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CENTER CITY TRANSPORTATION NEEDS OF TRANSIT-ORIENTED CITIES
SUMMARY OF THE NATIONAL URBAN COALITION SEMINAR

Boston, Massachusetts
April 1-2, 1970

Elizabeth Parker
Murray Kamrass

April 1970

IDA
URBAN MASS TRANSPORTATION PROJECT



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I. INTRODUCTION

In connection with the Center City Transportation Program (CCTP) the National Urban Coalition (formerly Urban America) organized several regional seminars directed toward establishing national participation in the development of principles and procedures for improving center city transportation. The first five seminars included background information about the CCTP, descriptions of the projects planned in the five-cities effort, and information about the UMTA program. The final three seminars were organized to address, individually, the respective needs, priorities, problems and alternative solutions in the 21 cities. These cities have been designated by IDA as Category I, II, or III cities on the basis of population density and present development of the transportation system. Although the division between categories is somewhat artificial, these elements appear to have a high correlation with transportation requirements and priorities. IDA's categorization differs from the National Urban Coalition's designation of Tier I, II, and III which was made on the basis of total population.

The Denver seminar included Category I cities, the Boston seminar was directed toward examining the situation in Category III cities, and the remaining seminar in Minneapolis is expected to surface major issues in the Category II cities.¹

The purpose of the Boston seminar was to address the needs of transit-oriented cities. It was limited to a discussion of Boston, Chicago, Philadelphia and New York. San Francisco, however, which was not represented at this meeting, is approaching these cities in density and in

¹Information from the previous seminars is reported in IDA Notes N-660 (Atlanta), N-687 (San Francisco), N-668 (Washington, D.C.), N-694 (Evaluation), and N-706 (Denver).

transportation requirements. Its commitment to BART places it in the category of a transit-oriented city. Cleveland, with its relatively high density and extensive transit system, also falls into the category of a transit-oriented city. The cities, designated by IDA as Category III cities, have well-developed transit systems which are used by a wide spectrum of the population. (See Table 1) The major transportation projects are associated with improving or extending existing systems, increasing efficiency and amenities of these systems, providing high-capacity people movers in the center city, improving interfaces among existing systems, and developing a more effective goods distribution system. Such improvements require extensive and expensive projects, for which financing and planning are complex.

This summary of the Boston Seminar constitutes a part of IDA's ongoing examination of the CCTP. It includes a discussion of general transportation problems in Category III cities, specific needs and requirements as reported by the cities, and the relevance of the present five-city effort, sponsored by UMTA. In general, the nature and the magnitude of the transportation problems in Category III cities set them apart from other cities in the program.

TABLE 1. SOME CHARACTERISTICS OF THE CATEGORY II AND CATEGORY III CITIES

CITY	U.S. RANK ¹	1967 SMSA ² POPULATION (000)	1960 CENTRAL CITY POPULATION PER SQUARE MILE ³	TRANSIT SUBSIDY 1968-1969
<u>CATEGORY III</u>				
Boston	6	3,250	14,586	YES
Chicago	3	6,771	15,836	YES
Cleveland	11	2,050	10,789	NO
Philadelphia	4	4,774	15,743	YES
New York	1	11,556	24,697	YES
San Francisco	7	3,009	11,013	YES
<u>CATEGORY II</u> ⁴				
Baltimore	12	1,990	11,886	NO ⁵
Detroit	5	4,114	11,964	YES
Los Angeles	2	6,857	5,638	NO
Pittsburgh	9	2,386	11,171	YES
St. Louis	10	2,311	12,296	NO
Washington, D. C.	8	2,704	12,442	NO

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1. Bureau of Census, 1968
 2. 1968 Statistical Abstract of the United States.
 3. Bureau of Census, 1960.
 4. Incomplete list of Category II cities, includes only those cities ranking 1 - 12.
 5. Subsidy for operating losses in operation of "ghetto service" from July 15, 1968 - April 18, 1969.

II. PRIORITY CENTER CITY TRANSPORTATION PROJECTS

This section outlines some of the needs and priorities of the Category III cities, as presented by representatives from Boston, Chicago, Philadelphia and New York. These cities all have well-established transit systems, the predominant one being rail rapid, which is supplemented by bus transportation. These cities have demonstrated their commitment to public transportation in that the systems are being subsidized and, at the same time, updated. The primary transportation problems include improving the service level, efficiency, and amenity of existing systems. Rapid increases in ridership have occurred in such new systems as the Lindenwold commuter line serving Philadelphia and the rapid transit increments in Chicago. In addition to updating and extending line-haul components of the transportation systems, which primarily serve the suburbanites and the downtown businesses, these cities have critical problems of people movement and goods distribution within the city.

In spite of recent successes in providing access links, these cities continue to face increasing requirements for financial assistance to meet the larger and longer term needs. Given the present UMTA funds, only a small proportion of the projects in these cities can be supported by the Federal Government. In addition to the shortage of funds, long-range planning is constrained by the present inability of the Federal Government to make long-term financial commitments. Some of these problems may be redressed by the pending transportation legislation; however, these cities will still be faced with a shortage of funds.

All of these cities do have the mechanisms for transportation at the local level; however, problems of coordination exist. In part, this is a result of the separation of the planning and implementation authorities.

A. BOSTON William McGrath, Commissioner, Traffic and Planning

The main priority of the Massachusetts Bay Transit Authority (MBTA) is modernization of the existing system. Recently, most of the available money has been used for access segments and station improvements. Some new equipment purchases have been made, but additional cars are needed, including some new low platform cars. The MBTA tends to neglect downtown Boston and instead focuses on access rather than on circulation. The most recent example of this was a proposed new tunnel to the poorly served financial district. This tunnel was dropped from the plans for economic reasons.

Transportation planners in the city Traffic and Planning Department currently are interested in examining a number of different distribution systems to ease downtown congestion. They believe that neither the subway nor the highway-parking garage system does a good job of distribution. They emphasize the necessity of putting hardware on the streets and testing it, rather than doing any further paper studies. Boston is considering a moving sidewalk which will circulate through a parking garage, the transportation center and toward the 100% corner. (The specifics of this system have not been determined yet; however, information should be available in October 1970). One of the determinants in selecting a system was that it be a "continuous vehicle." Other ways of moving people around downtown are being examined.

B. CHICAGO Milton Pikarsky, Commissioner, Public Works

Chicago's Public Works Department has recently completed two new rapid transit facilities along the median strips of the Dan Ryan and Kennedy expressways. The success of the Dan Ryan and Kennedy express service has demonstrated that new, reliable service can be competitive with the auto. In fact, ridership has more than doubled the initial estimates. For example, it was expected that the Kennedy link would attract about 20,000 new riders in the first few months, whereas it now has drawn over 50,000.

The Chicago Transit Authority (CTA) has expanded bus service, but further investment is needed for continued improvement. Other transportation plans include removing the elevated "loop" and replacing it with a subway which will run under Franklin, Van Buren and Wabash Streets. This subway would be linked to the existing rapid transit system. Part of the system includes a downtown linear distribution system. The total project cost is estimated at \$600 million; application for \$400 million of this total has been made to UMTA. The estimated completion time is 5 years.

Chicago also is interested in installing people movers in the downtown area, but feels that moving sidewalks are inadequate. New technology for high capacity people movers would be of interest.

As in other Category III cities, financing constitutes a major problem. Chicago would like UMTA to be able to commit funds over a longer time period. Chicago currently is engaged in a political battle with the state over whether the state has any responsibility to assist

public transportation. The city is in favor of having transportation as a public service and therefore, does not expect it to be supported from the fare box. At present, there are no alternatives for people who cannot afford fares.

C. PHILADELPHIA Damon Childs, Assistant Planning Director,
City Planning Commission

The first priority item in Philadelphia is a 1.8-mile tunnel (part of the Market East project) to connect the Reading and Penn Central railroads. Capacity of the commuter systems remains limited by terminal capacity. The Planning Commission maintains that a commuter railroad connection would eliminate a major source of auto congestion, i.e., trips from the suburbs. Philadelphia has applied to UMTA for a grant of \$87 million. The City Planning Commission also has proposed putting in a people mover along Chestnut Street, but they have yet to sell local businessmen on the idea.

Other projects in the planning stages are (1) interconnection with the Metroliner through the 30th Street Station, (2) relocation of a rail terminal in the model cities area, (3) a rail connection from the airport to the center city, and (4) a parking garage over the freeway, to be connected by a 1400-foot speed ramp to Penn Center.

Philadelphia also is interested in conducting a parking study, with the major emphasis being an examination of parking facilities along the commuter railroads.

There was some discussion, by other participants, of the Lindenwold Line, which has been highly successful in diverting auto trips. Two additional lines are being planned from South Jersey to Philadelphia. Although the Lindenwold Line was financed in part by bridge tolls, it

was pointed out that commuter lines in Philadelphia are subsidized. This raised some question about the current policy toward the fare structure and it was suggested that commuter railroads might be self-supporting with distance-differential fares.

D. NEW YORK Jonathan Barnett, Director, Urban Design Group,
Department of City Planning

New York center city, as described, includes all the area of Manhattan, south of 59th Street. The city is now served by four commuter railroads, ferries to Staten Island, three airports, various subway lines, and a number of bridges and tunnels. The highway loop system has not yet been completed. In addition, a fifth commuter line is planned which will provide rail service to Kennedy airport. The major transportation problem in midtown and downtown New York is one of adapting people movement and goods distribution to a 19th century street system. The following studies are under way for the midtown areas: (1) a crosstown people mover along 48th; (2) a pedestrian movement study; and (3) an examination of an underground truck tunnel system to ease the goods distribution problem and to reduce street congestion. Additional multi-level pedestrian connections have been proposed for the downtown area. Some already have been constructed, but more are committed.

Brooklyn and Harlem are two other major areas with good transportation access, but both face severe problems of circulation for people and goods. With improved transportation, there is a possibility of developing a strong shopping area in Brooklyn. Cross connections are the priority transportation need for Harlem (since the subway lines have terminals

at 125th Street). In addition, there is an overall problem of connecting various outlying areas of the city. These areas include Jamaica, Fordham Road and Newark. There is some thought that development of these areas would help to draw people away from downtown, thereby helping to alleviate downtown congestion.

.. One interesting development in New York is a private organization called the Fund for Better Subways. This organization has plans to raise money from local businessmen and property owners to improve subway stations. Already plans have been made to renovate the 51st Street Station on the Lexington Avenue Line.

III. PROBLEMS OF PLANNING AND FINANCING TRANSPORTATION PROJECTS

The discussion of financing center city transportation was led by Mr. James Kise of the National Urban Coalition. Others contributing substantially to the discussion included Milton Pikarsky, the Chicago Commissioner of Public Works; Damon Childs, Assistant Planning Director of the Philadelphia Planning Commission; Jonathan Barnett, Director of the Urban Design Group, New York City Department of City Planning; Donald Graham, Manager of Master Planning, Massachusetts Bay Transportation Authority; and James Martin, Executive Assistant, Old Philadelphia Development Corporation. The summary which follows is a synthesis of the discussion which occurred at this session.

The transportation problems of the Category III cities are primarily financial. The four cities represented at this meeting all have large investments in public transportation facilities. The operating costs of these systems are subsidized in part, generally from real estate taxes. The Boston situation is typical. The MBTA, representing 79 separate cities and towns, owns and operates public transportation in the Boston area. These towns are taxed to make up most of the operating deficit of the MBTA. Thus the deficit is transferred to real estate taxes. In addition, state aid is provided from a special tax on cigarettes dedicated to the MBTA.

Capital improvements are another matter. The MBTA, when it first started operations, received authority to issue capital improvement

bonds in the amount of \$225 million. Additional capital improvement funds have been received from UMTA for particular projects.

Capital needs identified by MBTA include new rolling stock, renovated stations, and line extensions. Improvements and modernization needs are estimated at about \$1 billion; the need for a second billion in the next few years is foreseen. Yet the total funds presently available from all sources, except federal, amount to only one-third of a billion. Thus they look to UMTA to provide the necessary additional assistance. They have an interest in seeing a large federal aid program and are looking for 12½% (statutory limitation in capital grant to one state) as their share. The other Category III cities seem to have financial needs similar to those of Boston.

The discussion of city priorities raised the question of cost-benefit analysis. One participant suggested that transportation priorities should be developed on a cost-benefit basis. Others disagreed, particularly with the suggestion that this should be the basis for UMTA capital grants since it could be used against, as well as for, projects which the cities themselves felt were necessary. The general view was that cost-benefit analysis might be used but with considerable caution. However, most of the participants seemed to have only a rough and perhaps mistaken idea of cost-benefit analysis.

The discussion also included the question of planning assistance which is a feature of the five-city program. The Category III cities represented at this meeting feel that they have ample capability to do their own planning and that all they need is access to funding for both the planning and the implementation process. They feel that they are capable of determining priorities and projects better than the Federal Government implicitly assumes by its insistence on elaborate controls over capital grants.

One criticism of the five-cities project is that it looks as though the cities are responding to what they think they can get from the Federal Government rather than what they think they need. The implication of this is that so many transportation improvements are needed that cities may as well get what they can with ease. This attitude stems from the lack of clarity of CCTP objectives and the fact that the selected projects were not balanced against all priorities in the urban area, including non-transportation priorities which most of the participants seemed to feel should have been ahead of most, if not all, of the CCTP projects. Finally, regardless of the situation in the five cities, the CCTP projects are not relevant to the Category III transit-oriented cities because they are confined to the center city area and because the two to five-year implementation time frame restricts options.

IV. SUMMARY

Transportation problems in Category III cities can be divided into the following two areas: access to center city and circulation within the center city. To date, access links have received the most attention in the Category III cities. Transit developments have tended to slight circulation within the center city and the rapid development of satellite activity centers.

In contrast to the transportation situation encountered in the five-city effort, which addressed problems relevant to the lower density Category II cities, the Category III cities already have extensive rail rapid transit systems, supplemented by bus systems. Whereas the Category II cities are just beginning to realize the necessity of providing improved public transportation, the Category III cities are committed to public transportation. Yet Category III cities face severe congestion problems both within the city and along access routes.

However, the Category III cities are faced with complex coordinative problems and requirements for large-scale and long-term financial commitments. The two cannot be separated, since long-range planning is dependent on the assurance of future funding. Here one of the major problems is that the ability of highway planners to make financial commitments in advance gives them a strong advantage over transit planners faced with only short-term funding commitments from the Federal Government.

Although circulation improvements are a common need in both Category II and Category III cities, the actual kinds of systems needed differ markedly. For example, the five cities are examining ways to intercept suburban auto trips to the center city through peripheral

parking-shuttle bus schemes. Such concepts have little relevance for rail-oriented cities whose major concern is to move large numbers of commuters at high speeds for relatively long distances. Auto intercept, if it occurs in such cities, is a considerable distance from the center city. However, two of the five-city projects may have applicability to Category III cities. These are the Pittsburgh poverty area bus system and the Dallas truck tunnel proposal. The discussion of these projects at the meeting did not relate them to the specific needs of the four cities represented.

One area of technological interest in Category III cities is the development of high-capacity people-mover systems for downtown circulation. Three such systems were discussed at this meeting. Boston currently is examining the feasibility of speedwalks or moving sidewalks; Chicago planners prefer a subway rail circulation line whose fixed facilities would be compatible with the rolling stock of the access systems; and Philadelphia planners are interested in the implementation of a people mover along Chestnut Street in the downtown area.

In addition to the general inapplicability of the five-city solutions to the problems of the Category III cities, there is an apparent consensus that the use of federally funded design concept teams is inappropriate for the Category III cities, inasmuch as these cities have their own planning staffs. Another criticism of the CCTP is that it has placed major emphasis on quick, visible results, implementable within two to five years. This disqualifies many, if not all, high-priority projects of the Category III cities. The limitations on the amount and use of capital grant funds disqualify many others.

In summary, the transportation systems requirements of Category III cities include the following:

1. Improving or extending existing systems,
2. Increasing the efficiency and amenities of existing systems,
3. Purchasing new equipment,
4. Providing high-capacity people movers in the center city,
5. Improving the interface among existing systems, and
6. Developing a more effective goods distribution system.

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