

The Regional Plan for the Paris District, which was completed in 1965, sets the time for development to the year 2000.

The Plan will accommodate a population increase of 5.6 million people in the Paris district; about three million more cars; all means of transportation will increase two to three fold; employment to increase by 2.3 million; housing to increase by 2.8 million units; purchasing power for food by three fold; industrial areas by two fold; office area three fold and housing area four fold. These are the significant figures for developing the regional plan.

The area for development was determined by the physical, economic, and human geography of the district. This resulted in a system of axial development corridors in contrast to the approach of the London developers, a circumferential ring of towns. The principal axis for urban development is along the Siene Valley as it flows from Paris westerly to the sea. The activities of the ports of Rouen and Le Havre are directed toward Paris through this axial corridor. The secondary axis for urban development, which does not have the power of attraction as the primaries, are the Siene Valley, upstream from Paris toward the Southeast, and the Marne River Valley, upstream east of Paris. Together, all the axes form a Y with Paris at the intersection.

Within the axis corridors, and outside of Paris, five Urban Centers are planned, each to accommodate 300,000 to one million people. Proposed zones for future urbanization are designated beyond the year 2000. There are two urban centers

in town, Defense being one of these.

If the French carry out their regional plan with the same degree of commitment they are devoting to La Defense, Paris will be one of the few metropolitan cities in the world to have defined its problem in measurable terms, set its goals and attained them.

RUSSIA

Alesky Kudvayavtsav, Chief, Planning and Urbanization Department, State Committee, Civil Construction and Architecture, Moscow, stated in a report to the United Nations that construction of new cities is one of the most important phases of urban development in the Soviet Union. He went on to state that more than nine hundred new towns have been created between 1917 and 1965, four hundred on completely new territory and five hundred, through the development and construction of small towns.

We were scheduled to visit a new town, during my visit to the Soviet Union but it never transpired. From my own personal experience, I would say that housing and city planning is one of the most important phases of urban development in the Soviet Union. The Russians claim they are building housing units at the rate of three million annually, twice as many as the United States. In Moscow alone, three hundred housing units are completed daily. Reports three years ago stated Russia was building at a rate in excess of two million units annually. After seeing several housing construction sites, I am inclined to believe the former.

In 1968, the Congress of the United States set a goal for construction of twenty-six million housing units in the next decade. We are now constructing about one and a half million units annually, and are presently lagging in our national commitment by three million units.

The Russians have been able to accomplish so much by the total commitment of national resources to this priority problem and through standardization of design and mass production of building components. There are approximately three hundred factories throughout the USSR, mass producing housing components, mostly of concrete. These concrete slabs and panels are usually transported to the site by truck and erected there. Most of their new buildings are nine to twelve stories high as these are considered to be the most economical to build. They are able to construct a nine story, 145-unit building in less than three months.

We visited several sites where acres and acres of new housing had been constructed in Moscow. It gives the impression of a series of dominoes standing in a row. The Russians refer to these areas as suburbs; however, you never see a single-family detached house. Their standards call for nine square meters (96 square feet) of living space per person (excluding halls, kitchen and bathroom); however they expect to increase this to twelve square meters (128 square feet).

The cost of buying a three room apartment (749 square feet of dwelling space) is \$4,400 and the cost to rent an apartment is about \$25 per month, with the renter occupant

paying for utilities separately. The salary of an architect is \$330 per month--the cost of a telephone is \$2.75 per month.

The government builds, owns, and administers housing in Moscow with the exception of co-ops, which make up about twelve per cent. Co-ops require a forty per cent cash down-payment with a government loan covering the rest. They are of much better quality than the government housing. The quality and craftsmanship is relatively poor in the government housing. Russian officials are aware of this but feel that, in time, quality will improve as technicians and the construction labor force become better trained.

In Moscow, there is a Construction Trust under the government that does all of the building in Moscow. It has a total of 800,000 employees of which 300,000 are engaged in construction of housing.

We had the opportunity to visit the permanent exhibition on the revised general plan for Moscow, a showing of various models and maps. We had an informal discussion with Mr. Koulikoff, of the Moscow Planning Office, who was apparently an architect and public relations man. He spoke fluent English and had toured the United States.

In Moscow, planning activities are administered by the master architect, with a council of architects representing the various institutions. The City itself is divided into eight planning districts and each district consists of approximately 400,000 people with an architect in charge. We were told that the total planning staff consists of 12,500 employees, 120 of

whom are professional planners. A large staff would be necessary because the planning activities go from plan preparation down to the supervision of construction. The revised plan for the development and redevelopment of Moscow is completed and is now before the Moscow Soviet, which consists of 1,500 deputies. After their approval, it must be approved by the National Government.

In the Plan, a belt-way circumscribes Moscow, is sixty-five miles in circumference, and serves as the City limits. This is nearly equal to the distance of the belt-way around Washington, D.C. However, the population within Washington's belt-way is 2.0 million whereas in Moscow it is 6.5 million. The Moscow Plan calls for a population of seven million people, or 500,000 more than at present.

The subway system in Moscow is without a doubt one of the best in the world. It is quiet, clean, fast, and efficient. High-speed reversible escalators at the stations transport you, in some cases over one hundred feet, from the train to the street level. The system is now eighty-five miles long and is planned to be eventually two hundred miles long. It costs about five and one-half cents to travel on the subway. It is the intent of the Russians in the future to make the subway free in order to discourage the use of the automobile. There are presently only 100,000 private autos in Moscow.

The Europeans are committed to solving their domestic problems and have living proof of their accomplishments. Many people say that we can look to the European nations for

solutions because they are older nations and have experienced the problem before that we have today.

In any event, we in the United States can solve our domestic problems. We have the resources (material and financial); and a technical capacity and quality that cannot be matched by any other nation, once we are committed. We experienced this in the space race, where once we were lagging. We then committed our resources and put a man on the moon.

With this same level of commitment, an awareness as individuals that the problem does exist, a plan of attack must be formulated and carried out. We can, as a world leader, demonstrate to the rest of the world how it can be done.

We have taken limited action in the area of new towns under the New Communities Act of 1968, which will guarantee loans up to 50 million dollars for a single new community development. So far, loans have been guaranteed for three new towns, in Illinois, Maryland, and Minnesota. Presently, there is before Congress the "Urban Growth and New Community Development Act of 1970" which promises to provide a greater impact for new community development. However, its fate is in doubt and much more has to be done.