I am gratified to find myself addressing such a distinguished group of "highwaymen"—and also to be in the company of such outstanding personalities as Governor Henry F. Schricker (that sounds as Dutch as Reinhold), President Hovde, Professor Ben Petty and the many others too numerous to list.

As my name has already indicated to you, I am a Pennsylvania Dutchman. Lancaster County to be exact. Down in that country the Dutch have a very famous saying—"Ve Gedt Too Soon Oldt Und Too Late Schmardt". I truly believe that homey statement is quite applicable to our present highway situation.

To me, the necessity of bringing the highway conditions of this country to public and industry attention is quite similar to our ministers and preachers telling us every Sunday about the value of a religious life. The Bible is a factual guide to the best principles of living. It is so well known that it is an instilled part of the life blood of our people and our republic. Nevertheless, the ministry must constantly repeat . . . and dramatize . . . and repeat again, the Bible's teachings to bring to our attention the fruits of a religious life.

The same philosophy applies to our highway conditions. We must constantly bring to light the facts—dramatize our deficiencies . . . set our goals and work for action if anything is to be accomplished.

The premise of our discussions is that today's highways are inadequate, in many cases worn out, and certainly not being replaced or modernized fast enough to keep pace with today's vehicular traffic. The opposite of this appalling highway situation is that the government is calling for a plan which will assure adequate highways for all-out defense of this nation if necessary.

This is certainly a perfect pair of opposites . . . our highway system falling apart on one hand and on the other hand, a demand
for highways adequate to handle the greatest emergency traffic the world may ever know. Yet . . . when we examine all of the facts there may be a way. Let us begin by rationalizing some of the facts we know.

Probably our most basic fact is that our problem is not solely one of providing a defense highway system . . . our nation was built upon a highly mobilized transportation economy. We are concerned not only with defense movement of traffic . . . we are equally concerned with promoting daily transportation that is adequate to the growth and expansion of our American way of life.

This statement can bring us to but one conclusion. Our job is to build civilian highways on a scale that will accommodate the possible military needs of this country. This will kill two birds with one stone. We will achieve mobility for our vast vehicular population and we will have automatically produced a highway system that could be instantly converted to military use. To my mind, it is equally important to protect our peacetime prosperity as to prepare for war. Our well known high standard of living in America is, in fact, one of our best fortifications for defense.

To restate this more simply, my suggestion is that we build an adequate civilian highway system and we will have a strategic military highway system.

RAPIDLY EXPANDING ECONOMY

A factor that some economists seem either to overlook or to underrate is the rapid expansion that has been taking place in this economy since 1940 and that is continuing unabated at this time. This expansion has involved rapid rises in productivity and consumption standards since 1940 and a great acceleration in population growth since 1947. While the American economy has been producing and consuming vastly increased quantities of goods and services, the American newlyweds have been producing new consumers at an unprecedented rate.

The number of babies born in the United States last year was more than 3,900,000, an all-time record figure. After deducting an approximate 1,450,000 deaths and adding an approximate 200,000 immigrants, we arrive at 2,650,000 persons as the estimated population increase of the single year 1951. During each of the past five years the net gain in population has been 2½ million or better.

While the recent rate of population increase may not continue, it is almost certain that more than 20 million people will be added
between 1950 and 1960; if so, the increment will again break all previous records for the United States.

Our national highway system is inadequate today and the street traffic and parking problems of the cities cry for solution. Unless we build highways, redesign street patterns and build parking garages at a tremendous rate, our nation may be just one big traffic jam when today's millions of babies graduate from kiddie cars to drivers' licenses.

So much for the anticipated increase in population. Now what about the increase in vehicles.

When most of our present mileage was built in the twenties or thirties no one could have guessed that we would be confronted with over 52-million vehicles in 1952. These will travel close to 500 billion miles this year. No one could have guessed at the higher average speeds, greater axle loadings, or mounting death rates that would occur. No one today, can accurately predict what our vehicle picture will be in 1962, but we can foresee that at least 3 million vehicles per year will be added despite those that are scrapped each year. This could mean 30 million more vehicles or a total of about 80 million vehicles on the highways within the next 10 years.

These facts cover only the possible civilian highway requirements within the next 10 years.

To further point out the civilian need for good roads, I wish to call your attention to the fact that over 54,000 of our communities—about 43 per cent of all towns and villages, have no railroad station or airport to serve them. All folks who live in them are entirely dependent on motor transportation to go where they have to go.

For this important purpose, we use over 3 million miles of highways and 300,000 miles of city streets. In short, our highway problem extends a distance equivalent to 133 times around the world.

That's the size of what I'm talking about tonight. And when you get a crisis of those dimensions you've really got something.

Highway traffic has jumped 75 per cent in the last five years. Nineteen million vehicles have been added since the war.

Truck registrations have increased around 77 per cent in the last 10 years—from 5,100,000 vehicles to over 9,100,000 carrying on the life commerce of the nation on our highways.

Accordingly, you find a strange paradox.

In the defense program and in national viewpoint as a whole, the essentiality of railroads to defense is recognized and provided for, and should be. But what about highways? Here you have an entirely different treatment.
Take the case of steel. Steel allocated for highways by the defense program authorities is not only far short of normal requirements, but is considerably less than the amount certified by the Bureau of Public Roads as essential and urgent.

For example, only half the 483,000 tons of steel that the Bureau of Public Roads specified as needed for the second quarter of this year is being permitted and less than one-third of the 230,000 tons of structural shapes.

**FACING THE FACTS**

Accordingly, the highway crisis you and I notice on all sides of us—the terrible congestions, the delays, the dangerous bottle-necks which fence us in—grows and grows all the time.

Much improvement has been accomplished in certain areas—a great deal achieved. But with 52 million vehicles now we have not only outgrown our essential highway system as a whole, but the system itself is deteriorating.

The solution to providing a practical peacetime and military highway system is not simple. It means we must forge the strongest, broadest chain of heavy-duty, inter-state highways this country has ever conceived. There may be a small percentage of these highways that would have to be of extra heavy construction to meet military demands, but in the main, the greater percentage of a really modern, peacetime highway system would be entirely satisfactory for military purposes.

Deficiencies in our vital road systems are both appalling and almost equally distributed. The total deficiencies in the federal aid highway system which represents our main routes were estimated by the American Association of State Highway Officials and the Bureau of Public Roads at the end of 1951 at a minimum of 32 billion dollars. The same figures indicate that our present highway system is about one-third abreast of the requirements of present day normal or defense traffic. About 425,000 miles are in need of improvement.

These facts cover only the possible civilian highway requirements within the next 10 years. Listen to these examples of how important these same highways are in any sort of defense production:

An investigation of the supply situation in connection with the building of the Walker Bulldog tank by General Motors at Cleveland revealed that parts and materials were shipped in by over 2000 suppliers in all parts of the nation and that nearly 80 per cent of these shipments came by highway. Also, the vast majority of the workers traveled to and from work by automobile or bus.
In another instance, the Glenn L. Martin Company looked into the sources of supply for the Matador pilotless bomber which it is building. Parts and supplies for this vital weapon come from 3,500 suppliers in all localities and two-thirds of the shipments travel by highway.

The automobile industry has more than 10,000 suppliers, most of which use the highways for shipping, and of it's own products . . . cars, trucks and buses . . . at least 75 per cent of the total production is delivered by highway.

Of the total United States labor force . . . comprised of 63 million members it is estimated that at least 75 per cent go to and from work in automobiles. We are told that two carloads of assembly line workers employed by Ford Motors at Chester, Pennsylvania actually commute from Lancaster, Pennsylvania—a daily round trip of 140 miles.

Let's not forget either that the highway transportation industry itself comprises a tremendous number of Americans. The Automobile Manufacturers Association informs us that more than 9,200,000 people are regularly employed in highway transportation—that's one cut of every seven people working for a living in the United States today.

If there has been any question about the importance of highways to both our peacetime economies and defense capabilities these facts seem to crystallize the truth.

These same facts seem to prove that when the requirements for transportation during peace or war are so closely allied—the planning of highways for the transportation requirements of both is the logical approach.

**HOW COME?**

There are a lot of excuses that could be made to justify why our highways are lacking. We all know that the pressure of an all-out war caused this nation to permit its roads to disintegrate during World War II. We all know that since then, almost in desperation, $1\frac{1}{2}$ billion dollars a year has been poured into maintenance. A goodly part should have gone into new roads. But how many of us have analyzed why we are really so far behind? You will note that we have talked so far almost exclusively about federal aid highways. We have noted these highway systems are the true backbone of our vehicle transportation routes. We find federal aid roads are deficient by at least 32 billion dollars in real work and money. Now, let's examine the record of federal aid and see why,
In the 1930’s expenditures for federal aid highway programs exceeded the collections from automobile excise taxes. Beginning in 1942, when collections were 625 million dollars only 20 per cent or 125 million dollars went for road building. These figures then show that in each succeeding recorded period that the ratio of highway expenditures in relation to collections has been permitted to lessen until in 1952 our anticipated figures indicate that more than 2 billion dollars will be collected in taxes while a paltry 500 million dollars (if we may speak disrespectfully of this sum of money) is slated for the “great defense highway program.” This is the figure for 1952. The Federal Budget Bureau suggests 400 million dollars for the years 1953 and 1954 keeping in mind the actual collections of excise taxes growing year by year.

SOME PROPOSED SOLUTIONS

I recently had the opportunity of appearing before committees of both the senate and house to discuss possible plans for solving our defense highway dilemma. I made this suggestion . . . and it was based on solid facts, backed by true statistics which were presented in support by Lt. Gen. Eugene Reybold, executive vice president of the American Road Builders Association.

In substance, the recommendations were: The basic network of highways in this country is in need of rebuilding or modernization over more than 65 per cent of its mileage. For the 425,000 miles of vital roads that need improvement, probably slightly more than 32 billion dollars would be required to produce first class highways suited to today’s civilian and possibly emergency military traffic.

In view of the immensity of the task, it is suggested that the national program be accomplished by a 10-year federal aid highway program operating at a 3 billion dollars per year level. This, of course, would mean 1½ billion dollars in federal aid matched by a like amount from the states. This is what it will take to overcome the laxities of the past and to measure up to the highway demands that will certainly exist by 1962. It was our recommendation that nothing less than this 10-year program at this advanced level of spending could be of much value since we are currently spending 1½ billion dollars to simply prolong the agonies of our present inadequate and antiquated roads through maintenance.

We emphasize that we must build bridges, tunnels, under-passes and clover-leaf’s that will be adequate and of such a design as to meet all future military needs. We must take this money and time and build with it not a network of special military highways, but an
adequate and modern network of highways that will provide excel-
lent peacetime transportation and be immediately convertible to mili-
tary use. We think this makes sense in these days of uncertainty . . .
yet makes certain of adequate transportation in any eventuality.

We all know what the steel situation is and I'm sure we are will-
ing to face it until such time as it eases. Meanwhile it be-
hooves every highway planner and engineer to proceed as rapidly as
possible with his planning and be ready to release the jobs for bids.
We all know that it takes months—sometimes a year to complete
surveys, and often much of this time could be also spent in locating
and acquiring the steel that might otherwise delay. Under today's
material supply conditions, we can't continue to work in the old
pattern. We must do first things first and second things along with
the first to overcome delays.

I'm sure you are all aware that the American Road Builders
Association has been trying for years to arouse the people of the
United States to a realization of highway needs. It is gratifying to
see that business itself has taken up the crusade and is attempting to
bring this realization to the public . . . the public is the only source
from which we can expect enough pressure to bring about an alloca-
tion of automotive tax moneys to their intended purpose—highways!
I would like to acknowledge here the costly promotion being put
behind the "better roads" program by General Motors, Ford, Good-
year, Firestone, Mack Truck and all the others who are smashing
home the message to John Q. Public with every means used by
modern advertising and promotion.

We would be amiss, too, if we failed to mention the hundreds of
farsighted editors of newspapers, trade journals and magazines who
have presented so many thousands of lines of editorial support in
favor of better roads.

After World War I the highway cry was "get us out of the mud."
Today, it must be "get us out of the muddle."

If my remarks about inadequate roads have made any of you
designers or highway officials feel badly, I'd like to quote a partic-
ularly fitting comment penned by Herbert Hoover.

"The engineer's works are out in the open where all men can
see them. He cannot deny he did it.
The doctor's mistakes are buried in the grave.
The voters forget when the politician changes the alphabetical
names of his falling projects.
Trees and ivy cover the architect's failures.
The lawyer can blame the judge or the jury."
Unlike clergymen, the engineer cannot blame his failures on the devil."

Another way of saying it is that if a boy outgrows his pants 10 times faster than anticipated, you can’t blame the mother, dad, or tailor.

My scrap book of old clippings reflects the furor that arose in November of 1941 over the much talked about 50 billion dollar transcontinental super highway glowingly called a 3,100 mile “Concrete Panama Canal.” We know why the plan was dropped because we were involved in a total war within a month of this initial meeting. But we don’t know why it has never been revived in the seven peace time years since the end of the war!

My scrapbook is jammed with published talks about roadbuilding and sweeping highway planning but there are remarkably few about completed projects on a large scale. If ever there was a time to stop talking and start doing, this is it! Certainly some of the biggest problems in our stewpot of highway troubles is at the federal level. But let’s not forget the prophetic statement made by Senator Estes Kefauver at the close of his national investigation of organized crime. He said that although crime was a problem of national scope, the ultimate solution to it lies in stamping out the problem in every local community.

In other words, applying this same philosophy to the problems of highways, if a demand for decency which rises up from the very grass roots of America can stamp out organized crime then a demand for adequate highways stemming from every American level must certainly be the impetus needed to force their construction! Judging from the conditions of some roads I have traveled recently and the congestion, it is possible that public demand may come sooner than we think.

I believe that the next 10 years can solve our highway problems. I believe that when automotive tax receipts are channeled into the purposes for which they were originated, highways, there will be enough money. I believe that the steel situation will right itself but can be helped by more aggressive and advanced planning, I believe the construction of proper and adequate civilian highway networks will simultaneously solve our defense highway requirements in the most logical manner. And I look forward to an aroused public demand for highway progress with many thanks to the support we are now being given in every quarter.

I guess—“Ve Gedt Too Soon Oldt and Too Late Schmardt”—sometimes. This time we are forewarned and forearmed with the
facts. We may grow old but we don't need to be “Too Late Schmardt” because the facts are before us and a lot of youthful vitality is being poured into the cause of better roads by hundreds of sources. With such impetus we just can't grow “Too Soon Oldt” It's up to us to individually press the issue in our own home territory. We needn't grow “Too Late Schmardt” because there is more and more fact and reason for this logical approach to a real American highway system being developed every day. Let's banish that old Pennsylvania Dutch saying and go to work