

First Year's Work in Statewide Transportation Planning in New York State

CLIFFORD ELKINS, Associate Transportation Analyst, Planning and
Research Bureau, New York State Department of Transportation

•THE MAJOR PART of the first year's work in statewide transportation planning in New York State is summarized in the report, "Plans and Policies for Transportation in New York State." It will be used to guide decisions that must be made immediately while intermediate- and long-range programs are being developed. A brief review of this report, therefore, will also serve as a review of this first year's work. The organization of the report, shown in Figure 1, also represents the general organization of the work. This includes an examination of each transportation mode as to its historical development, function, and scale, its prospects and problems, and the policies and programs to guide its growth and insure its balance with other modes.

GOALS

The goals reflect the work of the Goals Task Force and are related to users, providers, and members of the community. In summary, the goals are as follows:

1. For Users
 - a. Reduce accidents
 - b. Increase mobility
 - c. Insure dependability of transportation
 - d. Reduce user cost
 - e. Reduce user time
 - f. Reduce effort, increase comfort
 - g. Enhance visual features of transportation facilities
2. For Providers
 - a. Reduce construction costs
 - b. Reduce maintenance costs
 - c. Reduce operating costs
3. For the Community
 - a. Reduce pollution from transportation sources
 - b. Increase accessibility
 - c. Reduce disruption, dislocation, and negative effects caused by construction of transportation facilities
 - d. Encourage desirable physical or economic development patterns

Both the goals and the patterns of development, shown in Figure 2, which the State Office of Planning Coordination has proposed, importantly influence the development of the plans and policies. Transportation facilities and service help to shape the development, which is also served by transportation and within which economic and social goals of transportation are evaluated.

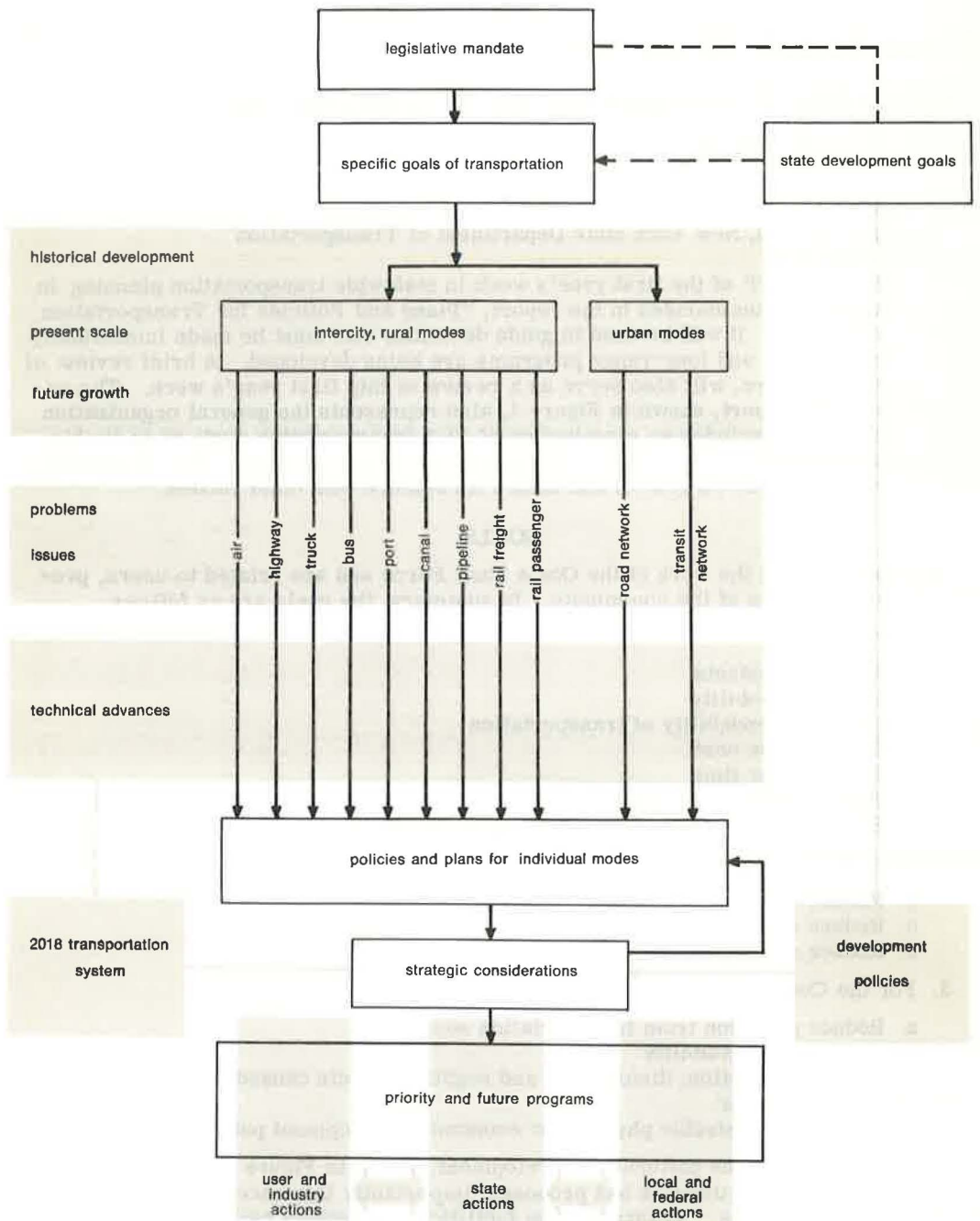


Figure 1. Process by which transportation policies and plans are developed, coordinated, and implemented.

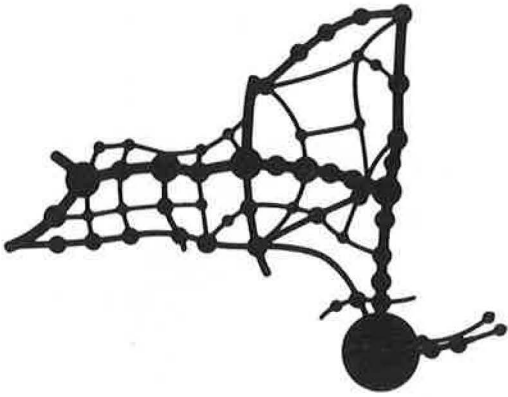


Figure 2. Growth and expansion in New York State.

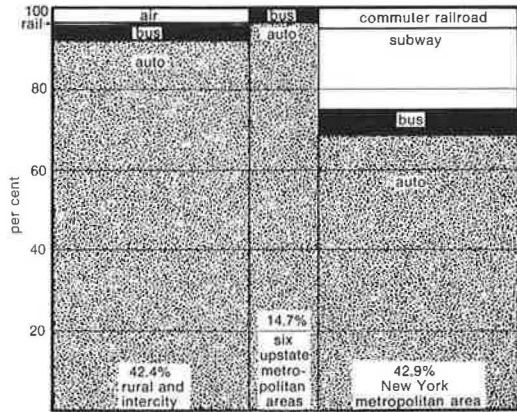


Figure 3. Distribution of person-miles of urban and intercity travel in New York State by mode—1965.

TRAVEL

Figure 3 shows the distribution of person-miles of urban and intercity travel by each mode in 1965. Less than half (42 percent) of all person travel takes place outside of the seven major urban areas. Ninety percent of this travel throughout the state is by automobile, in contrast to that in New York City alone, where just over 40 percent is by automobile.

In 1965, 296 million tons of goods were generated and consumed by New York's industries and residents. The impact of these on the transportation modes is shown in Figure 4. Over 40 percent of the ton-miles was shipped by rail, and over 50 percent by water. The latter does not include international shipping. For some analyses, ton-miles of travel do not fully reveal the importance of the mode. For example, air shipments appear insignificant, yet they are very high in value, and the ability to move goods quickly makes this means of transportation very important to the economy.

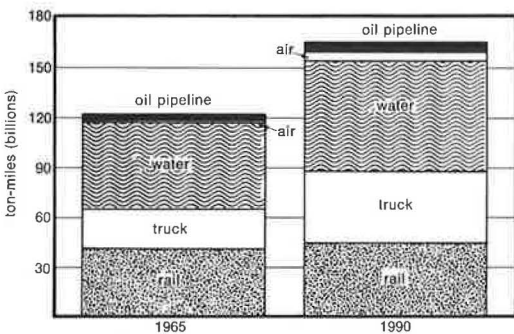
Figure 4 also shows ton-miles of goods in New York State projected to 1990. These projections are based on population and economic forecasts from secondary sources, evaluation of the impact of technology, and a small measure of intuitive judgment.

PERSON TRAVEL

Aviation

Figures 5 and 6 indicate the rapid growth that has taken place in aviation passenger transportation between 1933 and 1968. This tremendous growth has occurred in both scheduled air carrier and general aviation and has produced conditions of severe congestion on runways, in airspace, within terminals, and on ground access facilities.

Figure 7 shows communities where studies will be undertaken to determine where additional general aviation facilities should be built. These and two new jetports, which the report recommends, will relieve the congestion and provide



note: Water does not include international shipping.

Figure 4. Ton-miles of goods originating and terminating in New York State by mode—1965 and 1990.

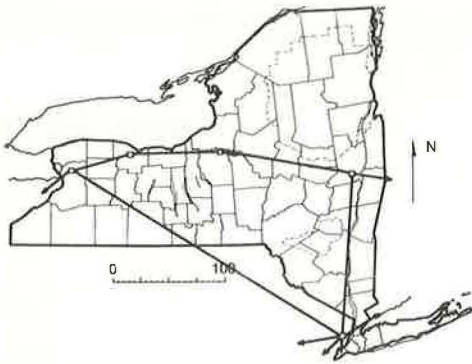


Figure 5. Scheduled air routes—1933.

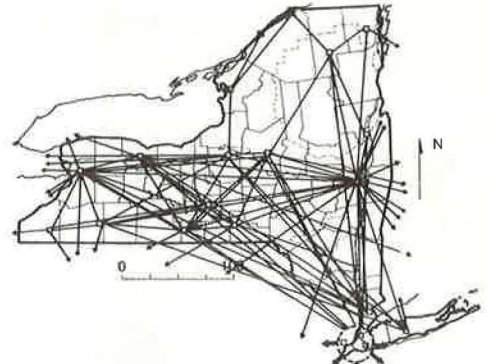


Figure 6. Scheduled air routes—1968.

better distribution of air facilities. The jetports are proposed for the New York City area and western New York State.

Railroads

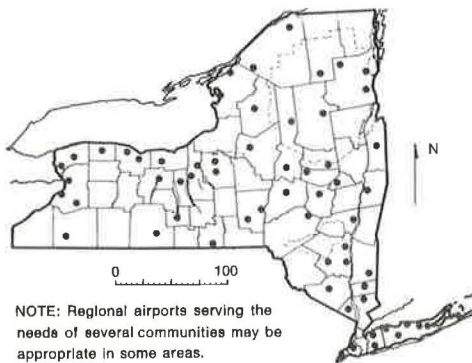
New York State's current rail passenger service is illustrated in Figure 8, which shows by bandwidths the frequency of non-commuter passenger trains. The six major upstate urban areas lie along the corridor shown.

Efficient and comfortable rail passenger service with terminals located within or in close proximity to city centers would offer additional relief to congested air corridors. The report, therefore, recommends a program to test high-speed train service between Albany and New York City and the expansion of this service to Utica, Syracuse, and Buffalo as success is demonstrated.

Bus

The importance of bus travel in New York State is better assessed in terms not of relative size, but in relation to how the travelers would have fared if there were no intercity buses. Intercity buses often provide the only means of public transportation to small cities.

The efficiency of bus travel is sometimes reduced because the location of the terminal relative to expressway access points forces intercity buses to lose valuable time in congested street traffic. In addition, terminals frequently do not have adequate facilities for passenger loading and automobile parking, nor is it convenient for passengers to transfer between bus lines. Intercity bus frequencies in New York State during 1968 are shown in Figure 9.



NOTE: Regional airports serving the needs of several communities may be appropriate in some areas.

Figure 7. Communities identified as having needs for new general aviation facilities.

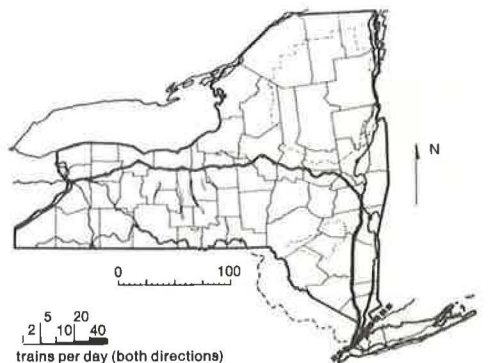


Figure 8. Non-commuter passenger train frequencies—1968.

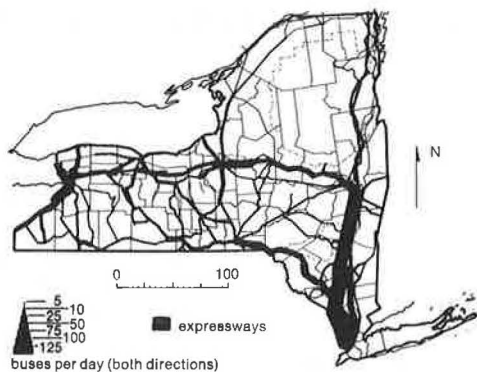


Figure 9. Intercity bus frequencies—1968.

Terminal location and coordination among intercity and intracity transportation are areas that the report recommends for special study and solution.

GOODS MOVEMENT

Aviation

Goods movement by air is expected to increase during the coming years, further adding to congestion already critically hampering the efficiency of air travel. The report, therefore, recommends a center to handle exclusively air freight in the mid-Hudson River Valley.

Railroads

In rail freight transportation, technological and management advances emphasize the need for careful planning. The report suggests several areas that need special study in New York State. These include the impact of rail mergers on the total transportation system, the consequences of multimodal ownership by rail carriers, and the establishment of freight rates that will allow optimal market utilization for rail shippers and an adequate financial base for continued development and expansion by rail operators.

Ports

New York State's ports need to expand and modernize their facilities with automated loading and unloading equipment as well as equipment which will efficiently transfer containerized goods to and from land modes. Access of land modes to ports is also seen as a necessary program to encourage water transportation. In addition to these improvements to New York's existing eight ports, the report recommends a new port, to be located in the mid-Hudson River Valley.

Canal

The Barge Canal is the only major canal network—some 524 miles—in the United States owned, operated, and maintained by a state. The tonnage volumes on the Canal have not varied substantially during the past 100 years, some three million tons per year. In 1967, 77 percent of the tonnage moved on the Canal was petroleum and petroleum products. The Canal is also used as a recreational, agricultural, and conservation facility. During the coming years, its role in the transportation system will be carefully examined.

Pipelines

New York State has an extensive network of pipelines carrying natural gas, refined petroleum products, and crude oil. In the future, they may also carry solid materials. The Department of Transportation considers pipelines to be an important mode in New York's transportation system and recommends a program of expansion and safety improvements.

Trucks

Trucks carry over half of all the tons of goods received and shipped in New York State. They are particularly suited for short-haul shipments and for goods movement within urban areas. Freight rates for truck shipments and regulations on size and weight of trucks are singled out by this report as matters that need to be examined. In addition, the location of truck terminals must be integrated with the total transportation system so that there is access to points of origin and destination and to other trans-

portation modes. Improvements planned for the intercity expressway network will also be of benefit to truck shippers and operators.

CONCLUSION

The first-year report also reviews the work and the recommended plans of the urban transportation studies in upstate New York as well as that for the New York metropolitan area being conducted by the Tri-State Transportation Commission. In addition, a very long-range speculative look was taken of transportation 50 years from now when tube transport, vertical and short take-off and landing aircraft, high-speed trains, and automatic guideways for automobiles may be fully operational. At the end of the first year, then, we have reviewed the past, examined the present, and charted a preliminary course for the future. We must now delineate that future course more precisely as we discover workable solutions to problems that prevent the efficient operation of New York's transportation system.