INTRODUCTION

In the following pages a number of major items associated with road and street construction and maintenance in Indiana are considered: (1) federal funds for highway construction—completion of the interstate, (2) highway and street needs for the entire state from 1970-1990, and (3) the state highway construction outlook for 1972 and beyond.

FEDERAL FUNDS AND COMPLETION OF THE INTERSTATE

A review of Indiana's state highway construction programs shows, that, in the most part, since 1919 or shortly thereafter, the amount of new construction and reconstruction on our state highway system has been geared to and controlled by the amount of funds available from the federal government, through what is now known as the Federal Highway Trust Fund, plus the amount of money Indiana has been able to provide on a matching basis. Only since the 1969 General Assembly approval of the two-cent increase in the motor fuel tax has there been any significant increase in construction projects financed by straight state funds.

Indiana has completed 85 percent of the 977 miles of interstate, exclusive of the toll road, but only 75 percent costwise. This 75 percent represents over one billion dollars. The following information gives an idea of the status of interstate construction as of March 1, 1972. See Figure 1.

In connection with I-65 and I-70, the Indianapolis innerbelt, 9.8 miles remain to be placed under contract at an estimated cost of $78 million. In connection with I-64, across southern Indiana, 18.4 miles remain to be let for grading and paving, 69.4 miles remain to be let for paving alone. In the Evansville area, on I-164, there are 14.3
Fig. 1. Completion of the Interstate System in Indiana as of March 1, 1972.
miles to be constructed at a cost of $24 million. On I-265, a connector between I-64 and I-65 (between New Albany and Jeffersonville), is a 6.7 mile section which has not been placed under construction. The estimated cost is $19.7 million. For I-275, part of the outerbelt around Cincinnati east of Lawrenceburg, Indiana, there are three miles remaining to be placed under contract, in Indiana, at an estimated cost of $25 million.

Under federal highway regulations we are required to upgrade some of the earlier sections to new safety standards. The estimated cost of this work is $105 million. (Signs moved back with breakaway bases, slopes flattened and some bridges widened to full shoulder width).

The total estimated cost of completing the interstate in Indiana is $320 million. About half of the cost of completing the system is in urban areas. At the proposed rate of funding, the interstate cannot be completed before 1982 or at least ten years later than proposed in 1956.

Since Indiana is ahead of most of the other states on completion of the interstate, and for various other reasons at the Washington level, Indiana's, as well as many other states' highway dollars from the federal trust fund, continues to decline.

To better illustrate—Figure 2 shows the total federal dollar obligation authority for the last three, four-calendar-year totals starting with the four-year period of 1961-64:

The 1961-64 years total—$349.2 million
The 1965-68 years total—$429.8 million
The 1969-72 years will total about $381.0 million.

This last four-year period, 1969-72, will show about a 11 percent decline over the previous four-year period of 1965-68, while at the same time Indiana taxpayers' contribution to the Federal Highway Trust Fund has continued to increase up to January 1, 1972.

In these fast changing times in thinking, spending emphasis is changing to education, medical care, prevention and correction of pollution, elimination of poverty, assistance to underprivileged areas and other social and economic goals.

Federal participation for highway construction, through the years, to a great extent, has been geared to national defense. In this day of modern weapons, defense does not seem to be a continuing factor, even for the completion of the interstate.

I think for these reasons, over a period of years, we can expect the federal highway dollar for road construction to continue to decline.
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*Note reduction since 1969 in funds from Federal Highway Trust Fund.*

*Note reduction in Federal Share - increase in State Share.*

**Fig. 2. State Highway Revenue.**
INDIANA'S HIGHWAY AND STREET NEEDS 1970-1990

Just because less federal tax money will be available for roads and streets in the future, that does not mean the need will also decline. Vehicle registration will continue to grow at a rate of about four percent per year as far in the future as we now are able to see. Travel—miles driven per vehicle—will continue to increase at a faster pace.

The disruption of highway construction brought on by World War II, and earlier slow-downs caused by the depressed economy, have not been overcome for various reasons. One reason has been the special early emphasis given to the construction of interstate systems at the expense of the primary, secondary and urban systems.

Our planning department early this year completed a total road and street needs report, required by Congress, for a two-decade period from 1970 to 1990.

The report shows, on a nation-wide basis, the costs for construction, maintenance, administration and right-of-way for all roads and streets in the total systems of each state and the nation.

Indiana's road system needs for this 20-year period is estimated to cost $13.408 billion, using 1969 cost figures. Figure 3 shows total needs. The report is broken down into three categories.

Fig. 3. Total Indiana Road and Street Needs.
Urban Areas of 50,000 and Over

Urban areas of 50,000 population and over need 2.882 billion dollars state-wide, or 21.5 percent of the total. These urban areas are: Anderson, Bloomington, the Calumet area, Evansville, Fort Wayne, Indianapolis, Kokomo, Lafayette, New Albany-Jeffersonville-Louisville area, Marion, Michigan City, Muncie, Richmond, South Bend, Elkhart and Terre Haute.

Smaller Urban Areas, 5,000-50,000

In the smaller urban areas, of from 5,000 to 50,000 population, a $.905 billion dollar estimate was made, or 6.75 percent of the total. The number of cities in this group total 71.

Rural Areas

In the rural areas of the state, 9.620 billion dollars will be required or 71.75 percent of the total.

Total Needs—State, Cities and Counties

I have used my own computations from prior needs studies to estimate the percentage of the total needs for construction and for maintenance.

Using this method, 82.9 percent, or 11.12 billion dollars of the state-wide needs, are required for construction, which includes right-of-way costs; and the remaining 17.1 percent, or 2.29 billion dollars, for maintenance, which includes administrative costs.

State Highway Needs—Construction and Maintenance

Figure 4 shows state highway needs—construction and maintenance. To break out an estimate for the state highway system during this 20-year period, I have estimated the department's needs as 5.89 billion dollars for construction and 1.21 billion dollars for maintenance. These figures do not include the cost of completing the interstate.

Where will the 7.1 billion dollars come from for the state highway needs? See Figure 5.

Indiana State Highway Revenue Versus Needs

During this 20-year period our audit and control division has estimated the projected total revenue from the present six-cent and two-cent motor fuel tax to be about 3.56 billion dollars.

Using current obligation authority from the Federal Highway Trust Fund of 75 million dollars during the present fiscal year would produce a guess estimate of 1.50 billion dollars during this 20-year period.
1970—1990 (BILLIONS OF DOLLARS)

TOTAL NEEDS
$13.4

STATE HIGHWAY
$7.1

CITIES & COUNTIES
$6.3

Fig. 4. Breakdown of Needs.

1970—1990 (BILLIONS OF DOLLARS)

TOTAL STATE HIGHWAY NEEDS
$7.1

APPARENT AVAILABLE REVENUE
$5.1

STATE M.V.H.F. (8¢)
$3.5

FEDERAL
$1.5

DEFICIT
$2.1

MAINTENANCE
17.1%

CONSTRUCTION
82.9%

Fig. 5. Indiana State Highway Revenue Versus Needs.
No apparent source of revenue is available at the present time for the 2.0 billion dollar needs deficit. This deficit could amount to about one-third more than the total cost of the 977 miles of interstate in Indiana.

*State Motor Vehicle Taxes to Cities, Towns and Counties*

I have made no attempt to review the cities and counties' sources of revenue to meet their road and street needs, but am sure they are equally as hard to meet as is the State Highway Department's.

Figure 6 shows, however, the amount of motor vehicle taxes to the cities, towns, and counties for the last 12 years broken down in four-year intervals.

**STATE HIGHWAY CONTRACTS LET IN 1972**

From where I sit, a guess is that the state highway dollar value of contracts let in 1972 will be close to calendar year 1971, or somewhere near 155 million dollars.

Figure 7 shows total contracts let and awarded over the past 12 years—1972 is estimated. The 1969-72 four-year period shows an increase of 126.7 million dollars over the 1965-68 four-year period. This could not have been accomplished without the state's 55 percent of the two-cent gas tax increase, plus a number of economy measures put in effect by Governor Whitcomb. The current four-year period shows a reduction of over 12 percent over the 1965-68 period.

**FEDERAL AGENCY CHANGES KEEP STATES OFF BALANCE**

Regardless of what is heard, the direction of our state highway programs are changing, because that is what the Congress, the Department of Transportation and other federal agencies are dictating. Our engineering and planning sections are pushing to get with their thinking—if they will hold still long enough for us to change direction. There is a constant flow of changing rules and procedures.

Alf Johnson stated in a talk in San Francisco, in October 1971, that federal-aid highway programs add stability, continuity and uniformity to the state's program that is in the peoples' interest, as long as they do not play politics with it at the federal level, or constantly keep the program off balance with all sorts of surprises.

We agree with Alf. To give you some idea of what I am talking about—prior to November of last year the interstate had been considered number one priority. Then out of a clear sky, emphasis was shifted to construction in high unemployment areas and safety oriented projects.
Fig. 6. State Motor Vehicle Taxes to Cities, Towns and Counties.

**Table:**

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<th>Year</th>
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<td>1971</td>
<td>115.9</td>
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<td>1972</td>
<td>135.5</td>
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**Graph:**

- **1961** to **1972**: 4 Year Total
  - **$263.3**: + $33.3 * + 14%
  - **$337.4**: + $74.1 + 21%
  - **$460.4**: + $123.0 + 36%

**NOTE:**
- Arterial Road & Street Board and a 2¢ Fuel Tax increase enacted by 1969 General Assembly. 45% of that increase is distributed to Cities, Towns and Counties by the A.R.S.S. Board.
- Based on: $230 million distribution from 1957 to 1960
- Change from quarterly to monthly distribution by General Assembly provided a $56 million wind fall in 1965.
Current Favorite Projects of Federal Agencies

On December 31 of last year, a number of the favorites of the last three months of 1971 were dropped or played down.

Current favorites are:

1. Emergency highway safety projects.
2. Non-interstate obligation for railway/highway improvements (Penn-Central).
3. Obligation of regular urban “C” funds.
4. Obligation of TOPICS funds.
5. Obligation of bridge replacement funds.

Shifting program emphasis this quick for the Indiana State Highway Commission has, and is, hard for us to do, but we are building up steam and are advancing engineering on a number of projects for early lettings.

HIGH CONSTRUCTION RATE FORSEEN FOR NEXT 20 YEARS

No attempt has been made to confuse you with facts and figures, but only to once again point out that the automobile and motor truck will be around for a long time.

The automobile will continue to be the mode of transportation the individual will select to take him to and from work, to the grocery store, to church, to the city for supplies, for travel of shorter distances, for family vacations and to sporting events. The motor truck use will also continue to be, in many cases, the only means of delivering goods and providing services to cities, factories, schools, farms and homes.

From these facts and observations, one can see that new construction for roads and streets will continue to be needed at a very high rate for at least the next 20 years.

Also, maintenance costs for the interstate and all other road and street systems will increase as the interstate gets older and more miles are traveled by the motorist on all systems.

HIGHWAY TRUST FUND FOR ROADS ONLY

Again I want to point out that the money Indiana tax-payers are paying into the trust fund at the federal level is needed for the purpose which it was collected, that is, to build highways. Also, the Indiana motor fuel tax must be retained for the same purpose if we are to continue to provide the type of safe roads and streets the public is demanding and entitled to.

NEED FOR TOLL ROADS

In addition to retaining the above sources of funding the construction of roads and streets, in my opinion, Indiana will again need to
take a closer look at providing some seriously needed new multi-lane highways in selected locations with the toll road method of financing.

Because of the many regulations at the national level and more recently at the state level, the time lag between the time a project is first approved until completed and opened to traffic can be as much as eight to nine years.

A number of nations are building toll roads today and they are being completed from beginning to end in one-third of the time conventional roads are taking in this country. In addition this method of financing major high-traffic-count roads would release funds for the building and repair of other needed roads with lower traffic counts and assist in improving maintenance on the entire system.

CONCLUSION

We are in no way opposed to other modes of transportation—rail, rubber-tired or whatever, they are needed to relieve our present systems—but do feel that because of the number of lives lost on our highways each year, the ever increasing number of motor vehicles on our roads and streets, the increase in miles traveled by each vehicle, and any number of other factors, the Federal Highway Trust Fund should be retained at, at least the present level or higher, to take care of our highway needs.