

U.S. DEPARTMENT OF TRANSPORTATION  
OFFICE OF THE SECRETARY  
WASHINGTON, D. C. 20590

STATEMENT OF CHARLES D. BAKER, ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS, DEPARTMENT OF TRANSPORTATION, BEFORE THE SUBCOMMITTEE ON ECONOMY IN GOVERNMENT OF THE JOINT ECONOMIC COMMITTEE, MONDAY, MAY 4, 1970.

Mr. Chairman and members of the Committee:

I am pleased to have this opportunity to appear before you to discuss the transportation planning and investment process. The more thought that can be devoted to this subject, the better. Transportation planning is complicated and certainly far from perfect. We are trying to improve it. I am hopeful that we will succeed.

At the outset let me state the obvious fact that there is no National Transportation Plan. There are at least three major reasons for this state of affairs, leaving aside questions of political philosophy. First, much of our transportation system is privately owned and therefore privately planned. Investment decisions here are the province of the private sector and result from the play of market forces. Second, much of the privately-owned system is regulated by the three independent Federal regulatory agencies and a host of other such agencies at the State and local level. This regulatory activity is not subjected to centralized control by a master planner in our Department or anywhere else in the Executive Branch. The regulatory authorities seek to identify and protect the public interest as they see it, and transportation planning and operations--private and public--have to adjust accordingly.

Third, much of the governmental participation in transportation planning places a premium on having State and local governments make and take responsibility for the decisions that affect them most. States, for example, are heavily involved in highway planning and actually select most of the locations for their roads and highways. Most highway planning in metropolitan areas is done as part of comprehensive areawide or community planning. Federal grant-in-aid programs of the type we administer usually require that capital projects be developed, at least nominally, in the context of a transportation plan for the area and be consistent with comprehensive areawide development plans.

I would like to digress here briefly for a few moments and address the urban planning situation because it is often the most controversial.

Urban transportation planning is under way in all 233 SMSAs, where two-thirds of our population resides. We are under no illusion that it works well everywhere. Criticisms abound: some say that highway planners dominate and always get their way; others point to lack of interest or capability in local governments; cases can be documented of Councils of Government that are locked in bitter jurisdictional arguments blocking all planning. But, remember, urban transportation planning as we know it today was under way in fewer than 30 areas as recently as 1960. The machinery is there; our problem now is to devise a Federal-State-local partnership to make it work. The alternative, which is to transfer the planning and decision-making to Washington, is simply unthinkable.

Returning to the Federal-Private-Regulatory-State/local pattern, the governmental involvement in most cases is concerned with major facilities

and equipment. Usually our programs provide grants for planning facilities and grants for actual construction or equipment procurement. A major reason for creating the Department of Transportation was the desire to have the several Federal transportation grant-in-aid programs coordinated. But the operative word is coordinated, not substituted, eliminated or consolidated. As you know, Congress specifically continued our program activities, and the necessary planning, on a modal basis. In short, we are given the task of obtaining coordination of planning within a modal framework.

That task is further to be done within the context of laws and legally sanctioned apportionment criteria which often specify what amounts of money are to be spent for which public purposes. There is no doubt that development and implementation of coordinated and intermodal plans can never be completely successful as long as there are constraints on one's authority to allocate funds among alternative uses. This opinion will not be a surprise to you: administrators always want more freedom and flexibility; legislators want to be very sure that public funds are indeed used for the purposes they deem most urgent and proper.

I would like to share with you now some of the conclusions which Secretary Volpe and I and others in the Department have begun to draw since we took over management of DOT just over a year ago. As I said earlier, the planning process is not perfect, but is in better shape--at least in its essentials--than we had expected. It is a process that is susceptible of improvement. We are trying to build into it a real concern for the quality of life which goes beyond mere recitation of stock phrases. The highway through the historic old quarter of New Orleans was stopped;



the jetport in the Everglades will not be built; the highway through Franconia Notch has been disapproved; the most enlightened housing relocation program in Federal history has been written into law.

The new legislative mandate provided by the National Environmental Policy Act of 1969, passed in December, is adding strength to the movement toward full consideration of environmental factors in transportation as well as all other Federal activities. We are presently working out the implications of that Act for our programs in full collaboration with Russell Train's staff.

I know that you have been intensely interested in the PPB System throughout the Government. I note that several examples of products from the DOT System were published in Volume 2 of the comprehensive Joint Economic Committee Report on the status of PPB last year. As Deputy Under Secretary of Transportation I was responsible for PPB in the Department. I believe we have begun to develop a reasonably adequate program structure to help us assess whether we are meeting our primary objective, which is, stated in short-hand, to see that this country's transportation systems move people and freight as efficiently and safely as possible, with minimal disturbance of the environment.

This program structure arrays urban, interurban, national, general transportation safety, and other national interest programs so that we can see what Federal resources we are devoting to these broad categories. And, to some extent, we can array the outputs and benefits of these programs. Eventually I hope we can array the relevant non-Federal costs as well.

for highway transport and land use purposes in most urban areas. It has also provided a formal structure for relationships between the State Highway Departments and local governments.

On the deficiency side, we can see that the process has focused too narrowly on highway planning and highway user benefits, slighting or ignoring transit and airport needs. It seems to have overwhelmed the developing state-of-the-art in general land use planning and articulation of community goals. As in practically every other sphere of public and private planning, environmental factors have seldom been incorporated, largely due to lack of data. It seems ill-equipped to deal with urban growth and it has not encouraged new systems. When this study is completed, I think we may have the foundation for a vastly improved approach to urban planning. When we are ready, the Department will strive to put findings into practice. If existing authority to do that is inadequate, we will not hesitate to ask the Congress for necessary legislative changes.

Mr. Chairman, that concludes my prepared statement. Now I will be happy to answer any questions you may have.

I would also like to mention that the Secretary has authorized preparation of a national assessment of transportation investment requirements on a completely intermodal basis. This is a first-of-a-kind experiment. We will seek the assistance of the States in attempting it. Our target date is 1972. We are hopeful that it will lead to serious improvement in transportation planning.

I stated earlier that a great deal of transportation planning and investment decision-making is done at the local level, especially in the area of urban transportation, and that the quality of planning depends on the effectiveness of the processes that are established at the local level. The Department is heavily involved in an evaluation of urban transportation planning at the present time. This study is focused on Section 9(a) of the 1962 Highway Act (section 134 of title 23, U.S. Code), but our objective is to develop a concept of urban transportation planning that will provide a framework for highway planning, public transportation planning and relevant airport/airways planning.

This study, directed by the Assistant Secretary for Environment and Urban Affairs, involves, BOB, HUD, approximately 40 mayors, 25 Councils of Government, all the State Highway Departments, over 200 urban transportation study groups, the National League of Cities, and the National Service to Regional Councils. Some preliminary findings have begun to emerge. We see both strengths and weaknesses. It is evident that the urban transportation process, as represented principally by Section 9(a) of the 1962 Act, was the first major stimulant of functional planning





# DEPARTMENT OF TRANSPORTATION

# NEWS

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REMARKS PREPARED FOR DELIVERY BY CHARLES D. BAKER,  
ASSISTANT SECRETARY OF TRANSPORTATION FOR POLICY AND  
INTERNATIONAL AFFAIRS, BEFORE THE SAN FRANCISCO BAY  
CHAPTER, NATIONAL DEFENSE TRANSPORTATION ASSOCIATION,  
SAN FRANCISCO, CALIFORNIA, WEDNESDAY, MAY 13, 1970

Gentlemen, this week is National Transportation Week. Now, it's all very well and good to set aside a week dedicated to the glories of transportation, but what are we really trying to accomplish by doing this? Is it merely to give us transportationists an opportunity to get together to indulge in self-congratulation or to chew the rag, just maybe about transportation? Or is it more than that? Well, I think it is -- or rather should be -- and I want to tell you why.

The way I see it, National Transportation Week is a time to pause, to take stock, and reflect on who we (in transportation) are, where we have come from, where we appear to be going, and, above all, where we should be going. Kind of like New Year's Eve.

Now Defense Transportation Day highlights something. It highlights that our total transportation system is vital to our total national security, and for that reason I'm not going to talk about MSTTS or MTMTS or some of the other alphabet soup organizations that the Pentagon whumps up from time to time. Rather I want to remark on our whole National Transportation System because that is -- all of it in one way or another -- National Defense transportation. Let me illustrate.

When President Nixon designated May 15 as National Defense Transportation Day, he said, "Today the field of transportation accounts for approximately 20 per cent of the Nation's Gross National Product and employs more than 10 million persons (or 10 per cent of the Nation's work force). Yet we know as we enter a new decade that the growth of our transportation systems is just beginning. This growth must be carefully planned and intelligently directed -- both our economic prosperity and our military security will depend on it. And so will the quality of life in our country."

And this is true beyond the shadow of a doubt. It's the transportation system of this country that makes the country hum! Or to put it another way, without it, we'd be back in homespun shooting rabbits for supper. That may have sentimental appeal for some of you, but I think I'd find homespun pretty uncomfortable and rabbit unpalatable for a steady diet. We require a steady growth of our economy -- and that means in our transportation system. Some, to be sure, would submit that a concomitant of this growth is environmental destruction and that consequently we must stop growing. I submit that we must grow if we are to improve our physical and social environment. We need resources to solve problems and it is economic growth that generates those resources. We must plan this growth rationally! We can improve the quality of our life! And we will! But we will have to pay for it -- and the way we can pay for it is to increase our output! And, believe me, that means transportation!

Now, how are we going to accomplish this? Let's reflect a bit. What have we accomplished already? What has our industry done in the first 70 years of this century? In the field of aviation we have made fantastic strides. From our first tentative efforts at Kitty Hawk in 1902 we have, in less than 70 years, grown to a point where in 1968 we had 168 million commercial passenger enplanements, 128,000 general aviation aircraft, and 3.11 billion ton miles of air freight. But getting back to Kitty Hawk where all this supposedly started, most people don't know that there were really three Wright Brothers -- Wilbur, Orville, and George.



Now George it was that really took the first flight. And the reason that people don't know him is that he took off directly over Long Island and found himself in the traffic pattern over Kennedy. Unfortunately, he's still there -- along with a lot of other people. So, we've had progress, but with it some problems.

Like aviation, the highway field has also been a 20th century phenomenon and here, too, progress can be measured in both quality and quantity. At the turn of the century there were 8,000 so-called automobiles buzzing around on 141 miles of "hard-surfaced" roads (150,000 additional miles of the 2,000,000 total were classified as "improved" -- i. e., most of the stumps were removed and not much grass grew between the ruts). By 1910, as a result of the first Federal highway construction project, there were 269,000 miles of surfaced roads accommodating nearly 2 million cars. This growth trend has continued and today we have approximately 89 million automobiles and 2.7 million miles of improved highways.

The first world war saw the demise of the cavalry and proved that trucks were far more efficient for carrying freight overland than horse-drawn carts. In 1910 there were 10,000 registered trucks -- by 1920, 900,000. By 1960 nearly 12 million trucks of all descriptions accounted for nearly 600,000 intercity miles and in 1967, the latest year for which statistics are available, they accounted for approximately 640,000 miles.

Now, again, as with aviation, the picture is one of tremendous growth and similarly some attendant problems. In spite of a massive road building program over the last decade and a half, we continue to be plagued -- particularly in urban areas -- by congestion. In 1916 the good roads movement pressured President Wilson into establishing the first Federal Highway Construction Program. Today, nearly half a century later we have a superb highway system, but congestion has not disappeared and we increasingly recognize that collateral issues such as environment and safety are concerns to be recognized.

While the stock of the automotive industry has been going up (usually), that of the public transit companies has been going down. The first electric car line (Richmond) as well as the first subway (Boston) appeared at about the same time as the automobile. And during the first quarter of this century, while automobiles were still a rich man's toy, transit enjoyed increased ridership. In 1905, local urban transit carried 5 billion passengers. Twenty years later ridership had trebled and reached its peak. From this time on (except for one brief shining moment

after World War II) public transit ridership, revenue, and service declined steadily. In 1950, there were 1,400 urban transit companies operating 87,000 vehicles and carrying 13.8 billion passengers. By 1967, there were 300 fewer companies and 25,000 fewer vehicles carrying 6.6 billion passengers. In that same period, operating income dropped from a \$66 million surplus to a \$67 million deficit. Hardly a rosy figure -- although the figure is red! And that doesn't include all the deficits of the large public systems. New York alone, for example, showed a deficit of over \$100 million, while my hometown, Boston, is in the red to the tune of \$40 million a year.

Water transportation of one sort or another is hardly a 20th century phenomenon, rather it's as old as civilization itself. This country's history and success have been inextricably bound to water transportation -- both inland and deep sea. In fact, until the advent of the railroads in the mid-19th century, water was the only feasible means of making large-scale shipments of freight. Although the improved inland waterway mileage has actually decreased slightly during this century as rivers straighten and change, domestic commerce has shown a steady increase. In 1900 there were 166 million tons being shipped on our inland waterways. By 1969 that number had increased to 1-1/2 billion tons.

U. S. oceanborne imports and exports have also increased fourfold from 1940 to 1967, but the percentage of total world tonnage carried by U. S. flag ships has decreased significantly in the last 15 years (from 43% in 1951 to 7% in 1966). At the same time, however, the total value of all U. S. oceanborne shipments has increased from \$7 billion in the mid-fifties to over \$8 billion in 1966. The percentage of U. S. exports and imports carried on U. S. flag ships has declined more slowly in value than in tons because the liner fleet -- which carries the high value cargo -- received direct subsidy and thus the liner fleet has been able to remain considerably more competitive than the bulk and irregular carriers.

Last, but certainly not least, are the railroads. Here, as in urban public transportation (and for some of the same reasons), the picture is not so rosy. During the first two decades of the 20th century, the railroads continued the growth trend established (both in passengers and in freight) during the last half of the 19th century. Track mileage increased from 13 miles in 1830 (the B&O's horse-drawn service from Baltimore to Endicott's Mills) to 193,000 miles in 1900 and finally reached its peak in 1916 at 254,000 in 1916. Since that time, trackage has decreased steadily and by 1968 had fallen to 209,000 miles.

Rail passengers have shown a similar -- although more marked -- decline. Reaching a peak of 47.4 billion in 1920, the number fell to 483 million in



1950, 325 million in 1960, and, finally, 296 million in 1968 of which the bulk are commuters, not intercity travelers. And there is no indication that this trend will not continue. As ridership has decreased, so too has profit. By 1963 the railroads assumed an out-of-pocket deficit of \$9 million for the passenger service they were providing. Five years later, in 1968, the avoidable deficit for intercity traffic alone had grown to \$170 million and is now over \$200 million.

The rail freight picture is slightly more optimistic. Although overall rail net income is not now (\$600 million in 1968) what it was back in 1929 (\$900 million) and the percentage of total intercity freight carried by the "roads" continues to drop (61 percent in 1940 and 41 percent in 1968), revenue ton miles have continued to rise since the depression years -- the rails accounted for 447.3 billion ton miles in 1929, down to 379 ton miles in 1940, but up to an impressive 755 billion ton miles in 1968.

On balance the railroads have declined over the last quarter century. Passenger ridership has declined in absolute numbers as has income from this service. Rail freight (and income) have dropped in relative terms, although in terms of absolutes freight tonnage has increased.

Now where do all these facts and figures leave us?

Today we have a transportation system that can boast of some tremendous successes. Just as clearly, however, there are some problems which must be solved. We must do something about congestion in our airports and our airways. The challenge here is not really one of quality or even of technology. Our air traffic control system is the best in the world and our airports are among the finest. But we simply do not have the capacity in our airways and airports to fulfill our present -- let alone our future -- needs. Obviously, the purpose of air transportation is to save time, but the ability of our aviation system to do this is diminishing.

In the highway area, we also have congestion and capacity problems, particularly in our urban areas. Even with a massive Federal and State highway construction program, we do not now have adequate highways to accommodate all our automobiles. In urban areas we are running out of room -- today as much as 60 percent of some cities are devoted to highway and related services (parking, etc.) and there is a physical limit to how much we can expand the central business district.

With the decline in public transit we are faced with ever-increasing numbers of automobiles on already choked urban streets. With an ailing transit industry, with increased indebtedness on the part of the localities who try



to support these systems, large segments of our urban population (the young, the old, the handicapped, and the poor) are frequently without adequate transportation service. And as our urban population increases in the coming decades, these problems will become still more severe.

The challenge presented by the railroads is one of infusing some new life into an industry that is seemingly lacking vitality. On the one hand, we have an unwanted and unprofitable passenger operation which provides the public with poor service and prevents the industry from investing in equipment which might improve its other service. The freight operation, in turn, although carrying more tonnage, is capturing a decreasing share of the total market and making less profit.

Generally speaking, the inland water carriers are in fairly good shape -- tonnage is increasing and so is the industry's share of the total. Only in one area does there appear to be any problem. The Great Lakes ports are suffering increasing competition from the railroads, and the Saint Lawrence Seaway, which a decade ago promised to open a fourth sea coast, has not yet developed enough traffic to pay the interest on its debt.

Finally, U.S. deep sea transportation is in serious trouble. World trade and U.S. foreign trade continue upward as output increases but the share of this carried by U.S. flag ships (and the ships themselves) is decreasing. Clearly there is a challenge here to reinstate the U.S. to its once major position.

Above and beyond these direct transportation concerns are a number of general considerations which in heavy measure determine and mold the action we take to effect solutions to our transportation problems. Increasingly we are becoming aware that transportation has a profound impact on our environment and our society. We are realizing that we can no longer simply deal in transportation objectives alone. A new airport in the Everglades would have solved Miami's air congestion problems, but perhaps at the expense of the ecology of the Everglades region. An extension of I-93 in New Hampshire would speed foliage watchers and skiers through Franconia Notch -- on the other hand, such a construction project might have seriously endangered the Old Man in the Mountain, one of the natural wonders that attracts so many tourists to that region. In cities, we must worry about housing that transportation projects displace and the effect these projects will have on land-use patterns in the community once they are operational. And then there is air! We have invested large sums in highway systems to accommodate

more automobiles and we have built airports for growing numbers of aircraft and air passengers, but what about the pollution these create?

Safety is another serious consideration. Transportation-related accidents kill over 60,000 people a year to say nothing of property damage. Highway accidents account for the highest number, but we have serious problems in aviation, with the railroads, and recreational boating.

And what of transportation availability? These days everyone in transportation talks about balance, but the statistics I quoted earlier give you some indication of how imbalanced we are now. Increasingly we are dependent on automobiles for both intra and intercity trips, while public transit and rail passenger services are increasingly deficient. Trucks are carrying more freight whereas the railroads are losing business. Now some of this may be in the proper order of things, but the 15 percent of our population that lacks access to an automobile is hard pressed in a highway-oriented society.

Finally, with our present system stretched to fulfill our existing transportation needs, what are we to do in 20 years when we will require approximately double the capacity we now have? Clearly, increasing capacity is something we have to think about in any transportation projects we undertake.

So that's where I think we have been and where we are!

Now, within the context of all this, what have we done in the 12 months since the last celebration of National Transportation Week? First, I'd like to talk about legislation, since that's action that's pretty concrete.

President Nixon has sent to Congress a program which will restore the U.S. Merchant Marine to its once proud position in the shipping lanes of the world. The program recognizes the fact that the old way of doing things hasn't done all the job and hasn't been the answer for our seamen, our shipbuilding industry, for operators, or, in these times of strict budgetary constraint -- for our Government. And, perhaps most important, it hasn't been the answer for transportation users.

The shipbuilding program is designed to meet both problems which lie behind the recent decline in the field -- low production rates and high production costs. By introducing a long-range building program and new approaches to construction subsidy, the Maritime Administration hopes to encourage builders to standardize ship design and introduce mass production techniques which have kept other American products



competitive in world markets. And with these cost reductions we expect that ship operators will be able to make the required capital investments over the next decade to build the new high-technology ships -- ships that will heavily determine the efficiency and competitiveness of our U. S. flag fleet. A variety of other provisions included in the program will aid the maritime research and development activities of the Federal Government.

Last summer we sent to Congress two programs which hit some of the aviation and urban transportation problems I addressed earlier. The Public Transportation Act, which has passed the Senate and is presently under consideration by the House, would provide \$10 billion over 12 years for (1) financial assistance to large and small cities with existing bus and rapid transit systems to replace, improve, and expand equipment and facilities; (2) financing part of the capital investment for new rapid transit systems in cities such as Seattle, Pittsburgh, Atlanta, and the like; (3) an expanded research, development, and demonstration program to get technological capability in a position to be utilized in the cities before the 70's are over! The program will provide relief for the congestion that presently chokes our cities by providing automobile users with an attractive transportation alternative. It will relieve some of the financial pressure now facing the transit companies -- public and private -- by providing the necessary capital for equipment investment and improvement which they can't otherwise afford. And the long-term duration of the bill and the schedule of funding authorizations establish the Federal Government commitment necessary for local agencies to pass bonding referenda and join in the commitment to the Federal/local partnership. And, finally, we think that the program speaks to some of the serious social problems that plague our cities by providing service for those less fortunate in our population, those who must rely on public transportation because they simply do not have access to a car.

The problem in aviation is primarily one of capacity, and the bill we sent to Congress will go a long way toward solving our problems here! Broadly speaking, the program proposes:

1. For airport development: a ten-year, \$2.5 billion grant-in-aid program (to be matched by local funds).
2. For airways: equipment investment in our air traffic control system at no less than \$250 million a year.
3. An R&D effort of at least \$60 million a year.



This legislation, supported by user charges on the aviation community will deal directly with the capacity problem. It has been passed by both Houses of Congress and I look for a bill on the President's desk before the month is out.

Earlier I mentioned the intercity rail passenger problem. The Department has spent the better part of a year working with Congressional Committees and within the Administration. Now the Senate has voted out a bill for a corporation-type approach to the intercity passenger issue. Soon the House will take it up, and I would not be surprised if we see a bill this year which will not only solve the problem of cash drain on the railroads but also concurrently do much to restore good rail passenger service where it is needed.

Now, getting beyond purely modal programs, the Department has also taken some administrative actions which reflect our concern with other issues. In the environmental area, we established in early '69 a new office -- the Assistant Secretary for Environment and Urban Systems -- to insure that all our programs are made compatible with the environment and further that all our planning comprises a real concern for the quality of life. This office played a major role in the Everglades jetport and Franconia Notch decisions. It was also instrumental in getting written the most enlightened housing relocation standards in Federal history, under which all DOT programs now operate.

In the safety area, the National Highway Safety Bureau is now a separate organization reporting directly to the Secretary. The problem of highway safety has needed greater recognition, not only within the Department but on a national scale as well.

Gentlemen, that is some of what we have done in the last year. Now, what's ahead? Our single, most pressing need is, I think, coordinated planning. There is no National Transportation Plan and transportation planning generally is at best complicated and at worst non-existent. Now, we must recognize that much of our transportation is privately owned and thus privately planned -- and I for one think this is a good thing! But to make things complex, much of this privately-owned system is regulated by the three independent Federal regulatory agencies and a host of other such agencies at the State and local levels, all of which are independent of each other and surely of DOT. The States, for example, are heavily involved in highway planning and actually select most of the locations for their roads and highways. Highway planning in most metropolitan areas is done as part of comprehensive, areawide or community planning, which brings in various jurisdictions. So I think it's fair to say that we in transportation face a complicated and involved job by Government and

industry if planning is to be coherent. In recent years State and local planning has been heavily in terms of highways because that is where the money is! Who can blame them? But it is becoming increasingly obvious in urban areas, particularly, that highways are not the only -- or frequently even the best -- answer -- that for environmental, social and economic reasons rapid transit or another transportation alternative may be a better solution. But now as resources for other alternatives are becoming available, we need to become more sophisticated and objective about determining just which alternative. In short, we have got to really get on with transportation planning, not just highway or airport planning.

Airport access illustrates the intermodal nature of the problem. Statistics indicate that often, particularly in the Northeast Corridor, the trip from the center city (say downtown Manhattan) to the airport often takes longer than to fly from LaGuardia to National Airport in Washington. Are more highways the answer or should existing rapid transit lines be extended to the airports (even though air traffic peaks at the same time as commuter traffic)? Is the answer to relocate airports at further distances from the city (as with Dulles or the new Dallas-Fort Worth Airports) and then service them with some sexy new high-speed ground system? Or should we think in terms of entirely new air systems such as STOL and V/STOL which envision center city ports and thus allow air trips from one center city to another? And so here we see intermodal problems and a very real need for transportation system planning, not simply modal trade-offs to do a segment of the job.

In international transportation, too, we need some new ways of thinking. President Nixon's maritime program will provide much stimulation but we need other changes as well. We have had some management and technological innovations -- containerization for example -- which promise to spawn really intermodal salt water and overland transportation. But if we are to realize the full potential of this and other similar systems we must overcome our natural inclination to resist change -- regulatory, organization, and operational. And the shippers' perception must be broadened. Often new services or concepts are looked at solely in terms of direct segmental rate reductions. Increasingly we must consider how a new system may permit other economies in overall distribution costs.

The job we face now is no longer purely modal nor can our interests -- yours and mine -- be narrow and parochial. Transportation associations and groups such as yours, users and carriers alike, can, should, and will continue to represent particular views. And this is all to the good. But you and I, the users, the suppliers, the overseers of transportation must recognize that we are operating in a larger context, where



increasingly the various modes affect one another and where transportation itself increasingly affects our total society. If we can recognize this and rise to the occasion, if we can plan, invest, operate and utilize true transportation systems, then our industry -- and our Nation -- will go forward. To date, I think we in transportation have only scratched the surface of this kind of thinking. Twelve months from now during Transportation Week 1971 I trust that you and I can say we have made a real start!

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# DEPARTMENT OF TRANSPORTATION

# NEWS

## OFFICE OF THE SECRETARY

WASHINGTON, D. C. 20590

25-DOT-70

REMARKS MADE BY CHARLES D. BAKER, ASSISTANT SECRETARY  
FOR POLICY AND INTERNATIONAL AFFAIRS, BEFORE NORTHERN  
CALIFORNIA STOL, SAN FRANCISCO, CALIFORNIA, MAY 13, 1970

The basic objective of the nation's air transportation system is to assure the availability of safe, economical, and fast air transportation services in a growing and changing economy. Increasingly, in high-density corridors (the Northeast, the Pacific Coast, for example) and major hub areas where population concentrations are heaviest, our system is not able to accomplish this. Particularly the nation's short-haul air transportation systems are becoming saturated to the point where delays in departures and arrivals cancel out the advantage of line-haul speed.

Now, why? First, there is the tremendous growth since World War II of intercity travel in general. In the decade and a half from 1948 to 1963

most of the growth in intercity travel was accounted for by automobiles while the common carriers (air, buses, rail) traffic remained relatively stable (from 65 to 80 billion passenger miles a year). However, in the half decade since 1963, there has been a dramatic growth in intercity common carriage, and most of it in air transport. And today air traffic, which already constitutes almost 90 percent of all intercity common carrier passenger miles, continues to grow as a percentage of total intercity passenger traffic. Buses are a major short-haul factor and continue to carry the greatest numbers of passengers, but the average trip here is only 50 miles. The old intercity common carrier leader -- rail passenger traffic -- by any method of counting is declining. Now whether the chicken (air traffic growth) or the egg (rail passenger service decline) came first is difficult to determine but the result is clear: In many parts of the country there is no or only a fading rail alternative to air travel.

But when one talks of common carriers, terminal to terminal is only one part of an intercity trip. Getting from and to your actual origin and destination must be undertaken regardless of mode. Now, even with departure and arrival delays, air travel is often the fastest part of the door-to-door trip. Take a New York to Washington, D. C. trip, for example. On a good day, the estimated air travel time on a DC-9 is slightly over 35 minutes. But at peak hours (which unfortunately coincide with peak commuter hours) it takes 52 minutes by the fastest public transit available (taxi) to travel from downtown Manhattan to LaGuardia and then another 17 minutes by taxi from D. C. National to downtown Washington. A similar situation exists here on the West Coast between San Francisco and Los Angeles, the most heavily traveled corridor. Peak hour travel time (by taxi) from downtown San Francisco to the airport is 35 minutes, from center city Los Angeles to the airport, 40 minutes. In theory, flying time is only 60 minutes.

Now, the access problem is complicated. Most airports are serviced by a variety of access systems (helicopter, highway, perhaps by some sort of rail transportation, by rapid transit, by bus, and so on). Often these systems are multifunctional, serving as both commutation and airport access systems. And because commuter and airport traffic peak during similar hours the transportation systems are hard pressed to accommodate both functions with any kind of efficiency. Since most of the traffic carried on such systems is not associated with air travel, the commutation aspect of the system often for political reasons usually gets more attention.

To make the access issue even more involved we are being faced



with an increase in the distance to be traveled. As land in urban areas gets scarcer and as noise and air pollution from aircraft (and associated traffic) become hotter issues, new airport construction is occurring at increasingly greater distances from the central city. Dulles Airport, serving the Washington area is upwards of 25 miles from the center city and that in the Dallas-Ft. Worth area a similar distance. Most new airports now in the planning stages (Los Angeles, for example) are following this trend. Now, moving airports further from the metropolitan area may solve some of the congestion and pollution problems in and around the airports themselves, but travel time from center city to the airport then tends to increase.

So, where does all this leave us? First, it seems clear that air transportation is and will remain the major intercity common carrier of passengers. But it is equally clear that to realize the potential of air transportation, we are going to have to first increase capacity if anticipated increases in demand for air travel are to be accommodated. (The doubling of air traffic volumes in the period from 1960 to 1970 together with the anticipated tripling in the next 15 years will require a greatly expanded capacity by any measure). Now, as alluded to earlier, much of today's air traffic delay results from inadequate terminal, airport, and airway facilities. So, these will have to be greatly added to if we are to handle the growth with any degree of efficiency.

But if it takes longer to make the short trip from Kennedy to downtown Manhattan than it does to fly from Washington to New York, and if building new airports further out exacerbates the problem, what then? Can we get more capacity from existing facilities? Can we have some facilities closer in? (And of course, can we find better ways of getting to and from the airport, either by new high-speed ground systems, and/or by finding better ways of using existing public transportation systems?)

Now, all this has obviously been leading up to something and since you're all here to participate in NORCALSTOL, you don't have to be a wizard to figure out what. Given the picture of intercity air travel I have described, I think the obvious question to ask here is where do STOL and VTOL fit in? In theory at least, aircraft with short or vertical take-off and landing capabilities appear to supply some possible answers.

As short-haul air transport systems, utilizing unused air space (vertical urban space as opposed to the horizontal metropolitan space used by conventional aircraft) and operating from segregated landing areas, it would seem that these aircraft could contribute significantly to relieving the existing airway and airspace congestion, thus creating more capacity in existing areas. This is particularly significant here



in the Bay Area where upwards of 50 percent of the air traffic has its origin and destination within the Los Angeles/San Francisco/Seattle Corridor.

And, because the STOL/VTOL craft require significantly shorter runway distance than conventional aircraft (1500 feet as opposed to the 6000 feet required by the DC-9 and the 12,000 feet required by the 737), they enhance the capacity of existing airfields. But beyond this, they could be flown from new small center city airports, thus bypassing some of the severe access problems with existing airports.

But today most of this is merely hypothetical as there are no certificated STOL craft in operation at the present time. The DeHavilland Twin Otter which you flew today requires about 2000 feet for take-off and landing and is in effect a quasi-STOL. It is in fact a bridge to get us from conventional to true STOL technology.

In my view, today's technology would permit a true STOL aircraft to be in commercial operation in the early 70's. But before this can happen, a number of questions need answering.

- (1) What will the commercial/operating aspects of potential vehicles be? How economically viable are they?
- (2) Will/can there be suitable terminal areas?
- (3) Can existing navigation aids and landing approach facilities be used, or will a new series have to be developed and perfected?
- (4) What affect would the service contemplated have on other transportation modes? On conventional air carriers?
- (5) What is the real passenger and cargo demand for such a service? ---it's theoretical advantages notwithstanding.
- (6) Will this new system really alleviate airway and terminal congestion?
- (7) Will aircraft noise or other environmental concerns be a problem? And let's not forget safety!

Several of these questions are technical in nature and will have to be answered initially or in part by the aircraft and equipment manufacturers. Others are government concerns (e.g., the FAA who operate navigation aids and landing approach facilities and certificate the aircraft for

operation). And to be sure, much very useful information projective and otherwise has been and will be realized from studies such as our Northeast Corridor project. Nonetheless, many important questions -- ridership, environmental response, operating considerations and the like -- need demonstrations such as this to really flesh out the answers.

Much has been written about the probable development of this new type of short-haul transportation, but thus far there has been only very limited actual operating experience and experimentation from which to draw conclusions. And that in my view is what NORCALSTOL should accomplish. The CAB, in a recent study on STOL and VTOL systems concluded that lack of direction and coordination and not lack of technology were impeding STOL progress and that what was really required was to get the public -- business, politicians, and bureaucrats of the municipal, state and Federal variety -- solidly behind the idea. If this demonstration is simply an exercise in tub thumps and poo-bah - then I'd suggest Disneyland as a better substitute and perhaps more fun. However, if this demonstration does in fact arouse interest, cause focus, develop new data and extend our real understanding of STOL potential -- then you will have really done something and aviation will be muchly in your debt. I'm betting that when the smoke clears, true commercial STOL and VTOL operations will be much closer to realization, thanks to your efforts.

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