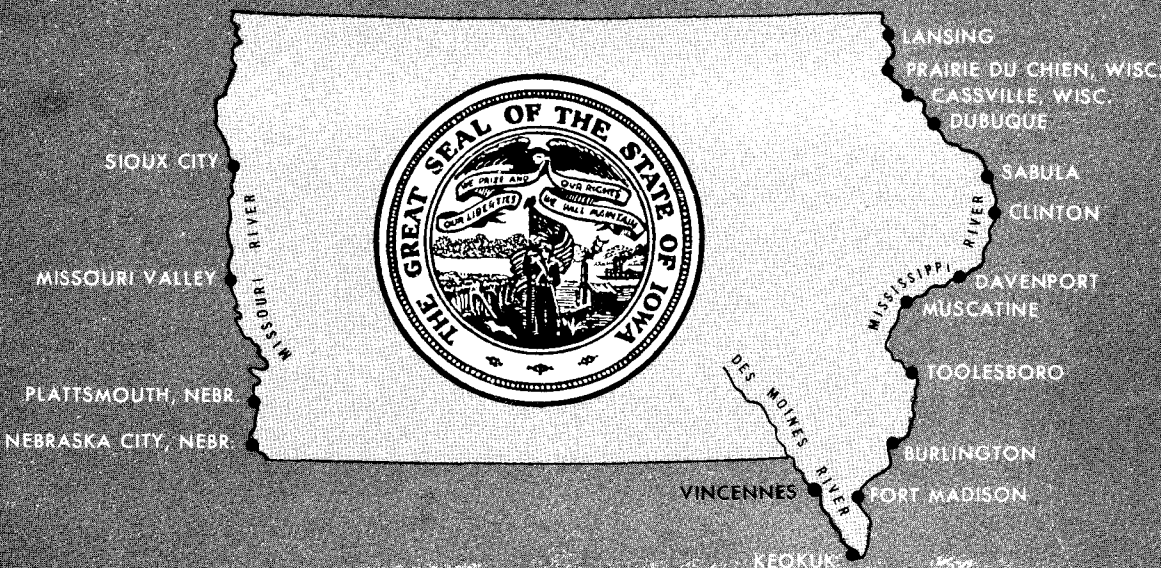
DES MOINES RIVER TOLL BRIDGE

OCTOBER 1968

IOWA STATE HIGHWAY COMMISSION



Bridge Location, Revenue and Traffic Studies

NEAR

VINCENNES, IOWA

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
consulting engineers
NEW YORK, N.Y.

WILBUR SMITH & ASSOCIATES
traffic consultants
NEW HAVEN, CONN.

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New Haven, Conn. 06510

October 11, 1968

Mr. J. R. Coupal, Jr.
Director of Highways
Iowa State Highway Commission
Ames, Iowa 50010

Dear Mr. Coupal:

We are pleased to submit this preliminary feasibility report for a new Des Moines River bridge at Vincennes.

The report includes an analysis of alternate bridge locations, preliminary engineering studies, traffic and toll revenue estimates, preliminary project costs and an indication of project feasibility.

The feasibility calculations indicate that the relationship of project cost to anticipated revenues is below that normally considered indicative of financial feasibility as a revenue bond project.

We gratefully acknowledge the assistance and cooperation given to us by members of your staff and the numerous other public and private agencies and individuals contacted in the course of our studies.

Respectfully submitted,

HOWARD, NEEDLES, TAMMEN & BERGENDOFF

Paul L. Heineman

Paul L. Heineman

WILBUR SMITH & ASSOCIATES, INC. N.E.

Wilbur S. Smith

Wilbur S. Smith

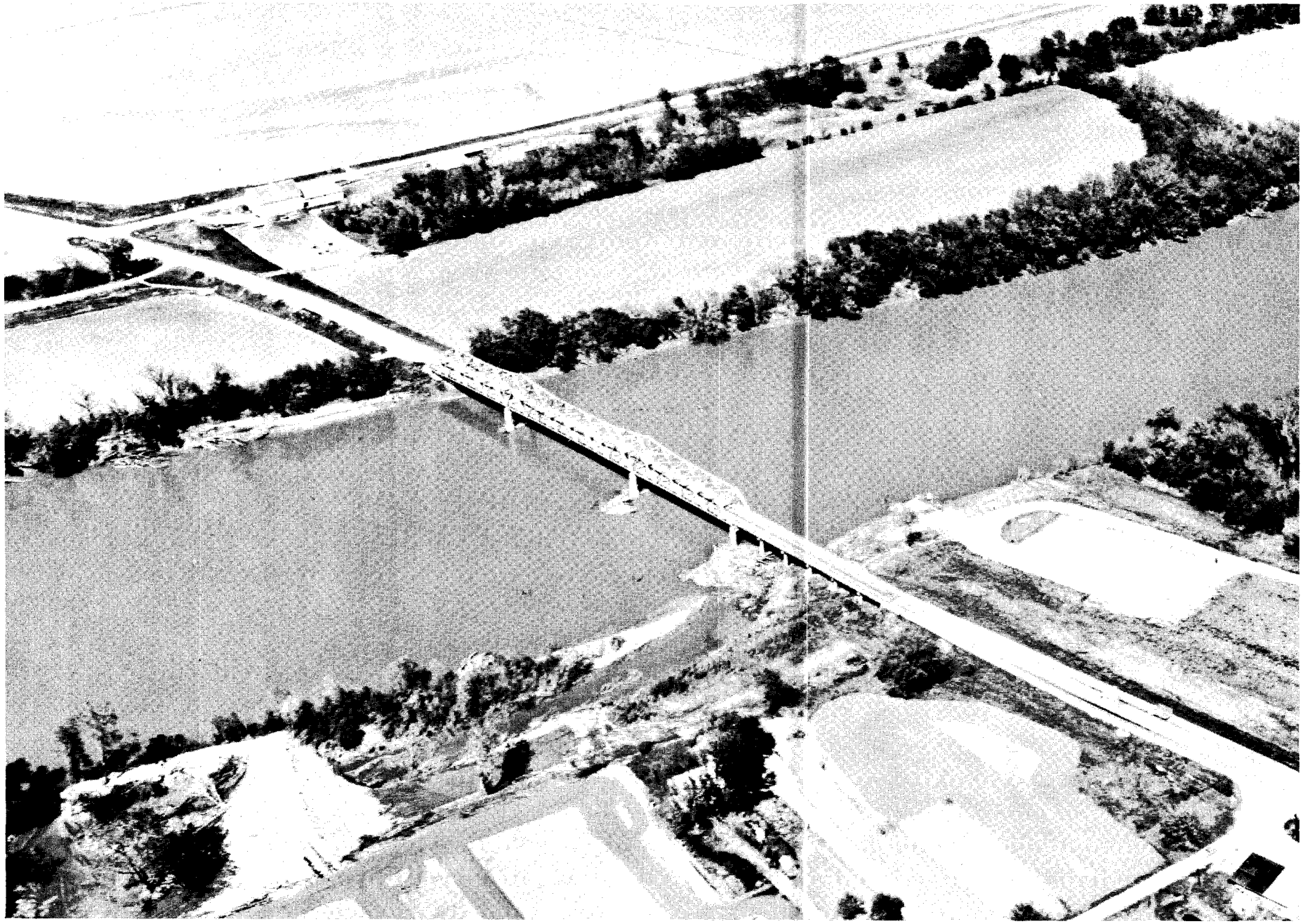
I hereby certify that this plan, specification or report was prepared by me or under my direct personal supervision and that I am a duly registered Professional Engineer under the laws of the State of Iowa.

Signed Date

Paul L. Heineman, P.E. Iowa Reg. No. 5156 October 11, 1968

Signed

Wilbur S. Smith, P.E. Iowa Reg. No. 4007 October 11, 1968



VIEW OF ST. FRANCISVILLE BRIDGE, LOOKING NORTHEAST

VINCENNES, IOWA

DES MOINES RIVER TOLL BRIDGE

OCTOBER

1968

PRELIMINARY ENGINEERING REPORT

- LOCATION STUDIES
- PRELIMINARY DESIGN
- COST ESTIMATES
- TRAFFIC AND REVENUE STUDIES

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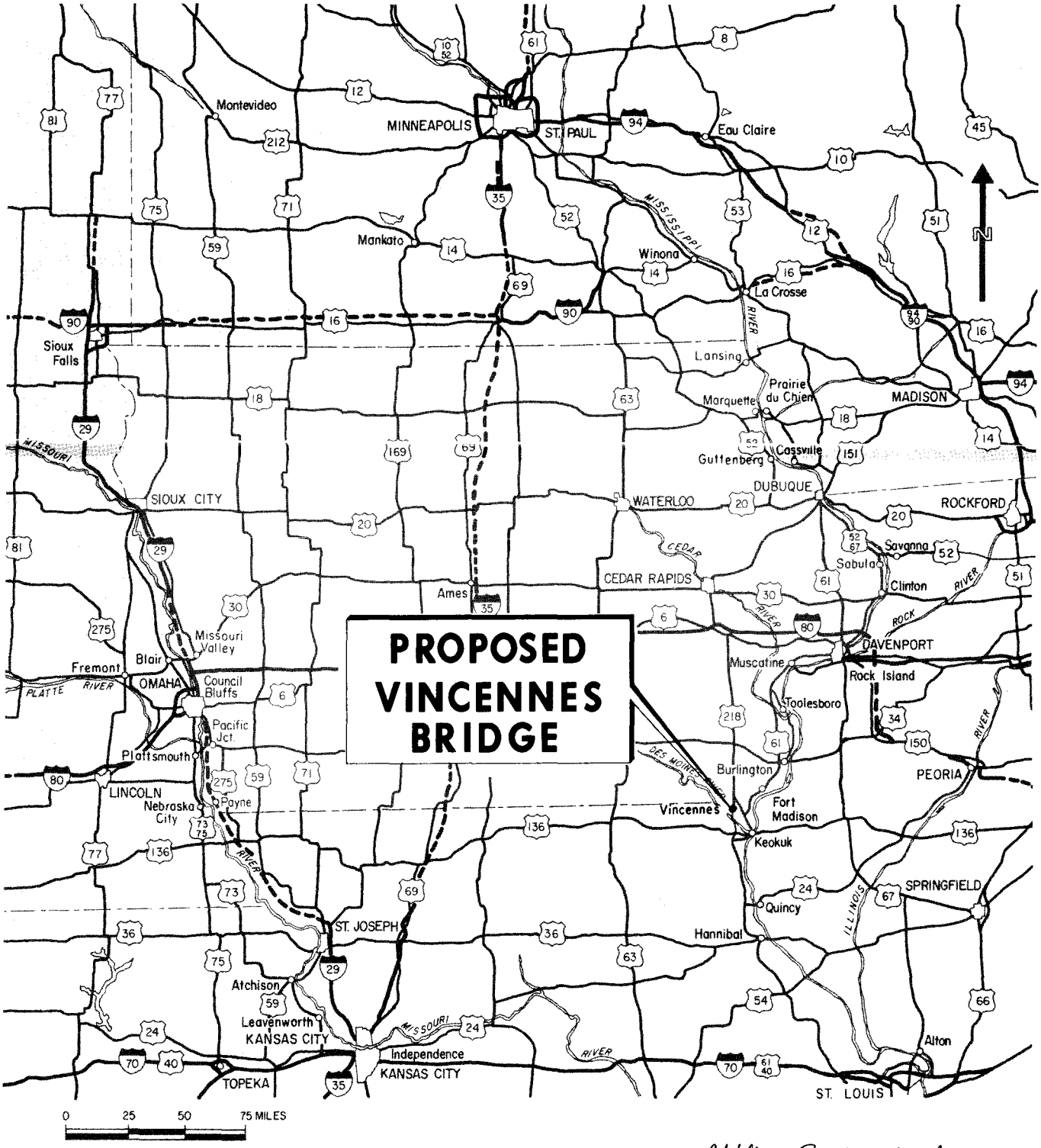

Wilbur Smith and Associates

Exhibit 1

REGIONAL MAP

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LIST OF ILLUSTRATIONS

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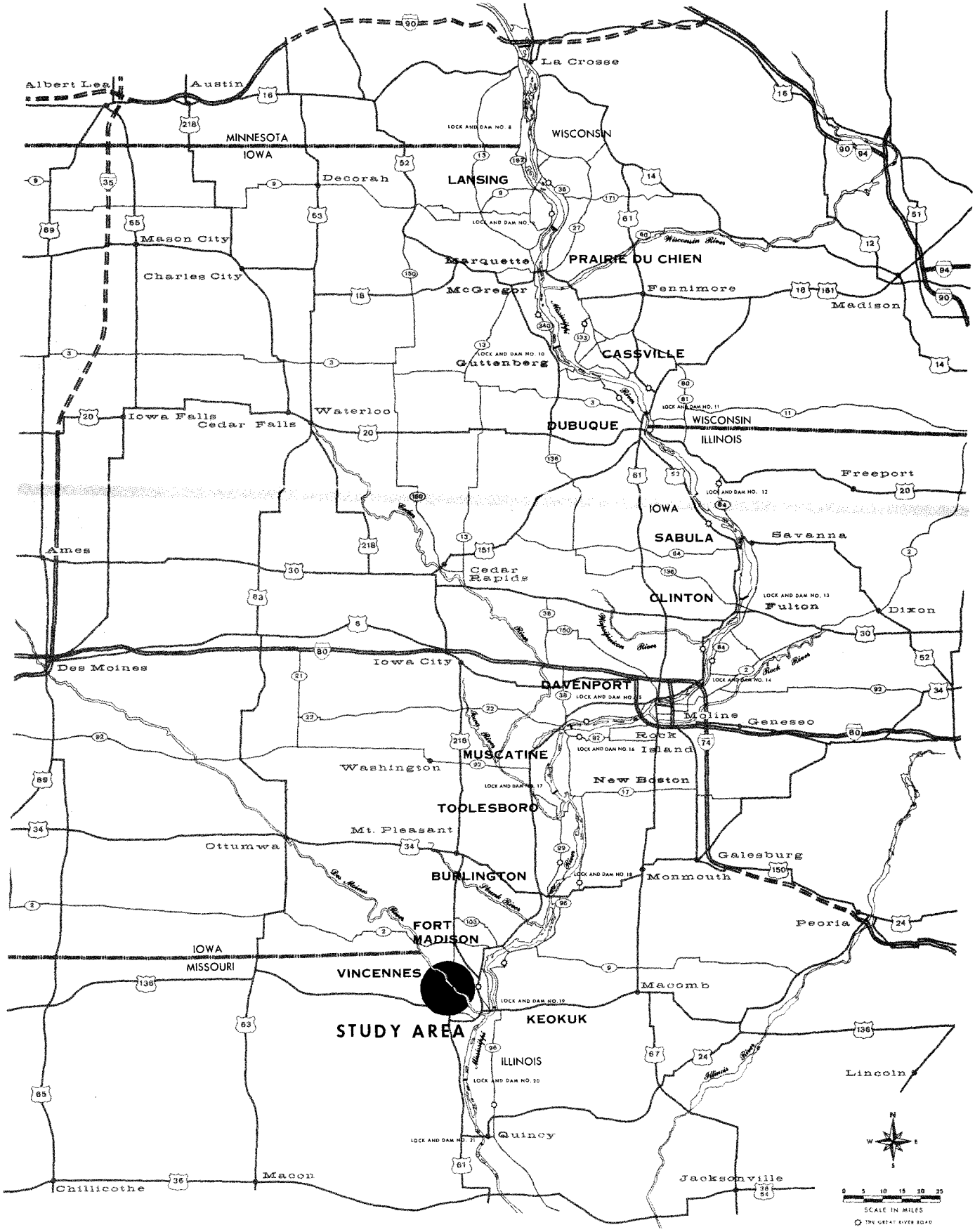


Exhibit 2

VICINITY MAP

SUMMARY OF FINDINGS

While the present St. Francisville Bridge at Vincennes provides a reasonable level of traffic service, the crossing does not meet modern roadway design standards. Preliminary project costs of a new bridge to replace the existing structure are estimated at $1,405,000; an estimated bond issue of $1,686,000 would be required to finance construction.

After deducting maintenance and operating expenses from gross tolls, first-year net revenues of $81,000 are estimated, increasing to an average of $116,000 per year over the 28-year earning period of the bond issue. Maximum interest requirements during the first year of operation of $93,000 are estimated. Level debt service over the 28-year earning period would be an estimated $119,000.

Preliminary feasibility calculations indicate that first-year net toll revenues would provide a 0.87 coverage of maximum interest and that average annual net revenues would cover level debt service 0.97 times. Both coverage values are below those normally considered indicative of financial feasibility. A total subsidy of $92,000 would be required to enable annual net revenues to balance level debt service over the bond term.

INTRODUCTION

The present St. Francisville Bridge provides a toll crossing of the Des Moines River near Vincennes, Iowa. The bridge links predominantly rural areas in Lee County, Iowa, and Clark County, Missouri, via county roads and has been in service since 1936.

As shown in Exhibit 1, Vincennes is located approximately 12 miles northwest of Keokuk, upstream on the Des Moines River. U. S. Routes 61 and 136 are carried over the river near Keokuk on a toll-free bridge. About 16 miles upstream from Vincennes, Iowa, State Route 2 crosses the river via a toll-free structure at Farmington.

Authority and Purpose of Report

In December, 1967, the Iowa State Highway Commission authorized preparation of a preliminary feasibility report for a proposed new toll bridge near Vincennes. This report is one of several comparable bridge studies to be conducted as part of the Iowa Toll Bridge Program, in accordance with legislation enacted by the Iowa General Assembly, a copy of which is included in the Appendix. The various locations in southeastern Iowa to be studied under this program are shown in Exhibit 2.

A copy of the Federal Legislation permitting construction and operation of the present bridge at Vincennes is included in the Appendix. The Legislation permits the collection of tolls for an indefinite period. A copy of the General Bridge Act of 1946, the Federal Law permitting operation of privately owned interstate toll bridges, is also included in the Appendix. If a new bridge were constructed at Vincennes by the Iowa State Highway Commission, the period of time during which such a bridge could be operated as a toll facility is limited by this Act to 30 years.

Scope of Services

This report summarizes preliminary engineering, traffic and revenues and feasibility studies for a proposed new bridge near Vincennes. These studies included:

1. Analysis of the physical limitations imposed by navigational requirements, terrain, existing levees, railroads, real property values and the present highway network.

2. Comparison of alternative bridge and approach road locations based on estimates of project cost and annual maintenance and operating expenses.

3. Analysis of the adequacy of present trans-river traffic service in the vicinity of the proposed bridge, as measured against present travel demands and anticipated future growth.

4. Development of preliminary traffic estimates for the various alternative alignments and estimates of annual traffic and revenues for the recommended bridge location, assuming operation as a toll facility.

5. A determination of the preliminary feasibility of the project, based upon the relationship of anticipated project cost and estimated toll revenues.

The engineering, location and cost studies relating to the proposed bridge were prepared by Howard, Needles, Tammen & Bergendoff and are discussed in Part I of this report.

Part II, prepared by Wilbur Smith and Associates, discusses the preliminary traffic and revenue potential of the crossing and project feasibility calculations.

Present Highway System

North-south travel in the bridge corridor is served by County Road Y in Iowa and County Road B in Missouri. These are both two-lane rural paved roads linking Iowa Route 2 and U. S. Route 218 in Iowa with U. S. Route 136 in Missouri.

In Iowa, U. S. Route 218 north of Donnellson follows a generally north-south alignment to Mt. Pleasant, Iowa City, and points north. Iowa Route 2 traverses the state on an east-west alignment through the southern tier of Iowa counties. In Missouri, U. S. Route 136 crosses the state on an east-west alignment south of the Iowa border.

Planned Highway Improvements

Iowa's Five Year Construction Program includes scheduled improvements to U. S. Route 218 throughout Lee County. Iowa Route 2 will be improved east of its junction with U. S. Route 218 and west of the Van Buren County line.

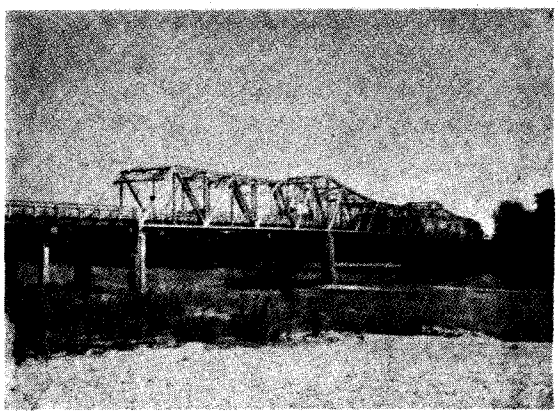
The Missouri State Highway Department plans improvements to U. S. Route 136 between Kahoka and Luray and to Missouri Route 81, for several miles south of Kahoka.

Highway improvements scheduled for the study area should be adequate to keep pace with the demands of area growth without resulting in any radical change to present trans-river travel patterns.

Present St. Francisville Bridge

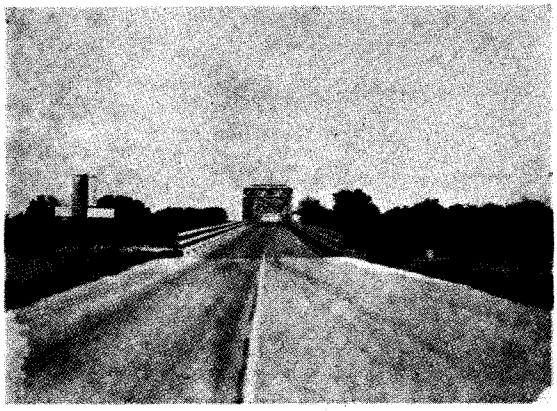
The present St. Francisville Bridge is a toll crossing. As shown in Exhibit 3, it is a cantilevered, through-truss structure, built in 1936 by the Wayland Special Road District of Clark County, Missouri. The three-truss bridge has a

BRIDGE PROFILE



TOLL BOOTH AT MISSOURI BRIDGEHEAD

MISSOURI BRIDGE APPROACH



PRESENT ST. FRANCISVILLE BRIDGE

center span of 228 feet, flanked by two 160-foot side spans. The main spans are linked to the Missouri embankment by six 34-foot spans, simply-supported on rolled beams. The bridge roadway is 22 feet wide, with a vertical clearance of 13 feet 11 inches. The structure was designed for an H-15 AASHO[1] loading and is in generally good condition.

In Iowa, the approach roadway follows a mild reverse curve to the first bridge span. Approach grades at both bridgeheads are negligible. No vehicle restrictions are posted for the structure.

A toll booth is located between the two travel lanes on the Missouri approach. The present toll schedule is based on a rate of $0.10 for a passenger car. As shown in Table 1, straight trucks pay $0.25, while heavier vehicle combinations are charged $0.50.

Present Alternative River Crossings

Upstream of the St. Francisville Bridge, the nearest Des Moines River crossing is at Farmington (Iowa Route 2), about 16 miles away. The nearest downstream crossing is via U. S. Routes 61 and 136 at Keokuk, about 12 miles distant. Both of these crossings are toll-free and provide unrestricted service to all classes of highway traffic.

---

[1] A structural design load rating standard of the American Association of State Highway Officials.

TABLE 1

PRESENT TOLL SCHEDULE

St. Francisville Bridge

TOLL CLASS	TOLL
Automobile	$0.10
Straight Truck	0.25
Semi-Truck	0.50

SOURCE: Wayland Special Road District, Wayland, Missouri.

Previous Studies

All available pertinent data and reports relating to this project were assembled and reviewed. This material included information obtained from the Iowa and Missouri Highway Commissions, other state agencies and numerous county, municipal and other contacts.

PART I

LOCATION AND COST STUDIES

BASIC DATA

Considerable information regarding existing conditions and proposed improvements must be procured and analyzed in conjunction with the preparation of bridge studies for a project of this magnitude. General features of the study area are shown on Exhibit I-1. The following are items of data pertinent to a Des Moines River crossing at Vincennes.

Geology

The study area is within the Dissected Till Plains Section of the Central Lowlands Physiographic Province. The bridge site is in the flood plain of the Des Moines River.

The flood plain consists of shallow deposits of alluvial silt, sand and gravel. Area bedrock is limestone and shale of the Augusta stage, Carboniferous System.

Substructure units for the proposed bridge may be founded on bearing piles driven through the alluvium and/or caissons or footings taken to bedrock. Prior to final design, foundation borings and laboratory soil tests will be required for evaluation of the proper foundation type and any special treatment necessary for embankment-foundation stability and settlement at the approaches.

River Conditions

The Des Moines River in the vicinity of Vincennes is a shallow stream of about 500 foot width. It has a normal low water elevation of of 496.0 Mean Sea Level with a record flood stage elevation of 522.0 Mean Sea Level reached in 1903. The path of the river under the St.

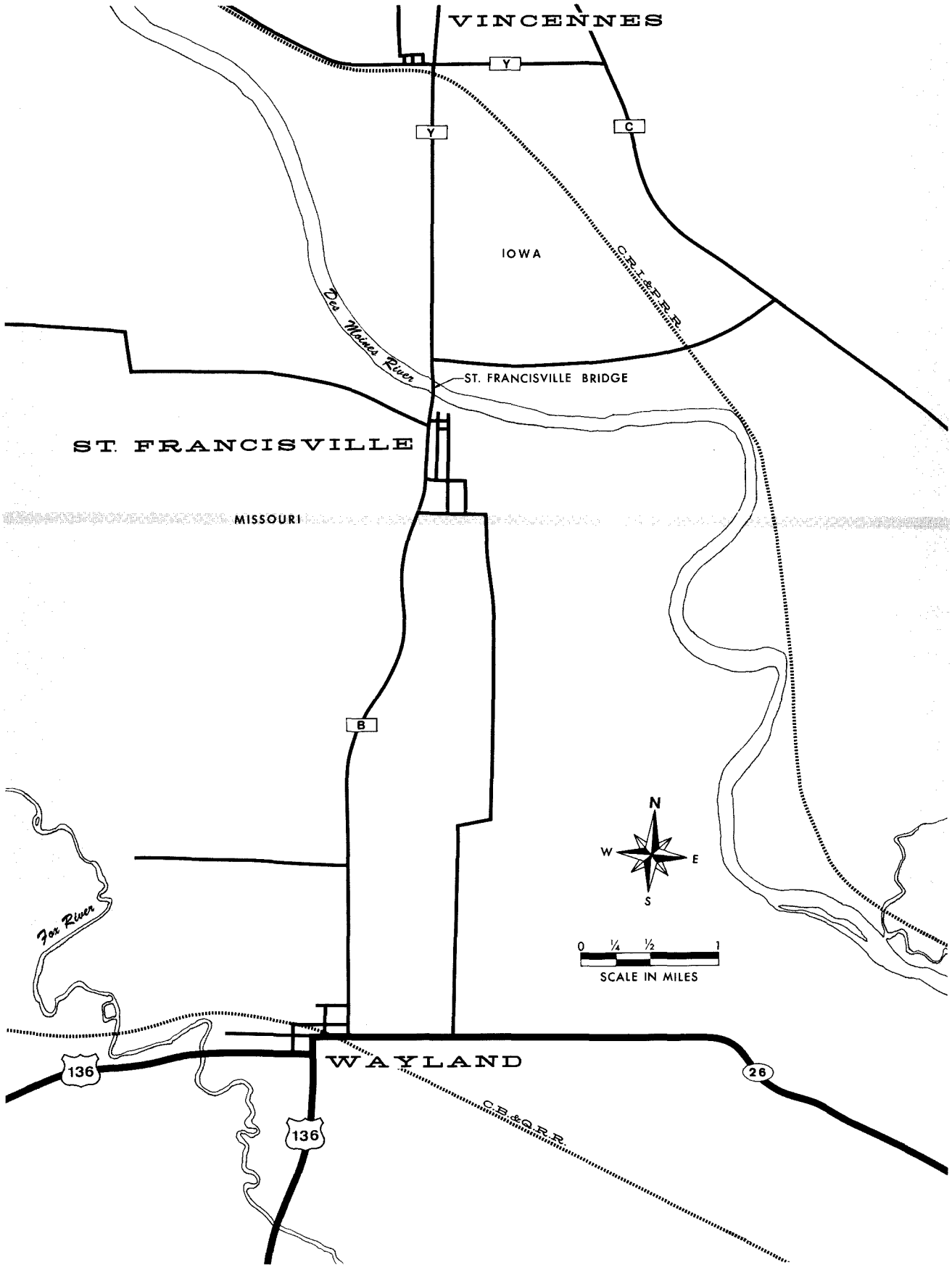


Exhibit I-1

VINCENNES STUDY AREA

Francisville Bridge approximates a 30 minute S-curve over a 5 mile reach commencing 3 miles upstream of the bridge. The topography surrounding the bridge is generally flat, with sharp rising bluffs along the south bank of the river west of the bridge. Levees protect those downstream areas not high enough to preclude flooding.

Des Moines River hydrologic studies are based on data obtained from the U.S. Geological Survey gage located at Keosauqua, Iowa, approximately 36 miles upstream from the St. Francisville Bridge. The Des Moines River at Keosauqua drains a watershed of more than 14,000 square miles. Since no major streams enter the Des Moines River within this 36 mile reach of the river, the data obtained from the Keosauqua gage is considered appropriate for discharge capacity study of the St. Francisville Bridge.

The maximum discharge of the Des Moines River at the Keosauqua gage was 146,000 cubic feet per second, recorded in June 1903. A near record discharge of 124,000 cubic feet per second occurred in June 1947. Corps of Engineers current flow frequency studies indicate a discharge of 140,000 cubic feet per second at Keosauqua would have a one per cent chance occurrence (100 year frequency), and a discharge of 120,000 cubic feet per second would have a two per cent (50 year frequency) chance occurrence.

The Rock Island District of the U.S. Army Corps of Engineers anticipates the Red Rock and Saylorville Reservoir system, upstream from Keosauqua on the Des Moines River, will be in operation in 1973. Their design studies indicate that upon completion of the reservoir system, a river discharge of 67,000 and 60,000 cubic feet per second at Keosauqua would have a 1 and 2 per cent chance of occurrence, respectively.

At water Elevation 518.5, the design high water elevation for the existing bridge, the waterway opening under the St. Francisville Bridge is sufficient to accommodate the non-regulated one per cent chance occurrence discharge without difficulty. After regulation through completion of the upstream reservoir system, the existing bridge will have more than double the waterway capacity required for a 100 year storm.

ALTERNATE LOCATION

The most economical location for a new bridge over the Des Moines River near Vincennes would parallel the existing bridge and be located immediately upstream from it, as shown in Exhibit I-2. Approach roadways 1300 feet in length on the Iowa bank and 600 feet in length on the Missouri bank would be required to connect the bridge to the existing road system. Right-of-way on both banks would consist of undeveloped land and acquisition costs would be relatively low. The new bridge, constructed according to current design standards, would provide a river crossing which would be capable of carrying modern highway loadings.

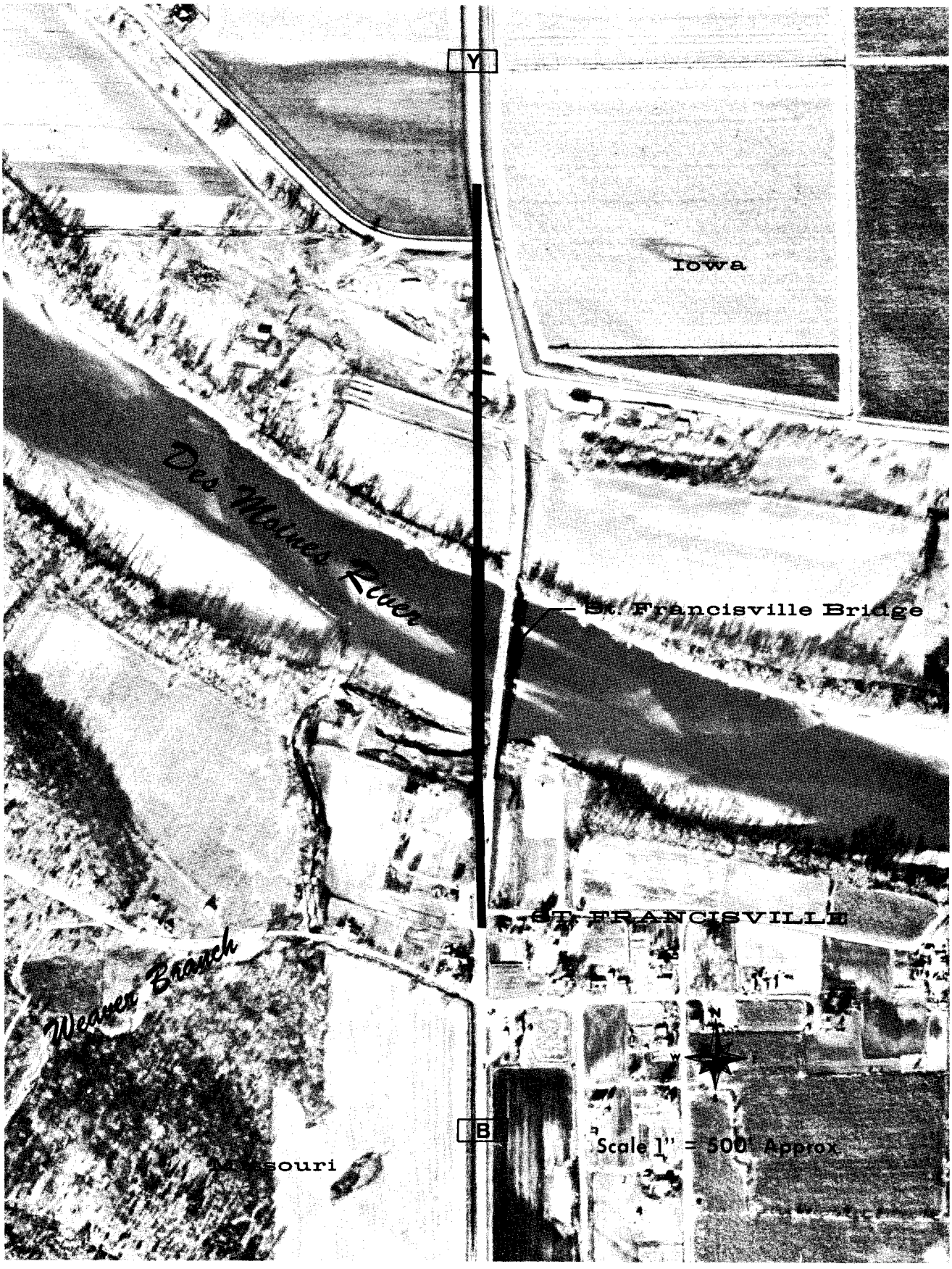


Exhibit I-2

ALTERNATE BRIDGE LOCATION

STRUCTURE TYPE

At this stage of investigations and design a four span continuous girder bridge has been selected for determining the approximate cost of a river crossing. These contemporary structures are popular because of economics, pleasing appearance and the elimination of obstructions above the roadway. Navigation on the Des Moines River is limited and the relatively greater structure depth as compared to other type structures will not be a disadvantage. Due to the low vertical clearance requirement the approach grades will be less steep, eliminating high fills or long bridge approach spans.

COST ESTIMATES

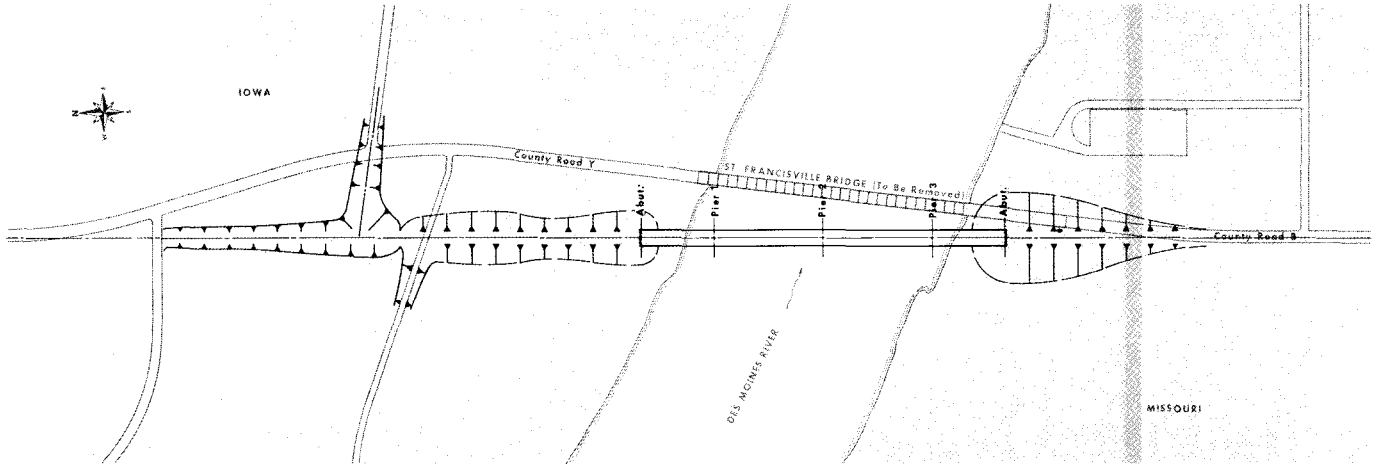
A plan, elevation and typical section for a new St. Francisville Bridge is shown in Exhibit I-3. The 32 foot roadway width provides 4 feet 6 inches of lateral clearance between the right hand edge of a typical 12 foot traffic lane and the barrier rail. This clearance from the normal edge of the lane conforms to the modern safety requirements of the American Association of State Highway Officials and the Bureau of Public Roads. There are few pedestrians crossing the river; therefore, sidewalks will not be necessary and have not been provided.

The estimated construction cost of the bridge at this location is $758,000. A detailed breakdown of this cost is shown in Table I-1. Quantities shown are based on a preliminary design of all structural components. Unit prices are based on a review of current construction prices of similar items.

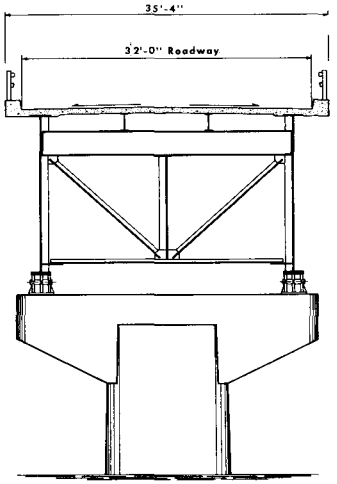
Prior to preparation of final design plans, additional engineering studies would be required. A complete subsurface investigation would be necessary to provide a firm basis for the determination of substructure type, substructure design and economical span lengths. Main river unit studies would include economic comparison of several types of construction. Architectural studies will also be needed to develop pleasing transitions between differing structure types and desirable aesthetic treatments for the entire structure.

The total project cost does not include any allowance for acquisition of any franchise rights or property now vested in the private toll bridge company, but does include cost of removal of existing bridge upon completion of a new bridge.

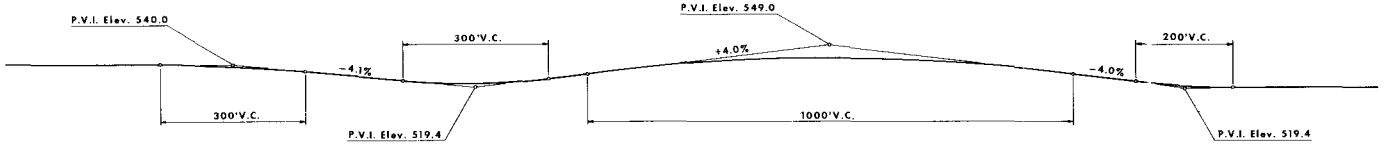
The preliminary roadway costs were determined by applying current unit prices to preliminary quantity estimates of the principal roadway construction items. Allowances have been included for modest escalations of unit costs during the one year that will elapse before construction begins.



PLAN

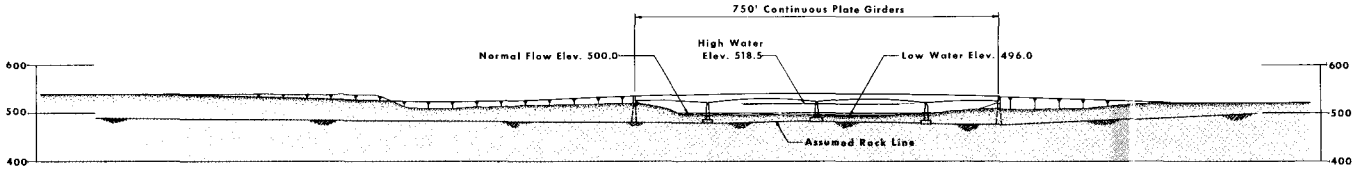


SECTION NEAR CENTER PIER

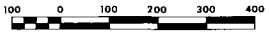


PROFILE GRADE

SCALE IN FEET



ELEVATION



SCALE IN FEET

Exhibit I-3

VINCENNES BRIDGE LOCATION

GENERAL PLAN AND ELEVATION

TABLE I-1

ESTIMATE OF BRIDGE CONSTRUCTION COST

Vincennes, Iowa, Bridge

Continuous Girder Spans 750 ft.

Roadway Width - 32'-0" Curb-to-Curb

ITEM	QUANTITY	UNIT PRICE	COST
Superstructure:			
Bridge Railing	1,540 L.F.	$12.00	$ 18,500
Concrete	710 C.Y.	90.00	63,900
Reinforcing Steel	212,000 Lbs.	0.14	29,700
Girder Steel A36	342,000 Lbs.	0.29	99,200
Girder Steel A441	729,000 Lbs.	0.32	233,300
Cast Steel and Misc. Metal	27,000 Lbs.	0.70	18,900
Navigation Lighting		Lump Sum	5,000
	SUBTOTAL		$468,500
Substructure:			
Concrete	2,080 C.Y.	$65.00	$135,200
Reinforcing Steel	208,000 Lbs.	0.14	29,100
Steel Bearing Piles (12BP53)	7,200 L.F.	8.00	57,600
Steel Pile Cofferdams	10,660 S.F.	5.00	53,300
Excavation	1,430 C.Y.	10.00	14,300
	SUBTOTAL		$289,500
	TOTAL BRIDGE COST		$758,000

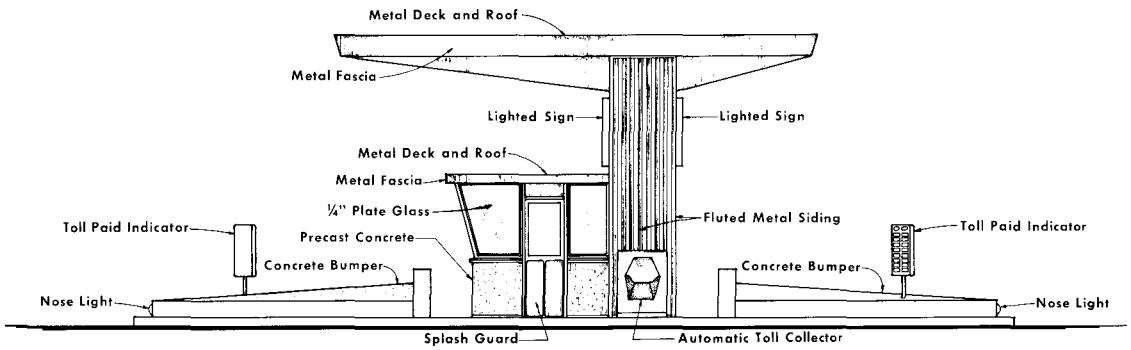
Right-of-way cost estimates were based upon fair market valuations of all real property involved. Allowances have been included for damages, severance losses and acquisition expenses.

A typical toll booth installation is shown on Exhibit I-4. The exact location of this facility on the bridge approach will be established during subsequent study phases. The cost of the toll booth is included in Table I-2.

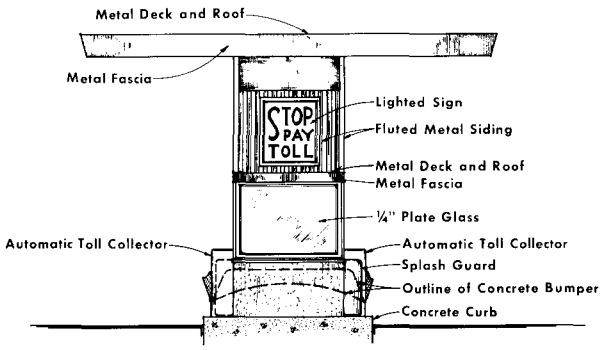
The total estimated project cost is shown in Table I-2.

Operation and Maintenance

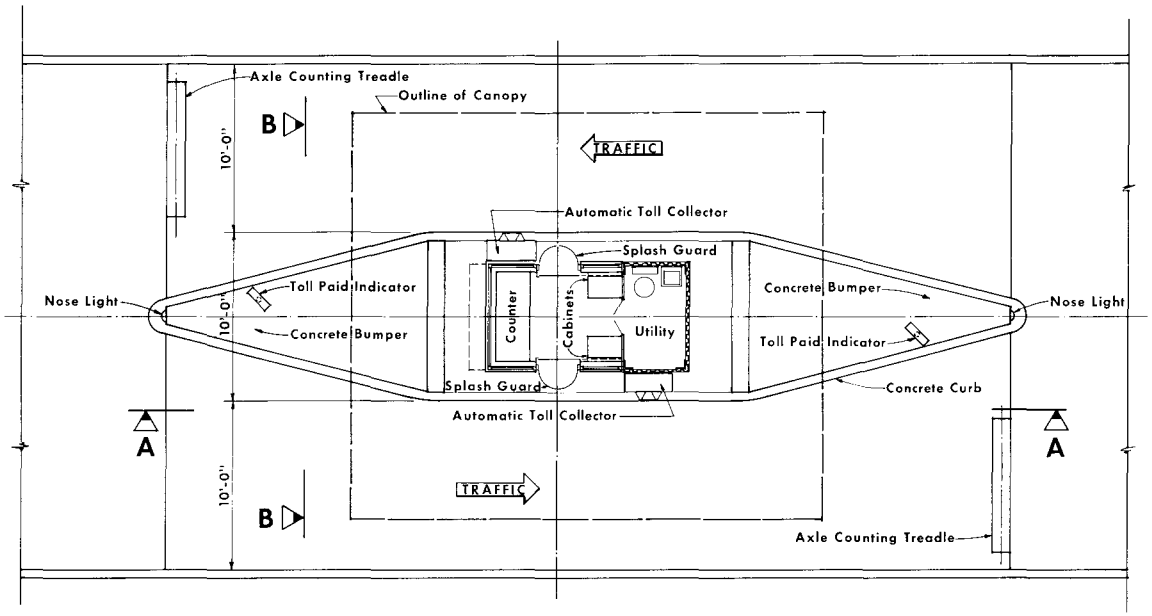
The estimate of first year expenses for operation and maintenance for a new St. Francisville Bridge is shown in Table I-3. Inasmuch as operation of the bridge by the Iowa State Highway Commission would be somewhat different than that of a private operator, several cost assumptions have been made: (1) No per diem for commissioners or pro rata cost for central administration by the Iowa State Highway Commission; (2) the nominal administrative duties performed by the toll sergeant will require no separate administration facilities; and (3) employee fringe benefits will be similar to existing private operation. Since the proposed bridge would be owned by a public agency, it has been assumed that it will not be subject to property or other local taxes.



ELEVATION A-A



ELEVATION B-B



PLAN

5 0 5 10 15

SCALE IN FEET

Exhibit I-4

GENERAL PLAN AND ELEVATION
TOLL BOOTH

TABLE I-2

SUMMARY OF ESTIMATED PROJECT COSTS

Vincennes, Iowa, Bridge

	RECOMMENDED ALTERNATE	
	Iowa	Missouri
Roadway	$ 103,600	$ 68,100
Structures	758,000	—
Removal of Existing Bridge	75,000	—
Subtotal	$ 936,600	$ 68,100
Toll Booth Complex	85,000	—
Engineering and Contingencies	279,500	14,000
Total Construction	$1,301,100	$ 82,100
Right-of-Way	15,000	1,500
Acquisitions and Contingencies	3,000	500
Administration and Legal	1,500	300
Total	$1,320,600*	$ 84,400
Total Project Cost	$1,405,000	

* Iowa costs include all costs of the river structure up to and including the south abutment.

TABLE I-3

ESTIMATE OF FIRST YEAR EXPENSES
FOR
OPERATION AND MAINTENANCE

Vincennes, Iowa, Bridge

ADMINISTRATION		
Toll Sergeant	$ 6,600	
Travel and Car Expense	1,000	
Consulting Engineers	3,600	
Miscellaneous	800	
Total Administration		$12,000
OPERATION		
Toll Collectors	$24,000	
Utilities	1,500	
Supplies and Postage	1,500	
Employee Benefits	3,000	
Total Operation		$30,000
REPAIRS AND MAINTENANCE*		2,000
INSURANCE		3,000
MAINTENANCE RESERVE		3,000
Total Operation and Maintenance		$50,000

* By District maintenance forces on force account cost basis.

PART II

ESTIMATED PRELIMINARY TRAFFIC AND REVENUES AND PROJECT FEASIBILITY

INTRODUCTION

A general economic evaluation was made of the area served by the St. Francisville Bridge, as a guide in projecting future trans-river traffic growth. Route reconnaissance investigations were conducted to inventory present traffic facilities and to determine average operating speeds and other traffic service characteristics. All available trans-river travel patterns and traffic trend data for the bridge and adjacent crossings were assembled and reviewed.

Using the travel pattern information, travel speed and route inventory data and empirical diversion curves developed from studies of similar facilities, traffic assignments were made, assuming replacement of the St. Francisville Bridge with a new, modern toll crossing. Preliminary assignments were made at several toll rates to determine the rate structure which would optimize toll revenues while still providing a reasonable level of traffic service in the travel corridor.

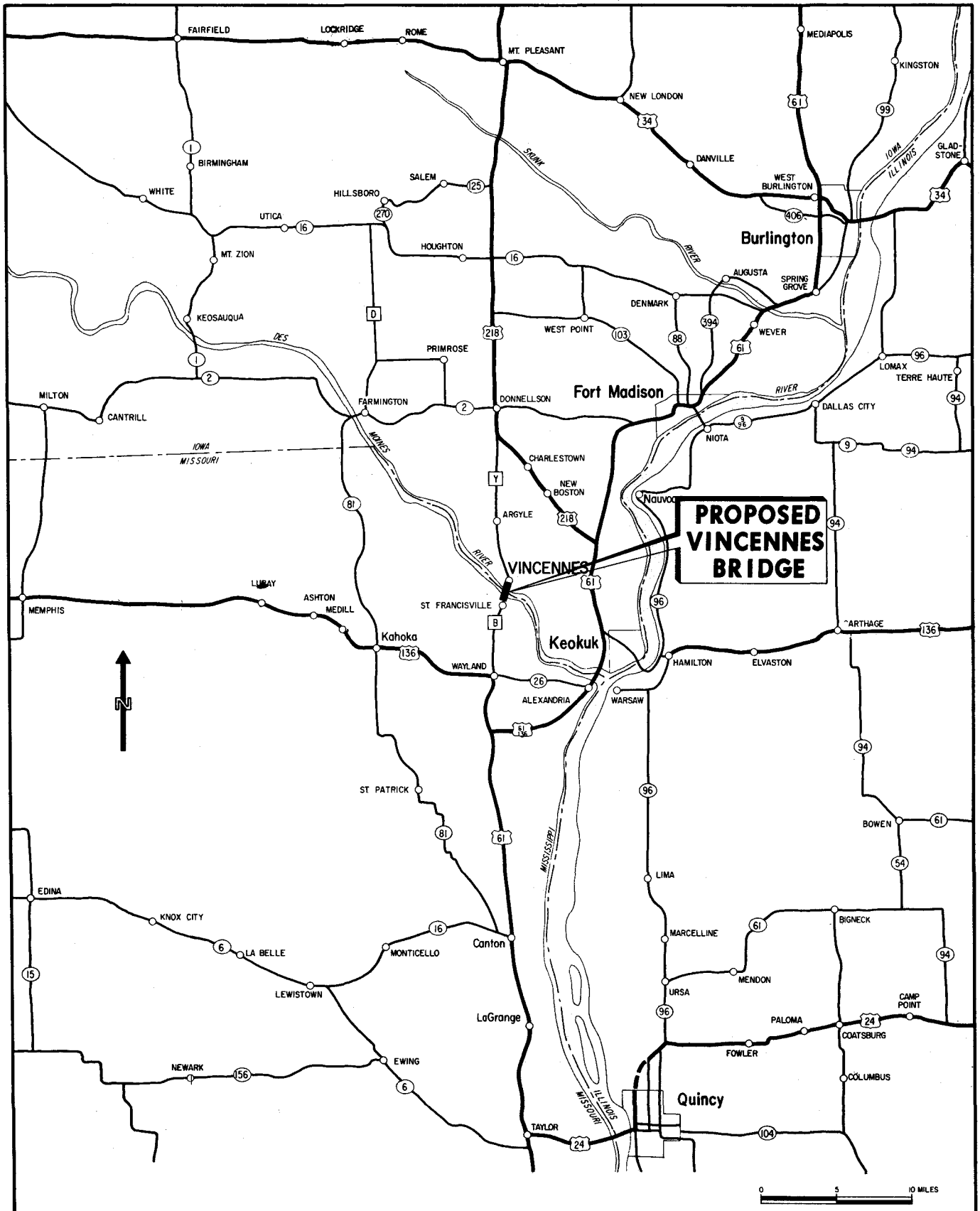
Preliminary estimates of annual toll revenues were then developed based on the economic and traffic trend studies and forecasts of future growth in the area. Using the project cost and annual maintenance and operating expense estimates developed by Howard, Needles, Tammen & Bergendoff, a preliminary indication of project feasibility was determined.

Proposed Vincennes Bridge

The proposed Vincennes Bridge would be designed as a modern, two-lane structure with minimum approach road grades and adequate lane widths.

The facility would have a 32-foot curb-to-curb section enabling smooth, efficient and safe passage for all vehicle types. The bridge would operate as a toll crossing.

Several alternate bridge alignments were given preliminary study. The alignment which produced the highest level of traffic service, commensurate with the most economical development cost, was selected for more detailed study. The location of this alignment is depicted in Exhibit II-1.



LOCATION MAP

Wilbur Smith and Associates

EXHIBIT II-1

AREA GROWTH ANALYSES

Several economic parameters were evaluated to determine relative levels of activity and recent growth trends in the Vincennes area. These indices included population, retail sales and average effective buying income per family. In addition, trends in motor vehicle registrations and motor fuel consumption, both excellent measures of highway travel, were analyzed. For study purposes, the bridge influence area, depicted in Exhibit II-1, was defined which included Lee County in Iowa and Clark County, Missouri.

Local field reconnaissance was conducted in the bridge study area and contact made with various officials and others to obtain information regarding trends and characteristics of land use and economic activity. Available current data and forecasts for the bridge study area were assembled and reviewed.

Study Area Characteristics

The surrounding region on both sides of the bridge in the Vincennes area is rural in nature. The predominant activity is agriculture. For commercial activity, including virtually all manner of goods and services, the predominant orientation is to Keokuk, located 12 miles southeast of the St. Francisville Bridge. The Shimek State Forest, near Farmington, generates some recreational travel activity.

Population Trends

Communities in the bridge influence area on both sides of the Des Moines River are generally small in size, as shown by Table II-1. The 1960 population of Donnellson (including Primrose) was 744, while Argyle (including Charlestown, New Boston and Vincennes) reported a population of 220. In Missouri, the closest communities to the proposed bridge are Wayland and Kahoka, with 1960 populations of 384 and 2,160, respectively. The larger municipalities,

TABLE II-1

POPULATION TRENDS

AREA	1950	AVERAGE ANNUAL PER CENT CHANGE	1960	AVERAGE ANNUAL PER CENT CHANGE	1966
Cities:					
Argyle[1]	375	— 3.5	220	— —	N.A.
Donnellson[2]	654	1.3	744	— —	N.A.
Kahoka	1,847	1.6	2,160	— —	N.A.
Wayland	350	0.9	384	— —	N.A.
Counties:					
Clark	9,003	— 0.3	8,725	— 1.3	8,100
Lee	43,102	0.3	44,207	0.2	44,800
Two-County Total	52,105	0.2	52,932	0	52,900
States:					
Iowa	2,621,073	0.5	2,757,537	0.3	2,813,600
Missouri	3,954,653	0.9	4,319,813	0.8	4,516,000
United States[3]	150,697,361	1.7	178,464,236	1.6	196,208,200

N.A. = Not Available.

(1) Includes communities of Charlestown, New Boston and Vincennes.

(2) Includes community of Primrose.

(3) Does not include Alaska and Hawaii.

SOURCE: U. S. Department of Commerce, Bureau of the Census; "Survey of Buying Power", *Sales Management.*

Donnellson and Kahoka, experienced some population growth between 1950-1960 — an average annual increase of 1.3 per cent occurred in Donnellson and 1.6 per cent in Kahoka. The smaller communities experienced smaller growths or declines in population.

The two-county bridge study area experienced little change in population over the 16-year period, 1950-1966. The 1966 population of Clark County was estimated at 8,100, a decline from the 9,003 persons recorded in 1950. The population of Lee County in 1966 was estimated at 44,800, a slight increase over the 43,102 persons enumerated in the 1950 census. The population change in Lee County remained fairly constant over the 16-year period, while the decline reported in Clark County occurred at a faster pace during the past six years than in the decade 1950-1960.

Statewide population growths in Iowa and Missouri have been nominal over the past 16 years with an average annual growth of 0.3 per cent in Iowa and 0.8 per cent in Missouri. These growths were considerably lower than those reported nationally over the same period.

Trends in Retail Sales

Retail sales in the two-county study area increased substantially between 1956 and 1966, following a pattern which conformed to state and national trends. In 1956, retail sales for the two-county study area totaled $52,003,000. By 1966, they had increased to $80,257,000, representing an average annual growth of 2.2 per cent between 1956 and 1961 and 6.7 per cent between 1961 and 1966.

Average Effective Buying Income Per Family Trends

In 1956, the average effective buying income per family in the study area was $4,547. By 1966, this had increased to $8,166, with average annual growths of 4.5 and 5.5 per cent occurring between 1955-61 and 1961-66,

respectively. Comparable growths were realized in both Lee and Clark County over this period. However, the income level in Lee County was higher, due to the influence of the two sizeable industrial cities of Fort Madison and Keokuk. In 1966, rural-oriented Clark County had an average family income of $5,563 compared to the $8,664 reported for Lee County.

Over the past five years, income growth in the study area was somewhat below the vigorous statewide average increase achieved in Iowa, but was higher than the growth rates recorded statewide in Missouri and nationally. The average income for the two-county study area, $8,166, was slightly below Iowa's statewide average of $8,416, slightly more than Missouri's average of $8,005 and below the national average of $8,522.

Trends in Motor Vehicle Registrations

Between 1956 and 1961, motor vehicle registrations in Lee County increased an average of 1.8 per cent per year. Registration growth accelerated between 1961 and 1966 to an average annual rate of 4.0 per cent, totaling 24,762 in 1966.

Over the last five years, growth in vehicle registrations in Lee County compared favorably with the rate of increase recorded statewide in Iowa (3.6 per cent per year) and that of Missouri (5.6 per cent per year). Nationally, motor vehicle registrations increased 4.4 per cent annually during this period.

Motor Fuel Consumption Trends

Reflecting the growths in personal income and motor vehicle registrations over the last decade, personal travel, as measured by motor fuel consumption, also increased. In Iowa, motor fuel consumption increased an average of 2.0 per cent per year between 1956 and 1961 and 2.5 per cent annually between 1961 and 1966. During the same period, Missouri recorded increases of 2.3 and 3.1 per cent annually, respectively. The national growth rate was somewhat higher.

Future Growth

Population projections for the bridge study area indicate that a continuation of the generally-stable population trend experienced in recent years is anticipated. As shown in Table II-2, it is estimated that the 1960 population of the two-county study area of 52,932 will show little change through 1980. A slight decline is anticipated for Clark County which will more than off-set a slight increase forecast for Lee County. A continued population decline is projected for the Argyle-Charlestown-New Boston-Vincennes area, while a nominal growth trend is estimated for Donnellson-Primrose.

TABLE II-2

POPULATION PROJECTIONS

AREA	1960	AVERAGE ANNUAL PER CENT CHANGE	1980
Cities:			
Argyle[1]	220	— 2.2	100
Donnellson[2]	744	1.1	921
Counties:			
Clark	8,725	— 0.8	7,090[3]
Lee	44,207	0.1	45,700
Two-County Total	52,932	0	52,790
States:			
Iowa	2,757,537	0.7	3,192,000
Missouri	4,319,813	1.3	5,647,200[3]

(1) Includes communities of Charlestown, New Boston and Vincennes.

(2) Includes community of Primrose.

(3) Interpolated from 1970-1990 projections prepared by the Division of Highway Planning, Missouri Highway Department.

SOURCE: Iowa State Highway Commission, Bureau of Planning; Division of Highway Planning, Missouri Highway Department.

The basically unchanged population total in the study area through the forecast period appears to be the result of a continuation of the historical movement of population from rural areas to urban areas. Statewide, growth in Iowa over the forecast period is estimated at 0.7 per cent annually while the outlook for Missouri envisions a growth of 1.3 per cent per year.

As leisure time and general prosperity increase, recreational travel will become a more important component of total future trip-making. State parks and forests are located in Iowa in or just beyond the study area. These include Shimek State Forest and Geode and Oakland Mills State Parks.

Pleasure driving and recreational travel is also expected to increase in importance as additional recreational facilities are developed, such as the "Great River Road" project on both sides of the Mississippi River. These factors can be expected to encourage trans-river travel movement potential to the proposed Vincennes Bridge.

TRAFFIC STUDIES

Preliminary studies were made to evaluate the traffic potential of the proposed Vincennes Bridge. These studies included route reconnaissance investigations to evaluate the quality of traffic service provided by alternative trans-river crossings, as well as assembly and analysis of data relating to magnitude and composition of traffic and present trans-river travel patterns.

Route Reconnaissance

County Road Y, approaching the St. Francisville Bridge from the north, is a two-lane paved road in good condition and follows a generally straight alignment. U. S. Route 218 from its junction with County Road Y northward, is a two-lane roadway with an 18-foot pavement width. It carries an "unsatisfactory" sufficiency rating and is scheduled for early reconstruction. Iowa Route 2 crosses the study area on an east-west alignment through Donnellson, where it joins U. S. Route 218. West of this junction, it is a two-lane paved road with a 24-foot pavement width and an "excellent" rating. East of Donnellson, the pavement narrows to 18 feet and the road is scheduled for improvement in the current Five-Year Iowa Highway Construction Program. There are several small feeder roads which serve the study area. These, for the most part, have crushed stone surfaces and are generally in good to fair condition.

County Road B, proceeding southward from the St. Francisville Bridge, has a 24-foot asphalt concrete pavement surface with good alignment and is well-maintained. U. S. Route 136 has a 22-foot wide asphalt concrete paved surface through the study area and is also in good condition. Missouri Route 81, running northward from Kahoka, has a 20-foot bituminous pavement surface, in fair condition.

Posted speed limits in the bridge study area range downward from the daytime limit of 70 miles per hour for automobiles on rural sections of the principal Iowa routes, to less than 30 miles per hour in built-up areas. Speed and delay surveys revealed generally good travel conditions, with no difficulty in maintaining speeds close to posted limits.

Present Traffic Volumes

The importance of study area highways, in terms of relative traffic volumes, is depicted in Exhibit II-2. U. S. Route 61 is the principal north-south route through the study area. In contrast, relatively little traffic is shown in the St. Francisville Bridge corridor. U. S. Route 136 is an important east-west traffic artery through northern Missouri. Iowa Route 2 carries comparable traffic volumes in a generally-parallel corridor to the north.

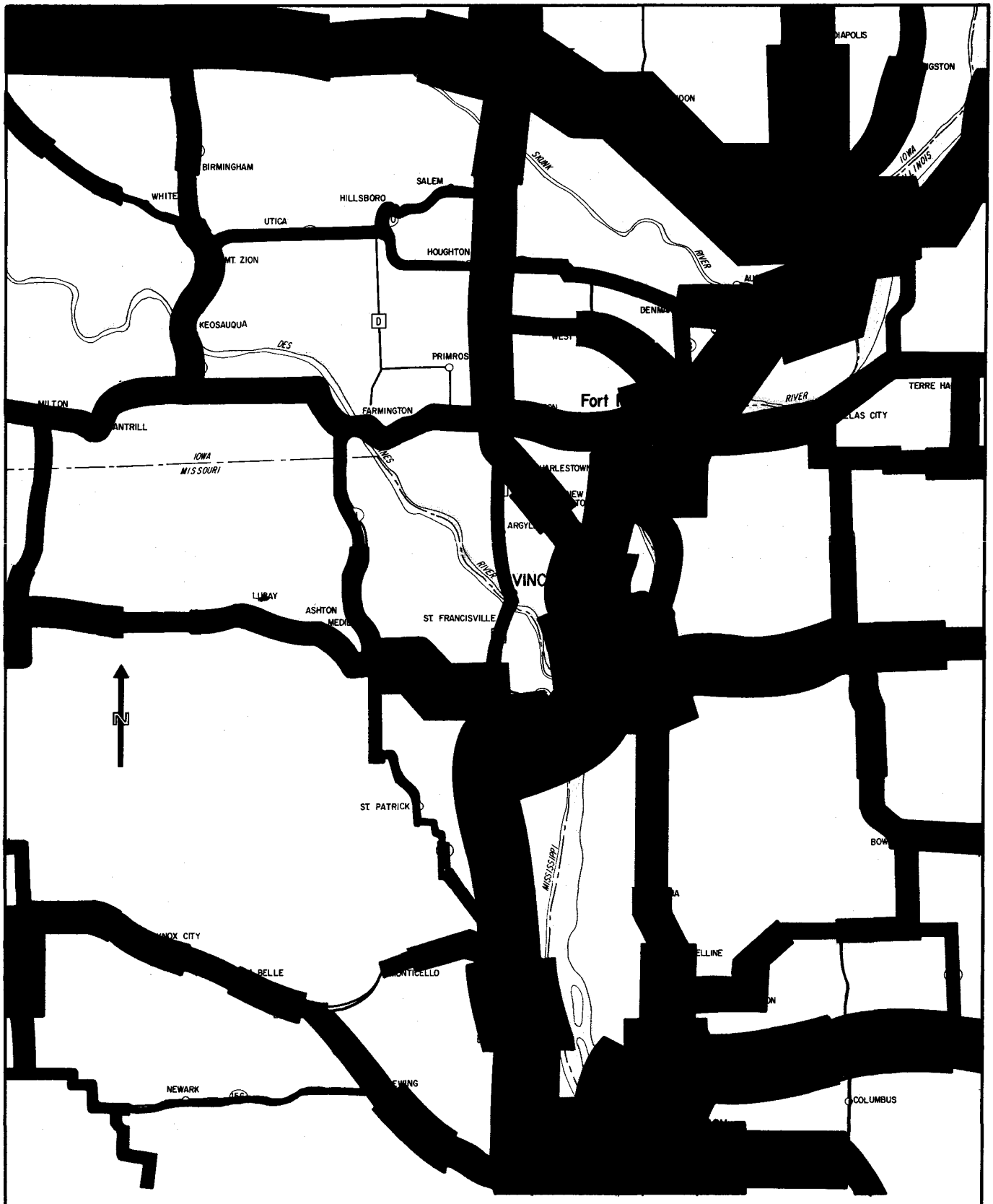
Annual Traffic Trends

Annual traffic and revenue trends for the St. Francisville Bridge were assembled and reviewed. In addition, annual average daily crossing volumes at the closest alternative crossings, the toll-free bridges at Farmington and the U. S. Routes 61-136 Bridge at Keokuk, were also reviewed and evaluated.

St. Francisville Bridge — As shown in Table II-3, in 1961 daily traffic on the St. Francisville Bridge averaged 165 vehicles, producing annual toll revenues of about $11,350. By 1966, traffic had increased to 524 vehicles per day, an average annual growth of 25.9 per cent, while yearly revenues increased an average of 23.2 per cent per year to $32,200.

Alternative Des Moines River Crossings — Average daily traffic on the Iowa Route 2 bridge at Farmington decreased from 1,870 vehicles in 1959, to 1,680 in 1965. As shown in Table II-4, although traffic decreased an average of 1.7 per cent annually over the entire period, the decrease occurred prior to 1962. Between 1962 and 1965, a traffic growth averaging 0.8 per cent per year occurred.

At the Keokuk crossing, traffic increased from an average of 2,870 vehicles per day in 1959 to 4,110 in 1965. The average annual growth of 7.2 per cent was generally uniform throughout the period.



TRAFFIC FLOW MAP

1965 AVERAGE DAILY TRAFFIC

Wilbur Smith and Associates

EXHIBIT II-2

TABLE II-3

ANNUAL TRAFFIC AND REVENUE TRENDS[1]

St. Francisville Bridge

YEAR	AVERAGE DAILY TRAFFIC	ANNUAL REVENUE
1961	165	$11,350
1964	310	19,800
1966	524	32,200
AVERAGE ANNUAL PER CENT CHANGE		
1961-1966	25.9	23.2
1964-1966	26.6	27.4

[1] Estimated by Wilbur Smith and Associates from traffic count samplings at bridge.

SOURCE: Wayland Special Road District.

TABLE II-4

ANNUAL TRAFFIC TRENDS

Adjacent Des Moines River Crossings

YEAR	IOWA ROUTE 2 FARMINGTON	U. S. ROUTES 61-136 KEOKUK
	(Average Daily Traffic)	
1959	1,870	2,870
1962	1,640	3,180
1965	1,680	4,110
AVERAGE ANNUAL PER CENT CHANGE		
1959-1965	— 1.7	7.2
1962-1965	0.8	9.0

SOURCE: Volume of Traffic on the Primary Road System, Iowa State Highway Commission.

Monthly Traffic Variations

Monthly traffic variations at the St. Francisville Bridge have remained relatively stable over the past several years and reflect trends typical for the area. Traffic is at a minimum level during winter months, close to the annual average during spring and fall and reaches a peak in summer. Analysis of seasonal variations for 1964 showed variations from the average month ranging from 27 per cent below average in the winter to 23 per cent above average during the peak summer season.

Origin and Destination Studies

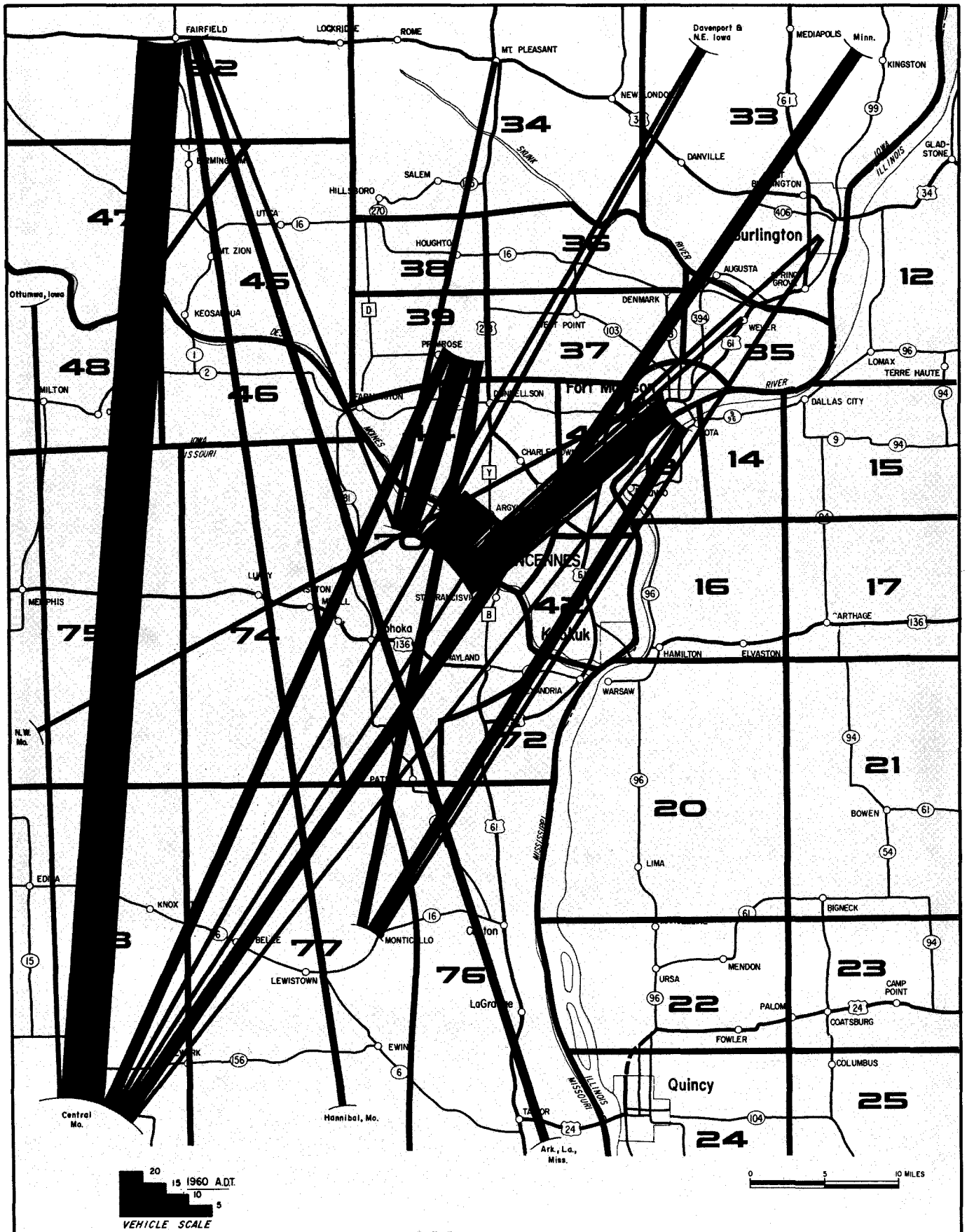
During the summer of 1960, the Iowa State Highway Commission conducted origin and destination surveys at a number of multiple screenline stations located along the state's borders. As part of this study, roadside interviews were conducted on a typical summer weekday with motorists using the St. Francisville Bridge. Information from this survey formed the basis for the travel patterns used in this study.

Vehicle Classification Counts

A summary of recent vehicle classification counts at the St. Francisville Bridge is shown in Table II-5. Passenger cars represented 80.5 per cent of all vehicles using the bridge. Straight trucks accounted for 4.0 per cent of all traffic and semi-trailer vehicles — 15.5 per cent.

Travel Desires

The traffic movements measured on the St. Francisville Bridge during the 1960 origin and destination survey were coded, for analysis purposes, to the geographic traffic zone pattern, partially shown in Exhibit II-3. The resulting zone-to-zone travel movements were then adjusted to represent an average day



TRAVEL DESIRES

ST. FRANCISVILLE BRIDGE

1960 AVERAGE DAILY TRAFFIC

Wilbur Smith and Associates

EXHIBIT II-3

in 1960 and the travel desire lines, also shown in Exhibit II-3, prepared. The widths of the traffic flow bands illustrated are proportional to the number of trips between each zone pair.

TABLE II-5

SUMMARY OF VEHICLE CLASSIFICATION COUNTS

St. Francisville Bridge

1966

VEHICLE CLASSIFICATION	AVERAGE DAILY TRAFFIC	PER CENT OF TOTAL
Passenger Cars	421	80.5
Straight Trucks	22	4.0
Semi-Trailer Vehicles	81	15.5
TOTAL	524	100.0

SOURCE: Wayland Special Road District.

Relatively little local or short-distance traffic was found on the bridge. Most of the trips were of an intermediate length, with one or both trip ends located within a 20-to-50-mile radius of the crossing. The St. Francisville Bridge apparently functions as a short-cut link between portions of major routes. For example, on a trip from central Missouri or St. Louis to Fairfield, the bridge route links the southern portion of U. S. Route 61 with U. S. Routes 218-34 in the Fairfield vicinity.

Important bridge trip exchanges took place between the Iowa communities of Donnellson, Argyle, Vincennes and Fort Madison and the Kahoka-Medill area in Missouri. In addition, there was a significant number of trips between the Fairfield and Donnellson areas and central Missouri.

Typical Time-Distance Relationships

Representative time and distance relationships for several movements which could use either the proposed Vincennes Bridge or the closest crossings up or down river, are shown in Table II-6. The travel distances and times indicated were developed from the route reconnaissance studies conducted on pertinent highways in the study area. The driving times shown represent average speeds rather than the fastest time that could be achieved between the various trip termini indicated.

On a trip between Fort Madison and Kahoka, a routing via the proposed Vincennes Bridge would be about one mile and seven minutes longer than a routing via the Keokuk Bridge across the Des Moines River. Use of the Farmington Bridge for the same trip would be two minutes longer but the same distance as the proposed crossing.

For a trip between Donnellson and the intersection of U. S. Route 61 and the southern Clark County line, a routing by way of the proposed Vincennes Bridge would save about nine miles and six minutes compared to a routing via the Keokuk Bridge. Between Donnellson and Luray, use of the Vincennes Bridge would be one mile longer but would save about a minute in driving time over a routing via the Farmington Bridge.

For many of the intermediate length trips found using the present St. Francisville Bridge, no important savings in time or distance would be offered by a new crossing at Vincennes. However, during periods of unusual travel conditions, such as highway construction or river flooding, savings in travel time could become significant. For those trips having one or both termini close to the proposed crossing area, routings via the nearest alternative bridges would be several times longer in both time and distance than use of the present or proposed Vincennes crossing.

TABLE II-6

TYPICAL TIME-DISTANCE RELATIONSHIPS

BETWEEN	VIA	DISTANCE (Miles)	TIME (Min.)	AVERAGE SPEED (MPH)	SAVINGS VIA PROPOSED VINCENNES BRIDGE (Miles)	SAVINGS VIA PROPOSED VINCENNES BRIDGE (Min.)
Fort Madison and Kahoka	Proposed Vincennes Bridge	42	55	46		
	Keokuk Bridge (Des Moines River)	41	48	52	— 1	— 7
	Farmington Bridge	42	57	44	0	— 2
Donnellson and the intersection of U. S. Route 61 at the southern Clark County line	Proposed Vincennes Bridge	29	38	46		
	Keokuk Bridge (Des Moines River)	38	44	52	9	6
Donnellson and Luray	Proposed Vincennes Bridge	38	49	46		
	Farmington Bridge	37	50	44	— 1	1

ESTIMATED TRAFFIC AND REVENUES

Estimated traffic and revenues for the proposed Vincennes Bridge are based upon the number of motorists now using the present St. Francisville Bridge who would continue to make trans-river trips via an improved facility, under revised toll conditions. In addition, possible diversion of some motorists to the new bridge from the closest alternative crossings as well as possible diversion from the present crossing corridor to alternate bridges, was studied.

Basic Assumptions

Estimates of traffic and revenues for the proposed Vincennes Bridge are predicated on the following assumptions:

1. The facility will be open to traffic on July 1, 1971.
2. The bridge and approaches will be constructed on the alignment discussed in this report.
3. The recommended toll schedule will be implemented.
4. The present St. Francisville Bridge will be closed to highway traffic upon opening of the new facility.
5. No new river crossings will be constructed in the reach of the Des Moines River between Farmington and Keokuk.
6. The new bridge will be adequately maintained, efficiently operated and effectively signed to encourage maximum usage.
7. The present general trend in economic activity in the bridge study area will continue and no national emergency will arise which will abnormally restrict the use of motor vehicles.

Any departure from the above conditions could materially affect estimated traffic and revenues for the proposed bridge.

Recommended Method of Toll Collection

It is recommended that tolls be collected from all motorists using the proposed bridge at a toll booth located between the two travel lanes on the northern bridge approach. Initially, only one attendant would be necessary to collect tolls from both directions of travel. However, provision should be made in the initial design of the booth to ultimately provide for two toll attendants, one collecting from each direction of travel.

Recommended Toll Schedule

Several toll rates were analyzed to determine the optimum toll structure for the proposed Vincennes Bridge. These studies indicated that the preliminary toll schedule, shown in Table II-7, would produce maximum revenues. A higher toll would tend to discourage usage to the point where toll revenues would be less than those estimated under the recommended schedule. Conversely, a lower toll would increase usage but not sufficiently to produce higher aggregate revenues.

TABLE II-7

RECOMMENDED TOLL SCHEDULE

VEHICLE CLASS	DESCRIPTION	TOLL
1	Two-Axle Vehicles	$0.80
2	Three-Axle Vehicles and Vehicle Combinations	1.20
3	Four-Axle Vehicles and Vehicle Combinations	1.60
4	Five-Axle Vehicles and Vehicle Combinations	2.00
	Each Additional Axle	0.40

Under the recommended toll schedule, drivers of two-axle vehicles would pay a cash toll of $0.80 for each crossing. Larger vehicles would be charged a toll based on a rate of $0.40 per axle. For example, three-axle vehicles and

vehicle combinations would pay a $1.20 toll while four-axle vehicles and vehicle combinations would pay $1.60. The recommended per-axle toll would provide maximum control and auditing benefits as well as being easily understood by bridge users.

Estimated Base-Year (1966) Traffic Assignments

The number of motorists who would use the proposed Vincennes Bridge at base-year (1966) traffic levels was estimated based upon relative trip costs via the closest crossings up-and-downriver, versus use of the new facility.

Previous studies indicate a good correlation between the ratio of road-user costs and the proportion of vehicles that will use alternative routes available. In general, equal costs for alternate routes indicate an equal division of a traffic movement. A high ratio of trip cost for use of a new bridge to costs via the best alternative routing, indicates a low percentage of traffic assignable to the proposed facility. Conversely, a low ratio of road-user cost on the new facility to cost via the most competitive routing, indicates that a high percentage of traffic is divertible.

The route reconnaissance studies made during the field phases of this project were used as the basis for determining trip times and distances via alternative crossings. In addition to mileage and time costs, tolls were also added, where appropriate, to arrive at total estimated trip costs. The travel patterns determined from the origin and destination study conducted in 1960 by the Iowa State Highway Commission were used to determine a redistribution of trans-river trips, assuming the proposed Vincennes Bridge was constructed.

Analysis of trans-river travel patterns on the St. Francisville Bridge correlated with the travel-time and cost evaluations indicated that the proposed new bridge would not attract trips presently using the crossings at Keokuk and Farmington. Both of these alternate crossings are toll-free. The present St. Francisville Bridge now provides a reasonable level of traffic service to all vehicle types for a nominal toll charge which indicates that all traffic potential to the immediate bridge corridor is now using the facility.

Since the recommended toll for the proposed crossing is considerably higher than present tolls on the St. Francisville Bridge, it was estimated that some motorists would divert to the Farmington and Keokuk crossings.

As shown in Table II-8, 297 vehicles were assigned to the proposed Vincennes Bridge at 1966 average daily traffic levels, at the recommended toll rate. Of the total, 250 or 84.3 per cent, were two-axle vehicles. In addition, 11 — three-axle vehicles and vehicle combinations, 12 — four-axle vehicles and 24 — five-or-more-axle vehicles were assigned to the bridge.

TABLE II-8

ESTIMATED BASE-YEAR (1966) DIVERTED TRAFFIC

VEHICLE CLASS	DESCRIPTION	AVERAGE DAILY TRAFFIC
1	Two-Axle Vehicles	250
2	Three-Axle Vehicles and Vehicle Combinations	11
3	Four-Axle Vehicles and Vehicle Combinations	12
4	Five-or-More Axle Vehicles and Vehicle Combinations	24
	TOTAL	297

Estimated Annual Traffic and Toll Revenues

Annual growth in usage of the proposed Vincennes Bridge was estimated based upon normal increases in trans-river traffic which might be anticipated over the next several years in the bridge travel corridor. The possibility of induced or generated and development traffic accruing to the new bridge was also considered.

Estimates of normal growth were based upon trends in use of the present St. Francisville Bridge, traffic trends on the crossings immediately up-and-down-river, and on trends and projected increases in population and other economic

parameters in the bridge study area. In considering recent traffic trends on the St. Francisville Bridge, the high growth rate experienced since 1961 appears to have been due, in large measure, to the fact that the approach roads on both sides of the river have been paved and upgraded to provide a higher level of traffic service, thereby inducing considerably more traffic than might normally be expected in the travel corridor.

It is estimated that a normal traffic growth of 5.0 per cent per year will occur in the proposed Vincennes Bridge corridor between 1966 and 1974, decreasing to 4.0 per cent annually between 1974 and 1978 and to 3.0 per cent per year between 1979 and 1985. For purposes of conservatism, no normal traffic growth was projected beyond 1985 although some increase in traffic is anticipated.

Since the present St. Francisville Bridge provides unrestricted service in the traffic corridor, no measurable amount of induced or generated and development traffic is anticipated to occur on the proposed bridge.

As shown in Table II-9, it is estimated that an average of 380 vehicles per day will use the proposed Vincennes Bridge during its first full year of operation, the 12-month period beginning July 1, 1971, producing gross toll revenues of $131,000. By 1985, the 15th year of operation, an estimated 635 vehicles per day will use the crossing, resulting in gross annual toll revenues of $220,000.

Average annual toll revenues over the first five years of operation are estimated at $144,000. Over the 28-year earning period of the assumed bond issue, average annual gross revenues are estimated at $196,000.

These estimates are preliminary and intended to show the earning trend over a period of years rather than the exact earnings for any particular year. There could, of course, be years in which growth in traffic and revenues might be higher or lower than indicated, depending upon economic conditions and other local factors that might affect bridge usage at that time.

TABLE II-9

ESTIMATED ANNUAL TRAFFIC AND REVENUES

FISCAL YEAR[1]	AVERAGE DAILY TRAFFIC	GROSS REVENUES
1971	380	$131,000
1972	400	137,000
1973	420	144,000
1974	440	151,000
1975	460	157,000
1976	475	164,000
1977	495	170,000
1978	515	177,000
1979	535	184,000
1980	550	190,000
1981	565	195,000
1982	585	201,000
1983	600	207,000
1984	620	213,000
1985	635	220,000
Next 13 Years Annually	635	$220,000
AVERAGE ANNUAL GROSS REVENUES		
First Five Years		$144,000
First Ten Years		$161,000
Twenty-eight Years		$196,000

[1] Twelve-month period beginning July 1.

PRELIMINARY PROJECT FEASIBILITY

Annual net revenues to be derived from the proposed Vincennes Bridge were determined by deducting annual maintenance and operating costs, developed by Howard, Needles, Tammen & Bergendoff, from gross revenues anticipated from the project. Preliminary project feasibility computations were then made by relating estimated annual net revenues to the maximum interest and level debt service requirements of an assumed bond issue sufficient to meet estimated capital costs of the proposed bridge.

Estimated Annual Net Revenues

Estimated annual net revenues for the proposed Vincennes Bridge are shown in Table II-10. For the first full year of operation, net revenues of $81,000 are estimated, increasing to $128,000 by 1985. Over the first five years of operation, average annual net revenues of $88,000 are estimated. Average annual net revenues over the 28-year earning period of the assumed bond issue are estimated at $116,000.

Preliminary Project Feasibility

There are two "tests" which financial advisors usually employ to determine the relative range of feasibility of a toll project. The first is the coverage of first-year (maximum) interest by first-year net revenues. The second is the coverage of level debt service by average annual net revenues over the earning period of the assumed bond issue.

As a measure of feasibility, financial interests normally regard a first-year net revenue coverage of maximum interest of 1.20 to be satisfactory. An average annual net revenue coverage of level debt service in excess of 1.50 is usually considered indicative of financial feasibility.

TABLE II-10

ESTIMATED ANNUAL NET REVENUES

FISCAL YEAR[1]	GROSS REVENUES	MAINTENANCE AND OPERATING COSTS	NET REVENUES
1971	$131,000	$50,000	$ 81,000
1972	137,000	53,000	84,000
1973	144,000	56,000	88,000
1974	151,000	59,000	92,000
1975	157,000	62,000	95,000
1976	164,000	65,000	99,000
1977	170,000	68,000	102,000
1978	177,000	71,000	106,000
1979	184,000	74,000	110,000
1980	190,000	77,000	113,000
1981	195,000	80,000	115,000
1982	201,000	83,000	118,000
1983	207,000	86,000	121,000
1984	213,000	89,000	124,000
1985	220,000	92,000	128,000
Next 13 Years Annually	$220,000	$92,000	$128,000

AVERAGE ANNUAL NET REVENUES

First Five Years	$ 88,000
First Ten Years	$ 97,000
Twenty-eight Years	$116,000

[1] Twelve-month period beginning July 1.

The feasibility computations shown in Table II-11 were developed assuming a bond interest rate of 5.5 per cent and a bond term of 30 years. Based on project costs developed by Howard, Needles, Tammen & Bergendoff, it is estimated that a bond issue of $1,686,000 would be required to construct the bridge on the proposed alignment at Vincennes. The escalation from estimated project costs to bond issue size includes such financing items as bond discount, legal and financial fees, and capitalized interest during construction. Based upon the relationship between project cost and bond issue size for several comparable projects which have been successfully financed, a factor of 1.2 was applied to project cost to determine a preliminary bond issue.

TABLE II-11

PRELIMINARY PROJECT FEASIBILITY

ITEM	
Bond Term	30 Years
Bond Earning Period	28 Years
Bond Interest Rate	5.5 Per Cent
Preliminary Project Cost[1]	$1,405,000
Estimated Bond Issue[2]	1,686,000
First-Year Interest	93,000
Level Debt Service over 28 Years	119,000
Estimated First-Year Net Revenues	81,000
Estimated Average Annual Net Revenues over 28 Years	116,000
COVERAGES	
First-Year Interest by First-Year Net Revenues	0.87
Level Debt Service by Average Annual Net Revenue over 28 Years	0.97

[1] Estimated by Howard, Needles, Tammen & Bergendoff.

[2] Assumes ratio of project cost to bond issue of 1.0 to 1.2.

As shown in Table II-11, estimated first-year net revenues for the proposed Vincennes Bridge would cover first-year interest 0.87 times. Average annual net revenues would provide a 0.97 coverage of level debt service. Both coverage values are considerably below the levels normally regarded as indicative of financial feasibility.

It should be emphasized, however, that the above computations were developed only as a guide and that a final determination of project feasibility should be made by financial advisors selected for this purpose. The coverages indicate that substantial subsidies would be required to finance the proposed facility.

Relationship Between Level Debt Service and Net Revenues

Some indication of the relative amount of subsidy necessary to supplement net revenues in order to meet level debt service for the assumed bond issue is shown in Table II-12.

It is estimated that the first year of operation would result in a deficit of $38,000 which would decline to approximately $1,000 annually by 1982. Annual surpluses would then begin to accumulate beginning with $2,000 in 1983, increasing to a maximum of $9,000 by 1985 and continuing at that level throughout the remaining life of the bond issue. Total deficits are estimated at $225,000. These would be partially offset by a total surplus of $133,000. Over the life of the bond issue, a total net deficit of $92,000 is estimated.

TABLE II-12

RELATIONSHIP BETWEEN LEVEL DEBT SERVICE AND NET REVENUES

FISCAL YEAR[1]	NET REVENUES	LEVEL DEBT SERVICE	NET REVENUES TO LEVEL DEBT SERVICE	
			Deficit	Surplus
1971	$ 81,000	$119,000	$ 38,000	— —
1972	84,000	119,000	35,000	— —
1973	88,000	119,000	31,000	— —
1974	92,000	119,000	27,000	— —
1975	95,000	119,000	24,000	— —
1976	99,000	119,000	20,000	— —
1977	102,000	119,000	17,000	— —
1978	106,000	119,000	13,000	— —
1979	110,000	119,000	9,000	— —
1980	113,000	119,000	6,000	— —
1981	115,000	119,000	4,000	— —
1982	118,000	119,000	1,000	— —
1983	121,000	119,000	— —	$ 2,000
1984	124,000	119,000	— —	5,000
1985	128,000	119,000	— —	9,000
1986	128,000	119,000	— —	9,000
1987	128,000	119,000	— —	9,000
1988	128,000	119,000	— —	9,000
1989	128,000	119,000	— —	9,000
1990	128,000	119,000	— —	9,000
1991	128,000	119,000	— —	9,000
1992	128,000	119,000	— —	9,000
1993	128,000	119,000	— —	9,000
1994	128,000	119,000	— —	9,000
1995	128,000	119,000	— —	9,000
1996	128,000	119,000	— —	9,000
1997	128,000	119,000	— —	9,000
1998	128,000	119,000	— —	9,000
		TOTAL	$225,000	$133,000

[1] Twelve-month period beginning July 1.

APPENDIX

Iowa Senate File 131

The General Bridge Act

Public Law 337-72nd Congress

STATE HIGHWAY COMMISSION – INTERSTATE BRIDGES
SENATE FILE 131

AN ACT AUTHORIZING THE STATE HIGHWAY COMMISSION TO ACQUIRE, PURCHASE AND CONSTRUCT INTERSTATE BRIDGES, APPROACHES THERETO AND SITES THEREFOR, TO RECONSTRUCT, COMPLETE, IMPROVE, REPAIR, REMODEL, CONTROL, MAINTAIN, AND OPERATE INTERSTATE BRIDGES, TO ESTABLISH TOLLS AND CHARGES FOR THE USE OF INTERSTATE BRIDGES, TO BORROW MONEY AND ISSUE BONDS PAYABLE SOLELY FROM THE REVENUES DERIVED FROM THE OPERATION OF INTERSTATE BRIDGES, AND TO REFUND BONDS PAYABLE FROM SUCH REVENUES.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

Section 1. The following words or terms, as used in this Act, shall have the respective meanings as stated:

"Toll bridge" shall mean an interstate bridge constructed, purchased or acquired under the provisions of this Act, upon which tolls are charged, together with all appurtenances, additions, alterations, improvements, and replacements thereof, and the approaches thereto, and all lands and interests therein used therefor, and buildings and improvements thereon.

"Commission" shall mean the state highway commission, the agency of the state of Iowa created and provided for under the provisions of chapter three hundred seven (307) of the Code.

"Construct, constructing, construction or constructed" shall include the reconstruction, remodeling, repair, or improvement of any existing toll bridge as well as the construction of any new toll bridge.

"Acquisition by purchase, gift, or condemnation" as used in this Act shall mean acquisition by the state highway commission, whether such terms "purchase, gift, or condemnation" are used singularly or in sequence.

Section 2. The state highway commission shall have full charge of the construction and acquisition of all toll bridges constructed or acquired under the provisions of this Act, the operation and maintenance thereof and the imposition and collection of tolls and charges for the use thereof. The commission shall have full charge of the design of all toll bridges constructed under the provisions of this Act. The commission shall proceed with the construction of such toll bridges and other facilities and the approaches thereto by contract immediately upon there being made available funds for such work and shall prosecute such work to completion as rapidly as practicable. The commission shall advertise for bids for the construction, reconstruction, improvement, repair or remodeling of any toll bridge by publication of a notice once each week for at least two (2) consecutive weeks in a newspaper published and having a general circulation throughout the state of Iowa, the first publication to appear at least fifteen (15) days prior to the date set for receiving bids. The commission shall have the power to accept such offer or offers, propositions or bids, and enter into such contract or contracts as it shall deem to be to the best interest of the state.

Section 3. The commission is hereby authorized to establish and construct toll bridges upon any public highway, together with approaches thereto, wherever it is considered necessary or advantageous and practical for crossing any navigable river between this state and an adjoining state. The necessity or advantage and practicality of any toll bridge shall be determined by the commission. To obtain information for the consideration of the commission upon the construction of any toll bridge or any other matter pertaining thereto, any officer or employee of the state, upon the request of the commission, shall make reasonable examination, investigation, survey, or reconnaissance to determine material facts pertaining thereto and shall report such findings to the commission. The cost thereof shall be borne by the department or office conducting it from funds provided for its functions.

Section 4. The commission is hereby authorized to enter into agreements with any federal bridge commission or any county, city, or town of this state, and with an adjoining state or county, city, or town thereof, for the purpose of implementing an investigation of the feasibility of any toll bridge project for the bridging of a navigable river forming a portion of the boundary of this state and such adjoining state. The commission may use any funds available for the purposes of this section. Such agreements may provide that in the event any such project is determined to be feasible and adopted, any advancement of funds by any state, county, city, or town may be reimbursed out of any proceeds derived from the sale of bonds or out of tolls and revenues to be derived from such project.

Section 5. Whenever the commission deems it necessary or advantageous and practical, it may acquire by gift, purchase, or condemnation any interstate bridge which connects with or may be connected with the public highways and the approaches thereto, except that the commission may not condemn an existing interstate bridge used for interstate highway traffic and combined highway and railway traffic and presently owned by a municipality, or a person, firm, or corporation engaged in interstate commerce. In connection with the acquisition of any such bridge, the commission and any federal bridge commission or any city, town, county, or other political subdivision of the state are authorized to do all acts and things as in this Act are provided for the establishing and constructing of toll bridges and operating, financing, and maintaining such bridges insofar as such powers and requirements are applicable to the acquisition of any toll bridge and its operation, financing, and maintenance. In so doing, they shall act in the same manner and under the same procedures as provided for establishing, constructing, operating, financing, and maintaining toll bridges insofar as such manner and procedures are applicable. Without limiting the generality of the above provisions, the commission is hereby authorized to cause surveys to be made to determine the propriety of acquiring any such bridge and the rights-of-way necessary therefor, and other facilities necessary to carry out the provisions hereof; to issue, sell, redeem bonds or issue and exchange bonds with present holders of outstanding bonds of bridges being acquired under the provisions of this Act and deposit and pay out of the proceeds of the bonds for the financing thereof; to impose, collect, deposit, and expend tolls therefrom; to secure and remit financial and other assistance in connection with the purchase thereof, and to carry insurance thereon.

Section 6. The commission, its officials, and all state officials are hereby authorized to perform such acts and make such agreements consistent with the law which are necessary and desirable in connection with the duties and powers conferred upon them regarding the construction, maintenance, and operation and insurance of toll bridges or the safeguarding of the funds and revenues required for such construction and the payment of the indebtedness incurred therefor. The commission shall adopt such rules and regulations in accordance with the provisions of chapter seventeen A (17A) of the Code as it may deem necessary for the administration and exercise of its powers and duties granted by this Act, and shall prepare annual financial statements regarding the operation of such toll bridges which shall be made available for inspection by the public and by the holders of revenue bonds issued by the commission under the provisions of this Act at all reasonable times.

Section 7. Whenever the commission deems it to be in the best interest of the primary highway system that any new toll bridge be constructed upon any public highway and across any navigable river between this state and an adjoining state, the commission shall adopt a resolution declaring that the public interest and necessity require the construction of such toll bridge and authorizing the issuance of revenue bonds in an amount sufficient for the purpose of obtaining funds for such construction. The issuance of bonds as provided in this Act for the construction, purchase, or acquisition of more than one (1) toll ridge may, at the discretion of the commission, be included in the same authority and issue or issues of bonds, and the commission is hereby authorized to pledge the gross revenues derived from the operation of any such toll bridge under its control and jurisdiction to pay the principal of and interest on bonds issued to pay the cost of purchasing, acquiring, or constructing any such toll bridge financed under the provisions of this Act. The commission is hereby granted wide discretion, in connection with the financing of the cost of any toll bridge, to pledge the gross revenues of a single toll bridge for the payment of bonds and interest thereon issued to pay the cost of such bridge and to pledge the gross revenues of two (2) or more toll bridges to pay bonds issued to pay the cost of one (1) or more toll bridges and interest thereon as long as the several bridges included herein are not more than ten (10) miles apart.

In addition, if the commission in its discretion determines that the construction of a toll bridge cannot be financed entirely through revenue bonds and that the construction of such toll bridge is necessary, the commission may advance funds from the primary highway fund to pay for that part of the construction cost, including the cost of approaches and all incidental costs, which is not paid out of the proceeds of revenue bonds. After all revenue bonds and interest thereon issued and sold pursuant to this Act and payable from the tolls and revenues of said bridge have been fully paid and redeemed or funds sufficient to pay said bonds and interest, including premium, if any, have been set aside and pledged for that purpose, then such amount advanced from the primary road fund shall be repaid to the primary road fund from the tolls and revenues of said bridge before said bridge is made a toll free bridge under the provisions of this Act.

Section 8. Whenever the commission shall authorize the construction of any toll bridge, the commission is empowered to secure rights-of-way therefor and for approaches thereto by gift or purchase or by condemnation in the manner provided by law for the taking of private property for public purposes.

Section 9. The right-of-way is hereby given, dedicated, and set apart upon which to locate, construct, and maintain toll bridges or approaches thereto or other highway crossings, and transportation facilities thereof or thereto, through, over or across any of the lands which are now or may be the property of this state, including highways; and through, over, or across the streets, alleys, lanes, and roads within any city, town, county, or other political subdivision of the state. If any property belonging to any city, town, county or other political subdivision of the state is required to be taken for the construction of any such bridge or approach thereto or should any such property be injured or damaged by such construction, such compensation therefor as may be proper or necessary and as shall be agreed upon may be paid by the commission to the particular county, city, town, or other political subdivision of the state owning such property, or condemnation proceedings may be brought for the determination of such compensation.

Section 10. Before the commission shall proceed with any action to secure right-of-way or with the construction of any toll bridge under the provisions of this Act, it shall first pass a resolution finding that public interest and necessity require the acquisition of right-of-way for and the construction of such toll bridge. Such resolution shall be conclusive evidence of the public necessity of such construction and that such property is necessary therefor. To aid the commission in determining the public interest, a public hearing shall be held in the county or counties of this state in which any portion of a bridge is proposed to be located. Notice of such hearing shall be published at least once in a newspaper published and having a general circulation in the county or counties where such bridge is proposed to be located, not less than twenty (20) days prior to the date of the hearing. When it becomes necessary for the commission to condemn any real estate to be used in connection with any such bridge, or to condemn any existing bridge, such condemnation shall be carried out in a manner consistent with the provisions of chapters four hundred seventy-one (471) and four hundred seventy-two (472) of the Code. In eminent domain proceedings to acquire property for any of the purposes of this Act, any bridge, real property, personal property, franchises, rights, easements, or other property or privileges appurtenant thereto appropriated or dedicated to a public use or purpose by any person, firm, private, public or municipal corporation, county, city or town, district, or any political subdivision of the state, may be condemned and taken, and the acquisition and use thereof as herein provided for the same public use or purpose to which such property has been so appropriated or dedicated, or for any other public use or purpose, shall be deemed a superior and permanent right and necessity, and a more necessary use and purpose than the public use or purpose to which such property has already been appropriated or dedicated, and any condemnation award may be paid from the proceeds of revenue bonds issued under the provisions of this Act.

Section 11. If the commission determines that any toll bridge should be constructed or acquired under its authority, all costs thereof, including land, right-of-way, surveying, engineering, construction, legal and administrative expenses, and fees of any fiscal adviser, shall be paid out of any funds available for payment of the cost of the bridge.

Section 12. The commission is hereby authorized and empowered to issue revenue bonds for the acquisition, purchase or construction of any interstate bridge. Any and all bonds issued by the commission for the acquisition, purchase, or construction of any interstate bridge under the authority of this Act shall be issued in the name of the Iowa highway commission and shall constitute obligations only of the commission, shall be identified by some appropriate name, and shall contain a recital on the face thereof that the payment or redemption of said bonds and the payment of the interest thereon are secured by a direct charge and lien upon the tolls and other revenues of any nature whatever received from the operation of the particular bridge for the acquisition, purchase, or construction of which the bonds are issued and of such other bridge or bridges as may have been pledged therefor, and that neither the payment of the principal or any part thereof nor of the interest thereon or any part thereof constitutes a debt, liability, or obligation of the state of Iowa. When it is determined by the commission to be in the best public interest, any bonds issued under the provisions of this Act may be refunded and refinanced at a lower rate, the same rate or a higher rate or rates of interest and from time to time as often as the commission shall find it to be advisable and necessary so to do. Bonds issued to refund other bonds theretofore issued by the commission under the provisions of this Act may either be sold in the manner hereinafter provided and the proceeds thereof applied to the payment of the bonds being refunded, or the refunding bonds may be exchanged for and in payment and discharge of the bonds being refunded. The refunding bonds may be sold or exchanged in installments at different times or an entire issue or series may be sold or exchanged at one (1) time. Any issue or series or refunding bonds may be exchanged in part or sold in part in installments at different times or at one (1) time. The refunding bonds may be sold at any time on, before, or after the maturity of any of the outstanding bonds to be refinanced thereby and may be issued for the purpose of refunding a like or greater principal amount of bonds, except that the principal amount of the refunding bonds may exceed the principal amount of the bonds to be refunded to the extent necessary to pay any premium due on the call of the bonds to be refunded or to fund interest in arrears or about to become due. The gross revenues of any toll bridge pledged to the payment of the bonds being refunded, together with the unpledged gross revenues of any other toll bridges located within ten (10) miles of said bridge, may be pledged by the commission to pay the principal of and interest on the refunding bonds and to create and maintain reserves therefor.

The commission is empowered to receive and accept funds from the state of Iowa or the federal government or any other state upon a cooperative or other basis for the acquisition, purchase, or construction of any interstate bridge authorized under the provisions of this Act and is empowered to enter into such agreements with the state of Iowa or any other state or the federal government as may be required for the securing of such funds.

The commission is authorized and empowered to spend from annual primary road fund receipts sufficient moneys to pay the cost of operation, maintenance, insurance, collection of tolls and accounting therefor and all other charges incidental to the operation and maintenance of any toll bridge administered under the provisions of this Act.

Section 13. The revenue bonds may be issued and sold or exchanged by the commission from time to time and in such amounts as it deems necessary to provide sufficient funds for the acquisition, purchase, or construction of any such bridge and to pay interest on bonds issued for the construction of any toll bridge during the period of actual construction and for six (6) months after completion thereof. The commission is hereby authorized to adopt all necessary resolutions prescribing the form, conditions, and denominations of the bonds, the maturity dates therefor, and the interest rate or rates which the bonds shall bear. All bonds of the same issue need not bear the same interest rate. Principal and interest of the bonds shall be payable at such place or places within or without the state of Iowa as determined by the commission, and the bonds may contain provisions for registration as to principal or interest, or both. Interest shall be payable at such times as determined by the commission and the bonds shall mature at such times and in such amounts as the commission prescribes. The commission may provide for the retirement of the bonds at any time prior to maturity, and in such manner and upon payment of such premiums as it may determine in the resolution providing for the issuance of the bonds. All such bonds and any coupons attached thereto shall be signed by such officials of the commission as the commission may direct. Successive issues of such bonds within the limits of the original authorization shall have equal preference with respect to the payment of the principal thereof and the payment of interest thereon. The commission may fix different maturity dates, serially or otherwise, for successive issues under any one (1) original authorization. All bonds issued under the provisions of this Act shall have all the qualities of negotiable instruments under the laws of the state of Iowa. All bonds issued and sold hereunder shall be sold to the highest and best bidder on the basis of sealed proposals received pursuant to a notice specifying the time and place of sale and the amount of bonds to be sold which shall be published at least once not less than seven (7) days prior to the sale in a newspaper published in the state of Iowa and having a general circulation in said state. None of the provisions of chapter seventy-five (75) of the Code shall apply to bonds issued under the provisions of this Act but such bonds shall be sold upon terms of not less than par plus accrued interest. The commission may reject any or all bids received at the public sale and may thereafter sell the bonds at private sale on such terms and conditions as it deems most advantageous to its own interests, but not at a price below that of the best bid received at the advertised sale. The commission may enter into contracts and borrow money through the sale of bonds of the same character as those herein authorized, from the United States or any agency thereof, upon such conditions and terms as may be agreed to and the bonds shall be subject to all the provisions of this Act, except that any bonds issued hereunder to the United States or any agency thereof need not first be offered at public sale. The commission may also provide for the private sale of bonds issued under the provisions of this Act to the state treasurer of Iowa upon such terms and conditions as may be agreed upon, and in such event said bonds need not first be offered at public sale. Temporary or interim bonds, certificates, or receipts, of any denomination, and with or without coupons attached, signed by such official as the commission may direct, may be issued and delivered until the definitive bonds are executed and available for delivery.

Section 14. The proceeds from the sale of all bonds authorized and issued under the provisions of this Act shall be deposited by the commission in a fund designated as the construction fund of the particular interestate bridge or bridges for which such bonds were issued and sold, which fund shall not be a state fund and shall at all times be kept segregated and set apart from all other funds and in trust for the purposes herein set out. Such proceeds shall be paid out or disbursed solely for the acquisition, purchase, or construction of such interstate bridge or bridges and expenses incident thereto, the acquisition of the necessary lands and easements there-

for and the payment of interest on such bonds during the period of actual construction and for a period of six (6) months thereafter, only as the need therefor shall arise and the commission may agree with the purchaser of said bonds upon any conditions or limitations restricting the disbursement of such funds that may be deemed advisable, for the purpose of assuring the proper application of such funds. All moneys in such fund and not required to meet current construction costs of the interstate bridge or bridges for which such bonds were issued and sold, and all funds constituting surplus revenues which are not immediately needed for the particular object or purpose to which they must be applied or are pledged may be invested in obligations issued or guaranteed by the United States or by any person controlled by or supervised by and acting as an instrumentality of the United States pursuant to authority granted by the congress of the United States; provided, however, that the commission may provide in the proceedings authorizing the issuance of said bonds that the investment of such moneys shall be made only in particular bonds and obligations within the classifications eligible for such investment and such provisions shall thereupon be binding upon the commission and all officials having anything to do with such investment. Any surplus which may exist in said construction fund shall be applied to the retirement of bonds issued for the acquisition, purchase, or construction of any such interstate bridge by purchase or call and, in the event such bonds cannot be purchased at a price satisfactory to the commission and are not by their terms callable prior to maturity, such surplus shall be paid into the fund applicable to the payment of principal and interest of said bonds and shall be used for that purpose. The proceedings authorizing the issuance of bonds may provide limitations and conditions upon the time and manner of applying such surplus to the purchase and call of outstanding bonds and the terms upon which they shall be purchased or called and such limitations and conditions shall be followed and observed in the application and use of such surplus. All bonds so retired by purchase or call shall be immediately canceled.

Section 15. All tolls or other revenues received from the operation of any toll bridge acquired, purchased, or constructed with the proceeds of bonds issued and sold hereunder shall be deposited by the commission to the credit of a special trust fund to be designated as the toll revenue fund of the particular toll bridge or toll bridges producing such tolls or revenue, which fund shall be a trust fund and shall at all times be kept segregated and set apart from all other funds.

Section 16. From the money so deposited in each separate construction fund as hereinabove provided, at the direction of the commission there shall be transferred to the place or places of payment named in said bonds such sums as may be required to pay the interest as it becomes due on all bonds issued and outstanding for the construction of such particular toll bridge or toll bridges during the period of actual construction and during the period of six (6) months immediately thereafter. The commission shall thereafter transfer from each separate toll revenue fund to the place or places of payment named in the bonds for which said revenues have been pledged such sums as may be required to pay the interest on said bonds and redeem the principal thereof as such interest and principal become due. All funds so transferred for the payment of principal of or interest on bonds issued for any particular toll bridge or toll bridges shall be segregated and applied solely for the payment of said principal or interest. The proceedings authorizing the issuance of the bonds may provide for the setting up of a reserve fund or funds out of the tolls and other revenues not needed for the payment of principal and interest, as the same currently matures and for the preservation and continuance of such fund in a manner to be provided therein, and such proceedings may also require the immediate application of all surplus moneys in such toll revenue fund to the retirement of such bonds prior to maturity, by call or purchase, in such manner and upon such terms and the payment of such premiums as may be deemed advisable in the judgment of the commission. The moneys remaining in each separate toll revenue fund after providing the amount required for the payment of principal of and interest on bonds as hereinabove provided, shall be held and applied as provided in the proceedings authorizing the issuance of said bonds. In the event the proceedings authorizing the issuance of said bonds do not require surplus revenues to be held or applied in any particular manner, they shall be allocated and used for such other purposes incidental to the construction, operation, and maintenance of any toll bridge as the commission may determine and as permitted under sections seven (7) and twelve (12) of this Act.

Section 17. Warrants for payments to be made on account of such bonds shall be drawn by the commission on duly approved vouchers. Moneys required to meet the costs of purchase or construction and all expenses and costs incidental to the acquisition, purchase, or construction of any particular interstate bridge or to meet the costs of operating, maintaining, and repairing the same, shall be paid by the commission from the proper fund therefor upon duly approved vouchers. All interest received or earned on money deposited in each and every fund herein provided for shall be credited to and become a part of the particular fund upon which said interest accrues.

Section 18. The commission may provide in the proceedings authorizing the issuance of bonds or may otherwise agree with the purchasers of bonds regarding the deposit of all moneys constituting the construction fund and the toll revenue fund and provide for the deposit of such money at such times and with such depositaries or paying agents and upon the furnishing of such security as may meet with the approval of the purchasers of such bonds.

Section 19. Notwithstanding any provision contained in this Act, the proceeds received from the sale of bonds and the tolls or other revenues received from the operation of any toll bridge may be used to defray any expenses incurred by the commission in connection with and incidental to the issuance and sale of bonds for the acquisition, purchase, or construction of any such toll bridge including expenses for the preparation of surveys and estimates, legal, fiscal and administrative expenses, and the making of such inspections and examinations as may be required by the the purchasers of such bonds; provided, that the proceedings authorizing the issuance of such bonds may contain appropriate provisions governing the use and application of said bond proceeds and toll or other revenues for the purposes herein specified.

Section 20. While any bonds issued by the commission remain outstanding, the powers, duties or existence of the commission or of any other official or agency of the state shall not be diminished or impaired in any manner that will affect adversely the interests and rights of the holders of such bonds. The holder of any bond may by mandamus or other appropriate proceeding require and compel the performance of any of the duites imposed upon any state department, official, or employee or imposed upon the commission or its officers, agents, and employees in connection with the acquisition, purchase, construction, maintenance, operation, and insurance of any bridge and in connection with the collection, deposit, investment, application, and disbursement of all tolls and other revenues derived from the operation and use of any bridge and in connection with the deposit, investment, and disbursement of the proceeds received from the issuance of bonds; provided, that the enumeration of such rights and remedies herein shall not be deemed to exclude the exercise or prosecution of any other rights or remedies by the holders of such bonds.

Section 21. When any toll bridge authorized hereunder is being built by the commission it may carry or cause to be carried such an amount of insurance or imdemnity bond or bonds as protection against loss or damage as it may deem proper. The commission is hereby further empowered to carry such an amount of insurance to cover any accident or destruction in part or in whole to any toll bridge. All moneys collected on any indemnity bond or insurance policy as the result of any damage or injury to any such toll bridge shall be used for the purpose of repairing or rebuilding of any such toll bridge as long as there are revenue bonds against any such structure outstanding and unredeemed. The commission is also empowered to carry insurance or indemnity bonds insuring against the loss of tolls or other revenues to be derived from any such toll bridge by reason of any interruption in the use of such toll bridge from any cause whatever, and the proceeds of such insurance or indemnity bonds shall be paid into the fund into which the tolls and other revenues of the bridge thus insured are required to be paid and shall be applied to the same purposes and in the same manner as other moneys in the said fund. Such insurance or indemnity bonds may be in an amount equal to the probable tolls and other revenues to be received from the operation of such toll bridge during any period of time that may be determined upon by the commission and fixed in its discretion, and be paid for out of the toll revenue fund as may be specified in said proceedings. The commission may provide in the proceedings authorizing the issuance of bonds for the carrying of insurance as authorized by this Act and the purchase and carrying of insurance as authorized by this Act shall thereupon be obligatory upon the commission and be paid for out of the toll revenue fund as may be specified in said proceedings.

Section 22. The commission is hereby empowered to fix the rates of toll and other charges for all interstate bridges acquired, purchased, or constructed under the terms of this Act. Toll charges so fixed may be changed from time to time as conditions may warrant. The commission in establishing toll charges shall give due consideration to the amount required annually to pay the principal of and interest on bonds payable from the revenues thereof. The tolls and charges shall be at all times fixed at rates sufficient to pay the bonds and interest as they mature, together with the creation and maintenance of bond reserve funds and other funds as established in the proceedings authorizing the issuance of the bonds, for any particular toll bridge. The amounts required to pay the principal of and interest on bonds shall constitute a charge and lien on all such tolls and other revenues and interest thereon and sinking funds created therefrom received from the use and operation of said toll bridge, and the commission is hereby authorized to pledge a sufficient amount of said tolls and revenues for the payment of bonds issued under the provisions of this Act and interest thereon and to create and maintain a reserve therefor. Such tolls and revenues, together with the interest earned thereon, shall constitute a trust fund for the security and payment of such bonds and shall not be used or pledged for any other purpose as long as such bonds or any of them are outstanding and unpaid.

Section 23. Whenever a proposed interstate bridge is to be acquired, purchased or constructed, any city, town, county, or other political subdivision located in relation to such facility so as to benefit directly or indirectly thereby, may, either jointly or separately, at the request of the commission advance or contribute money, rights-of-way, labor, materials, and other property toward the expense of acquiring, purchasing or constructing the bridge, and for preliminary surveys and the preparation of plans and estimates of cost therefor and other preliminary expenses. Any such city, town, county, or other political subdivision may, either jointly or separately, at the request of the commission advance or contribute money for the purpose of guaranteeing the payment of interest or principal on the bonds issued by the commission to finance the bridge. Appropriations for such purposes may be made from any funds available, including county road funds received from or credited by the state, or funds obtained by excess tax levies made pursuant to law or the issuance of general obligation bonds for this purpose. Money or property so advanced or contributed may be immediately transferred or delivered to the commission to be used for the purpose for which contribution was made. The commission may enter into an agreement with a city, town, county, or other political subdivision to repay any money or the value of a right-of-way, labor, materials or other property so advanced or contributed. The commission may make such repayment to a city, town, county, or other political subdivision and reimburse the state for any expenditures made by it in connection with the bridge out of tolls and other revenues for the use of the bridge.

Section 24. If the commission deems that any land, including improvements thereon, is no longer required for toll bridge purposes and that it is in the public interest, it may negotiate for the sale of such land to the state or to any city, town, county, or other political subdivision or municipal corporation of the state. The commission shall certify the agreement for the sale to the state executive council, with a description of the land and the terms of the sale and the state executive council may execute the deed and deliver it to the grantee.

Section 25. If the commission is of the opinion that any land, including improvements thereon, is no longer required for toll bridge purposes, it may be offered for sale upon publication of a notice once each week for two (2) consecutive weeks in a newspaper published and having a general circulation throughout the state of Iowa, specifying the time and place fixed for the receipt of bids.

Section 26. The commission may reject all such bids if the highest bid does not equal the reasonable fair market value of the real property, plus the value of the improvements thereon, computed on the basis of the reproduction value less depreciation. The commission may accept the highest and best bid, and certify the agreement for the sale to the state executive council, with a description of the land and the terms of the sale and the state executive council shall execute the deed and deliver it to the grantee.

Section 27. If the commission deems it consistent with the use and operation of any toll bridge, the commission may grant franchises to persons, firms, associations, private or municipal corporations, the United States government or any agency thereof, to use any portion of the property of any toll bridge, including approaches thereto, for the construction and maintenance of water pipes, flumes, gas pipes, telephone, telegraph and electric light and power lines and conduits, trams or railways, and any other such facilities in the manner of granting franchises on state highways.

Section 28. Any moneys received pursuant to the provisions of sections twenty-four (24) through twenty-seven (27) of this Act shall be deposited by the commission into the separate and proper trust fund established for the bridge.

Section 29. The commission shall have the right to impose and reimpose tolls for pedestrian or vehicular traffic over any interstate bridges under its control and jurisdiction for the purpose of paying the cost of reconstructing and improving existing bridges and their approaches, purchasing existing bridges, and constructing new bridges and approaches, provided that any such existing bridge or new bridge is located within ten miles of the bridge on which tolls are so imposed or reimposed, to pay interest on and create a sinking fund for the retirement of revenue bonds issued for the account of such projects and to pay any and all costs and expenses incurred by the commission in connection with and incidental to the issuance and sale of bonds and for the preparation of surveys and estimates and to establish the required interest reserves for and during the estimated construction period and for six (6) months thereafter.

Section 30. The bridges herein provided for may be incorporated into the primary road system as toll free bridges whenever the costs of the construction of the bridges and the approaches thereto and the reconstruction and improvement of existing bridges and approaches thereto, including all incidental costs, have been paid and when all revenue bonds and interest thereon issued and sold pursuant to this Act and payable from the tolls and revenues thereof shall have been fully paid and redeemed or funds sufficient to pay said bonds and interest, including premium, if any, have been set aside and pledged for that purpose. However, tolls may again be imposed as provided in section twenty-nine (29) of this Act.

Section 31. The commission shall have the power and is hereby authorized by resolution to issue, sell, or pledge its revenue bonds in an amount sufficient to provide funds to pay all or any part of the costs of construction of a new bridge and approaches thereto and the reconstruction, improvement, and maintaining of an existing bridge and approaches thereto, including all costs of survey, acquisition of right-of-way, engineering, legal, fiscal and incidental expenses, to pay the interest due thereon during the period beginning with the date of issue of the bonds and ending at the expiration of six (6) months after the first imposition and collection of tolls from the users of said bridges, and all costs incidental to the issuance and sale of the bonds.

Except as may be otherwise specifically provided by statute, all of the other provisions of this Act shall govern the issuance and sale of revenue bonds issued under this section, the execution thereof, the disbursement of the proceeds of issuance thereof, the interest rate or rates thereon, their form, terms, conditions, convenants, negotiability, denominations, maturity date or dates, the creation of special funds or accounts safeguarding and providing for the payment of the principal thereof and interest thereon, and their manner of redemption and retirement.

Such bonds shall include a covenant that the payment of the principal thereof and the interest thereon are secured by a first and direct charge and lien on all of the tolls and other gross revenues received from the operation of said toll bridges and from any interest which may be earned from the deposit or investment of any such revenues. The tolls and charges shall be at all times fixed at rates sufficient to pay the bonds and interest as they mature, together with the creation and maintenance of bond reserve funds and other funds as established in the proceedings authorizing the issuance of the bonds.

Section 32. The commission is hereby authorized to operate and to assume the full control of said toll bridges and each portion thereof whether within or without the borders of the state of Iowa, with full power to impose and collect tolls from the users of such bridges for the purpose of providing revenues at least sufficient to pay the cost and incidental expenses of construction and acquisition of said bridges and approaches in both states in which located and for the payment of the principal of and interest on its revenue bonds as authorized by this Act.

Section 33. Under no circumstances shall any bonds issued under the terms of this Act be or become or be construed to constitute a debt of or charge against the state of Iowa within the purview of any constitutional or statutory limitation or provision. No taxes, appropriations or other funds of the state of Iowa may be pledged for or used to pay such bonds or the interest thereon, but any such bonds shall be payable solely and only as to both principal and interest from the tolls and revenues derived from the operation of any toll bridge or toll bridges acquired, purchased, or constructed under this Act, and the sole remedy for any breach or default of the terms of any such bonds or proceedings for their issuance shall be a proceeding either in law or in equity by suit, action or mandamus to enforce and compel performance of the duties required by this Act and the terms of the resolution under which such bonds are issued.

Section 34. The commission is authorized to enter into such agreement or agreements with other state highway commissions and the governmental agencies or subdivisions of the state of Iowa or other states and with federal bridge commissions as they shall find necessary or convenient to carry out the purposes of this Act, and is authorized to do any and all acts contained in such agreement or agreements that are necessary or convenient to carry out the purposes of this Act. Such agreements may include, but shall not be restricted to, the following provisions:

1. A provision that the commission shall assume and have complete responsibility for the operation of such bridges and approaches thereto, and with full power to impose and collect all toll charges from the users of such bridges and to disburse the revenue derived therefrom for the payment of principal and interest on any revenue bonds herein provided for and to carry out the purposes of this Act.

2. A provision that the commission shall provide for the issuance, sale, exchange or pledge, and payment of revenue bonds payable solely from the revenues derived from the imposition and collection of tolls upon such toll bridges.

3. A provision that the commission, after consultation with the other governmental agencies or subdivisions who are parties to such agreements, shall fix and revise the classifications and amounts of tolls to be charged and collected from the users of the toll bridges, with the further provision that such toll charges shall be

removed after all costs of planning, designing, and construction of such toll bridges and approaches thereto and all incidental costs shall have been paid, and all of said revenue bonds, and interest thereon, issued pursuant to this Act shall have been fully paid and redeemed or funds sufficient therefor have been set aside and pledged for that purpose.

4. A provision that all acts pertaining to the design and construction of such toll bridges may be done and performed by the commission and that any and all contracts for the construction of such toll bridges shall be awarded in the name of the commission.

5. A provision that the state of Iowa and adjoining state and all governmental agencies or subdivisions party to such agreement shall be reimbursed out of the proceeds of the sale of such bonds or out of tolls and revenues as herein allowed for any advances they may have made or expenses they may have incurred for any of the purposes for which said revenue bonds may be issued, after duly verified itemized statements of such advances and expenses have been approved by all parties to such agreement.

6. A provision that when all outstanding indebtedness or other obligations payable from the revenues of such bridges have been paid the adjoining state agrees to accept ownership of that portion of the bridge within such state and agrees to pay the cost of maintaining such portions of the bridge or proportionate share of the total cost of maintaining the bridge.

Section 35. Counties are hereby authorized to issue general obligation bonds for the purpose of contributing money to the commission to help finance the construction of toll bridges across navigable rivers constituting boundaries between the county and an adjoining state. Prior to the issuance of such bonds the board of supervisors shall call and hold an election in said county at which the proposition shall be submitted to the voters of the county in the following form:

Shall the county of _____ issue its bonds in the amount of $_____ for the purpose of _____?

Notice of such election, stating the date of the election, the hours of opening and closing the polls, the precints and polling places therefor, and the question to be submitted shall be published once each week for three (3) consecutive weeks in at least one (1) newspaper published and having a general circulation in the county. The election shall be held on a day not less than five (5) nor more than twenty (20) days after the last publication of such notice. The proposition shall not be deemed carried or adopted unless the vote in favor thereof is equal to at least sixty (60) per cent of the total vote cast for and against said proposition at said election.

Section 36. The exercise of the powers granted by this Act will be in all respects for the benefit of the people of the state of Iowa, for the increase of their commerce and prosperity and for the improvement of their health and living conditions, and as the acquisition, construction, operation, and maintenance by the commission of the projects herein defined will constitute the performance of essential governmental functions, the commission shall not be required to pay any taxes or assessments upon such projects or upon any property acquired or used by the commission under the provisions of this Act or upon the income from such projects, and the bonds issued under the provisions of this Act, their transfer and the income therefrom including any profit made on the sale thereof shall at all times be free from taxation by or within the state of Iowa.

Section 37. Any person who uses any toll bridge and fails or refuses to pay the toll provided therefor shall be punished by a fine of not more than one hundred (100) dollars or by imprisonment for not more than thirty (30) days, or both.

Section 38. This Act shall be construed as providing an alternative and independent method for the acquisition, purchase, or construction of interstate bridges, for the issuance and sale or exchange of bonds in connection therewith and for refunding bonds pertinent thereto, and for the imposition, collection, and application of the proceeds of tolls and charges for the use of interstate bridges, without reference to any other statute, and shall not be construed as an amendment of or subject to the provisions of any other law, and no publication of any notice, and no other or further proceeding in respect to the issuance or sale or exchange of bonds under this Act shall be required except such as are prescribed by this Act, any provisions of other statutes of the state to the contrary notwithstanding.

Section 39. This Act, being necessary for the public safety and welfare, shall be liberally construed to effectuate the purposes thereof. If any provision of this Act or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions or applications of the Act which can be given effect without the invalid provisions or application, and to this end the provisions of this Act are declared to be severable.

Approved June 22, 1967.

Section 525. Construction and operation of bridges; consent of Congress; approval of plans; private highway toll bridges.

(a) The consent of Congress is granted for the construction, maintenance, and operation of bridges and approaches thereto over the navigable waters of the United States, in accordance with the provisions of sections 525–533 of this title.

(b) The location and plans for such bridges shall be approved by the Chief of Engineers and the Secretary of the Army before construction is commenced, and, in approving the location and plans of any bridge, they may impose any specific conditions relating to the maintenance and operation of the structure which they may deem necessary in the interest of public navigation, and the conditions so imposed shall have the force of law.

(c) Notwithstanding the provisions of subsections (a) and (b) of this section, it shall be unlawful to construct or commence the construction of any privately owned highway toll bridge until the location and plans thereof shall also have been submitted to and approved by the highway department or departments of the State or States in which the bridge and its approaches are situated; and where such bridge shall be between two or more States and the highway departments thereof shall be unable to agree upon the location and plans therefor, or if they, or either of them, shall fail or refuse to act upon the location and plans submitted, such location and plans then shall be submitted to the Bureau of Public Roads and, if approved by the Bureau of Public Roads, approval by the highway departments shall not be required. (Aug. 2, 1946, ch. 753, title V, Section 502, 60 Stat. 847; June 30, 1949, ch. 288, title I, Section 103 (a), 63 Stat. 380; 1949 Reorg. Plan No. 7, Section 1, eff. Aug. 19, 1949, 14 F. R. 5288, 63Stat. 1070.)

CODIFICATION

The Department of War was designated the Department of the Army and the title of the Secretary of War was changed to Secretary of the Army by section 205 (a) of act July 26, 1947, ch. 343, title II, 61 Stat. 501. Section 205 (a) of act July 26, 1947, was repealed by section 53 of act Aug. 10, 1956, ch. 1041, 70A Stat. 641. Section 1 of act Aug. 10, 1956, enacted "Title 10, Armed Forces", which in sections 3011–3013 continued the military Department of the Army under the administrative supervision of a Secretary of the Army.

SHORT TITLE

Congress in enacting sections 525–533 of this title provided by section 501 of act Aug. 2, 1946 that they should be popularly known as the "General Bridge Act of 1946".

TRANSFER OF FUNCTIONS

The functions of all other officers of the Department of Commerce and the functions of all agencies and employees of such Department were, with a few exceptions, transferred to the Secretary of Commerce, with power vested in him to authorize their performance or the performance of any of his functions by any of such officers, agencies, and employees, by 1950 Reorg. Plan No. 5, Sections 1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263, set out in note under Section 591 of Title 5, Executive Departments and Government Officers and Employees.

The Public Roads Administration, which was transferred to the Bureau of Public Roads within the General Services Administration, was transferred to the Department of Commerce by 1949 Reorg. Plan No. 7.

All functions of the Public Roads Administration were transferred to the Bureau of Public Roads within the General Services Administration by section 103 (a) of Act June 30, 1949. Section 103 (a) is set out as section 630b (a) of Title 5, Executive Departments and Government Officers and Employees.

RESERVATION OF RIGHT TO ALTER, AMEND, OR REPEAL

Section 511 of act Aug. 2, 1946, provided: "The right to alter, amend, or repeal this title (sections 525–533 of this title) is hereby expressly reserved as to any and all bridges which may be built under authority hereof (said sections)."

Section 526. Amount of tolls.

If tolls shall be charged for the transit over any interstate bridge of engines, cars, street cars, wagons, carriages, vehicles, animals, foot passengers, or other passengers, such tolls shall be reasonable and just, and the Secretary of the Army may, at any time, and from time to time, prescribe the reasonable rates of toll for such transit over such bridge, and the rates so prescribed shall be the legal rates and shall be the rates demanded and received for such transit. (Aug. 2, 1946, ch. 753, title V, Section 503, 60 Stat. 847.)

Section 527. Acquisition of interstate bridges by public agencies; amount of damages.

After the completion of any interstate toll bridge constructed by an individual, firm, or corporation, as determined by the Secretary of the Army, either of the States in which the bridge is located, or any public agency or political subdivision of either of such States, within or adjoining which any part of such bridge is located, or any two or more of them jointly, may at any time acquire and take over all right, title, and interest in such bridge and its approaches, and any interest in real property for public purposes by condemnation or expropriation. If at any time after the expiration of five years after the completion of such bridge the same is acquired by condemnation or expropriation, the amount of damages or compensation to be allowed shall not include good will, going value, or prospective revenues or profits, but shall be limited to the sum of (1) the actual cost of constructing such bridge and its approaches, less a reasonable deduction for actual depreciation in value; (2) the actual costs of acquiring such interests in real property; (3) actual financing and promotion costs, not to exceed 10 per centum of the sum of the cost of constructing the bridge and its approaches and acquiring such interests in real property; and (4) actual expenditures for necessary improvements. (Aug. 2, 1946, ch. 753, title V, Section 504, 60 Stat. 848.)

Section 528. Statement of construction costs of privately owned interstate bridges; investigation of costs; conclusiveness of findings; review.

Within ninety days after the completion of a privately owned interstate toll bridge, the owner shall file with the Secretary of the Army and with the highway departments of the States in which the bridge is located, a sworn itemized statement showing the actual original cost of constructing the bridge and its approaches, the actual cost of acquiring any interest in real property necessary therefor, and the actual financing and promotion costs. The Secretary of the Army may, and upon request of a highway department shall, at any time within three years after the completion of such bridge, investigate such costs and determine the accuracy and the reasonableness of the costs alleged in the statement of costs so filed, and shall make a finding of the actual and reasonable costs of constructing, financing, and promoting such bridge. For the purpose of such investigation the said individual, firm, or corporation, its successors and assigns, shall make available all of its records in connection with the construction, financing, and promotion thereof. The findings of the Secretary of the Army as to the reasonable costs of the construction, financing, and promotion of the bridge shall be conclusive for the purposes mentioned in section 527 of this title subject only to review in a court of equity for fraud or gross mistake. (Aug. 2, 1946, ch. 753, title V, Section 505, 60 Stat. 848.)

Section 529. Sinking funds; rate of tolls, cancellation of tolls.

If tolls are charged for the use of an interstate bridge constructed or taken over or acquired by a State or States or by any municipality or other political subdivision or public agency thereof, under the provisions of sections 525–533 of this title, the rates of toll shall be so adjusted as to provide a fund sufficient to pay for the reasonable cost of maintaining, repairing, and operating the bridge and its approaches under economical management, and to provide a sinking fund sufficient to amortize the amount paid therefor, including reasonable interest and financing cost, as soon as possible under reasonable charges, but within a period of not to exceed thirty years from the date of completing or acquiring the same. After a sinking fund sufficient for such amortization shall have been so provided, such bridge shall thereafter be maintained and operated free of tolls. An accurate record of the amount paid for acquiring the bridge and its approaches, the actual expenditures for maintaining, repairing, and operating the same, and of the daily tolls collected, shall be kept and shall be available for the information of all persons interested. (Aug. 2, 1946, ch. 753, title V, Section 506, 60 Stat. 848; May 25, 1948, ch. 336, 62 Stat. 267.)

AMENDMENTS

1948–Act May 25, 1948, extended the amortization period from 20 to 30 years.

Section 530. Bridges included and excluded.

The provisions of sections 525–533 of this title shall apply only to bridges over navigable waters of the United States, the construction of which is approved after August 2, 1946, under the provisions of said sections; and the provisions of the first proviso of section 401 of this title, and the provisions of sections 491–498 of this title, shall not apply to such bridges. (Aug. 2, 1946, ch. 753, title V, Section 507, 60 Stat. 849.)

Section 531. International bridges.

Sections 525–533 of this title shall not be construed to authorize the construction of any bridge which will connect the United States, or any Territory or possession of the United States, with any foreign country. (Aug. 2, 1946, ch. 753, title V, Section 508, 60 Stat. 849.)

Section 532. Eminent domain.

There are conferred upon any individual, his heirs, legal representatives, or assigns, any firm or corporation, its successors or assigns, or any State, political subdivision, or municipality authorized in accordance with the provisions of sections 525–533 of this title to build a bridge between two or more States, all such rights and powers to enter upon lands and acquire, condemn, occupy, possess, and use real estate and other property in the respective States needed for the location, construction, operation, and maintenance of such bridge and its approaches, as are possessed by railroad corporations for railroad purposes or by bridge corporations for bridge purposes in the State in which such real estate or other property is situated, upon making just compensation therefore to be ascertained and paid according to the laws of such State, and the proceedings therefor shall be the same as in the condemnation or expropriation of property for public purposes in such State. (Aug. 2, 1946, ch. 753, title V, Section 509, 60 Stat. 849.)

Section 533. Penalties.

Any person who fails or refuses to comply with any lawful order of the Secretary of the Army or the Chief of Engineers issued under the provisions of sections 525–533 of this title, or who fails to comply with any specific condition imposed by the Chief of Engineers and the Secretary of the Army relating to the maintenance and operation of bridges, or who refuses to produce books, papers, or documents in obedience to a subpena or other lawful requirement under said sections, or who otherwise violates any provisions of said sections, shall, upon conviction thereof, be punished by a fine of not to exceed $5,000 or by imprisonment for not more than one year, or by both such fine and imprisonment. (Aug. 2, 1946, ch. 753, title V, Section 510, 60 Stat. 849.)

Section 534. Conveyance of right, title, and interest of United States in bridges transferred to States or political subdivisions; terms and conditions.

The Secretary of the Army is authorized to transfer or convey to State authorities or political subdivisions thereof all right, title, and interest of the United States, in and to any and all bridges heretofore or hereafter constructed or acquired in connection with the improvement of canals, rivers and harbors, or works of flood control, together with the necessary lands, easements, or rights-of-way, upon such terms and conditions and with or without consideration, as may be determined to be in the best interest of the United States by the Chief of Engineers: Provided, That such transferred bridges shall be toll-free. (May 17, 1950, ch. 188, title I, Section 109, 64 Stat. 168.)

CODIFICATION

Section was not enacted as a part of the General Bridge Act of 1946 which comprises sections 525–533 of this title.

PUBLIC LAW 337 – 72D CONGRESS

CHAPTER 55 – 2D SESSION

H.R. 9385

An Act Authorizing Roy H. Campbell, Charles H. Brown, G. H. Wilsey, and Doctor H. O. Strosnider, their heirs, legal representatives, and assigns, to construct, maintain, and operate a bridge across the Des Moines River at or near Saint Francisville, Missouri.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

That in order to facilitate interstate commerce, improve the Postal Service, and provide for military and other purposes, Roy H. Campbell, Charles H. Brown, G. H. Wilsey, and Doctor H. O. Strosnider, their heirs, legal representatives, and assigns, be, and are hereby, authorized to construct, maintain, and operate a bridge and approaches thereto across the Des Moines River, at a point suitable to the interests of navigation, at or near Saint Francisville, Missouri, in accordance with the provisions of the Act entitled "An Act to regulate the construction of bridges over navigable waters," approved March 23, 1906, and subject to the conditions and limitations contained in this Act.

Sec. 2. There is hereby conferred upon Roy H. Campbell, Charles H. Brown, G. H. Wilsey, and Doctor H. O. Strosnider, their heirs, legal representatives, and assigns, all such rights and powers to enter upon lands and to acquire, condemn, occupy, possess, and use real estate and other property needed for the location, construction, operation, and maintenance of such bridge and its approaches as are possessed by railroad corporations for railroad purposes or by bridge corporations for bridge purposes in the State in which such real estate or other property is situated, upon making just compensation therefor, to be ascertained and paid according to the laws of such State, and the proceedings therefor shall be the same as in the condemnation or expropriation of property for public purposes in such State.

Sec. 3. The said Roy H. Campbell, Charles H. Brown, G. H. Wilsey, and Doctor H. O. Strosnider, their heirs, legal representatives, and assigns, are hereby authorized to fix and charge tolls for transit over such bridge, and the rates of toll so fixed shall be the legal rates until changed by the Secretary of War under the authority contained in the Act of March 23, 1906.

Sec. 4. After the completion of such bridge, as determined by the Secretary of War, either the State of Missouri, the State of Iowa, any public agency or political subdivision of either of such States, within or adjoining which any part of such bridge is located, or any two or more of them jointly, may at any time acquire and take over all right, title, and interest in such bridge and its approaches, and any interest in real property necessary therefor, by purchase or by condemnation or expropriation, in accordance with the laws of either of such States governing the acquisition of private property for public purposes by condemnation or expropriation. If at any time after the expiration of five years after the completion of such bridge the same is acquired by condemnation or expropriation, the amount of damages or compensation to be allowed shall not include good will, going value, or prospective revenues or profits, but shall be limited to the sum of (1) the actual cost of constructing such bridge and its approaches, less a reasonable deduction for actual depreciation in value: (2) the actual cost of acquiring such interests in real property; (3) actual financing and promotion costs, not to exceed 10 per centum of the sum of the cost of constructing the bridge and its approaches and acquiring such interests in real property; and (4) actual expenditures for necessary improvements.

Sec. 5. If such bridge shall at any time be taken over or acquired by the States or public agencies or political subdivisions thereof, or by either of them, as provided in section 4 of this Act, and if tolls are thereafter charged for the use thereof, the rates of toll shall be so adjusted as to provide a fund sufficient to pay for the reasonable cost of maintaining, repairing, and operating the bridge and its approaches under economical management, and to provide a sinking fund sufficient to amortize the amount paid therefor, including reasonable interest and fi-

nancing cost, as soon as possible under reasonable charges, but within a period of not to exceed twenty years from the date of acquiring the same. After a sinking fund sufficient for such amortization shall have been so provided, such bridge shall thereafter be maintained and operated free of tolls, or the rates of toll shall thereafter be so adjusted as to provide a fund of not to exceed the amount necessary for the proper maintenance, repair, and operation of the bridge and its approaches under economical management. An accurate record of the amount paid for acquiring the bridge and its approaches, the actual expenditures for maintaining, repairing, and operating the same and of the daily tolls collected, shall be kept and shall be available for the information of all persons interested.

Sec. 6. The said Roy H. Campbell, Charles H. Brown, G. H. Wilsey, and Doctor H. O. Strosnider, their heirs, legal representatives, and assigns, shall within ninety days after the completion of such bridge file with the Secretary of War and with the highway departments of the States of Missouri and Iowa, a sworn itemized statement showing the actual original cost of constructing the bridge and its approaches, the actual cost of acquiring any interest in real property necessary therefor, and the actual financing and promotion costs. The Secretary of War may, and upon request of the highway department of either of such States shall, at any time within three years after the completion of such bridge, investigate such costs and determine the accuracy and the reasonableness of the costs alleged in the statement of costs so filed, and shall make a finding of the actual and reasonable costs of constructing, financing, and promoting such bridge; for the purpose of such investigation the said Roy H. Campbell, Charles H. Brown, G. H. Wilsey, and Doctor H. O. Strosnider, their heirs, legal representatives, and assigns, shall make available all of its records in connection with the construction, financing, and promotion thereof. The findings of the Secretary of War as to the reasonable costs of the construction, financing, and promotion of the bridge shall be conclusive for the purposes mentioned in section 4 of the Act, subject only to review in a court of equity for fraud or gross mistake.

Sec. 7. The right to sell, assign, transfer, and mortgage all the rights, powers, and privileges conferred by this Act is hereby granted to Roy H. Campbell, Charles H. Brown, G. H. Wilsey, and Doctor H. O. Strosnider, their heirs, legal representatives, and assigns, and any corporation to which or any person to whom such rights, powers, and privileges may be sold, assigned, or transferred, or who shall acquire the same by mortgage foreclosure or otherwise, is hereby authorized and empowered to exercise the same as fully as though conferred herein directly upon such corporation or person.

Sec. 8. The right to alter, amend, or repeal this Act is hereby expressly reserved.

Approved, February 14, 1933.