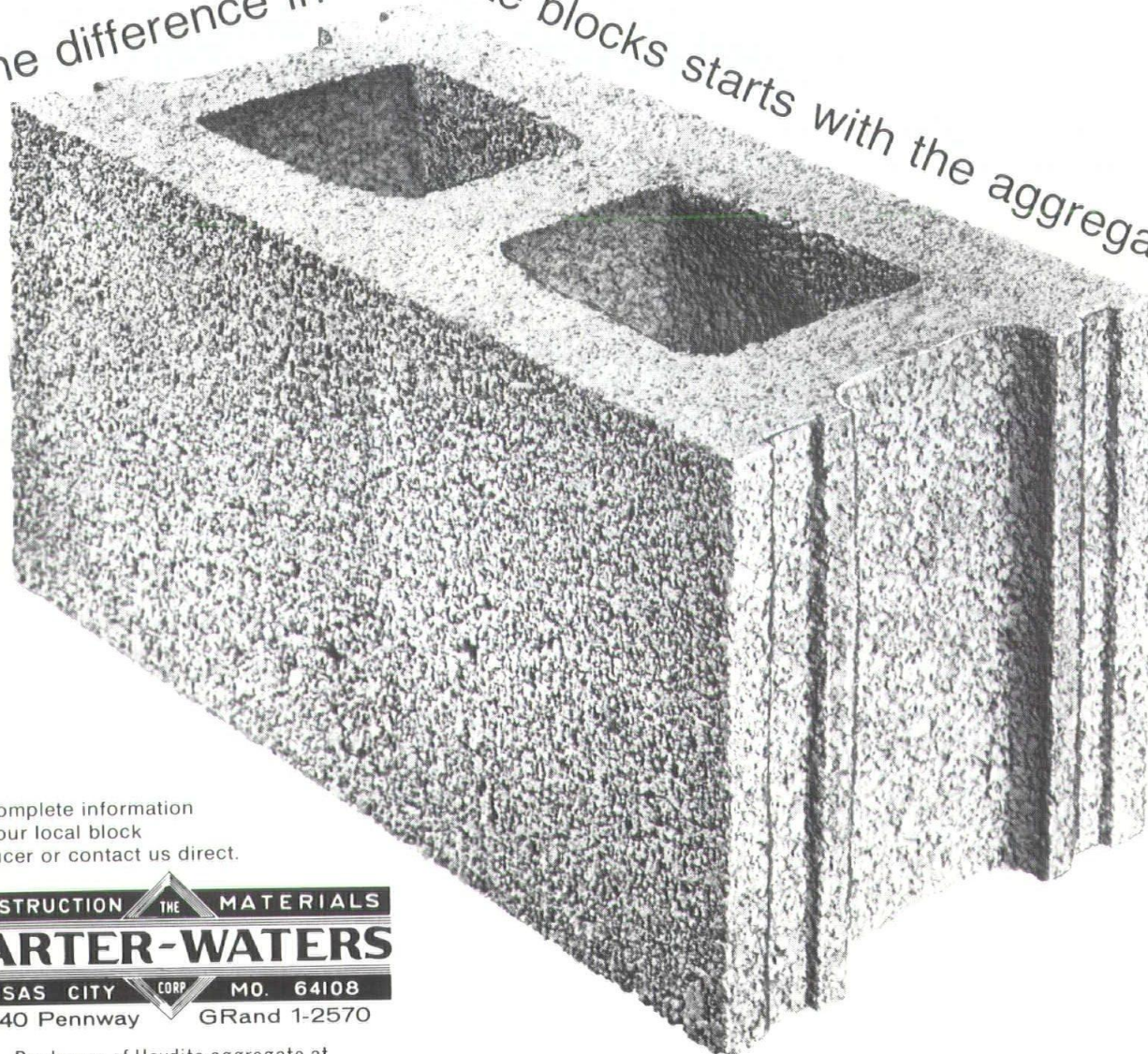
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A Critical Look at Urban Transportation

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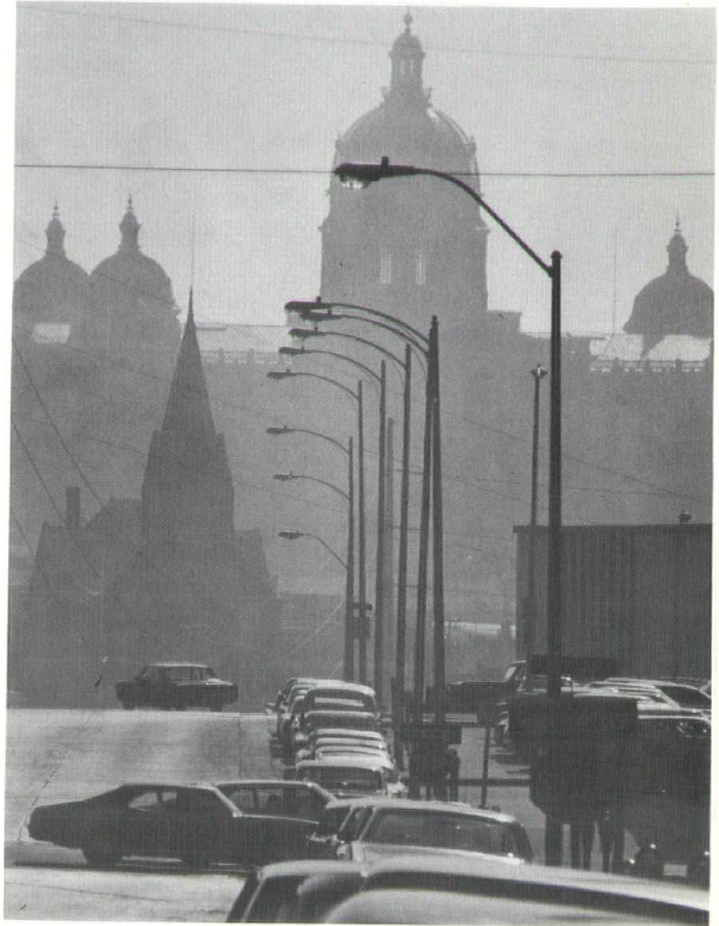
On January 25 and February 5, 1972 KDIN-TV aired a 'special' on the Des Moines transportation system, "Take Des Moines Please," produced by John Beyers. Following is a condensed portion of that broadcast.

Edited for publication

The definition of the "Urban Transportation Crisis" depends on your perspective. For instance, if you are embedded in Chicago rush hour traffic the most conspicuous element of the problem is the lack of public buses and trains. The supposition being that with more public transit, idiots clogging up the freeway would be reduced, thereby making your trip infinitely more pleasant.

There are obviously other points of view. To an urban planner, transportation is a tool for shaping a city. To a businessman it creates and modifies real estate value and business potential. To an urban traffic official, it is a chess game with cars; and to a politician transportation is surefire election stuff since it always borders on crisis and is perpetually incomprehensible to the voter. It is becoming increasingly evident that transportation problems in the U.S. cities differ by degree, not kind. And super size is not always a liability. For example, many experts say that Chicago's transportation network is, comparatively, well-integrated and efficient. On the other hand many smaller cities are floundering. Take Des Moines. Please.

Des Moines is a nice town. The people are proud of the art center, and there is a legitimate theater that holds four-thousand people. The air is still pretty clean and it is the capitol of Iowa. It's a great place to be raised if your under twenty or to retire if you're over sixty. According to the 1970 census, half the people are in that group. Moreover, the ones in between do alright. The average annual income in Des Moines \$8700—in the top twenty nationally. And hang in there, by 1990 it will be in the top seven—\$12,500. In Des Moines the living is easy, and if you put stock in projections, there ought to be twenty or thirty years more of the same. Extrapolation between Des Moines and Chicago would seem to be a little dubious at best. The entire population of metropolitan Des Moines is less than half the number of cars alone that enter Chicago's loop in a twelve hour workday sample. That does not even include the 140,000 people who ride mass transit during the same period.



Still there are some fundamental comparisons. Both cities were built on rivers; both were originally forts; and both cities had a plan.

Ever since the Bernham Plan of 1909 which was one of the first major planning documents for any city, we had the objective of maintaining a very strong central city. As Bernham well stated, the plan was to emphasize those things that should be emphasized and diminish the things that should be diminished, and one of the things he felt that needed to be emphasized and maintained was the central city [Chicago].

Consequently, since 1909 we have followed all through our years of planning this philosophy and to that end, all of our transportation routes and all of our major highways have centered on the downtown or Chicago central city.

It was 1925 and Cal Coolidge was President. . . . **In 1925 Des Moines was treated to its first Bartholomew Report.** Harlan Bartholomew was a St. Louis engineer who was commissioned to develop a city plan for Des Moines. His summary of recommendations was downright unfriendly.

"The present arrangement of streets which Des Moines is required to use was not devised to meet the circulation requirements of the community. Ever since Des Moines was incorporated its streets have been planned by men who were more interested in selling land than in laying out the highways and traffic arteries of a great city. The result is that the city today finds itself in possession of a somewhat faulty equipment of thoroughfares. There are nearly 1500 unnecessary jogs and terminations in its street system. Numerous streets are too steep to be useable. Important thoroughfares are too narrow and often end abruptly. The fact remains, however, that much of the cost of making Des Moines a first class city is chargeable to lack of foresight. Correcting mistakes has become an absorbing interest; prevention is scarcely considered. Meanwhile, things are done everyday that will require more costly corrective action in a few years."

Talk is cheap, and besides, according to historians the surveyor who laid-out Walnut Street used a rope instead of a chain. The rope sagged and so, consequently, did Walnut Street. It is conceivable that the surveyor did not stop there.

In 1940 Des Moines commissioned another Bartholomew Report. The city had changed in 15 years; there were only 1486 jogs and deadends. The central business district of Des Moines is very congested. The majority of the streets within the area are narrow. With the exceptions of Grand Avenue and Court Avenue, the streets have widths of only 66 feet. The blocks are short; the many intersections cause delay and congestion. Contributory causes of congestion are the loading and unloading of streetcars with the consequential blocking of traffic movement . . . double parking which is not properly controlled, and the use of too much of the narrow street space for parking purposes. The transit company has endeavored to reduce operating costs on certain lines and has increased the route mileage in an attempt to increase patronage.

Use of the automobile for local transportation can be expected to increase in the future.

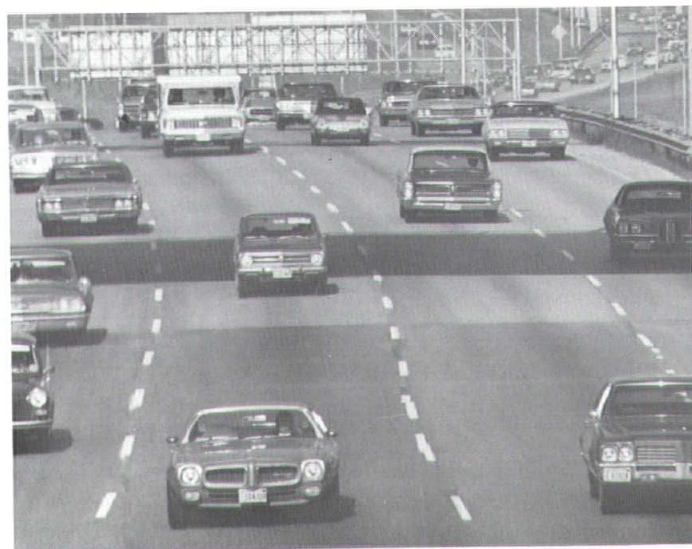
1960 found Harlan Bartholomew back in Des Moines. This time the city meant business, or more accurately business meant the city. A group of downtown merchants calling themselves 'the committee of 100' hired Harlan, who by this time was almost a legal resident.

The central business district of Des Moines covers far too large an area for the amount of business and activity conducted with it. The second major defect

is the generally poor quality of buildings. The third defect is the intermixture of building quality throughout the downtown area. Fourth major problem is poor access. There has been virtually no change in major street and highway access in and out of the business district in 20 years. Fifth, parking is inconvenient. And the final defect is the generally mediocre character and appearance of the downtown. The downtown does not constitute a real attraction that will bring people into it from beyond the metropolitan area.

The third and final Bartholomew Report proposed beefing-up retail activity downtown by making the surroundings more pleasant. Specifically it called for the addition of amenities such as pedestrian malls, and the shift of parking facilities to the periphery of the business district. One of the Bartholomew planners predicted that if the plan were not energized within six months it never would be. It is not known whether he stayed around for the hatchet job.

The Des Moines River is sort of a natural Maginot Line between the sovereign and independent nations of the East and West sides of the city of Des Moines. By the time they had concluded the sitzkrieg there wasn't much left of the Bartholomew Report; and what **was** left was polished-off when Younkers Department Store built a multi-level parking ramp in the center of the business district. The plan was dead before the ink was dry.



Today there is a fragmentary evidence of the Bartholomew plans, but fundamentally very little has changed. The narrow street and tall buildings still provide a lock for car emission and noise. The blocks are still short, and there is still no through access North and South. East 14th is the major North-South thoroughfare but it is out of the central business district, while 2nd, 6th, 9th, and Fleur Drive all end in the loop—one way or another.

And when Fleur Drive ends, it really ends. With this — the climax of Ad Hoc traffic planning with three major traffic in-flows and four outflows all occurring at one spot. Mix-in about 1300 high schoolers, a gas station and almost permanent street construction, and one begins to understand why the Iowa Commission for the Blind uses this mess as the final exercise of its students. It seems that Des Moines has hardly suffered a paucity of city plans. There have been eight transportation plans alone in the last 15 years. Further, today two planning agencies—The City Planning Department and the Regional Planning Commission—are both engaged in simultaneous and unrelated planning that will affect transportation. **The difficulty, apparently, in Des Moines is not making plans, it's following them.**

Chicago cheated . . . not only have they operated under basically one plan, but the city was obviously empowered to carry it out. These are basic elements in coordinating a city's transportation modes.

There is yet another parameter for comparison — suburban development. Both Chicago and Des Moines have suburbs, and must face the proposition that the way we live often determines the way we travel.

Many times people have made the attempt to compare Los Angeles and Chicago, two very distinct type of cities. Los Angeles is a city of great area; it's sprawled over many square miles, whereas Chicago

is highly concentrated within a 220 square mile area and had a very high rate of concentration of population; some better than 3½ million people. True, when the expressways and automobiles came into being the outward movement of people and the settlement of the suburban communities was accelerated; however, all this acceleration and growth didn't hurt Chicago a bit. Over the years as they've developed rapid transit and commuter lines, they've spent public money and have done many many things to encourage the growth and the use of public transportation. Chicago hasn't necessarily prohibited automobiles from coming into the central city. But fact remains that about 85% of the total come in during the heavy peak hours of the morning. These are the workers. The commuter rails bought new cars, have stepped up their schedules, have built extensions to the subways, and have bought new subway trains and of much of this . . . particularly the CTA the transit authority has public funds, and the city has actually sponsored the extensions of many of these lines.

How could Chicago sprawl? You can hardly build suburbs on a lake. **Des Moines, on the other hand is a textbook example of urban sprawl; a little over 200,000 people banging around in 180 square miles of space. Our compulsion for lebensraum is even seen in the downtown area; the central business district, normally the most compact area of a city,**





stretches from Tech High to the capitol East and West; and from the railroad tracks to the urban renewal area North and South. It is larger than the business districts of San Diego, Minneapolis, Kansas City and St. Louis.

In the suburbs, the census tells the story. During the 60's the population of Des Moines fell about 5%. But Urbandale grew by 139%—the fastest growing city in the state. West Des Moines averaged 500 new residents a year between census'. Windsor Heights grew by 1000. Clive went from 752 people in 1960 to 3000 in 1970; and the population of Ankeny quadrupled in ten years. They are suburban dormitories, and in order to get into the city of Des Moines you have two transportation options; drive your car or your wife's.

The cities tend to become spread out when you insist on using the automobile as the major transportation mode. Cities tend to become compacted when you use mass transit as a transportation mode.

Now in cities that have attempted to accomodate the automobile we have seen the phenomenon of the city spreading, that is, wherever you put traffic facilities you tend to get new shopping centers for example, you tend to get industry following the roads that are created around the city.

This tends to spread cities so that we have at the extreme a city like Los Angeles that is spread all over Southern California almost. We see this in smaller examples within the state of Iowa, for example, in Des Moines people find that the downtown business district can't accomodate the automobile so business offices tend to move toward periphery in order to get sufficient parking spaces for the automobile.



Parenthetically, it is curious that the builders of shopping centers have recognized what traffic managers and some downtown businessmen have not. Namely that it is more functional to keep cars outside of the area of retail activity.

Suburban living is also expedited by freeway. Freeways, as we have recently discovered in Des Moines, not only affect travel but also blood pressure.

The "heavy" in the recent flap over a proposed North-South freeway was the Regional Planning Commission. They had the audacity to suggest that a freeway should be built to accomodate the second heaviest car flow in the city. Normally this sort of thing is done by displacing a lot of black people, but the North-South freeway was different. It was planned so that a lot of bar-b-que pits would be replaced with passing lanes. That brought suburbia out, with the somewhat familiar revelation that cars pollute the air, are noisy and dangerous to kids, and that freeways lower land value. And so the North-South Freeway, though quite inevitable, has been quietly buried until the heat is off. What was once a harbinger of progress is now taking it on the chin. A freeway is comprised of long strips of concrete, mainly funded by the federal government. 90% of the time it does its job rather safely and quickly. A freeway should have ramps to get on and off, spaced so that the traffic will flow. It should have pedestrian cross-overs, and should not deteriorate the street frontage near by. **The question is, of course, if that is a freeway, then what is a "McVicar?"**

Most people who attempt to drive the expressway through Des Moines feel it is a very hazardous task; your accident rate is fantastic. This is due to some



poor planning obviously. The task that's provided the driver transversing the expressway is an impossible one. He's told to keep his car between 40 and 50 miles and hour and at the same time be able to read all the directions that are presented to them in center of Des Moines, a distance separation of 6/10 of a second. And it takes 2½ seconds to observe a direction and decide what he should do about it. Then the pattern of on and off on alternative sides of the freeway. A criss-cross mix-master that just has to produce accidents. **It was predicted that it would produce accidents on the design table. The prediction unfortunately has been fulfilled.**

What Des Moines wants, Des Moines gets. In a three mile span between the Harding Road and East 15th Street exit there are 13 entrances, 17 exit ramps, and 9 dead end lanes. Further there is no through lane either East or West bound on this stretch. Certainly keeps the average driver on his toes. It could be a strong impetus to start taking the bus.

The present bus system was operated for profit. The assumption was that there was a market for its services. The fact is there is no market for its services on a profitable basis. It is heavily in debt, it owns really nothing other than a piece of land and some equipment and has a tremendous bond outstanding and they're proposing basically that we subsidize the bond holders, that we bail them out. My position is to hell with them!

In New York you have to let the subways deteriorate terrifically. That didn't work, they were dirty, they were messy, they were just atrocious but people

still road them, then they increased the fares and this didn't take enough people off so they made the fares still higher . . . then the schedules have to be reduced, the next thing to drive people out is to make the schedules inconvenient. Finally, if nothing else works, most cities and in most cities they found increasing the fares to an exorbitant degree, making the schedules very inconvenient, and allowing the equipment to run down didn't work, so the last step is always to completely discontinue it.

Another matter is the whole business of developing a new attitude; I guess this is really the most important part—its really never been done in the country yet. And that is to develop an attitude on the part of the residents that in effect it's almost unpatriotic to have your family drive 3 or 4 cars; the husband driving to work, the housewife driving another car shopping, maybe a teenager driving another car just to sport around in. Almost like it was in WW II because of gas rationing and tire rationing and so forth, everytime you listened to the radio or read the paper or talked to your friends, it came out that you really shouldn't drive your car because it was unpatriotic.

When transit planners discuss the people who will actually ride their ideas, there are pavlovian overtones—in reverse. In this experiment, the laboratory patient drops a pellet into the fare box, and someone else is rewarded.

One wonders if any of the guys who develop mass transit plans would be caught dead on a bus themselves. In Des Moines only 2½ % of the people who come into town take the bus. Mrs. Marcie Tobin is an



expert. She has ridden public transit in Des Moines since 1925.

"Course the service was much better. Streetcars ran all night, on the hour. Now I understand you won't be able to get a bus after 9:00. They had shelters on some of the corners in the outlying districts. Three sides and a bench so you could sit and wait for the streetcar.

And you could ride from West Des Moines to the Fairgrounds for 10¢. And no charge for a transfer. I forget when the first increase in fares came. It wasn't for a number of years but after the first increase then the increases came closer together. Until now we pay 45¢ and 5¢ a transfer.

I think it's a little high, but I don't suppose the drivers are overpaid. So I really don't know what the problem is. Where the revenue goes except perhaps they just don't have enough business.

I believe they will never be able to solve it. It's just an insoluble problem. Everybody talks about it but nobody can do anything about it. Because what can you do about it? And sometimes I think even if they did have buses in the outlying areas people wouldn't use it cause they are so accustomed to the car. People get in the car and drive two blocks, so they are not going to walk two blocks to the bus if they have a car available.

Oh, I have many people ask me "do you ride the bus" like you poor soul! How do you manage? Well of course when I used to ride the streetcar, why that was the method of transportation to go to work. Because not too many people, women that is, drove to work. You took the streetcar downtown and there was good transportation and you didn't think anything of it. But now it is a social liability not to drive. You are really pitied. Can't you drive? You idiot! Can't you learn?"

So much for mass transit.

Up to this point, the elements that seem to shackle a viable transportation system are pretty familiar. After all, Des Moines did not patent cobbled-up city planning, an unresponsive legislature, urban sprawl, or an anemic bus company. Besides, they are not the real architects of the urban transportation crisis. But, the real mephistos . . . you . . . and your car.



The turn of the century and everything seemed under control. A real seer of the times said that it was "nothing less than feeble-mindedness to expect anything to come of the horseless carriage movement," and six years later Henry Ford's millionth model T rolled off the assembly line.

"I'll tell you one thing, the cities are finished," said Ford in the early 20's. Which is rather like Napoleon predicting that someone would get hurt at Waterloo.

Ford hired a man named Walter E. Flanders who introduced standardization. In another plant a few years later two workers took a cue from a Chicago meat packer and developed overhead hooks that transformed the assembly line into a production chain. The demand for American automobiles would never again exceed the supply.

Car production did fall off during the second World War (down to 610 passenger cars) but no one could get gas or tires anyway. In 1946 the war was over and we got back, literally, into gear. There were two million cars produced that year, and the ensuing four years would see the total output of the

previous eleven exceeded. Twenty years later, we're home free.

The United States is the largest banana republic in the world, and our bananas are cars. Next year there should be somewhere between 90 and 100 million cars on the road. Four out of five American families own at least one car, and that's half of them . . . in the world. By tomorrow there will be 6,000 more. 81% of the American people travel to work by car. The next closest is 45% in West Germany, and if you walk to work you are in an elite minority . . . 6% of the population to be exact. We do not own cars to travel, we travel in order to own cars. Passenger car miles traveled in the U.S. are increasing six times faster than the population. **If you are average, you will buy, rent, or borrow twenty to fifty cars in your life time. You will also own a new car at least every three years. It was the automobile industry that first taught us that something fun did not have to be terribly permanent. There's no doubt about it . . . we love those cars. And when Americans love something they pay for it. A fact that is not lost to every level of government.**

For example, the highway trust fund nationally is projecting its needs for the next 15 years at a figure just below the national debt for fiscal '70. About 320 billion dollars. Of course, figures like that are nonsense to most people.

Put another way, when you honk your horn in the city of Des Moines, fourteen state agencies, seven city agencies and the Polk County government hear it.

They would obviously like a hunk of the 120 million dollars you spent on fuel tax alone last year. That is second only to the income tax, and after refunds probably exceeds it.

Trying to determine exactly what happens to car-related revenue is like trying to get a head-count of the Viet Cong. Suffice to say that most of it goes to the Iowa Highway Commission.

In the 30's Iowa had a problem that they needed to get the state out of the mud. That is provide roads, farm to market roads primarily, and some roads across the state. So we had developed within the law of Iowa and within the constitution of Iowa the concept of the road-use tax to self-finance the construction of roads. Now this appeared to be a very good method at the time to get the road building out of politics. However, the result was we created a commission, the Highway Commission which is the dictator as far as road construction is concerned. In order to keep it out of politics, we have no legislative oversight over how they spend their construction funds, nor do we have any executive oversight by the executive branch of the government. The only control the Governor has for example is the appointment of highway commissioners. But their time in office is staggered so that no one governor can really dictate a philosophy on the part of the highway commission.

The Iowa Aeronautics Commission spends 400,000 dollars annually, and has a staff of eleven. **The Iowa Highway Commission spends 150 million dollars a**



year and employs over 4300 people.

It should be no surprise to anyone that when an agency like that is charged with building roads, that is exactly what they are going to do.

Last year, they literally could not build them fast enough.

Still, the Highway Commission does what it is supposed to do very well. The fact that in a given year, the Highway Commission spills more money than the cities will probably see is not their fault. And besides, there are other ways to get a piece of the action.

Everytime you drive into a town and you look for a place to park and you find it you feed the parking meter; this is a contribution to the automobile, to make a place for it. Property owners within every city are assessed on their property taxes for street improvements for the automobile. This is a direct subsidy for the automobile. Every city that creates a municipal parking lot is creating a subsidy to encourage people to come to that lot. And that lot in turn is taking money out of the tax base. When you put parking lots, for example, in the downtown business district of Des Moines you are taking the most valuable property in Des Moines out of the tax base. You can consider this as a direct subsidy to encourage the use of the automobile. You add up all these subsidies and you'll find that the automobile is a very, very, very expensive and highly subsidized mode of transportation.

As long as we're going to get soaked for using cars it follows we may as well use them with a vengeance—and we do. We landscape with them . . . we sleep in them. We do business in them. We are interested in them. We are entertained by them . . . most peculiarly at times, paying money to watch cars run into each other. We eat in them. We take them on vacations. We pamper them. About two million Americans have put their homes on wheels. So in a sense, we live in them. And most certainly . . . about 65,000 times a year, we die in them.

It's like wiping out the city of Council Bluffs over the next year. **There are some things about driving**

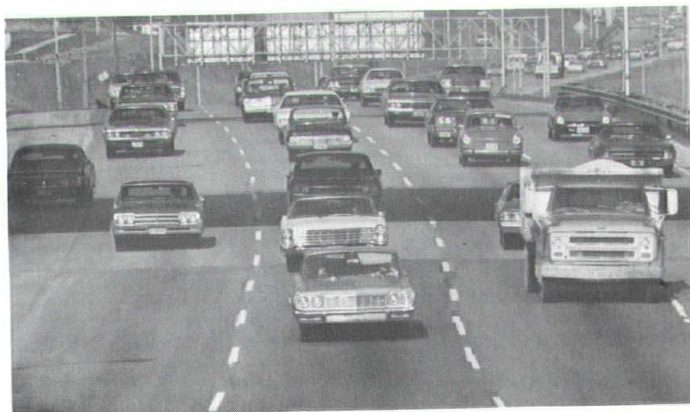
your car that you ought to know. Last year there were 22 million wrecks on American roads. Aside from keeping a lot of insurance men and lawyers employed, it also injured over four million people. If you drive a car with any degree of regularity, you are almost doomed to an accident. Fifty-five percent of you will have it within the next three years, and 94% will pile up sometime in the next ten years. Those are obviously not red hot odds. There must be a reason short of death wish that we cling to our cars.

At the moment Des Moines is facing considerable problems looking ahead. Although not as severe or intense as those that inflict the larger metropolitan areas. I think the saving grace for the smaller metropolitan areas such as Des Moines . . . that is if they look back, listen to their research properly, they can by various forms of judicious planning avoid the most acute problems which face our larger and older metropolitan areas. This is a question of whether human beings can learn from experience, and it remains to be seen what the answer will be.

The prognosis is this . . . By 1990 you will be making more money . . . There will be about 200,000 cars in Des Moines—two for each family. There will be little if any public transportation, and what there is will utilize buses in some yet undefined way.

But in 1972 the salient point about Des Moines transportation crisis is this . . . there is no transportation crisis. And if Des Moines' economic base and population remain static there won't be one in the foreseeable future. Remember, the city has been rather adept at avoiding great change in the past.

But with all of the vagaries of the future, there is one certainty and its got something to do with supply and demand. You and I will drive our beloved cars until we approach psychic collapse or bankruptcy or both. When we are finally forced to spend inordinate periods of our workday in traffic jams—or shell out \$65.00 a month to park downtown—or find it impossible to move or breathe in the city, then and only then will we rise up in splendid indignation demanding that our elected officials do something about that damned transportation in the city. Until then, I'll see you on the freeway.



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One of the most bold parts of the plan is the public acquisition of over one million acres of private land in and around the 60 metropolitan areas with populations over 500,000, where 80 percent of American growth is now taking place. Emphasizing that public control of land in order to guide development is not a new concept, but was followed by the founders of our nation in shaping the growth of Washington, D.C.; Philadelphia, Pennsylvania; Savannah, Georgia; and other cities, the Task Force recommended that we return to this old American principle (estimated cost at \$5 Billion).

The land purchased now would appreciate in value in a few years to the point where its original cost would be recovered along with much of the cost of preparing the land for development.

A series of tax incentives should be instituted to promote building and rebuilding at the neighborhood scale. This would be part of a recommended tax structure which would move away from property tax toward a broad based taxation at state and federal levels. Present Internal Revenue codes encourage

the quick buy-and-sell posture for the developer, discouraging his staying around to make certain that the costs and concerns of management and upkeep are given equal consideration to the cost of construction.

Major governmental changes are proposed:

1. At the federal level, a national development corporation to handle federal grants and consents; dealing with counterpart state, local and private agencies; and tapping national money markets.
2. At the state level, development corporations emulating and going beyond the pioneering example of New York State.
3. At the local level, public and public-private corporations subject to area-wide planning and participation.

We've listed just the highlights of a very comprehensive and detailed report and plan. As stated in the introduction: "This report is about America at its growing edge. It outlines a set of policies that can enable this nation, as a responsible member of a threatened world of nations, to shape its growth and improve the quality of its community life."

The challenge is clear. The report has the unanimous approval of the Board of Directors of the AIA. In the time since its release in January, Board representatives from the AIA's 18 regions have been conducting discussions around the country about the report—its goals and implications—in preparation for the National AIA Conventions in May.

We're confident that the report will be approved—probably revised or added to or improved after much discussion and debate—but approved as a background for action by the architects of America.

GF 40/4 Stacking Chair



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J. F. Clarke House, Fairfield, Iowa

Wesley I. Shank

19

This article presents the findings of one historical study of Iowa architecture; funded by a grant from the Iowa Arts Council and Iowa State University.

Edited for publication

The Clarke house, its overall outline, long horizontal eaves, bands of windows, plainness of wall surfaces, and excellent condition do not suggest a house designed in 1915.

Advanced spacial planning can be seen in the interrelationship of the entrance hall, living and dining rooms; all subdivisions of one large space. The volume of the fireplace and chimney, with the two attached screen walls, pierced by a wide opening extending from the door and window heads to eye level, provide privacy and visual continuity into the adjoining spaces. The prototype of open planning is Frank Lloyd Wright's Willits House of 1902 and Mies Van der Rohe's Brick Country House of 1923 and the German Pavilion at Barcelona in 1929.

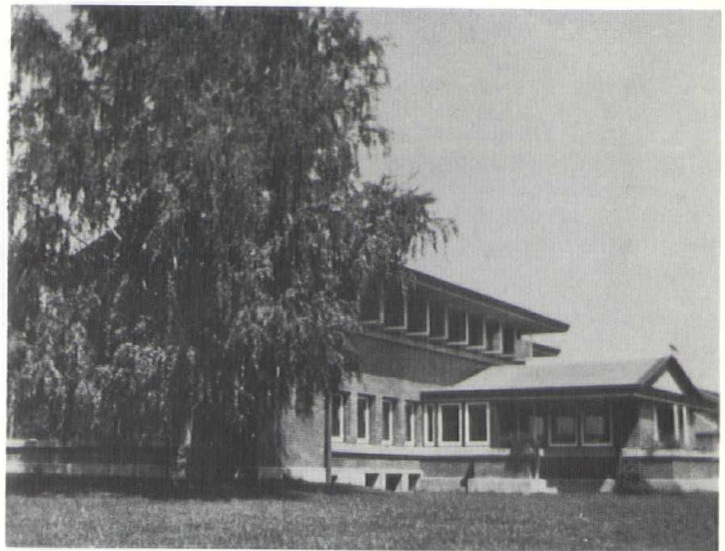
The circulation is efficient, the main rooms are oriented to sunlight and the garden. For summer comfort cross ventilation is provided in most of the rooms. The sun porch projects into the garden to take advantage of summer breezes. Window screens and storm sash are mounted on the inside of the windows, allowing easy and safe removal. The door and window trim and baseboards are flat and simple flush planes, unusual in 1915.

Working drawings were executed comparable to contemporary work and are indicative of quality professional service. The architect, Francis Barry Byrne, trained for six years in the office of F.L.W. His work is simple and refined in detail. He collaborated closely with Alfonso Ianelli on the interior glass windows with a few small squares of colored glass to enliven the linear pattern. Unlike Wright, he used simple decorative treatment, ceilings free of linear patterns and wood, bas relief sculpture above the fireplace and natural earth colors.

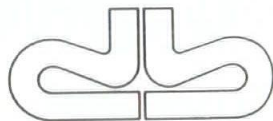
The exterior fence and gate screening the kitchen entrance and the balcony above the front door are ultramarine blue which harmonizes with the dark red-brown brick walls.

The client, Dr. James Frederic Clarke, a doctor of medicine, received his medical education shortly after some of the most important discoveries of medical science. He lectured on hygiene at the University of Iowa, was first in the county to use X-rays, performed the first appendectomy there, served two years in WWI, organized a medical unit which served in France, and assumed public responsibility instrumental in the construction of the county hospital. He also served as mayor and state legislator.

The owner and the architect were men with progressive ideas, each in his chosen profession. The house stripped of nostalgic design, is as progressive as the men who created it.

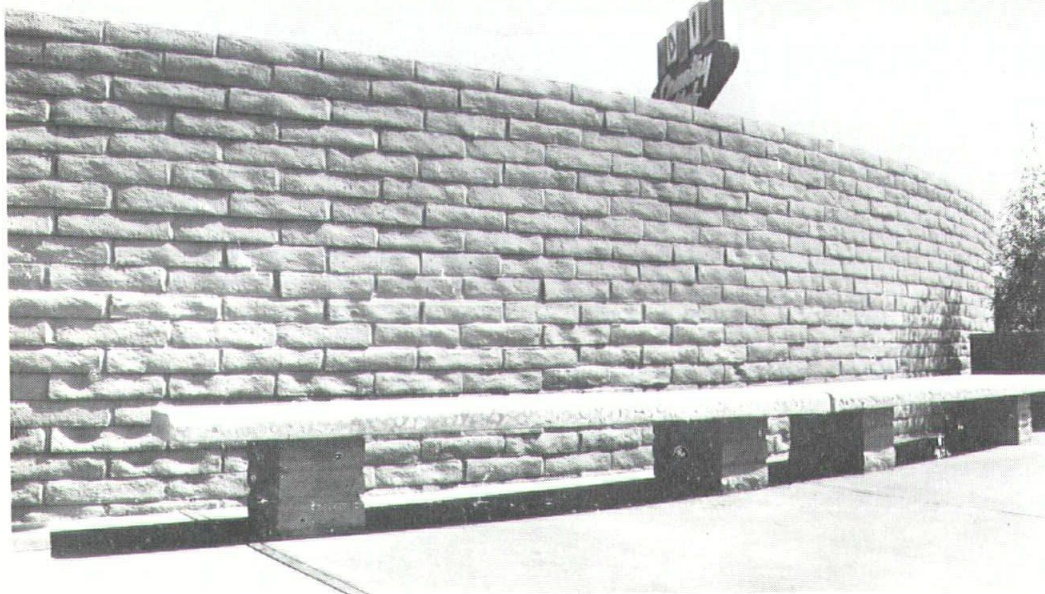


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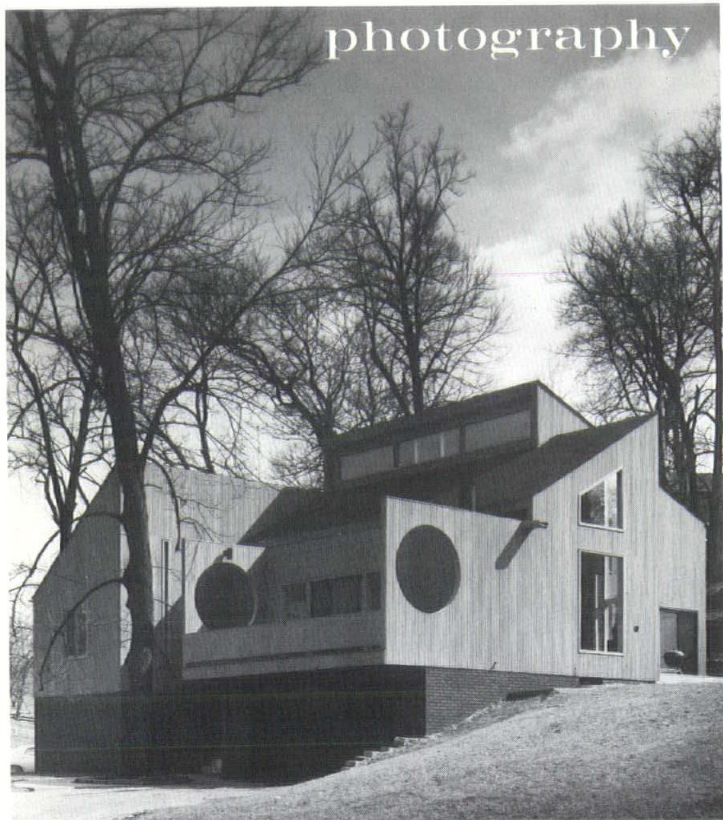
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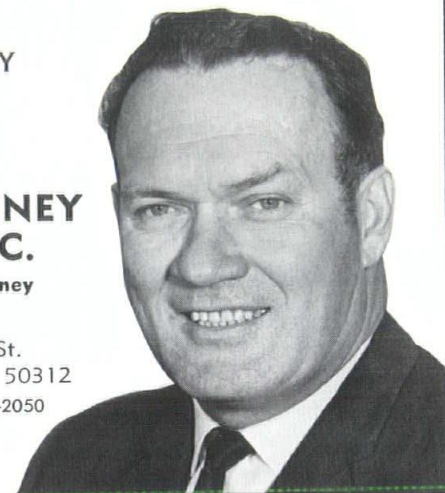
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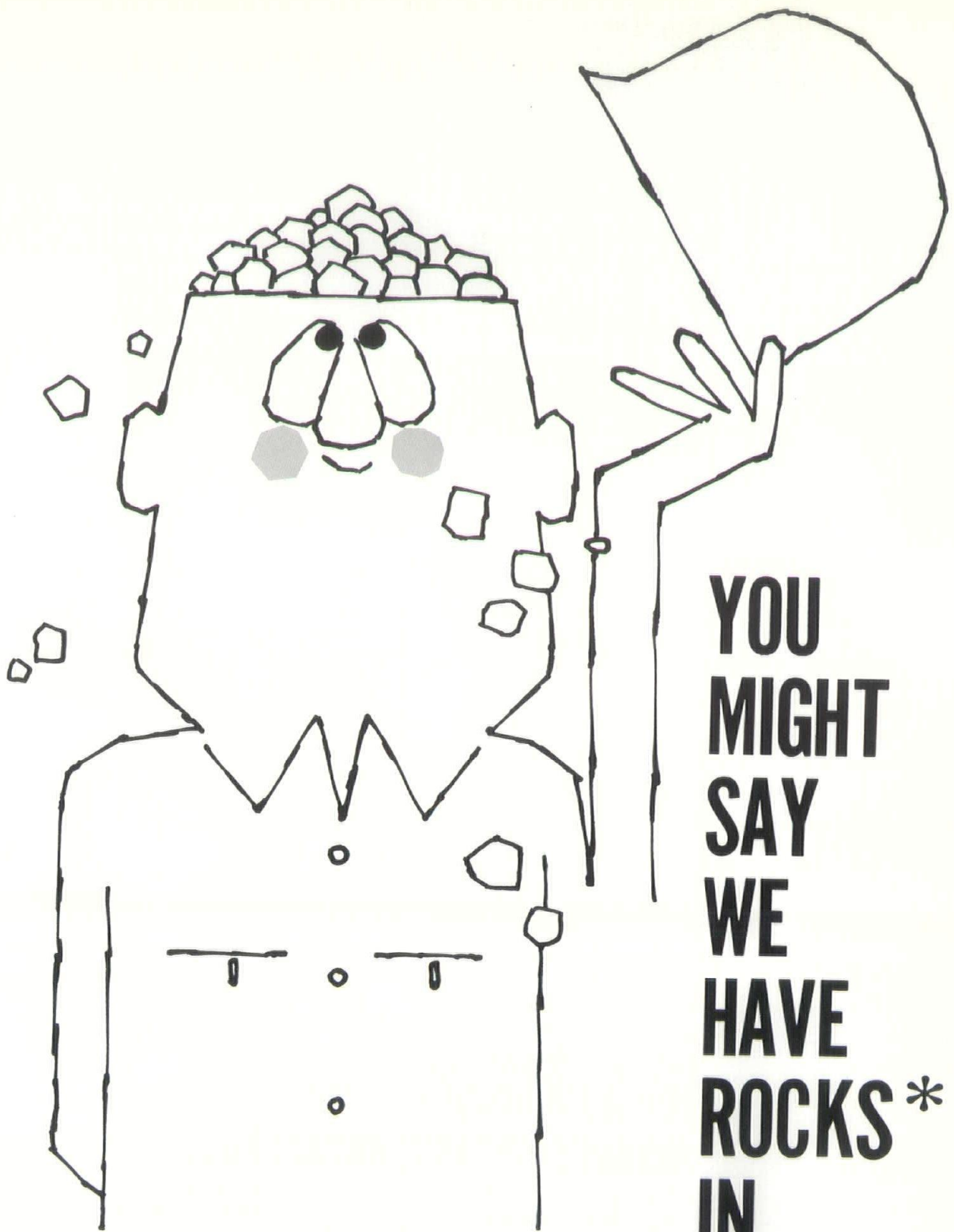
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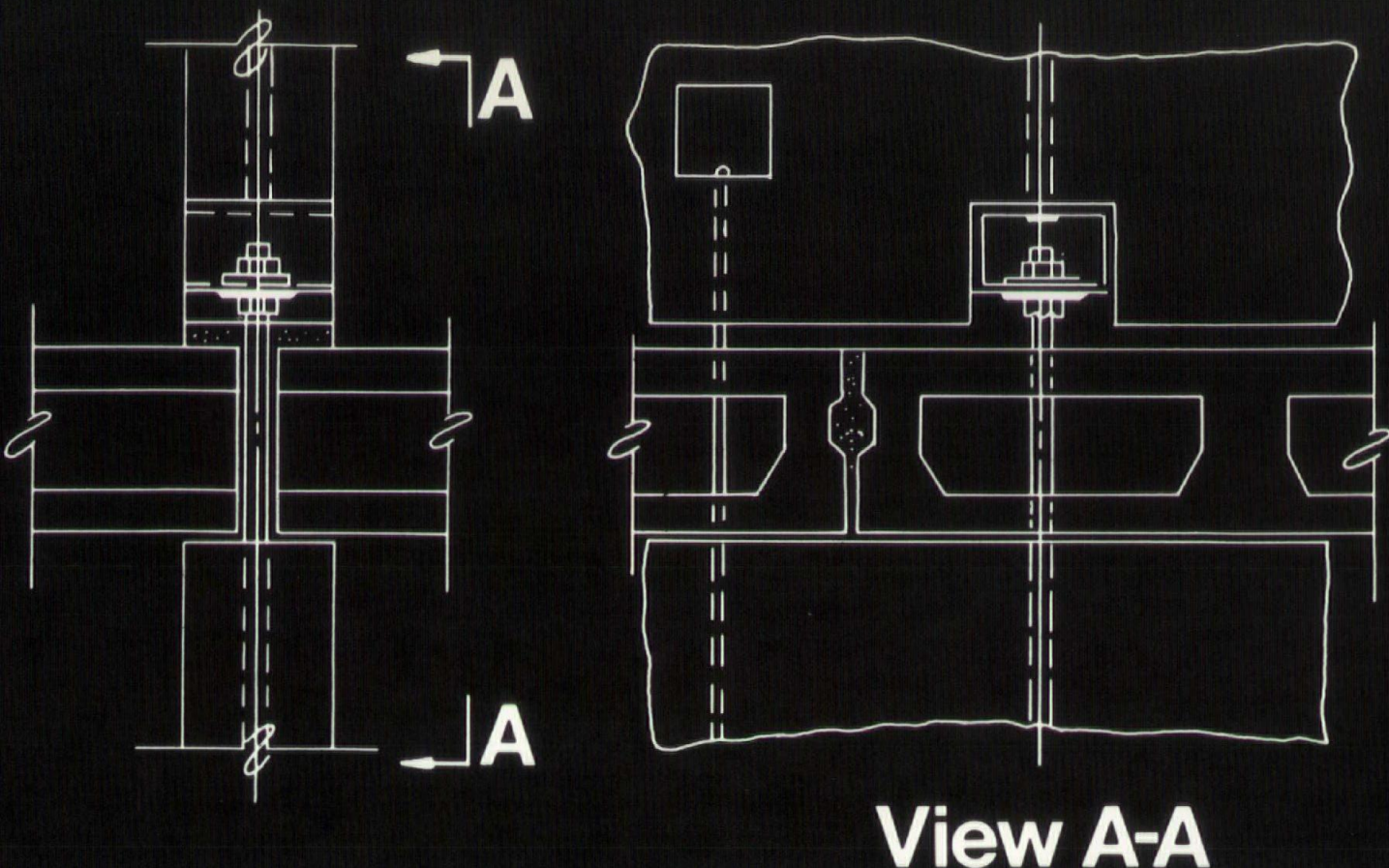
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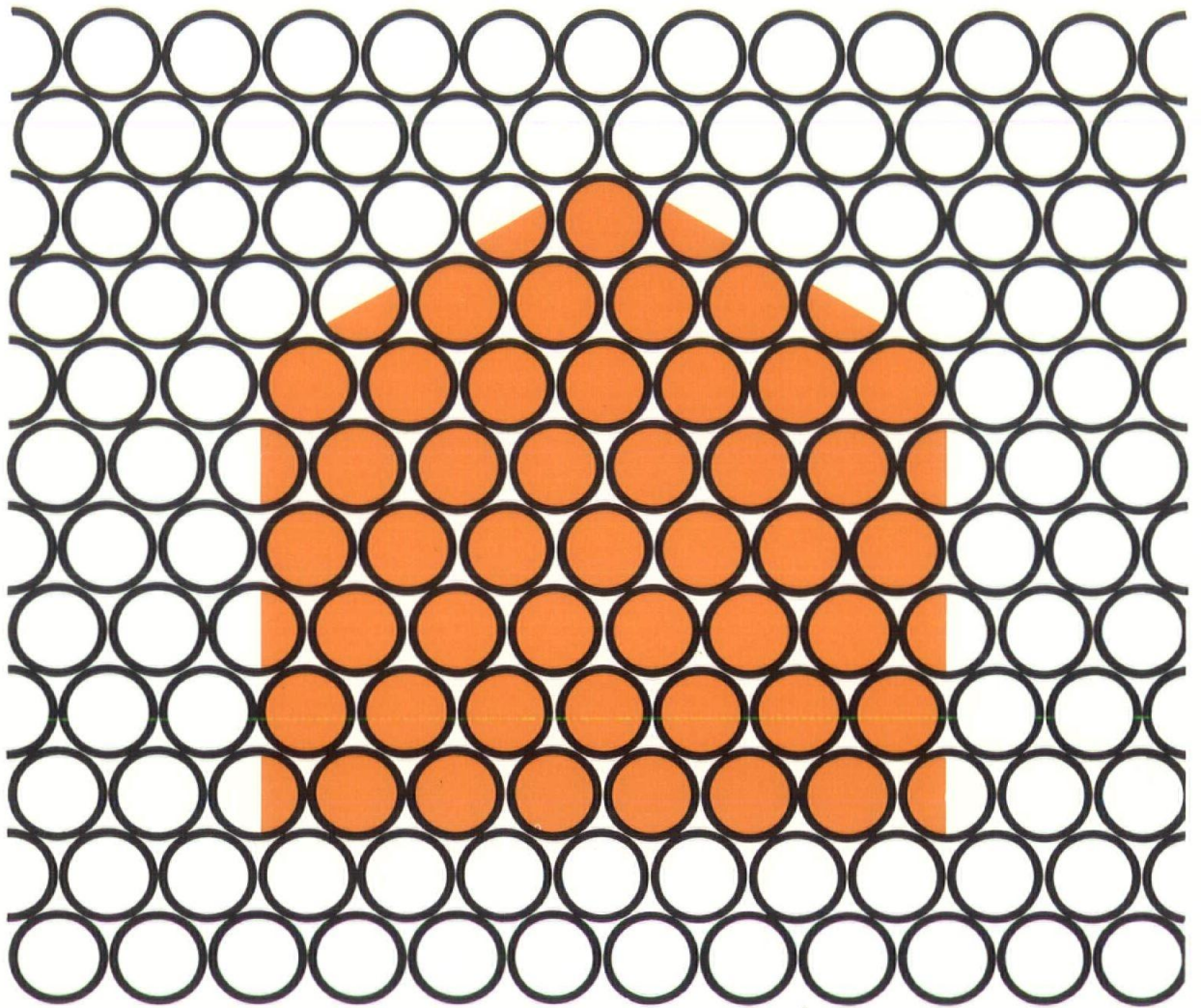
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