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THE AMERICAN SOCIETY OF HIGHWAY ENGINEERS

February 1980



## PRESIDENT'S MESSAGE

GEORGE J. PARRS

"What's good for Chrysler Corp. is good for Pennsylvania" — Why can't this phrase be changed to "What's good for the Highway Industry is good for Pennsylvania, Ohio, West Virginia, New York, etc., etc.

It was real interesting to watch how Chrysler Corp. wrangled a \$1.5 billion federal loan guarantee out of our legislature. Why can't we in the highway industry do the same thing? Surely we have as much to offer as Chrysler Corp.—job opportunities for thousands of people across the nation.

Congressman Joe McDade, R. Scranton., was part of an ad hoc task force put together by Speaker Tip O'Neill to convince other congressmen the 1.5 billion federal loan guarantee was good business. McDade made no bones about the fact that Chrysler had a tank manufacturing plant in his district that employed 1,000 workers.

Congressman Lederer D. Phila was reminded that \$1,495,105 worth of purchases were made by C.C. from his district. He was even given a list of supplies and dealers and the number of their employees.

Members of congress have been deluged by visits from Chrysler dealers who were armed with facts about how many people they employee and the amount of taxes they pay.

I think it's time that we in the highway field try the same tactics. Surely our industry employs as many people as Chrysler Corp. If it worked for the Nations' 10th largest industry, why can't it work for us.

Remember, we are not asking for a 1.5 billion loan guarantee. We are asking that

# A.S.H.E. HIGHWAY POLICY POSITION PAPER

The American Society of Highway Engineers is a nonprofit organization with almost 2,000 corporate and industrial members whose principal interest is in the construction and maintenance of a safer, more economical and more efficient highway transportation system.

Our Society supports the nation's objective of energy efficiency and conservation. We believe the motor vehicle industry can contribute to these objectives without reducing the nation's mobility. By maintaining our highway system and by creating and adapting new energysaving systems in the highway industry, we can also contribute to the nation's needs. During the past several years, inflation has taken its toll on Highway Departments across the nation. The Highway-User Tax (gas tax) of Pennsylvania and other states has not been able to keep pace with our changing needs, demands by the motorist or inflation. New steps must be taken by our Legislature to provide a steady, measurable flow of revenue to the Department that would adequately provide for the needs of the high-way user.

During the past year, the Pennsylvania Legislature promised a 202 million dollar budget for highways but only passed a 160 million dollar budget. It was anticipated that the two-cent gas tax would bring in 107 million dollars. However, with energy conservation and higher prices, there is a serious short-fall of this revenue. It is quite obvious that a cents-per-gallon tax cannot keep up with the nation's inflation rate.

We, the American Society of Highway Engineers, support an increase in revenue resources, such as:

- 1. Conversion of the gallon tax on motor fuel to a percentage base.
- 2. Value or weight-based vehicle registration.
- 3. Purchase and use-tax on motor vehicles.4. Out-of-State truck registration or ton
- mile-axle mile taxes.
  5. If we must have studded tire, then we must have a User Tax on those tires.

We support formulation of Highway-User Taxes and/or revenues which will keep pace with the nation's rate of inflation or deflation.

We support a revenue base that will allow for proper planning and programming of future Transportation facilities.

We believe that bold and positive steps must be taken by the Legislature to insure a balanced Highway Program and provide sufficient funding for the proper maintenance of the highway system.

a sensible form of revenue be collected so that the nations highways — the backbone of our economy — can be maintained in reasonable and safe manner.

#### OFFICERS AND DIRECTORS NOMINATED 1980 - 1981 FISCAL YEAR

Officers and Directors were nominated by the National Nominating Committee at a meeting held at the Sheraton Motor Inn, Milesburg, Pa. on January 10, 1980. The Nominating Committee reported the following nominations at the board meeting, January 11, 1980 for the fiscal year beginning June 1, 1980:

President - Gene G. Smith, P.E., Franklin Section.

1st Vice President - Charles J. Sincavage, P.E., East Penn Section.

2nd Vice President - J. Dixon Early, P.E., Harrisburg Section.

Secretary - Terrence D. Conner, P.E., continued on page 2

#### **GUEST EDITORIAL**

By Donald S. Knight, Executive Director, The Road Information Program

If a chain is only as strong as its weakest link, then the strength of the nation's transportation system rests on its bridges. And they are beginning to sag under the burden.

The most recent figures indicate that one in every five bridges in the U.S. is in need of replacement. One in five! The replacement cost alone is beginning to approach \$30 billion.

Yet that does not even begin to address the additional and possibly more serious problem of bridges now needing only rehabilitation and renovation. These are tomorrow's failing bridges.

Granted, the 1978 Federal-Aid Highway Act provided more money for the repair and replacement of bridges -- both on and off the federal-aid system -- than ever before.

And, granted, there has been much media attention cast upon our "shaky spans" -- last January's "Parade" magazine cover story based on TRIP's national assessments comes to mind. But the problem is far from solved.

Over the last decade TRIP has been working hard to get this story told. Operating on both a national and statewide basis TRIP has publicized the problem to hundreds of millions of people. Our message has been clear -- we have to move fast to protect the billions invested in the nation's mobility -- and the response is gratifying and growing.

Taken in total, the deficiencies and the expansive and expensive task of their replacement can be quite numbing. But taken individually, the real cost of a "bad" bridge is easily higher than the cost of its repair.

It is obvious that the most serious result of bridge neglect is its collapse. The result can be injury and even the death of pedestrians and motorists.

The most common effects of bad bridges are increased prices of goods and services, especially in farm products, and wasted fuel and time spent in detouring bridged with reduced weight limits and those simply closed.

Let me cite a few examples:

\*There is a Woodville, Ohio, construction company that was forced to add 68 miles per round trip on its heavy equipment bound for Toledo thanks to not one, but two, bridges on Route 20 being posted for reduced vehicle weights.

- \* Commuters in Wilmington, Delaware, spent a hotter than usual summer last year when all three bridges connecting the city and the northern suburbs were in the shop for repairs. The Augustine Bridge will probably be closed for at least another year. Commuters weren't the only people adversely affected. Many stores on the north side of the Brandywine Creek found their sales dropping as the bridges deteriorated.
- \* Then there was the story about the six families in Coolbaugh, Pa., who were literally isolated from emergency services when a bridge shifted and became impassable.
- \* A Fink-type truss bridge built in the last century in Hunterdon County, New Jersey, went crashing into the Assunpink Creek, but no one was injured. The bridge is being saved however. It'll be back together and sent to a Washington, D.C., museum. It may be the last one of its kind in the nation.
- \* Discovery of frayed cables on the U.S. Grant Bridge by the Ohio Department of Transportation has resulted in a 23-mile detour to a crossing up river.
- \* There was a bridge in Rushylvania,, Ohio, that served as one of the community's school bus routes. The students had to cross that bridge on foot while the bus followed behind, and then only when the last student had made it safely across. The bridge was too weak to bear the total burden.

The long road to repairing the nation's bridges began with the failure of the Silver Bridge over the Ohio River at Point Pleasant, West Virginia, in 1967. A total of 46 people died in that bridge collapse and Congress reacted with the initial allocation of funds for bridge replacement on the federal-aid system.

In the first eight years of that program begun in late 1971, more than \$1.7 billion was either allocated or authorized. More than half of that -- \$900 million -- came in 1979 alone. Next year some \$1.1 billion will be added to that total. It is evident that our awareness of this serious problem has led to positive action. But bad bridges persist, and as noted above, the list is a long one.

What can be done? A more active role on the part of state and local jurisdictions might be the answer. But it's industry's job to show strong support for all efforts designed to keep our transportation problems high on the public's agenda.

And recent election results indicate that money for repairing our bridges is a top priority.

This past November voters in Maine, New Jersey and New York as well as many counties in Ohio voted increased funds for these problems. And the margins of victory were encouraging.

I say encouraging because the growing support for the rehabilitation of all aspects of our deteriorating transportation system, as evidenced by these recent "votes of confidence," is the result of an educated public. TRIP has had a lot to do with that.

We will not repair and replace all our bad bridges overnight. It will take as long as we have spent ignoring them. But with support from all quarters, we will be able to significantly reduce those numbing deficiencies we now face.

### OFFICERS/DIRECTORS Continued from page 1

Southwest Penna. Section.

Treasurer - Robert E. Yeager, R.S., Altoona Section.

Directors (3 year term) - Arthur K. Banks, P.E., Charles Section, David E. Baker, Southwest Pa. Section.

George J. Parrs, P.E., North East Penn Section, who will become Immediate Past President, will serve 1 year as a member of the Board of Directors and Chairman of the Nominating Committee this year.

In addition to the nominees presented by the Nominating Committee, nominations may be submitted by petitions as outlined in Article VII, Section 2 of the A.S.H.E. By Laws.

#### MAN OF THE YEAR AWARD NOMINATIONS DUE APRIL 1sti

Joe Martinelli, chairman of the 1980 A.S.H.E. Man of the Year Award Committee has announced that April 1, 1980 is the absolute last day that his committee will accept nominations.

Those presenting nominations should submit a full resume of the nominee's past and what accomplishments he has made during 1979-1980 that should be considered by the committee.

Also, the nominee should be made aware that his name has been submitted for consideration and that the award will be made at the 1980 A.S.H.E. Convention on Saturday, May 17, 1980 at the annual banquet.

All nominations MUST be made in writing and sent to J.C. Martinelli, Man of Year Award, 283 Colonial Drive, Pittsburgh, Pa. 15216 Phone (412)-563-5737.

## W. GUY GUNN RETIREMENT DECEMBER 31, 1979

After 20 years as mentor, father-confessor and loyal fan, W. Guy Gunn has left a void in the day-to-day operation of his brainchild, Frankie PHIA.

Guy hit the Pennsylvania scene in November of 1959, wending his way to the Keystone State after a trip that started in Texas, detoured to our nation's capital, and ultimately ended here in Harrisburg.



Once here, a lot of additional miles were covered by Guy and Frankie PHIA. The duo beat the bushes throughout Pennsylvania, becoming well-known as "those guys who fight for better roads." They both firmly believed in the motto "Better Highways NOW - Save lives, Save time, Save money."

Guy was never hesitant about telling his highway story - whether there were ten or ten hundred people around. (And he's even been known to corner just one person, trying to convert a non-believer to his cause.)

PHIA's first Secretary-Treasurer, Guy held that office from 1960 until 1966 (at which time the two offices were split.) From '66 until early 1976, he was Treasurer and PHIA chief fund raiser. Since that time, he has served faithfully as a member of the PHIA Executive Committee, representing the contracting industry.

What can you say about someone who brought to life an idea he knew was pretty doggoned good; took that idea and flew with it; then made it a statewide organization supported by many diverse individuals and companies.

Along the way, Guy has made many friends! He will certainly be missed by Frankie PHIA and those friends. But since Texas just "loaned" him to us these past 20 years, they do have the right to

expect repayment on that "loan." And they'll be getting Guy back in the Lone Star State.

Sincere thanks, Guy, for what you have done for the people of Pennsylvania. We wish you well!

## APPROXIMATE FISCAL YEAR 1981 INTERSTATE APPORTIONMENT

(Millions of dollars)

71.5

Alabama

Alabama	•	•	•	٠	•	•	•	•	71.5
Alaska .	•	•	•						17.1
Arizona									55.0
Arkansas									18.1
California									299.5
Colorado									53.3
Connectio	ut								92.2
Delaware									17.1
Florida .									164.5
Georgia									135.6
Hawaii						•	:	•	69.1
71.1					•	•		•	17.1
Illinois .						•		•	41.3
Indiana .						•		•	50.3
Iowa .					,	•	•	•	44.4
Kansas .		•	٠	۰	٠	•	•	•	
		*	•	٠	٠	•	٠	٠	31.2
Kentucky				•	•	٠	٠	•	64.0
Louisiana					•				113.6
Maine .						•			17.1
Maryland					•	•		•	175.3
Massachus	setts				•				86.0
Michigan			•						85.6
Millinesor									67.4
Mississipp	i.								25.3
Missouri.									61.7
Montana									26.6
Nebraska									17.1
Nevada .									30.7
New Ham	pshir	re							17.1
New Jerse	v.								95.5
New Mexi	ico	i			•	•		•	50.5
New York							:		152.6
North Car			•	i					65.5
North Dal					٠	•	•	٠	17.1
Ohio					•	•	•	•	
Oklahoma				٠		•	•	•	75.9
				•	•	•	•	•	20.3
Oregon .		•		•	•	•	•	•	43.2
Pennsylva			•			•	•	•	188.3
Rhode Isl			٠	•	•	٠	•	•	43.2
South Car		a	•	•	•	•	•	•	45.4
South Da			•	•	•	•	•	•	17.1
Tennessee		•		•	•	•	٠	•	76.2
Texas .	•	•		•	•		•	•	164.2
Utah .			•		•		•	•	54.9
Vermont.									17.1
Virginia .									124.3
Washingto	on .						•		131.0
West Virg									71.9
Wisconsin									27.7
Wyoming									28.7
Dist. of C									45.2
				•	•	•	•		10.4

#### CHARLES J. SINCAVAGE RETIREMENT JANUARY 2, 1980

After 37 years Charles J. (Charlie) Sincavage announced his retirement as Assistant District Engineer at the Allentown Office, District 5-0, the Pennsylvania Department of Transportation (Highways) effective Wednesday, January 2, 1980.



East Penn Section - Charlie Sincavage.

He began his career with the Pennsylvania Department of Transportation in Construction as a Junior Construction Inspector, he advanced to Senior Inspector, Project Engineer and Resident Engineer, in 1954 was appointed District Traffic Engineer, and in 1955 District Maintenance Engineer. In 1958 he was named Assistant District Engineer until 1968 when he was appointed Deputy District Engineer.

Charlie, a Registered Professional Engineer, presently is National Second Vice-President of A.S.H.E. and President of the East Penn Section.

A World War II veteran, he served with the First, Third and Seventh Armies in the European Theatre of Operations with 1st Platoon, "A" Company 175 Combat Engineer Battilion.

A native of Shenandoah, Pa., he resides with his wife Peg at 312 Florida Avenue. They have one son Charles and three daughters Peggy, Shenandoah; Marcia, Hazleton; and Diane wife of Thomas Tichar, E. Norwalk, Conn.







#### HARRISBURG SECTION

Brian McCoola, P.E., Public Relations

A Maryland Tunnel, a major New York highway bridge, and a money saving technique being tested by the Pennsylvania Department of Transportation were the feature topics of discussion as the Harrisburg Section held three well attended dinner meetings between October and December.

On October 1, James K. VanBuren, a structural design engineer and project manager of the Baltimore office of Swerdrup, Parcel and Associates addressed some 45 ASHE members on the topic of Maryland's multi-million dollar Fort McHenry tunnel below Baltimore Harbor.

The eight lane mile long I-95 tunnel passes adjacent to an environmentally sensitive national park area and the tunnel is now being built at a cost in excess of \$100 million. VanBuren's interesting and highly informative talk was illustrated with a variety of slides and photographs.

The November meeting, held the first Monday of the month, saw two associate partners with a Harrisburg engineering firm discuss their firm's involvement with a four year construction project to add a second crossing to the nearly two mile long I-84 Newburgh-Beacon Bridge in New York.

Harry H. Sieg, principal designer of the multi-million dollar project discussed a variety of design aspects including specialized foundation conditions encountered. Joseph J. Scherrer, the firm's nationwide director of Field Services, discussed project construction.

The Newburgh-Beacon Bridge project was the subject of a cover story article in Engineering News Record November 22, 1979.

On Monday, December 3, 1979, the largest gathering in recent months, some 80 members and guests, turned out to

#### HARRISBURG SECTION

Joseph J. Scherrer, left, of Modjeski & Masters Consulting Engineers, with Hank Heck, Harrisburg Section. Scherrer addressed the local section on construction of New York's I-84 highway bridge across the Hudson River.

Hank Heck, current Harrisburg Section President presents a plaque to last year's section President Robert Turgeon (left). Presentation at October dinner meeting.

Hank Heck, left, Harrisburg Section President, with Harry M. Seig of Modjeski and Masters. Seig addressed the ASHE group on design aspects of the multi-million dollar I-84 Newburgh-Beacon Bridge in New York.

hear from Section President and now District Engineer for PennDOT's District 8-0 office, Alfred F. Lyng, discuss the innovative topic of Value Engineering. Recently introduced on a trial basis into PennDOT, Value Engineering is a combination technical and management discipline designed to eliminate unnecessary costs and improve productivity on a wide variety of engineering and public works projects.

Lyng was assisted by William Scott, a Bridge Construction Engineer with Penn-DOT's District 8-0 Harrisburg Office. Scott explained in detail an upcoming State Transportation Department safety improvement project in Centre County which was value engineered at a recent Federal Highway Administration sponsored seminar. Some \$1.3 million in initial construction cost savings were identified on the project by recommending simplified maintenance and protection of traffic, by downscaling design, and by using gabions at certain locations in place of walls. As previously designed, the project would have cost as much as \$2.7 million.

Lyng, who now heads a committee appointed by PennDOT Secretary Thomas Larson to implement Value Engineering throughout the State Transportation Department, has been a leading proponent of the innovative discipline for more than 10 years.

In May of 1979, while working with the firm of Erdman, Anthony Associates of Camp Hill, Lyng delivered a professional paper at an international Value Engineering Conference in Washington, D.C.





## **补水水水水水**

#### HARRISBURG SECTION

Albert Stalknecht, center, Harrisburg Section Program Chairman, with William Scott, left, and Alfred Lyng, right, at December 3 dinner meeting. Scott and Lyng addressed the ASHE group on "Value Engineering".

James K. Van Buren of Swerdrup, Parcel and Associates (Baltimore) presents a talk on the design of the multi-million dollar Fort Mc-Henry Highway Tunnel below Baltimore Harbor. Talk presented before the Harrisburg Section October 1, 1979.

James Little, left, listens attentively as Robert Turgeon, resident court jester of the Harrisburg Section, warms up with a caper from his bag of tricks.





#### HARRISBURG SECTION

Hank Heck (left), Harrisburg Section President congratulates James K. Van Buren following his talk October 1 to the Harrisburg Section. Van Buren discussed the design of the eight lane, mile long Fort McHenry Highway Tunnel.

#### S. W. PENNSYLVANIA SECTION Frank Petrarca, Public Relations

On Friday December 7, 1979 our section held it's annual Ladies Night and Christmas Party at Shady Side Inn, Uniontown. Members and guests enjoyed the cocktail hour followed by a delicious strip steak dinner with all the trimmings.

Drawings for various gifts were awarded to practically everyone. William Di-Cenzo thanked all the committee and donors for making the party a success. The remainder of the evening was spent dancing to the music by Sammy Bill.

January 23rd meeting found us at Nemacolin Country Club at Beallsville. The social hour was sponsored by Frank Gavik & Sons Construction Company. Many attended in spite of bad weather conditions. President Don Ryan spoke on retaining the present membership and increasing the complement by inviting buests to the meetings.

## OHIO LEGISLATIVE REVIEW REPORTS

At the recent Board of Director's meeting for ASHE, input from the Cuyahoga Valley Section was requested, regarding the activities of its Legislative Committee.

The committee has established short range and long range goals which we are attempting to follow as time and conditions permit. The short range goals include (1) to advise the membership of pending legislation affecting the highway industry and (2) to get participation of the membership.

The long range goals include (1) the

establishing of one on one contacts with our area legislators and (2) to establish the credibility of ASHE.

At the present time the Ohio Department of Transportation is experiencing finance problems as the State presently gets 7 cents a gallon tax on gasoline sales with which to conduct its highway construction programs. Further, we presently have a \$10.00 yearly registration fee for passenger vehicles. Counties may levy an additional \$5.00 tax. Most of the funds generated from the license fee are returned to the county of registration as Ohio has county and township roads which are under the jurisdiction of the respective county engineers and/or township trustees as the case may be.

Legislation is pending on 2 bills directly affecting the funding for highway construction and/or maintenance operations. One bill is for a 2 cent per gallon increase in the Ohio Tax on gasoline sales which would bring the State's total to 9 cents per gallon. The second bill would increase the vehicle registration fee from \$10.00 to \$20.00 per passenger vehicle, plus the \$5.00 piggy-back tax for those counties which have levied the additional tax.

Our membership has been advised and endorsed the passage of these two bills. Our legislative committee has drafted a letter in support of the legislation and presented it to the Chapter President for editing and presentation to our State area legislators.

Our legislative committee has also prepared a listing of the names and addresses of our State area legislators together with like information on the Chairman of the Highway Committees for both the Senate and the House. This listing has just recently been completed and will be disseminated at our next Chapter meeting.

#### ROAD REVENUES SEEN DROPPING

The combination of reduced gasoline consumption and increased trucking is dooming Ohio's highways, says the head of a roadway lobby group.

Thomas Dudgeon of Ohioans for Adequate Road Funding Now said road repair revenues from the state gasoline sales tax are dropping, while road deterioration is accelerating due to increased use by heavy trucks.

Addressing a meeting of the Ohio Agricultural Council, he said gasoline sales have declined 7% compared to the same period a year ago, while diesel sales, an indication of trucking volume, have increased 6 percent.

Gasoline tax revenues have declined for five consecutive months and are about 5% lower since July 1, according to the state treasurer's office. That will add up to a \$12.5 million drop in anticipated revenue for the Transportation Department by the end of the year, said departspokesman David Findlay.

Dudgeon said, "It doesn't make any sense to allow our \$12 billion asset in roads to deteriorate and that is exactly what's happening."

He said the state's 110,000 miles of roadways suffer from an overabundance of potholes, decayed pavement, fading edgelines and soft shoulders.

Findlay said the Transportation De-

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#### **EAST PENN SECTION**

Bart Snyder, Public Relations

The concluding event of the 1978-79 season of the Section was the traditional Stag Picnic held at the Orioles Picnic Grove in Lehighton on August 18, 1979. The menu included raw and steamed clams, topped off with filet mignon — what more could anyone ask for?

The first fall meeting of the Section was held at Hieter's Restaurant, in Emmaus Borough, on September 11, 1979. At the conclusion of the dinner, Mr. Peter Collopy, Staff Health Physicist for the Pennsylvania Power and Light Company, presented a very interesting talk on "Radiation." This subject was of particular interest to everyone, especially in light of what has happened at Three Mile Island in Harrisburg recently. PP&L is currently constructing their own nuclear facility near Berwick, Pa., which is scheduled for completion in 1981.

On October 9, 1979, the regular meeting of the Section was held at Trainer's Restaurant in Lehighton. The Social Hour was followed by the usual delicious meal at this establishment. Mr. William C. Berg, Eastern Regional Engineer for the Portland Cement Association, presented an interesting and informative slide lecture on portland cement concrete pavement recycling on the Edeus Expressway, also a discussion on bonded concrete overlays for highways.

The third fall meeting of the Section was held on November 13, 1979, at the Kempton Hotel, in the village of Kempton. This hotel, located in the heart of the Pennsylvania Dutch communities, is noted for its fine Dutch cooking, and needless to say, it certainly lived up to its reputation on this occasion. Instead of the customary two meats served at a fam-

#### **EAST PENN SECTION**

Mr. Dick Jounnet, of the Barber-Greene Co., speaker at the Dec. 5, 1979 meeting of the East Penn Section, receiving a token of appreciation from Bob Brown, program chairman for the evening.

Joseph Claffey, left and Karl Kish, right of the Ingersoll-Rand Equipment Corp., speakers at the Nov. 13, 1979 regular meeting of the East Penn Section. Center is John Werner, who introduced the speakers.

September 11, 1979, Hieter's Restaurant - Mr. Peter Collopy, Staff Health Physicist for PP&L Co., who spoke on Radiation, receiving token of appreciation from Harry Bisco, Program Chairman.











ROAD REVENUES
Continued from page 6

partment is operating on a program of delayed construction and maintenance in an effort to stretch roadway dollars as far as possible.

Dudgeon said the state stands to lose \$560 million in federal highway funds because it lacks the matching funds needed for the grants.

He held out little hope for improvement in the gloomy situation he outlined. "Nearly every elected official has gone on record against any tax increase," he said.

#### **ALTOONA SECTION**

Anthony J. Sawinski, P.E., Public Relations

The Altoona Section of ASHE held its January meeting at the Rustic Isle in Dun-

cansville.

State Senator Robert C. Jubelirer of the 30th District was the speaker. A few of the topics discussed were a percent gasoline tax and construction with federal matching funds.

A percent gasoline tax would keep pace with inflation. The current set tax per gallon has caused problems. While highway costs are up less gasoline is being purchased and less highway revenue collected.

Many legislators would like to see all federal matching funds be used for maintenance. In Altoona the construction of state routes 22 and 220 are important to the development of the area. Any change in matching funds would hurt Altoona and the surrounding communities.

December 21, 1979, "Two Baskets of

ily style dinner, there were three — beef, ham and turkey. Mr. Karl Kish and Mr. Joseph Claffey, of the Ingersoll-Rand Equipment Corp., presented a film and talks on down-the-hole large diameter drilling equipment and methods.

On December 5, 1979, the regular meeting of the Section was held at Trainer's Restaurant in Lehighton, where 43 members and guests enjoyed the usual delicious meal. Mr. Dick Jounnet, a representative of the Barber-Greene Co., gave a slide presentation on the Barber-Greene Recyclomat System for recycling bituminous pavements. This system includes reclaiming, reprocessing and repaving of bituminous roads with existing roadway materials.

The newly elected officers of the East Penn Section for 1979-80 are as follows: President - Charles J. Sincavage First Vice President - Harry Bisco Second Vice President - Ronald N. Fritz Secretary - John J. Donahue Treasurer - Richard S. Grammes, Jr.

In a survey of the buck hunters in the Section, only one member reported that he was successful in bagging an eight point buck — William Gillroy III, contractor's general superintendent. The unique part of this story is that Bill has been hunting deer for 25 years, and this is the first year he has scored. We hope it won't be another 25 before he repeats this historic feat.

#### EAST PENN SECTION

May 8, 1979, Trainer's Restaurant - Installation of Officers-Immediate Past President Bob Jones handing gavel to Pres. Charlie Sincavage.

May 8, 1979, Trainer's Restaurant - Immediate Past President Bob Jones receiving token of appreciation from President Charlie Sincavage.

Cheer" were raffled as a section fund raising project. The winners were Sherley Biddle and John Young.

Applications for membership were approved by the board of directors for M. James Stahl, David L. Cherry, Kenneth L. Hoover, Jr., Joseph Philip Biviano, John Francis Dougherty, Jr., and Donald Detwiler.

Ladies Night on February 15 featured "Phara" a belly dancer.

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PENNY POSTAL CARDS were in use in the U.S. Mail from 1872 to 1952, a period of 80 years. Today's postal card you send to friends while on vacation requires a 10 cent stamp.

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#### OHIO'S BRIDGES IN POOR SHAPE

Ohio's bridges are deteriorating faster than they can be repaired and the problem gets worse every year, says Donald Schramm, president of the County Engineers Association of Ohio.

"Most of the bridges were built at the turn of the century and they're just wearing out," said the engineer for Hamilton County. "Just like people, they're not going to last forever."

Bridges that are currently open are safe as long as posted weight limits are observed, Schramm said.

"I don't think people—if they're driving over a bridge within the posted weight limit—should be concerned. If you have an overloaded truck with cars following, a collapse could occur. That's an exception," he said.

But he termed the need for major repairs "critical."

A study commissioned by the Ohio Farm Bureau said 41% of Ohio's 38,998 bridges are obsolete or structurally weak and should be rebuilt or replaced. But Schramm said the problem extends beyond Ohio.

"The bridge problem is not just statewide, it's nationwide. . .for basically the same reasons. Across the country, bridges were built about the same time," he said.

Most Ohio counties just don't have the money needed for an extensive bridge program. The Farm Bureau study estimated it would take \$9.3 billion to upgrade all state bridges needing repair.

"Most counties are a year or two away from no money fro capital improvements," Schramm said. "The federal government is funneling more money into bridge repair, but it's very little when spread over 88 counties."

Schramm wants the Ohio General Assembly to raise the state's gasoline tax and vehicle license fees. All levels of government in Ohio would share in that increase, since gasoline tax goes to the state and license fees go to counties and cities.

#### PENNSYLVANIA LEGISLATIVE REVIEW REPORTS LOOKING AHEAD TO THE CHALLENGE OF THE 80'S

Highway transportation is still very much a topic of interest and of controversy here in Pennsylvania and the rest of the United States. The annual agony and frustration about needed funds continues without any let up. We still come up short year after year. No one questions the importance of having a safe and efficient

road system. But when it comes to funding that critical form of transportation, it becomes a political football and causes a myriad of hesitations.

This past year is a perfect example of this contradiction - what we need, what all agree we should have - and what we get. They are never in any logical pattern. The result is that Pennsylvania's highway users who still pay road use taxes can usually expect to get only a part of what is needed. Too often the roads are not safe to travel on, and the needed care cannot be done because there is not enough money to go around.

Traditionally we have used gasoline taxes or bonding to pay for the roads. We know from bitter experience that bonding only increases our indebtedness and is an unacceptable funding method, at least for the foreseeable future. Gas taxes, by themselves, simply don't do the job because inflation erodes allocated road levies almost as soon as they are enacted. We need a new approach to highway transportation funding if we are to have a viable system in the years to come.

Although the proposal made early in 1979 for a percentage funding formula instead of the cents-per-gallon approach was rejected, intervening time has shown it would be a much wiser way to finance road reconstruction and maintenance needs. A percentage could have provided a needed hedge against inflation. Consideration of a percentage approach should also include a review of the conversion of present highway user funds into a percentage that would provide monies from vear to vear. The General Assembly would still have the ultimate control in setting the percentage and, if needed, providing a limit (or cap) to the amount resulting from such a system.

There are other ways to fund highway transportation that deserve some closer scrutiny including (a) allocation of a portion or all of the auto sales taxes (b) additional fees for heavy weight vehicles, including those from out of state (c) establishing a new auto inspection sticker fee (d) setting new fees for new autos based on cost or (e) allocating additional monies from the state's General Fund.

This Commonwealth cannot afford to suffer through an annual "highway crisis." It is too expensive and does not serve the needs of those who pay for and use the roads and bridges. With the steady increase in pressure from inflation causing higher prices for fuel, labor and materials, it is necessary that we take a sober look at our traditional methods of road

financing. To ignore this problem is to court peril. Those in the highway transportation industry have a duty to take the lead in proposing ways in which the highway dollar can be most prudently spent. The alternative is a continuation of the annual frustration we have experienced and is a luxury we can no longer afford.

#### "BLASTING" SEMINAR

The Central Pennsylvania Section, Geotechnical Group of the American Society of Civil Engineers will hold a one-day seminar on "Blasting" at the Crossgates Inn near Harrisburg, Pa. on April 10, 1980. The purpose of the seminar is to provide engineers and contractors with an awareness of considerations necessary in designing and executing a successful blast. Experts in the field of blasting will discuss such topics as geological effects on blasting, design of blasts, vibration monitoring, federal and state regulations, safety, blasting methods and terminology and demolition blasting.

Exhibits by manufacturers and suppliers of explosives, blasting agents, initiation systems, vibration monitoring equipment, drilling equipment, plus other related items are also planned.

The registration fee for the seminar is \$60. This fee includes a luncheon, dinner and a copy of the seminar proceedings.

For further information contact: Mr. John Diviney, c/o Gannet Fleming Corddry and Carpenter, Inc., P.O. Box 1963, Harrisburg, Pa. 17105 or telephone (717) 763-7211.

## IMPORTANCE OF HIGHWAY SHOULDERS EMPHASIZED IN NCHRP SYNTHESIS REPORT

Shoulders are an important element of a highway system. Well-designed and maintained shoulders are essential for safe traffic operations, and serve as lateral structural support for the travel lanes. Shoulders provide space for emergency stops, clearance for signs and guardrails, and space for maintenance operations.

The varied uses of highway shoulders give rise to questions regarding geometric and structural requirements. Many of these questions are addressed in NCHRP Synthesis of Highway Practice 63, "Design and Use of Highway Shoulders", published recently by the National Cooperative Highway Research Program, which is administered by the Transportation Research Board.

Continued on next page

#### W. GUY GUNN **RETIREMENT DECEMBER 31, 1979**

After 20 years as mentor, fatherconfessor and loyal fan, W. Guy Gunn has left a void in the day-to-day operation of his brainchild, Frankie PHIA.

Guy hit the Pennsylvania scene in November of 1959, wending his way to the Keystone State after a trip that started in Texas, detoured to our nation's capital, and ultimately ended here in Harrisburg.



Once here, a lot of additional miles were covered by Guy and Frankie PHIA. The duo beat the bushes throughout Pennsylvania, becoming well-known as "those guys who fight for better roads." They both firmly believed in the motto "Better Highways NOW - Save lives, Save time, Save money."

Guy was never hesitant about telling his highway story - whether there were ten or ten hundred people around. (And he's even been known to corner just one person, trying to convert a non-believer to his cause.)

PHIA's first Secretary-Treasurer, Guy held that office from 1960 until 1966 (at which time the two offices were split.) From '66 until early 1976, he was Treasurer and PHIA chief fund raiser. Since that time, he has served faithfully as a member of the PHIA Executive Committee, representing the contracting industry.

What can you say about someone who brought to life an idea he knew was pretty doggoned good; took that idea and flew with it; then made it a statewide organization supported by many diverse individuals and companies.

Along the way, Guy has made many friends! He will certainly be missed by Frankie PHIA and those friends. since Texas just "loaned" him to us these past 20 years, they do have the right to expect repayment on that "loan." And they'll be getting Guy back in the Lone Star State.

Sincere thanks, Guy, for what you have done for the people of Pennsylvania. We wish you well!

#### APPROXIMATE FISCAL YEAR 1981 INTERSTATE APPORTIONMENT

(Millions of dollars)

Alabama									71.5
Alaska .									17.1
Arizona									55.0
Arkansas								. '	18.1
California									299.5
Colorado									53.3
Connecticut									92.2
Delaware									17.1
Florida .									164.5
Georgia									135.6
Hawaii									69.1
Idaho .									17.1
Illinois .									41.3
Indiana				2					50.3
Iowa .									44.4
Kansas .									31.2
Kentucky									64.0
									113.6
	•		•						17.1
Maine . Maryland	•								175.3
Massachuset		•		•				•	86.0
								•	85.6
Minnesota									67.4
Mississippi									25.3
									61.7
									26.6
Nebraska						•		•	17.1
					•	•			30.7
New Hamps						•			17.1
New Jersey								•	95.5
New Mexico			,		•	•	•	•	50.5
New York		•			•	•	•	•	152.6
North Carol		•	•	•	•	•	•	•	65.5
North Dako			•	•	٠	•	•	•	
				•	•	•		•	17.1
Ohio	•	•	•	٠	•	•	•	•	75.9
Oklahoma		•		•	•	•		•	20.3
Oregon . Pennsylvani	•	•	•	•	•	•		•	43.2
Rhode Islan				•	•	•	•	•	188.3
South Carol			•	•		•	•	•	43.2
		L	٠	•	•	•	•	•	45.4
South Dako	ta		•	•	•	•	•	•	17.1
Tennessee	•	•	•	•	•	•	•	•	76.2
Texas .	•	•	•	•	•	•	•	•	164.2
Utah .	•	•	•	•	٠	•	•	•	54.9
Vermont.	•	•	•	•	•	•	•	•	17.1
Virginia .	•	•	•	•	•	•	•	•	124.3
Washington		•	•	•	•	•	•	•	131.0
West Virgin		•	•	•	•	•	٠	•	71.9
Wisconsin	٠	•	•	•	•	•	•	•	27.7
Wyoming	•		•	٠	•	•	•	•	28.7
Dist. of Col	um	bia	l	•	•	•	٠,	٠	45.2

#### CHARLES J. SINCAVAGE **RETIREMENT JANUARY 2, 1980**

After 37 years Charles J. (Charlie) Sincavage announced his retirement as Assistant District Engineer at the Allentown Office, District 5-0, the Pennsylvania Department of Transportation (Highways) effective Wednesday, January 2, 1980.



East Penn Section - Charlie Sincavage.

He began his career with the Pennsylvania Department of Transportation in Construction as a Junior Construction Inspector, he advanced to Senior Inspector, Project Engineer and Resident Engineer, in 1954 was appointed District Traffic Engineer, and in 1955 District Maintenance Engineer. In 1958 he was named Assistant District Engineer until 1968 when he was appointed Deputy District Engineer.

Charlie, a Registered Professional Engineer, presently is National Second Vice-President of A.S.H.E. and President of the East Penn Section.

A World War II veteran, he served with the First, Third and Seventh Armies in the European Theatre of Operations with 1st Platoon, "A" Company 175 Combat Engineer Battilion.

A native of Shenandoah, Pa., he resides with his wife Peg at 312 Florida Avenue. They have one son Charles and three daughters Peggy, Shenandoah; Marcia, Hazleton; and Diane wife of Thomas Tichar, E. Norwalk, Conn.

> WIFE'S CAR FOR SALE -Good Motor and transmission. Body has one whole fender that hasn't been used. \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

which can be used to obtain early information on cement content in concrete.

Transportation Research Record 692 is available for \$3.00 a copy from the Transportation Research Board, Publications Department 805, 2101 Constitution Avenue, N.W., Washington, D.C. 20418. Add 10% for postage and handling for surface mail on orders for books sent to addresses both foreign and domestic. Payment in advance is required on orders of \$7.50 or less, and foreign payments must be made in U.S. funds drawn on a U.S. bank. International money orders are also acceptable.

## SEALING SYSTEMS FOR BRIDGE JOINTS REVIEWED

Open bridge deck joints and poor performance of sealed joint systems have caused extensive maintenance and costly remedial work on bridges, says the National Cooperative Highway Research Program (NCHRP), in a new report.

"Highway agencies experiencing such problems have applied much effort toward finding proprietary products on which they could rely to provide a watertight joint. At the same time, smooth ridability, low noise level, wear resistance, resistance to damaging snowplow blades, and similar desirable characteristics were also sought - with disappointing results. Historically, system design would appear to promise success in many features, only to fail in one or more of these important aspects, notably watertightness, when subjected to traffic and bridge movements", says NCHRP Report 204, "Bridge Deck Joint-Sealing Systems: Evaluation and Performance Specification", The report contains the findings of a research study carried out for NCHRP by Howard Needles Tammen and Bergendoff, of Fairfield, New Jersey.

The research began with a review of published data, research literature, promotional brochures, and other information available on joint-sealing systems and performance specifications. The researchers surveyed state and other highway agencies by questionnaire, established performance criteria, and used the resulting information to formulate a recommended specification.

Says Report 204, "Most bridge deck joint-sealing systems in use today are proprietary products. Some of these products are designed without adequate consideration of bridge behavior, field installation conditions, dynamic loading effects, climatic conditions, and maintenance pro-

cedures. As a consequence, they do not always function as intended. Some require costly maintenance, and others actually fail to survive more than a few years. Public agencies are forced to assume responsibility for the adequacy of the systems, even though they are furnished and installed by project contractors.

To avoid the worst of the systems, most agencies specify several apparently practicable proprietary systems for their bridges. This specifying practice, when combined with current contract bidding procedures, has an adverse effect on the quality of sealing systems. Because contracts are normally awarded to the low bidder, contractors must devise ways to furnish and install products that will satisfy contract requirements at least cost. Because this procedure emphasizes cost rather than quality, the suppliers of sealing systems are forced to modify their designs and procedures in order to be competitive. But a competitive position can generally be attained only by a reduction in quality and performance and by a corresponding increase in maintenance costs.

Minimum total cost, which considers long-term performance as well as first cost, should be the foal for bridge deck joint-sealing systems. The goal can be attained by applying an effective performance specification.

The Specification presented in Report 204 applies to prefabricated, surface mounted, bridge deck joint-sealing systems designed for a total horizontal movement of 4 inches or less, and is applicable to membrane-and-cushion-seal-type systems. The specification is presented in a form suitable for consideration for adoption by the American Association of State Highway and Transportation Officials (AASHTO). Independent of any action by AASHTO to adopt all or part of the specification, it should be valuable for modifying current practice in individual states.

## TRANSPORTATION SYSTEM ANALYSIS PUBLICATION

The Transportation Research Board has published Transportation Research Record 677, "Transportation System Analysis," containing twenty papers on the subject.

Included are: Decision-Maker-Defined cost-effectiveness Framework for Highway Programming, by David I. Wilson (University of Melbourne) and Joseph L. Schofer (Northwestern University); Sensitivity Analysis of Selected Transportation Control Strategies, by Robert J.

Maxman and Darwin G. Stuart (Barton-Aschman Associates); Evaluation of Road and Transit System Requirements for Alternative Urban Forms, by R.G. Rice (University of Toronto); Modelers, Muddlers, and Multitudes: Establishing a Balanced Transportation Planning Process, by Michael A. Goldberg (University of Iowa); and Models for Predicting the Impact of Transportation Policies on Retail Activity, by Clifford R. Kern (State University of New York and Cambridge Systematics, Inc.) and Steven R. Lerman (Massachusetts Institute of Technology and Cambridge Systematics, Inc.)

Also Optimizing Urban Mass Transit Systems: A General Model, by Alan Black (University of Texas at Austin), Making the Concept of Equity Operational, by Douglass B. Lee, Jr. (University of Iowa); Who Favors Work Schedule Changes And Why, by Anis A. Tannir (Saudi Arabia Parsons Limited) and David T. Hartgen (New York State Department of Transportation); Traffic Impacts of Work-Scheduled Changes in Medium-sized Urban Areas, by Tannir and Hartgen; Development of the California Transportation Plan, 1973-1977, by William S. Weber (Southern Pacific Transportation Company); Data Requirements for an Analysis of Intercity Passenger Travel by Bus, by Stanley L. Ring, R. L. Carstens, and James D. Grove (Iowa State University); and Marginal Weighting of Transportation Survey Data, by L. Taylor Ollmann (John Hancock Mutual Life Insurance Company), Stephen M. Howe (North Central Texas Council of Governments), Kenneth W. Kloeber (Calocerinos and Spina), and Gerald S. Cohen (New York State Department of Transportation).

Also Demonstration of a simplified Traffic Model for Small Urban Areas, by Donald Rhodes (New Hampshire Department of Public Works and Highways) and Thomas Hillegas (U.S. Department of Transportation); Evaluation of the Impact of Restricted Interchanges on Travel Demand, by Ronald J. Fijalkowski and Mark Rosenberg (Delaware Valley Regional Planning Commission); Interactive Computer Graphics for Station Simulation Models, by Gregory P. Benz and Jerome M. Lutin (Princeton University); Use Of Interactive Computer Model Streak For Transportation Planning, by Robert S. Scott and Bernard Mendes (De Leuw Cather and Company); Creation of Urban Transportation Network Models From Dime Files, by Jerome M. Lutin; Computer Geocoding of Travel Surveys, by Priscilla Sawyer Cornelio and Joseph M.

continued on back page



#### **OFFICERS 1979 - 1980**

Immediate Past President

#### DIRECTORS

3 Years

Charles E. Luff Albert J. Bedard, Jr., P.E. Clarence F. Hood, P.E. William H. Allen, P.E.

2 Years

Duane Berry, P.E. Anthony J. Gaeta, P.E. Warren A. Miller Ronald E. Springman, P.E.

1 Year

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DILLSBURG, PA.
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#### SECRETARY'S CORNER

By the time this issue of the Scanner goes to press, the nominating committee will have a slate of officers for the 1979-1980 year. Hopefully all of the Sections submitted their proposed nominations. Only with strong section participation will our Society continue to grow. Reminders:

- 1. Section nominating committees must have a slate of officers submitted to the National Secretary by March 15, 1980. Also each section should submit the number of paid up members to the National Secretary before March 15, 1980.
- 2. Invoices to each section for the National Assessment will be mailed prior to March 31, 1980 and are payable prior to May 31, 1980. Remember, the assessment is \$9.00 per member regardless of membership grade.
- 3. Sections should submit nominations for the "Man of the Year Award" by April 1, 1980 to Past President J.C. Martinelli, 283 Colonial Dr., Pittsburgh, Pa. 15216, Phone (412) 563-5737. No nominations accepted after April 1, 1980.

#### APRIL ISSUE OF SCANNER DEADLINE MARCH 15, 1980

Articles, pictures, announcements for the April issue of the A.S.H.E. Scanner MUST be in the hands of the editor NO later than March 15, 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.

## NATIONAL TRANSPORTATION WEEK DATES SET

The week of May 11 through May 17, 1980 has been designated as "National Transportation Week" by the National Transportation Committee, Washington D. C.

All persons, companies, and organizations are urged to make all efforts possible to get INVOLVED in some way during the designated week.

George Parrs, A.S.H.E. president, will soon appoint a committee of its members to plan for the associations involvement.

#### MEMBERSHIP

122
120
65
67
237
126
230
283
95
244
125
54
132
1900

## SCANNER SOON TO ACCEPT ADVERTISING

The A.S.H.E. Scanner will soon announce rates for advertising in its future issues.

Interested parties should contact Joe Martinelli, Editor (412)-563-5737.

#### TRANSPORTATION Continued from page 11.

Manning (Urban Transportation Systems Associates, Inc.); and Network Base File System for Transportation Analysis, by Claus D. Gehner (University of Washing -ton).

"He who serves his country well has no need of ancestors." Voltaire