DDE/hew

February 4, 1953

MEMORANDUM FOR DR. HAUGE:

Herewith an outline study prepared for me by Mr. Walker G. Buckner (partner in Reynolds and Company at 120 Broadway, New York) on the general subject of building a highway system in the United States as a series of self-liquidating projects.

Included in the study are suggestions, also, concerning the building of parking facilities in cities, and high-speed highways traversing some of our big cities.

There is mentioned, also, the subject of rent control. And there is a list of the various authorities that Mr. Buckner has conferred with in producing his outline.

The major portion of the study deals with a highway system.

I am personally convinced that, in a number of fields, this Administration will have to come forward, at a reasonably early date, with a constructive program that will be designed to meet, in a well-rounded and imaginative way, the constantly increasing needs of a growing population.

Our cities still conform too rigidly to the patterns, customs, and practices of fifty years ago. Each year we add hundreds of thousands of new automobiles to our vehicular population, but our road systems do not keep pace with the need. In the average city today, many of our streets become almost useless to traffic because of the necessity of home owners for using them for parking.

While this entire subject of vehicular traffic is but a small segment of the great program that must attract our attention, there is

nevertheless no reason why we should not proceed to its thorough study so as to have it ready for inclusion into a broad plan to be developed later.

To the greatest possible extent, all these projects should be locally controlled and owned. Ownership could be by municipality in many cases, and by states in others. Some of them could be privately owned. Still others could be under the control of an Authority something on the order of the New York Port Authority.

In appropriate cases, I think the Federal Government could well guarantee bonds, but we should not create a new demand for governmental funds as such. There might be some occasional departures from the rule -- but only for reasons so unusual as to make their exceptional character obvious to government.

While we were still in New York, Mr. Buckner gave me a preliminary paper on this matter. I think I already handed that document to you.

I request that you be my representative in undertaking with interested departments of government the kind of study herein roughly indicated. I should like to have plans crystallized and developed so that significant parts of it could be initiated without completion of the entire plan, but with the certainty that the part started will fit logically and efficiently into the whole. By and large, the timing of construction should be such as to have some effect in levelling out peaks and valleys in our economic life.

From time to time, please give me an informal report of progress.

DE

Survey of Some Potential Self-Liquidating Projects
by
Walker G. Buckner
Feb. 4, 1953

SUMMARY

Working with men who have participated in at least 70% of all existing toll bridges, roads, parking facilities and arterial highways, I have outlined a list of such self-liquidating projects.

10,000 miles of proposed and future toll roads would cost (see map)	$6 billion
Terminal Parking Facilities	$1 billion
Arterial Highways	$1.5 billion
Flood Control	
City Planning	

Survey of Some Potential Self-Liquidating Projects
by
Walker G. Buckner
Feb. 4, 1953

There are certain projects which are self-liquidating which would materially increase the national efficiency. These projects might be started at the time of a general decline in industrial activity.

Some of these projects can be constructed by private enterprise and the funds provided by private capital. Financing, if insured by the Federal Government, would make it possible to raise large amounts of money at substantially reduced cost to the various projects which would individually be too small to advantageously market their bonds. This type of obligation could be sold as partly taxable and partly tax exempt. Some of the bonds could mature serially in from one to twenty-five years, others could be long term bonds with special features after maturity. In all probability, projects might be financed even though money rates double their present level as higher interest rates would not materially extend the time required to liquidate the indebtedness.

All projects should be self-supporting and should not increase national indebtedness. In the opinion of competent engineers these projects should pay out both interest and principal in full. Nevertheless, some bankers may have reservations on this point which can be overcome by some form of federal insurance.

Some of these projects are:

Turnpikes
Terminal parking facilities
Arterial highways in cities
Irrigation and flood control
City planning

TURNPIKES

Present Situation of Toll Turnpikes in the United States

	Miles	Cost (Billions)	
Completed 9 projects	752	$.606	
Under Way 6 projects	1,150	1.35	
Proposed	2,400	2.1	$9.2
Future Additions	7,800	5.8	

These turnpikes are probably self-liquidating both as to interest and return of capital funds necessary for their construction.

These projects should be considered where they would be completely paid out in perhaps fifty years. The program would include the construction of turnpikes which would be of great value for national defense. Following is a list of possible future additions* totalling 7800 miles which might be considered:

Washington to Jacksonville, going inland west of Savannah and Charleston.

Chicago to New Orleans generally covering the Mississippi Valley with a branch from some point such as Paducah to Jacksonville by Nashville and Chattanooga.

Chicago to the neighborhood of San Francisco by Springfield, Kansas City, Salt Lake City

Neighborhood of Fort Worth, Texas, to Los Angeles or San Diego.

San Diego to Seattle, following inland route.

Kansas City south to Tulsa, Dallas and Houston.

Extension of the West Virginia Turnpike north to Cleveland and south to the Jacksonville-Washington Turnpike near Charleston, South Carolina

Cairo to Jacksonville

* See map attached

TOLL ROAD PROGRAM

January 15, 1953

	Miles	Cost Per Mile (thousands)	Cost (millions)
COMPLETED (per Engineering News-Record June 19, 1952)			
Overseas Highway - Key West	122	$ 70	$ 8.5
Westchester County Parkways - New York	25	1,000	25.
Merritt and Wilbur Cross Parkways - Connecticut	67	567	38.
Pennsylvania Turnpike-King of Prussia to Ohio Line	327	736	240.75
Maine Turnpike-New Hampshire line to Portland	44	468	20.6
Buccaneer Trail - Florida	17	271	4.6
New Hampshire Turnpike	15	500	7.5
New Jersey Turnpike	118	2,161	255.
Denver-Boulder Turnpike	17	353	6.
	752	805	$ 605.95
UNDER WAY			
New York Thruway	535	935	$ 500.
Turner Turnpike-Tulsa to Oklahoma City	88	432	38.
Pennsylvania-New Jersey Turnpike connection	39	1,282	50.(+ 50 for bridge)
Ohio Turnpike	241	1,353	326.
Garden State Parkway - New Jersey	158	1,804	285.
West Virginia Turnpike - Charleston to Princeton and Bluefield	88	1,091	96.
	1,149	1,127	$1,295.
say	1,150	1,174	$1,350.

TOLL ROAD PROGRAM

January 15,1953

PROPOSED	Miles	Cost Per Mile (thousands)	Cost (millions)
Connecticut Thruway - New York line to New Haven	40	$ 3,000	$ 120
Florida Turnpike-Jacksonville to Miami and Tampa	446	571	255
Georgia Turnpike-Coatesville to Tennessee line	65	800	52
Indiana Turnpike	155	900	140
Kentucky-Louisville to Elizabeth Town	40	600	24
Massachusetts-Boston (Route Mass.128) to New York line	130	1,154	150
Maine Turnpike - extension to Augusta	58	1,121	65
Michigan-Detroit to Indiana line near Lake Michigan	190	900	170
-Detroit to Toledo	45	1,000	45
-Detroit to Flint	35	1,000	35
New Hampshire-Massachusetts line to Concord	40	900	36
-Portsmouth to Rochester	20	800	16
New Jersey Turnpike - extension to New York line	15	3,333	50
- connection with Holland Tunnel	8	11,250	90
- across state	55	1,091	60
New York Thruway-extension to Massachusetts line	23	850	20 (+ 50 for bridge)
-Buffalo to Pennsylvania line	80	900	70
North Carolina Turnpike - Charlotte to Virginia line	56	982	55
Tennessee - Knoxville to Memphis and Chattanooga	575	600	345
Texas - Dallas to Fort Worth	30	900	27
Virginia - Old Dominion Turnpike	75	1,053	79
- Richmond-Petersburg by-pass	30	1,000	30
West Virginia Turnpike - Charleston north) - Princeton to Virginia Line)	60	1,000	60
Wisconsin - Twin Cities to Illinois line, near Chicago	150	600	90
	2,421	860	2,084
	say 2,400	875	2,100

TOLL ROAD PROGRAM

January 15, 1953

	Miles	Cost Per Mile (thousands)	Cost (millions)
FUTURE			
Washington to Jacksonville (excluding Richmond by-pass)	650		
Chicago to New Orleans	950		
Springfield, Illinois to San Francisco	2,000		
Fort Worth to Los Angeles	1,300		
San Diego to Seattle	1,200		
Kansas City to Houston	700		
Extension of West Virginia Turnpike	250		
Cairo to Jacksonville (inc.Georgia Turnpike)	550		
	7,600	$750	$5,700
	say 7,800		$5,800

Suggested Procedure

Construction

Construction of these projects could be proposed by a national board which would determine whether or not it is feasible for a toll charge to pay for a specific project over an extended period of years.

The Department of Defense could review the projects and recommend any changes which might assist our national defense.

Administration

Administration of these turnpikes might be by state board subject to supervision by a federal board.

Financing

There are unique opportunities provided in the financing of this type of turnpike. This is due to the fact that the revenue in the earlier years might be inadequate yet in the later years more than required. To meet this situation, the issuing authority might consider:

1. Issue a portion of the bonds to the public and hold the balance until such time as the income would be sufficient to issue the remaining bonds.

2. Issue the entire amount of the bonds and make contributions for the payment of interest until the revenue from the project is sufficient to pay the interest. Ultimately the revenues will be sufficient to repay the capital as well as the interest.

This obligation will appeal particularly to pension funds. From the twentieth year to the fortieth year bonds could be retired serially. After its principal had been repaid, the pension fund could then receive a percentage of the gross operation of the project for a period of perhaps an additional twenty years. This would meet the requirements of the pension fund which increase with the passage of time as well as the requirements of the project whose revenues increase over a period of time.

TERMINAL PARKING FACILITIES

A condition exists generally where traffic flows to city limits by highways and airways where it then becomes congested. No adequate parking facilities are provided. This is damaging the efficiency of our cities which is their main reason for existence. Here are two examples of the effectiveness of spending money for parking facilities:

Example No. 1: In the City of New York it has been estimated that if cars were not parked in the city streets, present traffic could be quadrupled without creating a traffic problem.

Example No. 2: It has been estimated that two 500 car garages could accommodate all the cars which can park on both sides of Fifth Avenue from Washington Square to 60th Street in New York City.

These examples will aid in visualizing the large areas which would be relieved of parking problems by a relatively small number of parking garages.

Suggested Procedure

We have considered the possibility of freezing real estate assessments of municipalities on such projects and also the possibility of eliminating real estate taxes on such projects. However, experience has shown that whenever a concession of this kind is granted by a municipality it requests power to exert control over the project which is detrimental. The property required for these projects would probably have to be acquired by condemnation proceedings.

Construction

An appointed board of approval serving without salary might approve applications for loans for the construction of parking garages which should meet certain requirements:

a. Local board approval
b. State board approval
c. National board approval

Administration

Administration of projects might be by a local board, subject to review by state and national boards.

It has been suggested that there be no restriction on parking rates as economic factors should probably determine the construction and management of these garages.

There are two methods which might be used in the construction and administration of these terminal parking garages:

1. Private owner who invests in the same general manner in which F.H.A.projects are financed.
2. Local parking authority

There must be some protection afforded the parking garages in the form of legislation and enforcement to prevent free street parking which would be competitive. Also, the relationship between metered street parking and parking garages must be studied to give adequate protection to those building parking garages.

Financing

Securities which would be issued for the construction of terminal parking facilities would be very attractive to individuals and institutions requiring short term obligations. This is due to the fact that these projects produce their maximum income in a short period of time. In all probability these securities should be issued as serial obligations. The question of whether or not they are taxable should be determined at the time they are issued.

It appears that $750 million to $1 billion could well be spent within the next fifteen years to provide needed off-street parking facilities assuming private initiative does not supply the need.

ARTERIAL HIGHWAYS IN CITIES

There are many cities where there are not adequate facilities to carry traffic to the center and from the center to the outskirts. There are in general poor transportation facilities from airports and highways to the centers of our cities.

There is very little experience in the field of arterial highways in cities with toll facilities. It constitutes perhaps the largest potential field of all of the projects considered.

It is suggested that the problem of toll collections in the centers of cities be given thorough study and perhaps in some cases experiments should be made to determine how the projects would actually function.

The principal cost in arterial highways is the securing of right of way. Condemnation proceedings need not materially delay construction. Awards are made for the condemnation in court actions which take approximately one year. However, competent engineers can estimate an approximate cost of these awards prior to the time they are actually made. Construction can start prior to the completion of condemnation awards.

It has been estimated that these projects create values in excess of a ratio of 2 to 1 of their cost. Material cost is largely made up of labor. Not only do these projects result in expenditures for direct labor and materials but also for the services that are provided in the communities during the period of construction.

Construction

Local authorities might be created which would authorize construction of these throughways.

Administration

These projects might be approved by an appointed board of approval serving without salary.

a. Local board approval
b. State board approval
c. National board approval

The local authority should manage the project subject to review by state and national boards.

Financing

Although there is a great deal of work to be done in this field, the nature of the financing would have to be developed to suit the requirements as they arise. The extent to which arterial highways in cities can be carried will have to be determined by engineering work on each project.

It appears that $1 billion to $1.5 billion could well be spent within the next fifteen years on such projects.

IRRIGATION AND FLOOD CONTROL

The following men might be contacted for information regarding irrigation and flood control:

Mr. Wesley Horner
Horner & Shifrin
903 Shell Building
St. Louis, Missouri
Chairman of Committee on Water Resources, engineer, has just done large report on all water resources prepared by all engineering societies in the United States.

Mr. Thorndyke Saville, Dean
New York University School of Engineering
University Heights
New York

Mr. Royce J. Tipton
610 Insurance Building
Denver, Colorado
Reclamation Service, familiar with the financing of irrigation and flood control projects

Mr. Malcolm Pirnie
25 West 43rd Street
New York 18, New York
Engineer, familiar with water works

CITY PLANNING

Mr. Robert W. Dowling, whose background is given on page 12, suggests the following: It is his opinion that substantial real estate values can be created in cities simply by removing the present buildings and streets in some sections and replacing them with fewer but wider streets. Mr. Dowling has had a great deal of experience in this field in Pittsburgh. He has recently been employed by the Pennsylvania Railroad to do an evaluation of this idea in Philadephia. Many years ago he did something of this nature in Parkchester, New York City. I feel that these ideas can best be presented verbally by Mr. Dowling, who believes that he can show how to stop the decay which is going on in our cities.

Statement by Mr. Enoch R. Needles

"The Federal Government collects about $2 billion in various forms of taxes on gas, automobiles, etc. Only about one quarter of what is collected or about $550 million is spent for Federal highway aid.

"It has been proposed that the Government make Federal highway aid available to the states for highway construction with the states raising the other half of the money any way they see fit, by general obligation bonds, gas taxes or revenue bonds. If revenue bonds are sold, tolls will be collected to pay off the state share from the sale of the bonds.

"If Federal aid should be doubled or tripled and if on toll roads or revenue bond projects federal aid were cut to 25% instead of 50%, it would go a long way toward making some of the projects feasible which are not at the present time.

"The proposal of having the Federal Government get into toll road situations and integrate the program is receiving more and more support from different sources all the time."

NEEDLES, ENOCH R.

Mr. Needles is a past president of the American Institute of Consulting Engineers and also the American Road Builders' Association. He was a Colonel in World War II in the Office of Chief of Engineers. He is a consulting engineer, specializing on bridges and major traffic ways. His firm is Howard, Needles, Tammen & Bergendoff, of New York and Kansas City. They have served as engineers on revenue bond projects for over twenty-five years. Some of their principal bridges include the Delaware Memorial Bridge and eight major bridges over the Mississippi River. They have also served as general consultants on the Maine Turnpike, the New Jersey Turnpike and the West Virginia Turnpike. They have served or are serving in other engineering capacities on the Ohio Turnpike, the Colorado Turnpike and the Oklahoma Turnpike. They were recently advised of their selection as General Consultant on the proposed Massachusetts Turnpike. For many years they have numbered among their clients several of the more important railroads, many state highway departments, and departments of the Federal Government.

DOWLING, ROBERT W.

Mr. Dowling is connected with the following organizations:

Municipal Art Commission
Citizens Budget Commission
Regional Plan Association
Commerce & Industry Association
Citizens Zoning Committee
Borough of Manhattan Advisory Planning Board
American Scenic & Historic Preservation Society
Down Town Manhattan Association

Housing and Planning Consultant:

Parkchester
Stuyvesant Town
Clinton Hill
Peter Cooper Village
Fordham Hill,
all of New York City

Consultant on Gateway Center, Pittsburgh, built for Equitable Life Assurance Society of United States

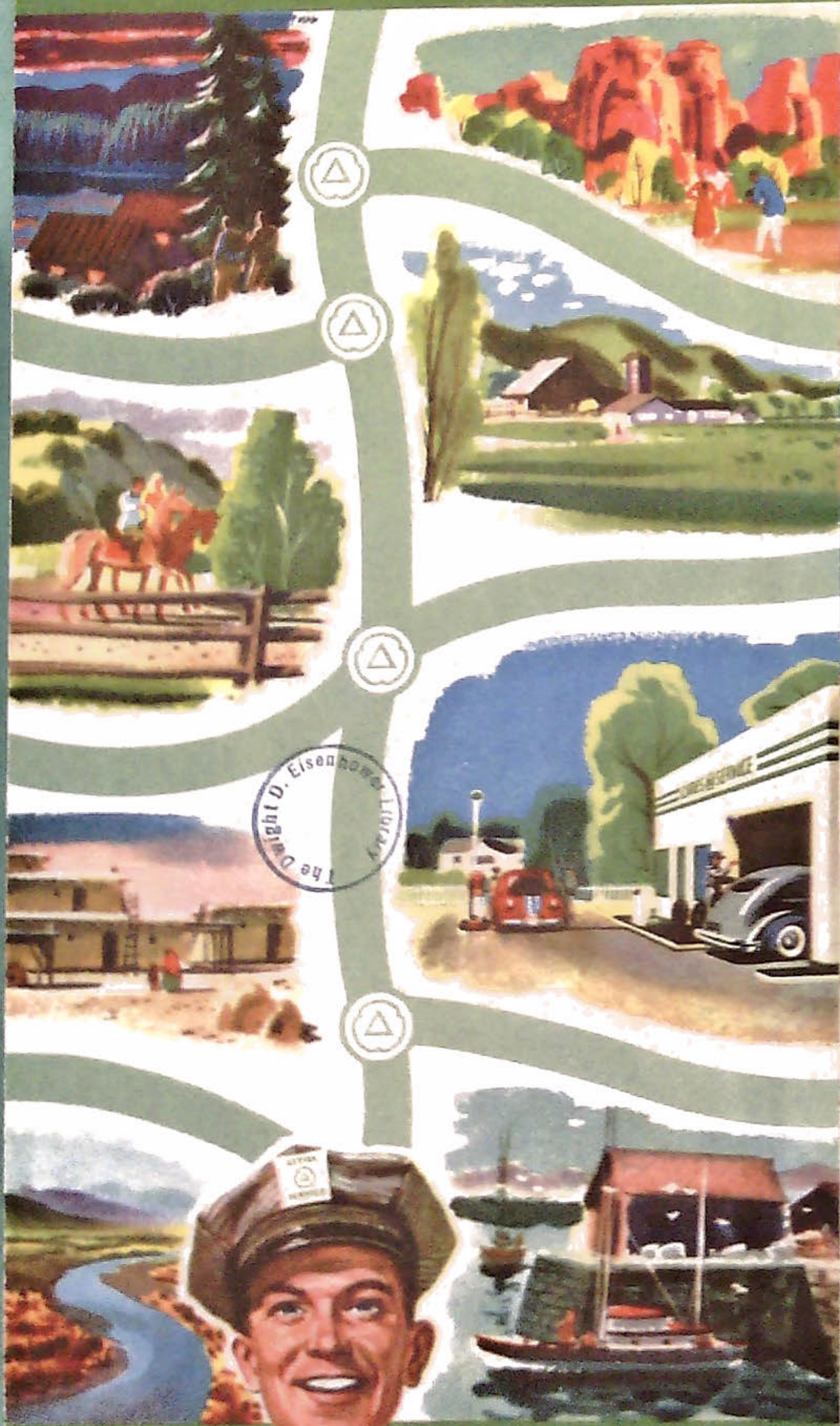
Awarded Gold Medal of Honor for "Meritorius service in civic development", by Municipal Art Society March 15, 1950

DURPEE, GEORGE V.

Mr. Durpee is President of Coverdale & Colpitts. This firm has participated in over 70% of the traffic studies of turnpikes, bridges, arterial highways, and off-street parking facilities which are now in contemplation or in existence. Coverdale & Colpitts has made 286 traffic studies in 34 states.

CITIES SERVICE

TOLL HIGHWAYS UNITED STATES



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