1. Several years ago Latin America passed the point where more people were living in cities than in the countryside. Latin America's rate of urbanization exceeds that of any other world region; some cities are experiencing annual growth rates as high as 7 per cent. The problems generated by such rates of urbanization will directly influence the political, economic and social development of Latin America in the years to come. Sound urban development is essential to speed the rate of economic growth and to achieve desirable social changes within the nations of Latin America.

2. The cities of Latin America are facing difficult problems as a result of their extremely rapid growth: inadequate housing, inadequate transportation facilities and traffic congestion, the difficulties of providing public services of an adequate standard. Because of their urgency, it is essential to develop at an early moment basic strategies with which to confront the social problems generated by the difficulties of life in slums and squatter settlements and the lack of employment opportunities for the individuals streaming into the cities.

3. The inter-American organizations concerned with the social and economic development of Latin America are in a position to make a major contribution by expediting the training of professionals to deal with such problems and by sponsoring research which can deepen understanding of urban development.

4. This report sets forth some suggestions for ways in which the inter-American agencies (and particularly the Organization of American States and the Inter-American Development Bank) might contribute to such education and research. Preliminary in nature, it is presented mainly to advance discussion and to further study of this complicated matter. It covers very briefly...
(a) the need for education and research in urban and regional development,
(b) the current efforts being made to meet the needs of increased knowledge
and for trained personnel, and (c) additional programs called for in the
future.

The Need

5. The question of training professional personnel for the urban
development task is a very complicated one. The field of concern itself
needs to be defined, and the professionals who contribute to it must be
identified. This makes the education-and-research question more complex
than it is in the case of established fields such as medicine, law or
engineering. Some would quickly identify the appropriate professional group
in urban development as being the planners, the education problem as one of
training city planners, and the research problem as one of generating the
information needed by city planners to carry out their tasks. Such an
approach, however, would not be completely relevant to the special circumstances
of urban growth in Latin America. City planners in Latin America have
traditionally been concerned with the problems of physical development, and
more especially problems of land use, the design of housing projects, and the
location of public buildings. Under present conditions, and even more so
under conditions to be faced in the future, the physical development approach
by itself is not broad enough to cope with the kinds of policy problems rapid
urbanization presents.

6. The characteristics of these problems determine the nature of the
decisions to be made and the programs to be carried out by public bodies in
Latin American countries. These include:
(a) Decisions about the extent to which the government should try to influence migration to the urban centers. Such decisions will depend in part on knowledge of the relative costs of providing jobs, housing, and public services in larger as against smaller centers. They call for help from professionals who understand internal migration processes and who can evaluate the relative costs and benefits of different kinds of urban development.

(b) Decisions about the creation of urban infrastructures. Transportation facilities, water and sewerage facilities, housing, schools, hospitals and similar facilities comprise a large portion of all infrastructure in Latin America. The efficiency of investment in urban infrastructure can have a great impact on the relative returns to all such investment and, therefore, on the development of the Latin American countries. The composition of infrastructure will influence the content and distribution of national development. Professionals are needed at every level, and especially among the urban communities, who understand this relationship. They can help national decision-making by projecting the probable effects on urban infrastructure requirements of investments crucial to national development. They can help the urban decision-makers to identify the impact of national investments already made, and the potential effects of those anticipated.

(c) Decisions about the development of marginal communities. Improvements within the slum and squatter settlements are essential because so many people live in them. The cost of providing good housing for everyone is prohibitive (even the rich countries do not achieve this), but the selective provision of public facilities, especially water and sewerage, can improve the quality of life greatly. Families in these marginal settlements might be induced to improve themselves substantially through "community development" efforts.
Such improvements involve not only physical factors, but economic, financial, social and psychological factors as well. The professionals who contribute to such efforts must be able to understand these factors deeply; they would have to be grounded in fields such as sociology, social work, or finance, each of which is a speciality of its own.

(d) Decisions about urban transportation. For many of the major metropolitan centers in Latin America the need for an effective, low cost, mass transportation system increases day by day. Some 95% of all movement of persons takes place by mass transportation and demand tends to increase at least as rapidly as these areas grow. Narrow streets, inefficient organization, politically maintained low fares, lack of access to investment funds, and the increasing scale of the metropolis conspire to keep the systems constantly on the verge of crisis and jeopardize the productive efficiency of the region as a whole. Improvement of urban transportation will require contributions from a number of professions and disciplines, including engineering, economics, law, management and administration. More than this, however: since transportation is directly related to the organization of the metropolis it will need strong ties to urban and regional planning.

(e) Decisions about urban housing. Providing housing for urban populations which are threatening to double each fifteen years will continue to be the most massive challenge confronted by Latin American cities. Large cities will characteristically find 25% or more of their populations housed in poorly-serviced shantytowns. Previous efforts to mitigate this problem have been balked in large part by the high costs of low-rent housing and community services culturally acceptable to Latin Americans. Hence, the need for innovation is great both in the design and organization of low cost housing
and in the management of the activities necessary to achieve the rates of
construction and improvement consistent with existing backlogs and anticipated
rates of growth. Architects, anthropologists, engineers, community development
experts, and city planners, sensitized to the problem as a whole, will be an
important key to any breakthrough on the urban housing front.

(f) Decisions about natural resources with an impact on urban areas.
While the development of water and sewerage systems has received considerable
attention from international agencies and lending institutions, it becomes
increasingly clear that many metropolitan regions in Latin America are confronted
with severe problems in the management of their water resources. These involve
not only a growing divergence between the demand for water at reasonable prices
and the supplies available at acceptable costs, but also the increasing
pressure on water quality. While engineers have made great contributions in
the design of water supply facilities, it will be increasingly important for
them to join with city planners, economists, and physical scientists in the
development of overall water resource programs for these growing metropolitan
regions.

(g) Decisions about the development of regional "growth poles." Cities
are the important energizers and organizers of the sub-national—or regional—
economics, but they have not always played this role well in Latin America.
They have been passive spectators in the development of national economic
development policy and in the growing centralization of the national economy
in great metropolitan centers. More and more the rate and character of
national economic growth will depend on the exploitation of regional development
opportunities, on the ability of the individual regions to maximize their
contributions to the national economy. The regional "capitals," then, must be
able to serve a series of functions well: to provide a productive environment for new industry, to develop key human resources to support a more productive local role, to provide the specialized services needed in its hinterland, to develop the web of institutions necessary to coordinate the regional economy and articulate it with the larger economy. It is clear that such policies will require inputs from a large number of specializations ranging from economist to regional planning to vocational education to industrial estate management.

8. While these kinds of decisions cover a great deal of ground, they converge on a set of substantive matters which has an identifiable core, made up of the elements that determine the pace and nature of urban development:

...the economic base of the city, including industrial location;
...the public services and facilities provided (the infrastructure) and the public finances that support them;
...land uses in and around the city;
...building and rebuilding of the urban physical plant;
...the poverty pockets, involving a constellation of problems arising from poverty and other disadvantages;
...the migration of persons into and out of urban communities;
...the economic and social progress of the region surrounding the urban community;
...the nearby natural resources that directly sustain city activities.

This list goes substantially beyond the traditional concern of city planners with the problem of land use and physical construction simply because the problems of urban development that are of direct interest to public decision making are broader and more complex. But, on the other side, they do not cover all questions of planning and development. They can be distinguished
from the concerns of the national economic planner; the latter focus on such matters as balance-of-payment problems and foreign exchange, the prices of agricultural products, and dozens of other such matters (although always recognizing that national decisions inevitably affect urban development in one way or another). Thus, while broad, the urban items mentioned above make up a strongly linked and identifiable core. At the periphery, they spill over into many other fields, but that is characteristic of almost any important field of work.

9. The breadth of the urban problems and of the elements centrally involved in dealing with them place them beyond the ability of any single field of work to provide all the technical know-how that their solutions require. A number of fields of knowledge and work demonstrably can contribute in special ways to the solution of problems of urban development. Among these are

....the social sciences, especially economics, sociology, geography and political science;

....the technical sciences, particularly architecture, landscape architecture, engineering and public health;

....social work, including community development;

....city planning.

The last of these, city planning, fits the requirements most directly and broadly. People trained in this field tend to come originally from one or another of these fields but have additional training in the various aspects of urban development. However, city planning cannot provide all the technical knowledge and skills that are needed. Thus, the civil engineer building a road system in and around the city must not only be an expert engineer but a
well-trained urbanist as well; the architect designing a large housing project must be a well-trained urbanist; the social worker in the slum must be a well-trained urbanist. The economist and finance experts carrying out economic base studies, preparing capital budgets, or evaluating proposed infrastructure projects will need a thorough grounding in the processes and characteristics of urban development. The sociologist preparing a social program to involve slum dwellers in an effective community development and improvement effort will need a strong background in the urban dimensions of his field.

10. This means (a) that the training of city planners will need to emphasize the skills of the "urban generalist" on the one hand, and the unique features of the Latin American urbanization experience on the other, and (b) that professionals, with various kinds of specializations, who will be working on urban problems need extra preparation in the substantive knowledge about Latin American urban development for their specialized tasks within the city.

11. It is extremely difficult to provide meaningful estimates of the quantities and types of urban experts needed. Today Latin America can boast of at best a handful of trained city planners, and even fewer social scientists, architects, and engineers who have had any urban-oriented training. Accordingly, cities are not in the habit of trying to hire specially trained urban experts; thus, there is no "market" for such persons at the present time, and so there is no understood career line with well-established definitions of jobs and related salary scales. However, the evident need is so much greater than the present supply that substantial training programs can be established without fear of "over-supply" for some time to come. The individuals running the training programs will be alert to the question of numbers and, as is true in the case of
other professional training programs, will be adjusting to demand by limiting the number admitted for training each year. At the present time our best guess is that there is need for at least five or six training centers each equipped to graduate 30 to 40 "urbanists" each year.

Supply: Existing Training Programs

12. There are various types of educational programs in Latin America which are actually (or potentially) useful in the training of urban-oriented professionals. The major existing distinction is between "general planning," centers and "urban planning" centers. The major existing centers may be classified as follows (employing initials to identify them):

Existing Training Centers

<table>
<thead>
<tr>
<th>General Planning (Emphasis on economic and social subjects)</th>
<th>Urban Planning (Greater emphasis on physical and technical subjects)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-regional</td>
<td></td>
</tr>
<tr>
<td>ILPES (Santiago)</td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
</tr>
<tr>
<td>CENDES (Caracas)</td>
<td></td>
</tr>
<tr>
<td>*CENDE (Quito)</td>
<td></td>
</tr>
<tr>
<td>COL-MEXICO (Mexico City)</td>
<td></td>
</tr>
<tr>
<td>*TNECUR (Montevideo)</td>
<td></td>
</tr>
<tr>
<td>Inter-regional</td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
</tr>
<tr>
<td>IPU (Lima)</td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
</tr>
<tr>
<td>CIDU (Santiago)</td>
<td></td>
</tr>
<tr>
<td>CALI (Cali)</td>
<td></td>
</tr>
<tr>
<td>*IERU (Buenos Aires)</td>
<td></td>
</tr>
</tbody>
</table>

* Research only. Others provide for teaching and research.
13. On the international scene. The Latin American Institute of Economic and Social Planning (ILPES) in Santiago is training professionals from all over Latin America in general planning. Consequently, ILPES covers fields closely related to urban development or comprising an important speciality within urban development. ILPES, in addition to its major focus on general planning, has a number of training programs which are useful for individuals who will be working in problems of transportation, education, and health planning. Even though these programs are still being developed, they do provide a useful base for public officials working on such urban problems but who are handicapped by an inadequate background in general urban planning.

14. The most active program for the training of urban personnel at the present time is the Inter-American Program of Urban and Regional Planning (PIAPUR) in the Planning Institute of Lima of the National Engineering University of Peru. This program has been supported with funds from the Organization of American States from its initiation in 1961 (the training program actually began in 1962). PIAPUR has provided two-year training programs in city planning leading to a Master of Arts degree in city planning. Some 50-60 students have been attending this training program each year. Recently, the annual cost of the PIAPUR training and research program has approached $300,000.

An evaluation of the PIAPUR program by members of our Advisory Group has revealed a number of problems. One of these is that the program itself, as organized, has been too narrow and too closely tied to the problems of physical development to meet the needs of professionals to work on problems of Latin American urban development. There have also been some problems involved in obtaining faculty of a high enough caliber, given the complications and
difficulties of the urban development field. PIAFUR is undertaking a number of reforms and it is anticipated that these will improve the situation substantially. The leadership of PIAFUR is committed to bringing about these reforms including a changed relationship of the program to the engineering school and of the latter to the university. However, it is well to note that interest in this training program has continued to be very high. Thus, for example, between 1963 and 1966 applications for OAS fellowships to PIAFUR have ranged from $10^4$ to 138. (During these years fellowships actually granted range from 30 to 40.)

15. Two noteworthy training programs concerned with urban development which have emerged in very recent years deserve comment. One of these is the Center for Studies on Development (CENDES) of the Central University of Venezuela and the other is the Inter-Disciplinary Committee on Urban Development (CIDU) of Catholic University of Santiago, Chile. CENDES is well-established and has been training general planners for several years. In addition, it has successfully launched a sophisticated research program on urbanization which has enabled it to attract able scholars. CIDU, on the other hand, has only recently been launched with support from the Ford Foundation to carry out a well-conceived program (1) to train urban specialists, (2) to engage in research and (3) to conduct intensive in-service training for government officials dealing with urban problems.

16. A number of city planning programs can be found associated with schools of architecture in Latin American universities. Their courses tend to focus on physical planning and urban design, which frequently are little more than extensions of architectural training. An occasional urban planning curriculum may include some training in economics or in other social sciences,
but they tend to be peripheral to the main focus on design. While the graduates of such programs can and do make significant contributions in the design of projects--particularly in housing programs--and provide valuable expertise within planning agencies dealing with problems of urban design, they are generally not equipped to perform the broad functions which are called for under the circumstances described earlier. In a similar category is the Inter-American Housing Center in Bogotá (CINVA) which has been supported by the Organization of American States for over a decade and which has been concentrating on problems of shelter and urban housing. CINVA concentrates on short-term training on various aspects of housing programs--construction, administration, and management, and its graduates are equipped to serve as specialists within planning agencies.

17. In summary, then it is evident that training in problems of urban development is limited in Latin America today; that most of the training is very narrowly conceived and oriented to the limited problems of physical development; and that a very limited and early start has been made so far in broader types of training. It is evident that a very limited and early start has been made so far in broader types of training. It is evident that some substantial changes are called for.

Recommendations

18. The needs for education and research in urban development are so large and so urgent, and the effort to meet this need so small by comparison, that an entirely new approach by the inter-American agencies seems called for. THE KEY INTER-AMERICAN ORGANIZATIONS (PARTICULARLY THE OAS AND IDB) SHOULD ACCEPT RESPONSIBILITY FOR THE WORKING OUT OF STRATEGIES TO MEET THE MOST
IMPORTANT NEEDS. This general recommendation gives rise to several specific recommendations:

19. THE OAS AND THE INTER-AMERICAN DEVELOPMENT BANK MIGHT WELL JOIN FORCES IN UNDERTAKING THE GENERAL RESPONSIBILITY IN THE FIELD. The OAS has long been interested in education and research in urban development. The IDB has become deeply concerned with urban development as a result of increasing demand for loans to support the investments in urban infrastructure, which rapid urbanization calls for. Housing, water and sewerage systems, transportation facilities, schools, and hospitals will be built in increasing numbers. The training of Latin American experts to help guide urban development is one of the best assurances that the very large volumes of investment called for will be effectively employed.

20. A JOINT "URBAN AFFAIRS COUNCIL" SHOULD BE SET UP BY THE INTERNATIONAL ORGANIZATIONS IN LATIN AMERICA TO GUIDE THE WHOLE EFFORT AND JOINTLY FINANCE AND STAFF IT. This council should be made up of 5 to 7 distinguished professionals to advise the inter-American organizations on all matters pertaining to problems of urbanization in Latin America. It should be headed by an outstanding urban expert who has the respect of others in the field and supported by a small capable staff. There would be many advantages to locating the staff in Latin America (possibly with a small sub-office in Washington). The staff, which might be associated with a major education-and-research center in Latin America, should maintain close contact with the university centers in the region and be prepared to provide assistance on short notice. The staff would:

(a) study the urban development situation continuously,

(b) provide recommendations for action by the inter-American agencies,
(c) assist universities in establishing training and research programs in urban planning and development,

(d) assist Latin American countries to understand and treat effectively their problems of urban development,

(e) improve communications among urban experts by any appropriate means such as sponsoring conferences of persons working on urban problems, and,

(f) carry out other tasks that can advance education and research in urban development in Latin America.

21. OVER THE LONG RUN THE COUNCIL SHOULD SEEK TO ESTABLISH AT LEAST ONE STRONG CENTER OF CITY PLANNING AND URBAN STUDIES IN EACH OF THE LARGE LATIN AMERICAN COUNTRIES (BRAZIL, MEXICO AND ARGENTINA) AND TWO OR THREE REGIONAL CENTERS TO SERVE THE SMALLER COUNTRIES NOT YET ABLE TO SUPPORT THEIR OWN NATIONAL CENTERS.

There are a number of reasons for this recommendation. National centers in countries that can support them can do a great deal to help their national planning efforts. This is particularly true of in-service training, an important part of the training need in Latin America today. Also, the research sponsored by such national centers would in large part focus on the cities of the nation and would provide important information for the planning of such cities. The smaller countries will not be able to support a national center for some time to come and it would be appropriate in such cases to sponsor two or three regional centers to take care of their needs. Thus, CENDES, CIDU and PIAPUR might serve students from Colombia, Venezuela, Bolivia, Paraguay, Ecuador, Peru, Chile, and the Central American countries. This is a middle-way strategy between a single regional center for all of Latin America and an approach which would seek to assist any and every university that wanted help in setting up a center of urban development studies or city planning training.

22. ASSISTANCE TO THE SELECTED NATIONAL AND REGIONAL UNIVERSITIES SHOULD TAKE A NUMBER OF FORMS: (A) MATCHING GRANTS TO SUPPORT EDUCATION AND RESEARCH
PROGRAMS; (B) THE GRANTING OF FELLOWSHIPS TO TOP STUDENTS ATTENDING SUCH SELECTED PROGRAMS; (C) THE PROVISION OF BOOKS AND STUDY MATERIALS IN CITY PLANNING AND URBAN STUDIES; (D) FUNDS FOR VISITING SCHOLARS INVITED FROM OVERSEAS AND OTHER COUNTRIES OF LATIN AMERICA. The major purpose would be to set a "floor" of competence in each case: the first item would help insure that there were several full time teachers and researchers in each program, the second item would serve to attract able students to such programs; the third item would insure a minimum adequacy of reading materials; and the last item would help to give at least a minimum flavor of competence.

23. THE NUMBER OF FELLOWSHIPS IN URBAN DEVELOPMENT SHOULD BE GREATLY INCREASED AND MADE AVAILABLE TO STUDENTS WHO DESIRE TO ATTEND ANY OF THE SELECTED NATIONAL OR REGIONAL UNIVERSITIES. THE UNIVERSITY WOULD RECEIVE A GRANT EQUAL IN AMOUNT TO THE FELLOWSHIP FOR EACH STUDENT, TO HELP COVER THE UNIVERSITY COSTS OF TRAINING SUCH FELLOWS. While most students are likely to choose their own national university where there is one, there are obvious advantages in an open competition among the universities for the better students. The competition would be greatly sharpened by attaching an amount equivalent to the fellowship that goes to the university for its urban training and research program. This is a technique employed by several private foundations and has had favorable consequences. The university is encouraged to strengthen its urban program so as to attract the maximum number of fellowship students.

24. THE PROPOSED COUNCIL SHOULD SPONSOR THE PREPARATION OF MATERIALS FOR THE TRAINING OF URBANISTS IN LATIN AMERICA. The situation in Latin America has many unique features--as outlined earlier--and training should reflect such unique features. This is important not only for city planners, but at least as
much for engineers, architects, social workers, and others working, or intending to work, on the urban scene. Such specially prepared materials can help orient the various groups of professionals to the problems of Latin America and also introduce them to the best methods of solving urban problems known anywhere in the world. The proposed Urban Affairs Council should have funds to sponsor the preparation of such materials. They should be made available, when published, to the selected universities at minimum cost or free and to other groups at full cost.

25. There are a number of additional activities that might be carried out by the universities in cooperation with the proposed Urban Affairs Council.

(a) In-service training is an important part of the training mission. Many officials are already working on urban problems within various national governments who could gain from taking part-time training while on the job. The universities should be equipped as quickly as possible to carry out in-service training programs to help such officials improve their professional capabilities to fulfill these responsibilities well. The universities throughout Latin America should also be encouraged to establish courses in urban development as part of their general education at the college level. This would help prepare their graduate for work in the cities, where the overwhelming majority will be working. General courses are also needed to increase the effectiveness of professionals--architects, engineers, public health officials, social workers, and others--who will be carrying out specific responsibilities in the development of Latin American cities, and who should understand the problems and the processes of urban development. This training is especially important for those going into political and public administration posts. General courses in urban development throughout the universities could
make a very great contribution to sound development of cities in Latin America in the future.

(b) At the earlier stages, the universities and the Urban Affairs Council will have to give very serious thought to the best methods for training of teachers to man the various programs described above and to carry out the research that is needed. Serious thought needs to be given to the circumstances under which teachers should be trained at Latin American universities and those under which overseas training would be preferable. The training of teachers in city planning and urban development should be a continuing concern of the Urban Affairs Council.

(c) The Urban Affairs Council and the universities should sponsor conferences to develop a common language among the various professional groups and to help keep them up-to-date.

26. The financing of a program of the scope suggested here will be different. The rate of urban growth and the importance of urban development in Latin America suggest that the annual appropriations for urban development made by the International Agencies working in Latin America should be greatly increased. Substantial annual appropriations are needed to provide a solid base to finance the various proposed programs. With such a base it would be possible to obtain additional funds elsewhere. Thus, it would be logical to make an effort to obtain additional funds from the U.S. Agency for International Development, the UN development program, and private foundations. The Urban Affairs Council could be very useful in developing the financial base for this program, a consideration which underlines why a high level staff is needed in the council. In addition to funds, it should be possible to obtain direct support from U.S.
and European universities for these urban development programs; they can assist in the training of Latin American teachers; they can prepare and provide appropriate training materials; they can participate in conference programs; they can support specific research activities.

* * * * *

The imperative problems of urban development in Latin America invite the international agencies to consider immediate steps to initiate a program of the type suggested by this report. Recognizing that no program can be instituted without careful consideration, nor achieve immediately the scale of effort suggested by the problem, it is nevertheless essential to make a good beginning at the earliest possible moment. A good beginning, in the eyes of this committee, would be the scheduling by the interested agencies of early deliberation of the recommendations herewith submitted.