Volume XVI, No. III

THE AMERICAN SOCIETY OF HIGHWAY ENGINEERS

August 1980



PRESIDENT'S MESSAGE GENE G.

SMITH

Thank you for your confidence in electing me president of the American Society of Highway Engineers, I am deeply honored. I only hope that I can serve my term and perform to the satisfaction of the entire membership, and maintain the high standards of the presidents who have served before me.

I am setting a goal for myself to attend at least one home meeting of every section of our society.

I also have a couple of challenges for each of you and the entire membership.

Every year since I have been on the national board, we try to reach the two thousand plateau of membership. Those of you who know me know I am not that conservative and that I am very optimistic and enthusiastic about our organization.

We have virtually an untapped reservoir of potential members out there waiting to be signed up. Pennsylvania sections have not yet scratched the surface in going after utility company people, local government engineers and road crews. Ohio and West Virginia are just getting started and can look to any field for their members.

I think we should consider our total membership of 1,900 plus and consider the 2,000 goal in our hip pocket, now we back off to about 1,200 really active members then each of these members go out and sign up one new member and "bang" we are now at 3,000. You have or no doubt will see a white sticker with blue lettering "sign 1 for '81" - this is what it's all about.

I intend to keep moving for more new sections which will also increase our membership. I intend to initiate a program of nationwide advertising to help in this endeavor.

1980 CONVENTION HIGHLIGHTS



Passing the gavel. Incoming President Gene Smith - outgoing President George Parrs.



Man of the Year Award presented by President George Parrs to Guy Gunn who is accompanied by Mrs. Gunn.

MORE COVENTION PHOTOS ON INSIDE PAGES!

PRESIDENT'S MESSAGE

continued from page one

In order to make our society more attractive to prospective new members and be more effective, we have to stand up and be heard. We have to keep our name in the market place. The highway industry in Pennsylvania is struggling through the most trying times in the history of the state, the big push is now on a percentage gas tax. Ohio is just beginning to feel the crunch as evidenced by Director Weir and Governor Rhodes' \$500,000,000 bond issue. West Virginia, is just moving into the heavy building period and the financial problems may be within sight if they are not careful.

I would like each of you at the local section level to glean out a good active public relations man. Someone who will keep the society's name in the papers and on the boob tube. There is a lot of free publicity out there, use it.

We will maintain an active legislative review committee at the national level covering committee and floor action of any bills affecting the highway industry in any state where we have membership, as well as the federal government.

We intend to intensify the white paper and/or position papers to legislators and will welcome any aid or input from anyone. Sample letters will be sent to the sections and we ask that each and every member consider themselves on a legislative "action" committee to get the message to the legislators, both state and federal.

Through the public relations at the local section level we will again try to encourage speakers to speak to local civic groups, on selected highway topics, to get the message to the people.

We intend to join with PHIA and The American Road and Transportation Builders Association in their recent campaign "RU4BT?" Are You For Better Transportation?

In short, to sustain our existance and enhance our growth we have to take the highway message to the people and to the legislators, and we ask the help of every member.

We have a great society. We represent an industry and a way of life that is vital to the very well being of our great nation, we are all Americans, members of The American Society of Highway Engineers. I ask you, how do you spell American? A-M-E-R "I Can".

Yes, I can, we can and we must, if we want to grow and porsper and be a viable asset to our industry.

SIGN 1 FOR '81

A. S. H. E.

PENNDOT NEWS

Brian McCoola, P.E., Public Relations

Recent State Transportation Department initiatives and an indepth look at the Department's proposed new revenue package were the principal topics of discussion Monday, March 3, 1980 as State Transportation Secretary, Thomas Larson, addressed some 60 members of the Harrisburg Section at a monthly dinner meeting at Hardings Restaurant in Camp Hill.

Larson cited the appointment—on a merit basis—of 67 new County Maintenance Managers, appointment of an Inspector General and a 50% increase in federal obligation dollars committed to Pennsylvania as three important elements of a comprehensive package aimed at increasing productivity, improving the quality of work, and eliminating waste within the Department.

Also cited were expanded truck weight enforcement teams, formation of a central Program Management Committee to address priority programming needs, a new fiscal management system and a comprehensive review and reevaluation of contract quality control in the Department.

Larson emphasized that maintenance and reconstruction of the state's 45,000 mile road network will continue as a top priority of his department. "Our state has invested approximately \$45 billion in its highway system over many decades. This is a substantial investment which must be protected and preserved. If we don't provide quality maintenance to our road network, this valuable asset will become a very costly liability."

Despite the best efforts of the Department's staffing and management system, Larson observed that funding limitations have become the overriding constraint to mission accomplishment. "Our Department's revenue picture is highly uncertain". He noted that PennDOT is collecting less revenue this year with an 11 cent per gal-

PAST PRESIDENT'S MESSAGE

Some great things have been happening these past few months that should prove to be fruitful and may help us win the battle for sound financial support our highway system.

Sections are getting the message to their legislators and we are getting backing from other professional organizations. In the P.S.P.E. Chapter, Pittsburgh, January newsletter 2/3 of the copy was highway related. Not only did they reproduce the ASHE position paper but they reviewed many other problems concerning our highways, thanks to Al Kozel, Kozel Engineering Co. Inc.

The Clearfield Section of ASHE submitted letters to all their local legislators and placed some excellent articles with the news media, TV, radio and newspapers. By this time each section should have received copies of Clearfield's letter. Thanks to Guy Tiraacorda, President.

In cooperation with P.H.I.A. & A.P.C., we have been asked by President Bob Bartlett to make speakers available during the coming year. I think it is a great opportunity to pitch in with these two fine organizations to tell the highway story. Persons selected to give talks should be cognizant of the fact that in Pennsylvania over 100,000 persons are employed in the highway industry in one fashion or another. My guess is that Ohio and West Virginia have approximately the same number. Not only does our industry suffer from bad roads, everyone who uses the highway network for work or play suffers

I wish to express my deep appreciation to all the officers and directors who have helped make this year a success. It was a real pleasure visiting with the sections. We got into some lively discussions that were enlightening and fruitful. With the spirit and dedication our members express, we cannot help but continue to grow.

I wish you all success and happiness in the years to come.

Best regards, George

lon gasoline tax than last year, when the tax was only 9 cents per gallon.

Gasoline consumption in Pennsylvania is down due to the escalating price of gasoline. Also, revenue from license and registration fees has declined as citizens are not buying a second car as quickly as they have in the past. As a result, Larson said, his Department this fiscal year expects to collect some \$60 million less than it is

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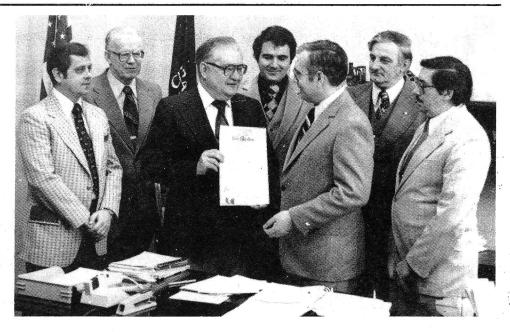
NORTH-EAST PENN SECTION

James E. McHugh, Public Relations

The picture of engineers with Mayor Eugene Hickey of the city of Scranton during the presentation of the Proclamation Observing Engineers' Week February 17 to 23, 1980 are as follows (I to r): Al Brocavage, Burns and Revetti; Frank Yatsko, Penn State University; Mayor Hickey, City of Scranton; Jim Palumbo, Pa. Gas and Water Co.; Harry Mumford, Sandvik Steel, Inc.; George J. Parrs, National President, ASHE; Jim Lewis, Vice-President, ASHE, North-East Penn Section.

Recently members of the American Society of Highway Engineers, Pennsylvania Society of Professional Engineers and the Northeastern Plant Engineers prepared an attractive display in downtown Scranton noting the work of Engineers. It was so well received by the public that it remained for viewing an additional week.

George J. Parrs, National President, American Society of Highway Engineers, was presented a certificate of appreciation for his work in helping to reclaim Mine Waste Areas through the application of sewer sludge. The project was accomplished on excess highway right-of-way in the



city of Scranton. Mr. Parrs was instrumental in getting the Department of Transportation to enter into an agreement with the U.S. Department of Agriculture and then supervised the design and construction of the demonstration site. Applications of the sewer sludge and eventual seeding operation were handled by Dr. William Sopper of Penn State University.

It was quite amazing how plant life could be so easily established on coal wasteland and, in turn, beautify the area. Other participants in the sewer sludge demonstration project were the Lackawanna County Soil Conservation District, the Pennsylvania Department of Environmental Resourced, the City of Scranton and Penn State University.

PENNDOT NEWS continued from page two

legally authorized to spend. This short-fall Larson stressed could grow to \$169 million by next year if current funding mechanisms are not changed.

Larson suggested the Thornburgh administration's proposed extension of the retail sales tax to gasoline and a reduction of the current flat tax from 11 cents to 5 cents per gallon as an effective and viable way of providing the Department with a predictable funding base.

"We need the understanding and support of the citizens of Pennsylvania. The funding mechanism we are proposing will not create windfall profits---it will raise the necessary dollars to provide much needed transportation services for the People of Pennsylvania."

Larson concluded by stressing that Transportation Department programs are in line with the Thornburgh administration's broad goal of revitalizing the state's economy. "Good roads are essential if we are to attract new commerce to the Commonwealth. No business is going to be attracted to a state where the road system is inadequately maintained and does not allow expeditious transportation of goods". In closing Larson expressed

optimism that professional groups such as ASHE would assist him in transmitting this message to other fellow Pennsylvanians.

OHIO ROADS AND BRIDGES IN DIRE NEED, STUDY SAYS

More than 20,000 miles of Ohio's paved main roads are dangerous and 16,000 bridges are either too weak or too narrow to adequately handle traffic, according to a study released recently.

Also, nearly 13,000 miles of main roads in Ohio have serious surface deterioration, according to a report by The Road Information Program (TRIP) Washington, D.C.

The TRIP study found:

-20,701 miles of paved arterial and collector roads and highways are narrow and have sharp curves or other outdated design or engineering problems.

-An estimated 16,000 Ohio bridges are too narrow, have too few lanes or are too weak to handle traffic authorized on roads they connect.

-12,741 miles of main paved roads have substandard surface conditions.

—Some \$151 million per year for 10 years would be needed to correct the most serious of the bridge and surface problems.

Of the 12,741 miles with substandard surfaces, TRIP said 11,471 miles are rated

"fair" and require resurfacing within the next six years. After that time these roads will require reconstruction, which costs 10 times more than resurfacing, the agency said.

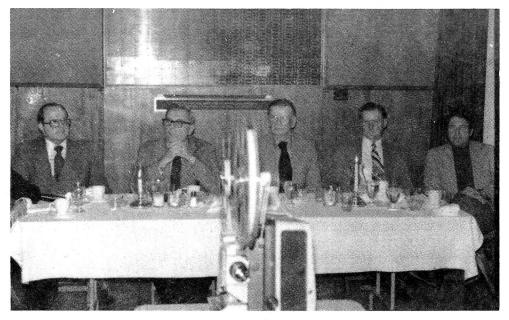
The other 1,294 miles are considered "poor" and have already deteriorated to the point where they no longer can benefit from resurfacing. TRIP recommended that those roads be reconstructed.

The 20,701 miles of roads rated obsolete should be upgraded to handle today's traffic conditions, the study noted. This would involve widening, straightening, leveling and correction of shoulder deficiencies. These roads were built in the 1920s and 1930s when traffic was lighter and vehicles were smaller and speeds were slower.

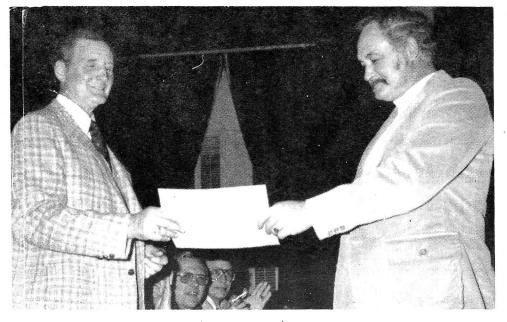
The 10-year, \$151-million-per-year program recommended by TRIP includes costs for the 12,741 miles of road resurfacing and reconstruction, and renewal and replacement of Ohio's 898 most heavily traveled deficient bridges. TRIP did not estimate the cost of updating the 20,701 miles of roads with design and engineering deficiencies, due to the many variables involved.

"Ohio's fuel taxes simply are not enough to cope with our tremendous and

continued on back page







FRANKLIN SECTION

J.S. Klosinski, Public Relations

A joint meeting of the Franklin section, "ASHE" and the Midwestern Chapter of the Pennsylvania Society of Professional Engineers was held at the Franklin Elks Club in Franklin, Pa.

Host for the event was Jack Ricalton, P.E. of PennDot. The joint meeting was arranged through the efforts of Joe Kurtanich, President of the Midwestern Chapter and Herb Hasbrouck, President of the Franklin Section, for the purpose of fostering better relations between the two organizations in an informal setting.

A film was shown from Raymond International entitled "The William Preston Lane Memorial Bridge", which illustrated the design and construction of one of this country's outstanding engineering projects

The Annual Venison Dinner of the section was again held at the "Franklin Club" at 1340 Liberty St., Franklin, Pa.

This event always produces exceptionally prepared and tasty venison and this year was again no exception.

Hosting the event was William Hawks. Another good turnout was produced. Shown was a film entitled, "Getting There From Here" narrated by Lowell Thomas and presented through the courtesy of the L.B. Smith Company.

The drawing for the 50-50 was held on January 18th, with the lucky winner being L.D. Hutchison of Petrolia, seller of the ticket was Sherell Hindman, member of the Franklin Section.

The Annual "Ladies Night" was held at the Titusville Country Club, north of Titusville on Route 8.

Host was Herb Hasbrouck, section President, and was ably assisted by Herb's wife. Good music, food and comaraderie was the order of the evening.

The Catholic War Vets Club at 720 Atlantic Ave., Franklin, Pa. was the site of the Annual Spaghetti Dinner.

FRANKLIN SECTION continued on next page I to r. Joe Kurtanich, Pres. Midwestern Chapter; George Atkin, State Pres. P.S. P.E; Jack Ricalfon, Sec., Franklin Section; and host Herb Hasbrouck, Pres. Franklin Section and Tim Haslett, Director, Franklin Section.

Leading off at the serving table at left are Bill Hawks and Charles Mergl - first at right is Bob Johnson, center is Norm Cowell.

Franklin Section President, Herb Hasbrouck (I) presenting membership certificate to Frank Horn (r). Visible on Herb's right are D. Gildea and R. Schreckengost.

HARRISBURG SECTION

Brian McCoola, Public Relations

An innovative bridge rapair project on the Pennsylvania Turnpike's Northeast Extension near Scranton was the subject of a recent illustrated talk to an ASHE gathering.

Neal E. Wood, Bridge Engineer for the Pennsylvania Turnpike Commission spoke before 70 Harrisburg Section members at a dinner meeting in Camp Hill.

The speaker detailed a \$2.7 million construction project designed to redeck a major 4 lane crossing. Precast reinforced concrete planks rather than conventional cast-in-place construction was used.

A major consideration in the selection was traffic control. Two of the four lanes were to remain open during the construction.

The bridge, located in Clarks Summit, is 1627 feet in length and crosses 140 feet above U.S. Route 6.

Construction started last May, and by fall work on both southbound lanes was completed. The northbound lanes are to be done this summer.

The precast concrete planks, used for the first time on a state funded road job in Pa., are credited with cutting project construction time in half.

Each plank weighs roughly 1800 pounds and measures about 29 x 7 feet. They were trucked to the work site from a plant 80 miles away.

During the plank placement, a number of federal and state highway officials from several Mid-Atlantic states visited the job site to view the innovative construction.

FRANKLIN SECTION

As usual, the event was well attended and well prepared. Preparing the "goodies" again were Russ and Don Hart, Bob Gerwick and Jack Kemmerer.

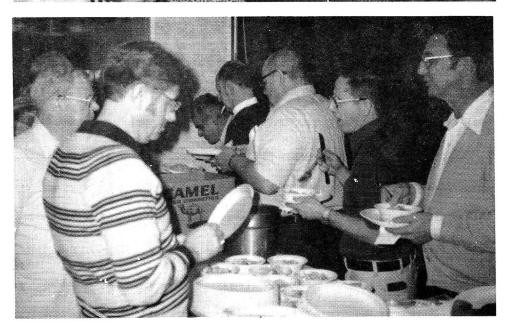
Waiting in anticipation for the serving of the venison is a segment of the Franklin Section membership.

Winners of the center pieces pictured I to r: Mrs. Marian Hasbrouck, Mrs. Marilyn Horne, Mrs. Leah Barnicle and winner of the 50/50 was Joanne Strickland.

At serving table at left are Bob Gerwick and Jack Kemmerer. Identifiable from I to r: Bob Cardy, Dick Lynn and Bob Offutt.

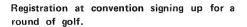








New National Officers - Robert Yeager, Treasurer; Dixon Earley, 2nd Vice Pres.; Charles Sincavage, 1st Vice Pres.; Gene Smith, President; Terry Conner, Secretary.







Tom Criswell and Chuck Luff display Ohio flag and ASHE plaque of the Ohio Section.



Ladies of the convention enjoying a treat of gourmet cooking by Hershey Pocono chef.



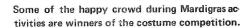
George Parrs, President, providing TV news with message on highway funding.







Some tired but happy faces from Mardigras Nite - Northeast Penn Section.







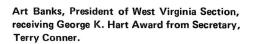
Mardigras Nite - Chairman of convention, Jim Lewis and his wife, Jean.



Past Presidents attending convention: Mr. and Mrs. Robert Yeager, Mr. and Mrs. John Leapson, Mr. and Mrs. Russel Horn, Mr. and Mrs. John Wachter, Mr. and Mrs. Harold Poulson.



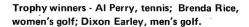
Gene Smith presenting Attendance Award to Joe Bianco, Pittsburgh Section.







The Convention Committee - Mr. and Mrs. Jerry Cicolli, Mr. and Mrs. Nick Senovese, Joe Swegel, Mr. and Mrs. George Parrs (chairman), Mr. and Mrs. Jim Lewis, Mr. and Mrs. John Kolander, Mr. and Mrs. Cliff Hoffman, Mr. and Mrs. Dave Jones, Mr. and Mrs. Harp McHugh.





ON PAVEMENT CONSTRUCTION AND PERFORMANCE TO BE STUDIED

Based on a study conducted by the American Association of State Highway and Transportation Officials, and on other information, there appears to be an increase in the occurrence of problems such as placement difficulties, excessive displacement under traffic, thermal cracking, raveling, and stripping of asphaltic concrete pavements placed in recent years. This situation could result in higher maintenance costs, shorter service life, and criticism by the public of our pavements.

One of the causes of these problems is believed to be variations in the temperature susceptibility of various asphalt cements. In an effort to check the validity of these beliefs, the National Cooperative Research Program (NCHRP), which is administered by the Transportation Research Board, has entered into a \$50,000 research contract (designated NCHRP 1-20 FY '79) with the Texas A&M Research Foundation, in College Station, Texas. The research is expected to be completed by the end of July 1980.

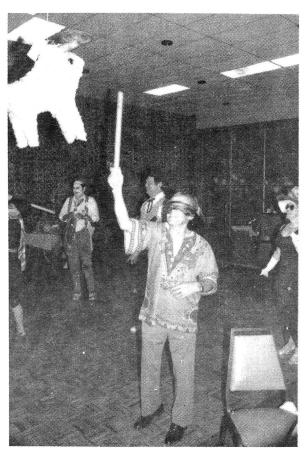
Says a spokesman for Texas A&M Research Foundation, "A strong feeling exists among the field engineers that asphalt has changed. Furthermore, it is evident that from an asphalt manufacturing standpoint, a greater number of problems will have to be faced rather than a small number. Therefore, if asphalts have changed or will change in the future, what is the potential

impact on the performance of pavements? As a starting point, the temperature susceptibility of asphalt should be considered in relation to field construction and performance properties."

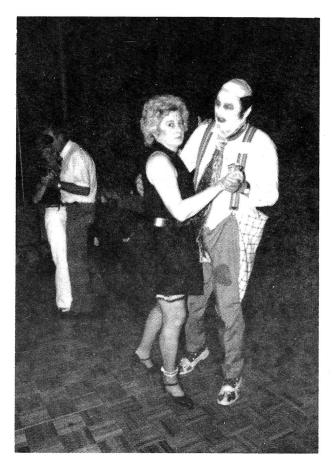
The researchers point out that the U.S. dependence on foreign crude oil has increased in the last ten years. With the dependency, the asphalt manufacturers are faced with the following problems:

- 1. A larger number of crude sources are often required to supply a refinery. This constant change in crude source has created some uniformity problems, and has required blending of crudes.
- 2. Major manufacturers have little assurance that a foreign crude source will be available for an extended period of time.

continued on next page



Encol Acri trying his hand at breaking the Piniata.



George and Jean Parrs as they appeared for costume party.

- 3. Crude sources have changed over the last 10 years and in some cases present day sources do not produce the desirable asphalt.
- 4. Oil companies are, as never before, requiring that all product lines, including asphalt, carry their proportion of profits. Thus, several alternatives for the bottom of the barrel from which asphalt is produced are seriously considered.
- 5. Periods of heavy demand for fuel oil have created situations where manufacturers are producing very hard asphalt and then "fluxing back" to obtain the softer asphalt cements. This manufacturing operation has become more prevalent in the last few years.
- 6. The bottom of the barrel, and hence asphalt, has become a "disposal site" for elements which create environmental problems. For example, sulfur often ends up in relatively high concentration in asphalt.

From these six points, it appears possible that the properties of asphalt cement have changed over the past ten years. However, based on limited research work,

these changes are not particularly evident as measured by the standard asphalt cement property tests. Thus, it appears as if more extensive research needs to be performed on this matter.

The overall objectives of the research are, (a) to determine the range or extent of variability in temperature susceptibility of asphalt cements currently being used in road construction, (b) to evaluate the effects of the identified variability, in relation to other factors and over the full range of service temperatures, on pavement construction operations and shortterm performance of pavements, (c) to identify the limits of variability in temperature susceptibility that can be accommodated through application of known asphalt technology by changes in asphaltic concrete construction procedures and mix design consideration, and (d) to determine procedures for accommodating or controlling that variability in temperature susceptibility of asphalt cements that cannot be accommodated by known asphalt technology.

The NCHRP was created in June 1962 as a means to accelerate research into particularly acute problems affecting highway transportation on a nationwide scale. It is sponsored by the American Association of State Highway and Transportation Officials in cooperation with the U.S. Department of Transportation's Federal Highway Administration.

The Transportation Research Board was organized in 1920 and is a cooperative organization of professionals from government, the academic world, and industry. The Board's purpose is to advance knowledge of the nature and performance of transportation systems and their interaction with society through the stimulation of research and the dissemination of information resulting from research.

The Board operates within the Commission on Sociotechnical Systems of the National Research Council, which serves both the National Academy of Sciences and the National Academy of Engineering.



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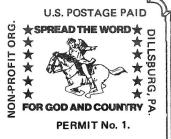
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Robert Sherr Box 14 B-1 Star Route Jim Thorpe, Pa. 18229



SECRETARY'S CORNER

I have been your Secretary for one year and have found the "job" quite demanding but very enjoyable. I have met new people and have made many new friends. Most sections are very co-operative and meet my necessary deadlines. To these a thank you and to the rest, please try a little harder. Both my office and home telephone are listed on your officers roster, do not hesitate to call if you have any questions.

Have a pleasant summer and a nice vacation. (if you can afford the gasoline to go).

Sincerely, Terence D. Conner

EDITOR RESIGNS

Please note: Joe Martinelli has relinquished his association as Editor of the Scanner and beginning with the next issue, Bob Sherr will take over the job. All persons having news, photos, etc. are to send them to Bob Sherr, Box 14-B1 Star Route Jim Thorpe, Pa. 18229.

SEPT ISSUE OF SCANNER DEADLINE AUGUST 10, 1980

Articles, pictures, announcements for the September issue of the A.S.H.E. Scanner MUST be in the hands of the editor NO later than August 10, 1980 to be published.

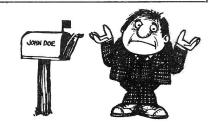
All pictures submitted for publication must be BLACK & WHITE on GLOSSY paper with SHARP details. Do not write

CHANGE OF ADDRESS?

Please Note . . .

Postage is one of our most expensive items. It costs 25¢ for each letter we get back with the wrong address. Please help us by sending us your change of address when you move.

Thank you.



on back of pictures, but rather affix gummed label with names of those on the picture. Any article pertaining to the picture should be written on a separate sheet of paper. Mail all material to be published to the editor.

OHIO ROADS AND BRIDGES

continued from page three

growing road and bridge needs," said C. William Swank, who released the study.

Swank is executive vice president of the Ohio Farm Bureau Federation, which requested the TRIP study. TRIP is a nonprofit research and information agency supported by the highway industry. Highway improvement costs in Ohio have more than doubled in the past 10 years and are likely to continue escalating in the future, the study noted.

Revenue from Ohio's seven-cent-per-

MEMBERSHIP

Altoona	122
Charleston	129
Clearfield	65
Cuyahoga Valley	76
Delaware Valley	237
East Penn	126
Franklin	231
Harrisburg	289
N.E. Penn	95
Pittsburgh	244
Southwestern Pa.	125
Western Reserve	54
Williamsport	137
TOTAL	1930



gallon motor-fuel tax is not keeping pace with the state's road needs because motorists are getting more miles of driving for each gallon of taxable fuel, TRIP stated. This is because of the wider use of smaller, more fuel-efficient cars and other factors, according to TRIP.

A \$1.51 billion road and bridge improvement program between now and the end of 1990 would create 3,271 construction jobs and another 3,297 jobs in related fields, the study estimated.

At present, the unemployment rate in the construction industry in Ohio is 18%, compared with a 7.3% overall unemployment rate statewide, TRIP said.

TRIP's study was based on data from the U.S. departments of Commerce, Labor and Transportation, the Internal Revenue Service, and the Ohio Department of Transportation.