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REMARKS PREPARED FOR DELIVERY BY ALAN S. BOYD, SECRETARY OF
TRANSPORTATION BEFORE THE 30TH ANNIVERSARY CONVENTION OF THE
COMMUNICATIONS WORKERS OF AMERICA AT THE SHERATON PARK HOTEL,
ON FRIDAY, JUNE 21, 1968, AT 2:00 P.M.

I am happy to join with you in your anniversary convention.
The past 30 years have seen your union and your industry grow
and prosper. This is a tribute to the wisdom and progressive
thinking of all parties concerned. I congratulate you.

These past 30 years have also brought with them a steady
improvement in communications service. We are no longer amazed
that we can pick up a telephone, dial a few numbers and seconds
later talk to a friend 2,000 miles away. Nor are we impressed
that we can do this repeatedly - at any time of day, any day of
the week - any time of year - and do it with full confidence
that there will be no hitch. Businessmen can sit down at a
teletype outside their office and query a computer several
hundred miles away - and receive immediate answers. Nor are we
unduly surprised when we hear of one of our secretaries answering
her phone to find herself talking - via a communications
satellite - with her fiancé in Vietnam. We have come to expect
you communications workers to produce miracles on demand; and
you do. You can be most proud.

There is close connection between your business and mine - between communications and transportation. As I learn more about transportation, I become more and more impressed with the interdependence between the two. This interdependence is, moreover, an old story.

When man was first motivated to communicate over long distances, his only option was travel. To convey his message, he had to set out on foot or horseback. With the invention of writing, a mail service began. And it began early - in ancient Persia. This early mail service was later augmented by couriers, messengers, and ambassadors, but communications continued to depend on transportation.

The first break between the two came late in the 18th century with the development of the optical telegraph. This first independent communications system involved flexible semaphore devices placed atop tall buildings or mountains and operated by ropes and pulleys. By 1844 this system connected 29 French cities through 500 relay stations over a distance of more than 3,000 miles. Between Paris and Toulon, a distance of over 500 miles, a short message could be relayed in only 20 minutes.

In time, man began to understand the properties of electricity and by 1812 a rudimentary electric telegraph was devised. Then followed the inventions of Morse, Bell, and Marconi. Communications began to break away from transportation.

But communications and transportation did not completely sever their ties. It was a question, rather, of a reversal in roles. The scientific revolution which brought forth the marvels of communication also produced spectacular new advances in transportation. The invention of the steam engine and the internal combustion engine led to the steamboat, the railroad, and the automobile. And later came the airplane. As these new vehicles grew in numbers and in speed, their safe and efficient management increasingly demanded enlarged and improved communications. Transportation began to know dependence on communications. The prime example is the vast complex of communications which make up our Federal Aviation Administration's air traffic control system.

Equally important, communication helped relieve some of the burden of transportation. The telephone call frequently saves a trip. And we all are for it. We have no argument with "letting your fingers do the walking."

Advanced planners foresee additional substitution between communications and transportation. The Post Office, for example, affords an outstanding explicit form of communication dependent upon a substantial transportation element. We can, however, conceive of the Post Office of the future utilizing sophisticated communications system to replace the transportation facility devoted to the mails today. Electronic facsimile devices are an operating part of existing communications capability. Only further refinement of today's communications systems and machines are needed for the electronic post office became a fact of our lives.

Again, looking to the future, we are on the threshold of video telephone service. That device, permitting us to view as well as hear those with whom we communicate, will decrease the incentive for face to face physical meetings. Thereby the need for participants to travel will be diminished. Beyond that scientists and engineers are speculating about motion laser hologram displays, interconnected by electronic communications, which might permit us to recreate in three dimensions an image which has its physical presence thousands of miles away. Conceivably, then, a conference room setting could be recreated including conference participants who remain physically many miles apart.

There are other planners today who seriously discuss communications substitutes for urban transportation in the future. These schemes envision a broad band communications link to each home coupled with a terminal that includes a video camera and screen, a facsimile sender and receiver, a high speed printer and keyboard, along with the voice facilities we use today. Those terminals, linked to a vast network of computers would permit the white collar worker to remain at home and still perform his job. The bonus to transportation from such a system would be the elimination of the morning and afternoon rush hour.

I hope these things will come to be. We in the Department of Transportation are looking for help in relieving transportation pressure. In the meantime, we have **much to learn from** each other. I am certain that one of the best opportunities for making our streets and highways more efficient - and more safe - lies in communication. We must devise new communications systems to facilitate traffic flow. We must, moreover, adapt basic communications principles to the solution of transportation problems. In your telephone system for example, the basic function is transmission - or transportation - or messages.

Yet in the development of that system, equal emphasis was placed on switching. This approach affords many alternative routes for the movement of messages and gives rise to the phenomenon of trunking efficiencies. In contrast, we in transportation have placed our principal interest upon transmission alone. We tend to think of fixed points.

There are many other ways we can be of use to each other. But I am interested today in more than your professional approach.

I well know of your justifiable pride in the fact that you are "the community-minded union." The passage by this 30th Anniversary convention of your resolution on highway safety supports your claim to the title. I appreciate that support. It is much needed. It will be helpful.

This "community-minded" approach impresses me. It is what we are trying to establish in the Department of Transportation. It's the way we want our people to look at transportation problems. And I think we are succeeding.

We have the best transportation system in the world. But it is not good enough. President Johnson explained this in his message setting up our Department.

"Our transportation system," the President stressed, "has not emerged from a single drawing board, on which the needs and capacities were all charted. It could not have done so, for it grew along with the country itself - now restlessly expanding, now consolidating, as opportunity grew bright or dim."

"The result," he said, is that America "lacks a coordinated transportation system that permits travelers and goods to move conveniently and efficiently from one means of transportation to another, using the best characteristics of each."

Instead, "both people and goods are compelled to conform to the system as it is"

Our job - in the broadest sense - is to reverse that order - to compel the system to conform to the needs of travellers and the shippers of goods and of the people who live by the side of the road or off the end of the runway.

That means at least two things:

-First, we have to start looking at transportation as a whole - as a single, integrated system. We should not, for example, build airports without adequate access roads or rails - or undertake extensive road-building without taking into account the feasibility of rail or other mass transit.

- Second, we have to start looking at transportation in terms of its impact upon the total environment in which it operates and upon the total society it is supposed to serve.

And we have started doing some of these things.

Under President Johnson's leadership we have made a great beginning- the recognition that you can't deal with transportation as a system unless you look at all modes in relation to each other - and, on the recognition that transportation is not, and cannot be, a system sufficient unto itself.

Transportation is a system that must serve a larger system: The city, which must in turn serve the people who live and work there.

Before a city can decide what kind of transportation system it needs, it must decide what kind of city it wants to be. It must decide what kind of life and work and recreation it wants to offer its people.

And the key word here is people.

In today's world - even more in tomorrow's - any urban transportation system designed to do no more than move passengers and products from place to place is a failure, no matter how magnificently it performs that function. Because if that is all it is designed to do, it will inevitably do a lot of other things it was not designed to avoid - assault our ears, erode our lungs, usurp our land, destroy or disrupt our neighborhoods.

I think it is time we started making sure we don't make the same mistakes all over again.

And I think we have to start by developing transportation schemes that take urban needs fully into account.

We hear a lot, for example, about the virtues of greater and greater mobility - as if mobility was an end in itself. Yet there is absolutely no virtue in travelling 7 miles to work rather than 5 unless it means a better job or a better house or neighborhood.

Alan Voorhees, for example, the distinguished consultant on transportation affairs, has pointed out some time ago - and cited study after study to prove his point - that our aim, in transportation and land use planning, ought to be the reduction of transportation requirements rather than simply increased mobility.

He and others have demonstrated that changes in techniques in land use planning can reduce travel requirements by 20 percent or more compared with prevailing patterns of land development - without at all reducing the range of opportunities for jobs or housing or other services. People, in other words, would enjoy all the advantages of "increased mobility" without having to travel as far or as often.

In short, we can do a great deal to solve the so-called urban transportation problem - in the cities and communities we already have and in those yet to come. And we can do so with the technology and the know-how we already have in hand.

Our problem is not that our technology is inadequate. Our problem, instead, is that our attitudes and approaches are too often obsolete. Our problem is to make transportation thinking "community minded."

Recognizing this was the first step toward a more rational better-coordinated transportation network for this country. Unfortunately, the first step was the easiest and the hard work still lies ahead.

How much the system can be improved will depend - in the last analysis - on how badly the people who use it want to see it change.

That is where you come in. We will be counting on your continued cooperation.

Thank you.

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