I N D E X

PROPOSED FEDERAL AUTHORITY TO FINANCE AND ACQUIRE LAND FOR TRAFFIC FACILITIES AND RELATED DEVELOPMENTS

Three general methods are available for the total or partial self-liquidation of the cost of traffic facilities. These are:

1. Tolls collected from the traffic,
2. The acquisition of bordering land and subsequent sale or lease at a profit (method of excess taking),
3. Operation at a profit of certain traffic services such as gasoline filling stations, lunch rooms and rest hotels or the lease of concessions to supply such services.

The possibilities of successful use of each of these methods and the limitations of each are indicated as follows:

Tolls. - Liquidation of the cost of traffic facilities through toll collection depends upon the attraction of toll-paying traffic in sufficient volume to recover the cost of the facility at a rate of toll payable by the traffic. As toll highways must generally compete with more or less adequate free highways serving the same traffic sources, their patronage depends upon the offering of substantially more attractive facilities. Such superior attraction, at the present stage of free highway development, must

include complete elimination of cross traffic at grade, a maximum of separation of the lines of moving traffic on the toll facility itself, complete or virtually complete elimination of obstruction and danger of collision with vehicles entering the toll highway, involving the necessity of limited access and entrances at relatively long intervals. As the large majority of existing highway usage consists of trips of shorter length than the essential interval between entrances to a toll facility, the proportion of traffic now moving over free highways paralleling the line of any proposed toll facility which could use the toll facility, if offered, is necessarily a relatively small part. Of such part a considerable proportion must be counted unavailable because of inability or unwillingness to pay any toll. This is inevitable in view of the fact that the large percentage of highway users are persons whose incomes lie in the groups below $2500 per year. Combination of the above factors; namely the necessity of offering super-facilities involving high costs, the elimination of short distance traffic, and the elimination of an additional group of users who are unwilling or unable to pay, results in the requirement of a relatively high rate of toll, payable by only a small proportion of the existing free highway movement. In general there is a greater prospect of the use of toll facilities by trucks than by passenger cars. At best it is believed that no more than 1/3 of the total movement which would use a free superhighway with limited access can be counted upon as available for the payment of tolls on a competing toll facility. This would generally be from 10 to 15 percent of the existing total movement on the present main highways between similar destination points.

In general the prospects of self-liquidation by tolls are more favorable for tunnels and bridges than for highways. In the case of these latter facilities, the competition of free facilities may generally be excluded and the toll cost offset by savings of time, distance, and vehicle operating cost; 100% self-liquidation is possible where the facility is wisely located.

Excess Taking. - The acquisition of an excess of land bordering upon a traffic facility in rural territory with the expectation of subsequent disposal at a profit is generally inconsistent with operation of the traffic facility as either a toll facility or a freeway of limited access. Increase in the value of the land may generally be expected only where free access to the traffic facility is provided. Where access is denied the effect of the facility upon the value of bordering land may be actually detrimental. There may be, however, a considerable possibility of profit in the acquisition of land at or in the near vicinity of the entrances to either a toll facility or a freeway of limited access. Acquirement of considerable tracts of land at such points would permit the development of what may be described as highway towns and such tracts offer attractive opportunity of development as the sites of low-cost housing, rural resettlement and a decentralized, semi-rural industry. Government acquisition of the land will permit absolute control of the development and a substantial profit may be possible over a period of years which will offset the cost of the traffic facility.

It is in cities that the method of excess taking offers perhaps the most attractive possibilities. The experience in London with the financing of the Kingsway and Northumberland Avenue improvements is indicative of what may be expected.

The Kingsway improvement was sanctioned in 1899. It resulted in the creation between Holborn and the Strand of two great thoroughfares - Kingsway and Aldwyck - out of a mass of mean streets and slums which formerly stood on the site. The scheme provided for the construction of new thoroughfares 100 feet wide, having a total length of approximately three-quarters of a mile. More than 600 properties, covering an area of approximately 28 acres, were acquired for the improvement and demolished. The area of the land dedicated to public streets was about 12-1/4 acres, leaving about 15-3/4 acres of surplus lands available for recoupment purposes. From these lands the London County Council receives about £ 143,000 annually in ground rents and the buildings erected on the lands have cost approximately £ 5,000,000. A sum of £ 966 a year is received by the Council in respect of betterment charges.

A total of £735,507 has been received from the sale of sites and other sites valued at £225,191 were transferred in settlement of claims on a reinstatement basis. The total debt charges incurred for the improvement to March 31, 1936 (£5,209,563), plus the net debt outstanding at that date (£3,208,607), amounted to £8,418,170. Against this the aggregate rents received, plus the value of the leased sites, amounted to £6,009,931. The difference (£2,408,239) may therefore be said to represent the net cost to the taxpayer up to March 31, 1936. The annual net charges to be carried by taxes (that is, the total debt charges less the rents and improvement charges), which in 1935-36 amounted to £60,752, will be reduced as loan charges diminish. In the year 1955-56 it is anticipated that there will be a small surplus of £2,000. This and ensuing surpluses will be a credit to the tax account year by year. A large part of the debt will become extinguished in 1961-62, so that the total debt charges in that year will decrease by about £114,177. In 1965-66 the surplus for the year is estimated at £143,725, increasing later to £146,000, the debt being finally paid off in 1987-88. The properties will thereafter be an unencumbered asset, so far as existing debt is concerned.

It is understood that a somewhat similar experience has followed the construction of Northumberland Avenue from Trafalgar Square to the Embankment, in connection with which there was a similar use of the method of excess taking for the financing of this new direct artery.

This English experience is of particular interest in view of the urgent need that exists at present in many of the older and larger

cities of the United States, to do three things: (1) Open up the block plan of the old business section so as to provide wider streets for the accommodation of present and expected heavy traffic flows and also to provide really adequate facilities for the disposal or parking of the vehicles of workers during the working day: (2) the cutting through to such business sections of express arteries joining them with the principal rural highways and residential and suburban sections (more than half of all traffic on the main highways approaching most cities is destined to or bound from the business section); (3) the reclamation of the belt of decaying property that generally fringes the old business section, resulting from the outward movement of residents who now find it unnecessary to live close to the places of business, (in this fringe there lies the possibility of providing the additional space necessary for opening up of the business section block plan and also the development of both low-cost and high-cost downtown apartment housing).

The three types of development here mentioned are not simply desirable. They are, as we look to the immediate future, imperative. They can be properly carried out only if they are carried out under a single unified plan which provides for all three. The attempt to deal with them separately will inevitably engender a conflict of purpose and economic loss. If they are dealt with together the large public cost may be in considerable measure recovered by the certain increase in the value of the land and property affected; and this seems to offer the only prospect of public recovery of such costs.

Examples of the effectiveness of express highways joining the business section with the outer suburbs and rural main highways are supplied by the Westchester County Parkways in combination with the improvements of other main arteries, such as the Westside improvements in New York City, and by the recently constructed St. Louis express highway. This latter project has a total length of approximately 41.5 miles, of which 34.7 miles are without, and 6.8 miles within, the city limits. Two important units in the 41.5 mile route lie on developed thoroughfares involving no current improvements. The most interesting section is that which has been built as a depressed freeway within the city, passing under all of the cross streets. While the conception and plan of this section is perhaps not as bold as it might well have been, the excellent express service it furnishes is abundantly indicative of the value of such improvements. The actual cost of acquiring property for the improvement was approximately $825,000, in spite of the fact that a considerable portion of the route lies through a public park. The cost of the construction work was approximately $1,600,000. In this case the method of excess taking was not employed.

Provision of, or Lease of Concessions to Provide, Traffic Services. - On traffic facilities operated either as toll facilities or as freeways of limited access, the control of access and abutting land makes possible a public monoply of the services of motor fuel sale and catering to the subsistence and lodging necessities of travelers. These services may be publicly operated or may be operated through concession to private operators, in either case

at a substantial profit. An interesting example of the possibility in this direction is found in the plan of the German Government to operate rest hotels at convenient intervals along the elaborate system of Reichsautobahnen.

Federal Aid in Acquisition of Rights of Way for Free Highways

The proposed Federal authority would make possible financing of the construction of traffic facilities in any of the above described ways. The authority proposed is intentionally made broad enough also to permit another form of aid to the development of the free highway facilities that are becoming urgently necessary, specially in and near the metropolitan areas. The increase of traffic in such areas is fast making it necessary to enlarge the existing two-lane highways built during the last 20 years to provide four or more lanes. Such multiple-lane highways must, in the interest of safety, have dividing spaces to separate the traffic flowing in opposite directions. Because of the large volume of their traffic, it is highly important that free movement be assured by a control of access and the use of abutting property. All of this will entail the public acquisition of a large amount of right of way in areas where land costs are necessarily high. Each year now the needed mileage increases but its provision by the States is hampered by the difficulty, or in some cases the virtual impossibility, of acquiring the necessary land. In this way a large volume of expensive but absolutely necessary

improvement is being dangerously deferred, and will accumulate a formidable burden of expenditure within a few years. It is highly desirable that this inevitable expenditure be spread over as long a period as possible and, to that end, it is desirable that means be found to aid the States in acquiring the essential rights of way. The means suggested is the purchase of such rights of way by the proposed Federal agency and rental to the several State highway departments, over a long period, on terms which will recover to the United States the amount invested, either without interest or with nominal interest. By this means it is believed that the difficulties (and in some cases constitutional inhibitions) with which the States are confronted in the effort to negotiate loans, may be overcome. It is believed that practically all State highway departments now possess sufficient authority to permit them to pay a rental for right of way supplied, and although in some cases it will not be possible for the present State authorities to commit their successors, it is believed that obligations thus incurred will be as fully honored as any contractual obligations between the Federal Government and the States. It is repeated that the purpose of this method is the provision of right of way necessary to facilitate the construction of vitally needed free highway facilities.

Tentative List of Self-liquidating Projects

There is attached a tentative list of projects involving the provision of traffic facilities which can be set in motion promptly and which will be either in whole or in considerable part self-liquidating.

On certain of these projects there is the probability of operation at a profit. Others will doubtless fail to produce a revenue sufficient to liquidate the investment in them. Taken together there is the possibility that the losses on certain projects will be compensated by profits on others.

The proposal contemplates a pooling of all revenues and liabilities of the suggested Federal Authority and such a selection of projects as to maintain a reasonable balance between revenues and liabilities in the operations as a whole over a period of years.

There is also attached a general outline of the basic features that should be included in legislation designed to create the Federal Authority and to effectuate the purposes herein proposed.

Legislation to set up a Federal Authority for acquiring lands for traffic facilities and for developing excess lands so acquired should embody the following:

1. The Authority should be set up under the Secretary of Agriculture with the Chief, Bureau of Public Roads, as Administrator, the Bureau of Public Roads organization to be expanded and utilized.

2. The Authority should have corporate status, should have a capitalization of $50,000,000, to be subscribed by the Secretary of the Treasury, and should be empowered to issue obligations in the form of notes, bonds, or other debentures of not to exceed $1,000,000,000 in any one year, the total of such obligations outstanding at any one time not to exceed $5,000,000,000. Such obligations should be guaranteed upon their face by the United States and should the Authority be without money to pay the same, principal and interest, when due and on demand such payment should be made by the Secretary of the Treasury who should succeed to all the rights of the holder.

3. The Authority, subject to the Civil Service laws and the Classification Act, as amended, should have power to select, employ, and fix the compensation of such officers, employees, or agents as it may deem necessary for the performance of its duties, and to expend any moneys in its possession in meeting the necessary expenses of its operation.

4. The Authority should be given power to acquire lands, or rights or interests in lands, by purchase, gift, condemnation, or otherwise, and to arrange for the utilization of lands or interests in lands so acquired by sale or lease to the States and their political or other subdivisions or to private persons, firms, or corporations, and to make loans to such private persons, firms, or corporations for the development of traffic facilities or other authorized facilities on such lands.

5. The Authority should be empowered where condemnation is necessary in acquiring any lands or interests in lands to proceed under such Federal or State laws as will most expeditiously place it in possession of such lands or interest in lands for the purpose intended.

6. The Authority should have the power to recapture any lands sold or leased, including any developments thereon, on failure of the purchaser or lessee to carry out the purchase or lease agreement, and to complete such developments and to retain and operate the same pending arrangements for other utilization and operation thereof.

7. It may occur that a whole tract of land adjacent to the right of way necessary for the traffic facility can be purchased at no greater or less cost than to acquire only part of it and to

pay resulting damages to the owner of the remainder. No limit, therefore, which will interfere with acquiring the whole of tracts of land under such circumstances should be prescribed as to width of acquisition.

8. The Authority should have the power to formulate and keep current a program of projects for the location and construction of highways, bridges, tunnels, viaducts, grade crossings, and other structures designed to facilitate traffic flow or reduce traffic hazards, including the development of areas adjacent to such facilities to provide for suitable roadside development, emergency landing fields and flight strips for airplanes, locations for development of industries, low-rent and low-cost housing projects, and other business enterprises.

9. The proceeds of the sale or leasing of any properties by the Authority shall be utilized by the Authority in amortizing its outstanding obligations and in meeting its administrative expenses, the purpose being that the Authority so far as feasible and practicable shall be self-liquidating over a long period of time.

STATEMENT OF ESTIMATED POSSIBLE EXPENDITURES
(By Fiscal Years)

	Total	1940	1941	1942	1943
	(In Millions of Dollars)				
Total for Land - all purposes	491.55	206.85	160.80	87.90	36.00
" " Constr. " "	2,361.15	618.00	961.35	609.20	172.60
Grand Total	2,852.70	824.85	1,122.15	697.10	208.60
Allocated as follows:					
Direct right of way	211.70	89.10	69.20	37.90	15.50
Construction on right of way	1,242.55	324.90	506.05	320.60	91.00
Total	1,454.25	414.00	575.25	358.50	106.50
Excess Land	279.85	117.85	91.50	50.10	20.40
Construction on excess land	1,118.60	293.10	455.30	288.60	81.60
Total	1,398.45	410.95	546.80	338.70	102.00

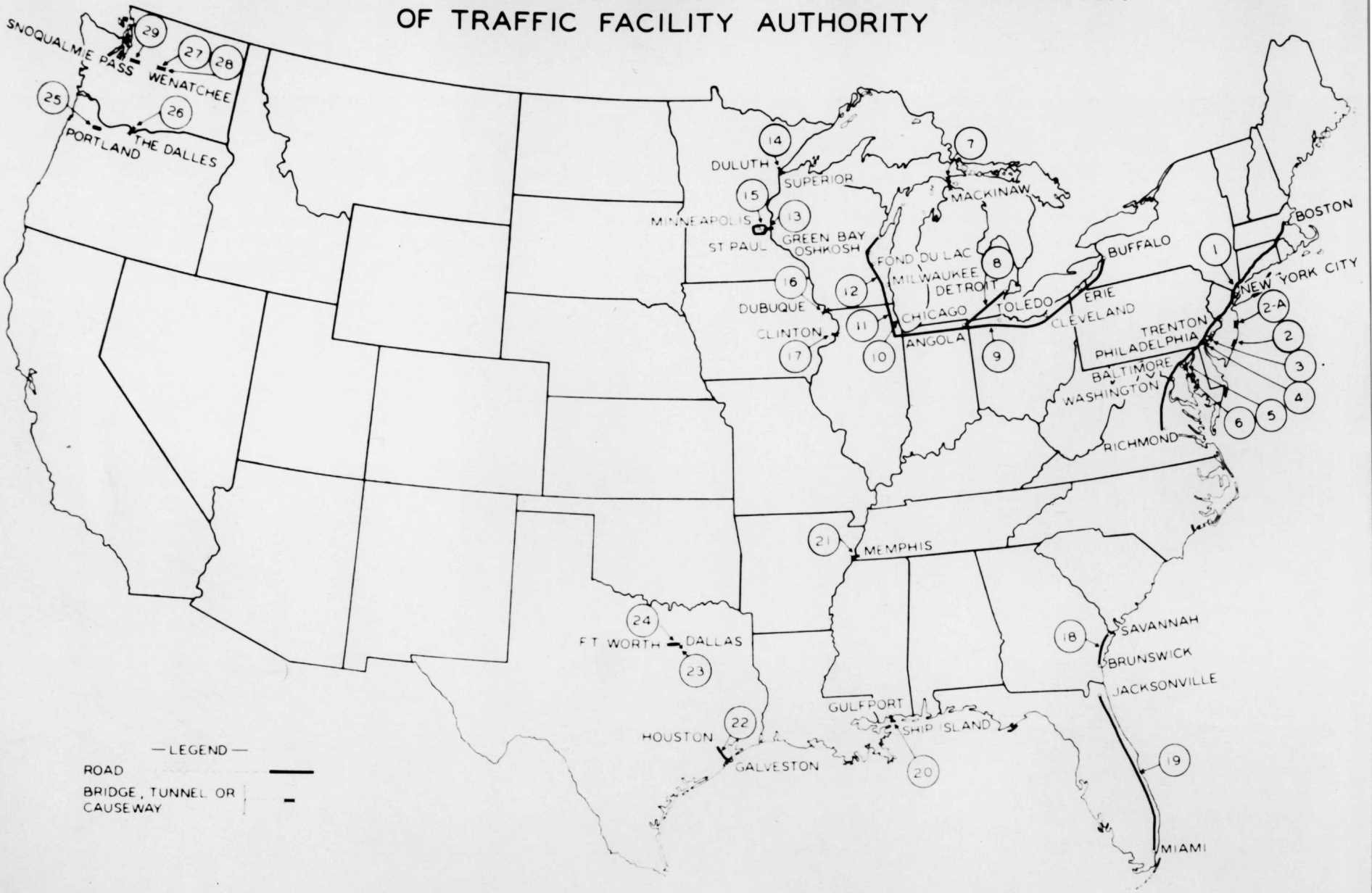
STATEMENT OF ESTIMATED PERCENTAGE OF SELF-LIQUIDATION OF TENTATIVE PROGRAM OF PROJECTS

Based on an average appreciation of 20% of excess land and construction thereon the program of $2,852.7 million is estimated to be self-liquidating over a period of 50 years.

Based on an average appreciation of 106% of excess land only the program is estimated to be self-liquidating over a period of 50 years.

Based on Direct Construction of Traffic facilities the program is estimated to be 76% self-liquidating.

LOCATION OF SUGGESTED PROJECTS FOR CONSIDERATION OF TRAFFIC FACILITY AUTHORITY



DECEMBER, 1938

(1) A through highway of divided roadway type with a minimum of four traffic lanes and all grade crossings eliminated from Richmond, Virginia, to Boston, passing west of Washington, Baltimore, Philadelphia, Trenton and New York with approaches to cities, estimated length 525 miles; estimated cost, including 300 feet of right of way for construction only, 300 million dollars.

As a toll facility estimated to be 80 percent self-liquidating on the above cost.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 140 million dollars for 1,000 feet average on each side of right of way for one-third the length of the highway. Estimated construction which may be generated on such land 560 million dollars. Appreciation of land value necessary to make project self-liquidating 42 percent. Appreciation of land and construction value necessary to make project self-liquidating 9.5 percent.

(2) Bridges over Little Egg Inlet and Brigantine Inlet to connect U. S. Route 9 near Tuckerton and Atlantic City and avoid a circuitous route between Tuckerton and Atlantic City; estimated length of project 5 miles, estimated cost including 300-foot right of way for construction only 10 million dollars.

As a toll facility estimated to be 30 percent self-liquidating on the above cost.

Addition land adjacent to the right of way estimated to cost 200 thousand dollars. Appreciation of land and construction value necessary to make project self-liquidating 71 percent.

(3) A tunnel under the Delaware River in the vicinity of Chester, Pennsylvania, with approaches, is estimated to cost 15 million dollars.

As a toll facility estimated to be 50 percent self-liquidating on the above cost.

Additional land adjacent to the tunnel acquired through excess condemnation. Estimated to cost one million dollars. Estimated construction which may be generated on such land 4 million dollars.

Appreciation of land value to make project self-liquidating 750 percent. Appreciation of land and construction value to make project self-liquidating 47 percent.

(4) Delaware River bridge or tunnel at Wilmington. Both a bridge and a tunnel have been considered at this point and a commission appointed by the Governor of Delaware is now investigating the feasibility of both. The bridge previously proposed was estimated to cost between 7 and 8 million dollars. It has been strongly opposed by both the War and Navy Departments. The proposed tunnel with approaches is estimated to cost 16 million dollars. The War Department has stipulated that it must be sunk to -50 elevation. The location heretofore considered for both tunnel and bridge is about 2 miles south of Wilmington where the crossing is a little less than a mile wide.

As a toll facility estimated to be 70 percent self-liquidating on the above cost.

Appreciation of construction value necessary to make project self-liquidating 30 percent.

(5) Bridge over Baltimore Harbor. Plans are developed for a bridge connecting the Fairfield section of Baltimore on the south side of the harbor with the Canton section on the north side of the harbor by means of a bridge the through truss spans of which total 6,790 feet. The bridge, with approaches, is estimated to cost 11 million dollars. This bridge will provide for a possible connection between the Governor Nice highway, east of Baltimore toward Philadelphia, and the Baltimore-Washington road south of Baltimore by-passing Baltimore on the east.

As a toll facility estimated to be 100 percent self-liquidating on the above cost.

Additional land acquired through excess condemnation. Estimated to cost three and one-half million dollars for 1,000 feet average on each side of right of way exclusive of the bridge and from the connection with the Governor Nice highway to the connection with the Baltimore-Washington road. Estimated construction which may be generated on such land 14 million dollars.

(6) A bridge across Chesapeake Bay between Sandy Point near Annapolis and Kent Island, with approaches, is estimated to cost 15 million dollars.

As a toll facility estimated to be 70 percent self-liquidating on the above cost.

No additional land adjacent to the right of way is to be acquired through excess condemnation. Appreciation of right of way and construction value necessary to make project self-liquidating 30 percent.

(7) Bridge over Mackinac Strait. Surveys are now being made for a bridge to run from a point north of Mackinaw City on Route 51 to the southernmost point of the northern peninsula of Michigan east of St. Ignace. The length will be a little over 4 miles and the cost is estimated to be 30 million dollars.

As a toll facility estimated to be 25 percent self-liquidating on the above cost.

Appreciation of construction value necessary to make project self-liquidating 75 percent.

(8) A through highway of divided roadway type with a minimum of four traffic lanes and all grade crossings eliminated from a connection with Angola, Indiana, on the Chicago-Buffalo road to Detroit; estimated length 114 miles, estimated cost including 300-foot right of way for construction only 40 million dollars.

As a toll facility estimated to be 60 percent self-liquidating on the above cost.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 13 million dollars for 1,000 feet average on each side of right of way for one-third the length of highway. Estimated construction which may be generated on such land 52 million dollars. Appreciation of land value necessary to make project self-liquidating 123 percent. Appreciation of land and construction value necessary to make project self-liquidating 30 percent.

(9) A through highway of divided roadway type with a minimum of four traffic lanes and all grade crossings eliminated from the Illinois-Indiana line in the vicinity of Gary, Indiana, eastwardly, and to the south of Toledo, Cleveland, and Erie to Buffalo, New York, with approaches to cities; estimated length 490 miles, estimated cost including 300-foot right of way for construction only $175,000.

As a toll facility estimated to be 65 percent self-liquidating on the above cost.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 52 million dollars for 1,000 feet average on each side of right of way for one-third the length of highway. Estimated construction which may be generated on such land 208 million dollars. Appreciation of land value to make project self-liquidating 118 percent. Appreciation of land and construction value necessary to make project self-liquidating 27 percent.

(10) A depressed highway along Congress Street in Chicago from the Loop to the western city limits. The estimated cost of land used for the construction is 20 million dollars and the estimated cost of construction 5 million dollars - the total cost of construction being 25 million dollars including right of way.

This project is not considered as a toll facility.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 10 million dollars. Estimated construction which may be generated on such land 40 million dollars. Appreciation of land value necessary to make project self-liquidating 250 percent. Appreciation of land and construction value necessary to make project self-liquidating 71 percent.

(11) A through highway of divided roadway type with a minimum of four traffic lanes and all grade crossings eliminated from the Illinois-Wisconsin State line to the Indiana State line in the vicinity of Gary, Indiana, being an outer through belt line with necessary approach connections to Chicago, estimated length 96 miles; estimated cost, including 300-foot right of way for construction only, 46 million dollars.

As a toll facility estimated to be 50 percent self-liquidating on the above cost.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 15 million dollars for 1,000 feet average on each side of right of way for one-third the length of highway. Estimated construction which may be generated on such land 60 million dollars. Appreciation of land value necessary to make project self-liquidating 153 percent. Appreciation of land and construction value necessary to make project self-liquidating 38 percent.

(12) A through highway of divided roadway type with a minimum of four traffic lanes and all grade crossings eliminated for the major portion of the distance between the Wisconsin-Illinois line and Milwaukee, Fond du Lac, Oshkosh, and Green Bay, with approaches to cities, estimated length about 175 miles; estimated cost including 300-foot right of way for construction only 40 million dollars.

As a toll facility estimated to be 75 percent self-liquidating on the above cost. Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 12 million dollars for 1,000 feet average on each side of right of way for one-third the length of the highway. Estimated construction which may be generated on such land 48 million dollars. Appreciation of land value necessary to make project self-liquidating 83 percent. Appreciation of land and construction value necessary to make project self-liquidating 20 percent.

(13) An interstate bridge between Wisconsin and Minnesota on U. S. Route 12 across the St. Croix River at Hudson, Wisconsin. Estimated cost $1,500,000.

As a toll facility estimated to be 100 percent self-liquidating on the above cost if the existing inadequate toll bridge is abandoned.

(14) A high-level bridge between Duluth, Minnesota, and Superior, Wisconsin, at the head of Lake Superior. The estimated cost of this project, with approaches, is 4 million dollars.

As a toll facility estimated to be 75 percent self-liquidating on the above cost.

Additional land adjacent to the approaches acquired through excess condemnation. Estimated to cost $200,000. Estimated construction which may be generated on such land $800,000. Appreciation of land value necessary to make project self-liquidating 500 percent. Appreciation of land and construction value necessary to make project self-liquidating 24 percent.

(15) A belt-line highway around St. Paul and Minneapolis, Minnesota, including one bridge across the Mississippi River near St. Paul, with all grade crossings eliminated, estimated length 51 miles; estimated cost including 300-foot right of way for construction only 15 million dollars.

As a toll facility estimated to be 35 percent self-liquidating on the above cost.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 5 million dollars for 1,000 feet average on each side of the right of way for one-third the length of highway. Estimated construction which may be generated on such land 20 million dollars. Appreciation of land value necessary to make project self-liquidating 196 percent. Appreciation of land and construction value necessary to make project self-liquidating 49 percent.

(16) A bridge across the Mississippi River at Dubuque, Iowa, estimated to cost 3 million dollars. It may be necessary to acquire and abandon the present inadequate bridges.

As a toll facility estimated to be 100 percent self-liquidating on the above cost.

Additional land adjacent to the approaches to this structure acquired through excess condemnation. Estimated to cost $200,000. Estimated cost of construction which may be generated on such land $800,000.

(17) A bridge across the Mississippi River at Clinton, Iowa, estimated to cost 3 million dollars.

As a toll facility estimated to be 100 percent self-liquidating on the above cost if the present inadequate and poorly located bridges are abandoned.

Additional land adjacent to the approaches to this structure acquired through excess condemnation. Estimated to cost $200,000. Estimated construction which may generated on such land $800,000.

(18) A through highway consisting of two lanes with land acquisition for four lanes, between Savannah and Brunswick, Georgia, with all grade crossings eliminated, estimated length 70 miles; estimated cost including 300-foot right of way for construction only 15 million dollars.

As a toll facility estimated to be 35 percent self-liquidating on the above cost.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost $2,300,000 for 1,000 feet average on each side of right of way for one-third the length of highway. Estimated construction which may be generated on such land $9,200,000. Appreciation of land value necessary to make project self-liquidating 490 percent. Appreciation of land and construction value necessary to make project self-liquidating 65 percent.

(19) A through highway, two lane, with land acquisition for four lanes, with all grade crossings eliminated, from Jacksonville to Miami, length 325 miles, with approaches at cities; estimated cost including 300-foot right of way for construction only 30 million dollars.

As a toll facility estimated to be 80 percent self-liquidating on the above cost.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 10 million dollars for 1,000 feet average on each side of right of way for one-third the length of highway. Estimated construction which may be generated on such land 40 million dollars. Appreciation of land value necessary to make project self-liquidating 60 percent. Appreciation of land and construction value necessary to make project self-liquidating 15 percent.

(20) A causeway from Gulfport, Mississippi, to Ship Island. This is a recreational project serving the Mississippi coast for the States of Mississippi, Alabama, and Louisiana. It would be about 12 miles long and is estimated to cost 2 million dollars.

As a toll facility estimated to be 35 percent self-liquidating on the above cost.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost $500,000. Estimated cost of construction which may be generated on such land 2 million dollars. Appreciation of land value necessary to make project self-liquidating 260 percent. Appreciation of land and construction value necessary to make project self-liquidating 52 percent.

(21) A bridge across the Mississippi River at Memphis, Tennessee, with approaches, is estimated to cost 6 million dollars.

As a toll facility estimated to be 100 percent self-liquidating, if the present inadequate free combination railroad and highway bridge is abandoned for highway traffic.

Additional land adjacent to right of way acquired through excess condemnation. Estimated to cost $1,500,000. Estimated construction which may be generated on such land 6 million dollars.

(22) A through highway of divided roadway type with a minimum of four traffic lanes and all grade crossings eliminated from Houston to Galveston, Texas, estimated length 51 miles; estimated cost including 300-foot right of way for construction only 8 million dollars.

As a toll facility estimated to be 60 percent self-liquidating on the above cost.

Additional land adjacent to right of way acquired through excess condemnation. Estimated to cost one million dollars for 1,000 feet average on each side of right of way for one-third the length of the highway. Estimated construction which may be generated on such land 4 million dollars. Appreciation of land value necessary to make project self-liquidating 320 percent. Appreciation of land and construction value necessary to make project self-liquidating 35.6 percent.

(23) The improvement of Central Boulevard in Dallas, Texas; estimated cost, including necessary right of way, 8 million dollars.

While there is a possibility of operating this improvement as a toll facility, this project at this time is considered as a non-toll facility.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated to cost 5 million dollars. Estimated construction which may be generated on such land 20 million dollars. Appreciation of land value necessary to make project self-liquidating 160 percent. Appreciation of land and construction value necessary to make project self-liquidating 61.5 percent.

(24) A through highway of divided roadway type with a minimum of four traffic lanes and all grade crossings eliminated from Dallas to Fort Worth, Texas, with necessary connections to the cities, estimated length 33 miles; estimated cost, including 300-foot right of way for construction only, $13,600,000.

As a toll facility estimated to be 75 percent self-liquidating on the above cost.

Additional land adjacent to right of way acquired through excess condemnation. Estimated to cost 2 million dollars. Estimated construction which may be generated on such land 8 million dollars. Appreciation of land value necessary to make project self-liquidating 170 percent. Appreciation of land and construction value necessary to make project self-liquidating 21.8 percent.

(25) Front Street arterial development in Portland, Oregon; estimated cost, including right of way for construction, $12,400,000.

This is not considered as a self-liquidating toll facility. There is a possibility of this project being handled by loan and grant. The demand for improvement has been insistent but negotiation will probably be difficult.

Additional land adjacent to right of way acquired through excess condemnation. Estimated to cost 5 million dollars. Estimated construction which may be generated on such land 20 million dollars. Appreciation of land value necessary to make project self-liquidating 248 percent. Appreciation of land and construction value necessary to make project self-liquidating 71.4 percent.

(26) A bridge over the Columbia River near The Dalles in Oregon; estimated cost $1,500,000 including cost of right of way necessary for construction.

As a toll facility estimated to be 100 percent self-liquidating on the above cost.

It is probable that cooperation might possibly be arranged with the Washington Toll Bridge Authority in connection with construction of this facility.

(27) and (28) Two bridges near Wenatchie in Washington - one over the Columbia River and the Great Northern Railroad, and the other over the Columbia River alone; estimated cost, including necessary right of way for construction only, $4,250,000.

As toll facilities these two projects are estimated to be 100 percent self-liquidating on the above cost. It is possible that cooperation with the Washington Toll Bridge Authority might be arranged for the construction of these two projects.

Additional land adjacent to the right of way acquired through excess condemnation. Estimated cost $250,000. Estimated construction which may be generated on such land one million dollars.

(29) A tunnel in the Snoqualmie Pass east of Seattle in Washington, estimated length 2.6 miles, tunnel to be a two lane facility with two sidewalks and the necessary ventilating equipment installed; estimated cost 4 million dollars.

The liquidation of this project through tolls alone is doubtful. If the State would abandon surface route it is estimated that this project would be 100 percent self-liquidating on the above cost.

(30) Acquisition of right of way to be leased to State highway departments for construction by them with State and Federal-aid funds, estimated expenditure 30 million dollars a year. This would generate construction of approximately 120 million dollars a year.