## **[COMMENTATOR]**

## Prof. Nobuo Yoshida, Fukuoka University

The presentations today on present situations, issues and future plans for eight cities have been extremely valuable. It is impossible to comment adequately on the various problems and solutions of these eight cities in a mere five minutes, and so I would like to ask you to examine the material I have prepared, which will also serve as reference during the opinion exchange scheduled for later. I believe you all have copies of the pamphlet entitled "Urban Transportation Problems and Policy in Asian-Pacific Cities." In the rear of the pamphlet you will find many photographs with English text, which summarize an overview of metropolitan transportation, based on data from the cities of Fukuoka, Guangzhou, Kagoshima, Kuala Lumpur and Pusan, for which presentations were given. Unfortunately we do not have data for Oita and Naha in Jane's Urban Transport Systems, and have been omitted here. In the appendices you will find an across-the-board picture of the issues presented in the speeches today. Toward the rear are a range of diagrams and tables, which I hope to explain while identifying the particular problems faced by each city, and in discussion of common issues. Overall, citification is progressing at a never-before encountered speed, a speed which has not been experienced in Japanese cities, but is being experienced especially in Bangkok, Guangzhou, Pusan and Kuala Lumpur. In these nations the proportion of the population engaged in agriculture is estimated to be high and the proportion of city population low, which I believe is leading to an excessive centralization mentioned in the speeches. The cause is the fact that the development of the city is not matched by the development of transportation facilities which support city activity. I surmise that in the future not only traffic planning, but also city planning and land use planning will become major issues in the future. When one examines the contents of the presentations, a flood of development projects for the urban and suburban regions is evident. At the same time, public infrastructure such as roadways, subways and expressways are requiring enormous investments of time and capital. I believe these two points define the basic approach to the entire field. In this sense, I believe that the issues and problems cited in the presentations can be classified into 6 groups as shown in the table labeled "Urban Transportation Problems" in the material. First is the chaos in city traffic systems, and the second is the accompanying decline in utilization of public transport services such as subway and bus. Third is the problem of people who cannot drive, for example children and the elderly. Fourth is the increase in the number of cars coupled with inability to upgrade road networks to match, leading to an increase in traffic accidents. In addition, there are also the problems of degradation of the global environment and pollution, as cited in the presentations. It was also mentioned that an extension of these problems into the 21st century indicates that a global energy crisis may be approaching due to the consumption of petroleum by automobiles. The reality of these problems is presented in Figure 1. The horizontal axis indicates kilometers of road per 1000 population, and the vertical axis the number of cars per 1000 population. The plotted data was received from the Secretariat. The black squares indicate cities with rail-based public transportation, such as subways or streetcars. The white squares indicates cities without such transportation facilities. It can be seen that Guangzhou and Pusan are very close to the origin, indicating that the rail-based transport systems here must be upgraded. Compared with Bangkok and Kuala Lumpur, for example, it appears that the number of cars will continue to increase in Guangzhou and Pusan. When the situation of Japanese cities is examined, they are located to the upper right, showing that the roadway infrastructure is quite developed, but that the number of cars is increasing at a similar rate. As the presentation on Bangkok revealed, the rate of growth in the number of cars is far higher than the rate of roadway development there. I have visited that city many times myself, and the congestion from Donman Airport to the downtown area is horrendous. I would expect that average speed of cars in Bangkok to be about 8km/h. A Japanese quiz show once asked what city has the most parking spaces, and after brief thought the answer given is generally Bangkok. The reason is that the jammed roadways, unable to move, can be considered as parking lots. Table 2 shows the number of cars and the average speed of travel, for weekdays and weekends, for eight cities in Kyushu including Fukuoka, Kagoshima and Oita. The range is generally between 20 and 27km/h. The nation, prefecture and city governments are currently working to improve this to 30km/h by about the year 2010.

We have also included reference figures for the congestion and improvement rates for your convenience. Now turn to Table 3. In Japan, as well as in Manila, person-trip surveys are held to follow the movements of individuals. Before planning can be formulated to extend from a base of the current situation, accurate data and information on the current state is essential. Northern Kyushu is indicated to the left, showing data for a person-trip survey implemented in Fukuoka and Kitakyushu cities in 1972. A second person-trip survey was conducted about a decade later in the same region. These basic person-trip surveys have also been performed for the cities of Kagoshima and Oita, which gave presentations today. Table 4 presents examples of smooth roadway transport from the road viewpoint. One approach is to increase the capacity of the roadway itself, which has generally been the method used in the past. Under that is transportation demand management, which is based on the realization that traffic problems cannot be resolved merely by traffic planning, and will require regulation of the currently unrestricted environment in points such as land and car use. The examples presented

are drawn from both Japanese and other cities. Similar examples were given in today's presentations, and it is clear that some cities are committed to implementing transportation demand management.

As far as forming organizations to relax traffic congestion as far as possible, as mentioned in the presentation from Naha, a council formed under the auspices of the Ministry of Construction for the alleviation of regional traffic congestion problems on the individual prefecture level is helping implement resolutions through cooperative effort by national, prefecture and city governments. For buses and other public transportation, another council under the Ministry of Construction has been organized to examine public transport issues on the individual prefecture level. Table 5 indicates measures to restrict the number of cars in use. Using examples from Singapore, Table 6 shows a unique restriction which requires a person wishing to purchase a car to obtain qualification (quarter premium). Without this certificate it is impossible to purchase a car, but the certificates themselves are actually sold through a sort of auction as shown in Table 5. Across the top are the types of cars "small, medium and large" and below that are the final prices for February 1992 for each. A small car, for example, is about 9000 Singapore dollars, which would be equivalent to about JY630,000 at the current exchange rate of JY70. Unless the person wins the qualification in competitive bidding, he cannot purchase the car. When I was in Singapore last year I asked for the recent prices, and found out that a big car or a luxury car now costs 60,000 Singapre dollars for this qualification. Unless the person pays about JY4,200,000 in advance, he cannot purchase a car in Singapore. After that tax is paid, the qualification received, and then the registration fee paid. The total works out to about JY70,000. For a company car this is about 5,000 Singapore dollars, or about JY350,000. And on top of this is the additional registration fee, which is 150% of the customs duty on the car. I have run out of time, and would like to save the remainder for later discussion.

## Chairman Akasaki

Thank you, Professor Yoshida. We have heard from eight cities on the theme of City and Transportation, with a range of valuable information on current situations and problems in different cities. The commentator, Professor Yoshida, has also presented us with meaningful opinions. I would like to organize the contents of the presentations on the eight cities in my own way, if I may.

First, from my home city of Kagoshima we heard a detailed presentation on the formation of a functional network designed to immediately meet the needs of transportation demand. The presentation from Bangkok presented the extremely congested present situation, and discussed corrective measures in the form of heightened bus transport efficiency and an expanded range of transportation methods.

Fukuoka mentioned that future policy will include efforts to revitalize the railway system, and decentralize traffic concentration in the downtown area.

Guangzhou plans to modernize itself over the next 15 years into an international metropolis, and presented outlines of concrete transport systems planned for introduction or upgrading. An outline of the key features of the transportation situation in Kuala Lumpur was presented, with an introduction to the current situation and issues faced there.

In Naha, because there is no rail transport network, all transportation depends on road transport, and their presentation described the current situation and problems encountered there. The presentation from Oita covered current problems, situations and policies related to the city structure, and touched upon sea transport.

The city of Pusan explained basic transportation policy, and the content and problems of various construction projects under way to upgrade transportation functions. The speaker also introduced the very important concept of the "Asian-Pacific City Summit Working-Level Conference on Transportation Issues."

I have summarized the presentations from the eight cities, but would like to point out that these summaries show that most of the cities face problems of traffic centralization, resulting in increasing congestion and a major impact on city functions. Key contributing factors seem to be the radial city structure; the fact that most city functions are concentrated in the core; and the sudden growth in the number of privately-owned cars. In response, corrective measures include the construction of beltways and rail-based transportation systems, and stronger traffic regulation.

As a mark of the interest in this Summit and an indicator of its significance, I am delighted to note the forward-looking approach and comments of the participants, including a willingness to learn from each other and the experiences of other nations and regions in the world; to improve the present situation; to deepen mutual interrelationships through exchange to contribute to the creation of a better society and global peace; and to assist the development of the Asian-Pacific region.

A period of free exchange of opinion is scheduled now, and I hope that we all can enhance our mutual understanding and work cooperatively toward a resolution of transportation problems. In addition, we must cover issues such as the continuation of this Summit, and the suggestion made by the delegate from Pusan. I trust that Professor Yoshida will continue to provide us with his comments as well.

I would now like to open the floor for discussion among the delegates. If you wish to speak please raise you hand to be recognized, and please identify yourself and the city you represent before you begin. Please express yourselves freely.

As our host today, is there anything that the city of Fukuoka would like to bring up?

## OPEN DISCUSSION

## Mr. Takayoshi Hagio, Executive Director of Urban Planning & Development Bureau of Fukuoka

My name is Hagio, I'm Executive Director of Urban Planning and Development Bureau, Fukuoka City. I would like to discuss measures for alleviating traffic congestion, and traffic problems in the city center.

The presentation from Pusan covered strengthened transportation management policy, such as the license number program for private cars and car pooling. Other cities as well discussed transportation management and non-hardware policy implementation. These non-hardware measures will require the cooperation of the city residents, and here in Fukuoka we formulate policy with consideration of input from the residents. I would like to know how this type of resident participation in public transportation regulation is implemented in other cities.

At the same time, I would like to provide additional explanation to the presentation by presenting a part of the congestion alleviation measurements being put into effect here in Fukuoka. First, to stimulate the switch from private cars to public transportation, we have implemented bus-only lanes, a bus location system, and a new city bus system. Bus-only lanes you are probably already familiar with in your own city. The bus location system makes it possible to monitor the status of the buses on that particular bus route at each bus stop. The new city bus system combines the bus location system with a new system which issues bus priority signals to make bus spacing more uniform. In addition, we also have reversible lanes to promote effective roadway utilization. The handling of freight is another problem, and especially in the downtown Tenjin region we have started the cooperative distribution system. The involved distribution firms jointly form a company to assure effective freight transport in the shared service region. There are other policies being implemented as well, such as parking, for example, but in all cases committees including the automobile industry and representative of local residents have been formed, for discussion and debate centered on city-originated proposals. The final step is the report on the proposal to the City Council, and then implementation in a form which fully reflects input from residents. I apologize for the length of my question, but I would like to hear how the requests and opinions of the residents are reflected into public transportation regulation.

## Chairman Akasaki

Thank you.

## Mr. Keiichi Kuwahara, Mayor of Fukuoka

I would like to add a comment, if I may. A wide range of hardware is the responsibility of the city, but transportation management requires a wider approach, including the city government, residents and police, and is therefore quite difficult. From what I hear things are proceeding very smoothly in Singapore, and programs such as riding only even-numbered cars on even-numbered days and such are effective. I would think that in Pusan and Seoul, for example, the police are also local organizations, such as the Fukuoka City Police in the case of Fukuoka. As the city government we want to work closely with the police, but we are not yet interacting smoothly toward common goals. The extended Fukuoka city region includes a total 22 cities, towns and villages, and though it may act like a single city it is actually composed of many separate governments. It might be very difficult for only Fukuoka to charge a car-pool fee on cars with only one rider, and force adjacent communities to do the same. We have been interested in the idea for some time, but it is impossible to implement.

#### Chairman Akasaki

Would you like to ask any city in particular?

## Mr. Keiichi Kuwahara, Mayor of Fukuoka

In particular, Pusan.

### Chairman Akasaki

In that case, Mr. Hong, would you be willing to comment?

## Mr. Hong Wan Shik, Director, Transportation Planning Section of Pusan

As the Mayor of Fukuoka City mentioned, we place importance not only on the hardware aspects but also on the soft in Pusan City. We are implementing a variety of projects which encourage the citizens to voluntarily cooperate with traffic regulations. For example, when a large-scale event is scheduled in Seoul or Pusan, we conduct traffic control by restricting private cars by registration number: odd numbers only or even numbers only. As a part of the GT Movement, we also distribute a Green Mark to the citizens to promote the careless day system or the car-pool movement where the citizens ride together as much as possible to reduce the number of cars in town. Furthermore, to develop citizens' consciousness, all the governmental staff, including the mayor, utilize public transportation systems to come to the office on the first Monday of every month. Private companies are also cooperating with this campaign. This means we are implementing a kind of image control. It might be better to support these activities with laws or regulations. We think, however, voluntary cooperation of the citizens is the most efficient

way to address the problems. We rather put importance on traffic demand management. Traffic problems are common among large cities, and we will continue trying to settle them while exchanging opinions with other cities. Moreover, as for this kind of problem, we cannot expect instant results from any project. Therefore we are planning to expand the movement with the participation of citizens in a long-term span of ten years in the future.

## Mr. Keiichi Kuwahara, Mayor of Fukuoka

Here as well the 14th of each month is designated as Energy-saving Day or Environment Day, and we ask commuters to use the subway, but we are having little success. In Pusan, as well as in Kyushu and especially northern Kyushu, Environment Day has been established to clean up all the coastlines at once, and Pusan City participates as well. I think it might be a very good idea to research the possibilities of No-Car Days in future study groups, which would meet perhaps several times a year, with a goal of establishing such a campaign day, as Mr. Hong suggests.

### Chairman Akasaki

Thank you. Perhaps the delegate from Bangkok has something to add?

## Prof. Krisda Arunvongse, Governor of Bangkok

Chairman, when we are talking about the software possibility and the hardware that government, central government and local government will have to institute in order to correct traffic problem, the condition in Bangkok is so serious that about six months ago, the former Prime Minister of Thailand has organized a traffic emergency measures comprising of representative of all the industries in Bangkok, leading businessmen from ten committees to suggest to the government that certain things should be done, and the leading citizens who are representative of those organization are willing to make the sacrifice in order to have a better traffic conditions.

But somehow, the implementation of those suggestion has been relatively slow. If we decided on it at a reason for that group organization is to keep the confidence of the government, that it doesn't matter, don't worry so much. The people will accept this kind of strong measure. They want to get out of this terrible traffic condition, so I hope that that kind of impulse, along with the Bangkok Municipality, that they handle, are trying to give the fact that we need a lot of budgetary allocation in order to solve the problem, because we don't have the same kind of share of tax in town, like other cities in the world. Whatever tax is connected private and corporate entities in Bangkok, we get back to the Municipality only 4%, comparing to maybe 40% in South America, and maybe 30% average in China, and in Japan, so we need a lot more

assistance in order to do the major hardware projects.

The software, like I said, the citizens, concerned citizens' decision to make important movement in Thailand has formed, and presented their suggestion. Newspaper has asked individual suggestion to citizen and all that. I think we are ready as to the software part of it, that the government has the basis to decide without much worry about the citizen objection, and for the hardware, I think if they overcome the fact that there is a great discrepancy between the quality of life in Bangkok and the people of country, that is the main obstacle to allocate a big amount of money to correct Bangkok difficulties, because out of 360 member parliament, there are only 35 member of parliament from Bangkok. So when a large amount of money need to be spent in infrastructure, in things like this, then the representative from the city has a little uneasiness that people in their own town still doesn't have pipe water, and why does the Bangkok people so worry comes from you being rich, buying so many cars of the boom. We had a big boom, but very poor distribution of income. That's why it result in what it is, and to calm down Professor Yoshida's worry about traveling from Blongburn to Bangkok, our Blongburn Expressway is about to be finished. Next time you visit Bangkok, it will take 20 minutes from Blongburn to town, but once you get into town, that is another problem.

## Mr. Li Ziliu, Mayor of Guangzhou

I was very interested in the proposal by Pusan for the "Asian-Pacific City Summit Working-Level Conference on Transportation Issues." As mentioned by representatives of other cities, comprehensive and scientific planning is required to cope with the present traffic situation. Since the situation may vary depending on each district, let's take Guangzhou as an example. After the return of Hong Kong to China in 1997, an enormous amount of vehicles will probably flow into Guangzhou City. Considering there are 30 million people in the high-income class living in the environs of Guangzhou province, privately-owned automobiles will also drastically increase in the near future. If the number of automobiles increases annually by 30 %, we will not be able to deal with the traffic problem in a positive manner without scientific plans for the future. This is just my personal opinion, but we certainly need studies, to exchange opinions and to learn from the experiences of other regions.

Next, the most important issue is how to raise the funds. Without enough funds, excellent plans with a perfect blueprint can never be carried out. The situation here might vary depending on the countries and regions. In the case of Guangzhou, the city belongs to the country and is under obligation to pay more than 60% of all of its tax and other income to the national government. We are planning to spend 25 billion dollars solely on traffic problems in the coming fifteen years. The majority of the budget

needs to be provided within the finances of Guangzhou. We will have to raise funds for city construction using income from the municipal government, income from real estate and funds from the private sector.

The total amount of money spent last year on traffic problems increased ten or twenty times over what it was before, and was all raised using the above-mentioned methods. It is impossible for the national government to manage everything on its funds.

According to the Mayor of Fukuoka, the subway of the city was funded one-third by the national government. In case of Guangzhou, the municipal government must finance 100% of the construction of the subway, which is too expensive for the city. The financial problem is the most important issue to be resolved.

The third problem is traffic control. This can be classified into three groups, which are residents, police and the floating population from outside the city. The people flowing into the city from outside can not be regarded as a fixed population and represent various problems. Traffic regulations, traffic management and traffic control are issues that residents are supposed to be involved with. Last year, we constructed a road stretching 10 kilometers. This road is equipped with seven multilevel crossings and twenty-one pedestrian bridges instead of traffic lights. With no traffic lights, the speed of cars has been improved from 12 to 14km/h, which allows cars to run more smoothly. These are merely examples, but after listening to the presentation of other cities, I was struck by the need for the "Asian-Pacific City Summit Working-Level Conference on Transportation Issues" proposed by Pusan City. I think we should really hold this meeting. Thank you.

### Chairman Akasaki

Thank you. Are there any other opinions concerning transportation management?

## Mr. Keiichi Kuwahara, Mayor of Fukuoka

The mayor of Guangzhou mentioned that they plan to eliminate traffic signals to increase speed, while making most intersections elevated crossings. There are also many signals here in Fukuoka. It often seems that you spend longer waiting for a signal to change than actually driving. There seem to be few signals in China as a whole, even in Beijing. I wonder what the accident rate in China is?

#### Chairman Akasaki

Would the delegate from Guangzhou care to comment?

## Mr. Li Ziliu, Mayor of Guangzhou

Certain conditions and the cooperation of residents are required to remove traffic lights.

For example, there are multilevel crossings and pedestrian bridges. When crossing in the north-south direction, pedestrians must climb up and down the pedestrian bridges since they can not cross the road. Only cars can run on the road underneath the bridges. This is the first point.

The second point is regarding bicycles running east-west. Because an enormous number of people use bicycles, we set a rule to use a part of the road exclusively for bicycles only before 8 a.m. and after 5 p.m. to avoid the danger of accident. Fortunately, no terrible accident has occurred yet. However, a crash between cars might lead to a chain collision, because the speed has been increased after removal of the traffic lights. If there is an accident, it will certainly cause terrible traffic congestion.

We admit that everything has its own pros and cons, but the traffic functions of Guangzhou will be completely paralyzed unless we take these measures. After consideration, we came to the conclusion that there were more advantages as a whole. I believe that using this method will greatly help the traffic of the entire city to move smoothly, but only if we pay strict attention to traffic control and enforce the regulations.

### Chairman Akasaki

Thank you. I would like to pose a question to the delegate from Kuala Lumpur. You mentioned that transportation management strategy is being applied to optimize traffic signal timing at major intersections. Could you be a little more specific?

### Mr. Tham Kok Seng, Executive Engineer of Kuala Lumpur

Chairman, the old system, before SCATS system, which is fixed time. Fixed time means to say that the time has been fixed. Before the traffic tie-up, so we found out from this fixed time is not optimizing, so after, when we made a study, we feel that this SCATS, that is the "Sydney Adaptive Techniques," which is very good because you can use dynamic inform, means to say that you can response to the traffic on the routes. If the traffic on the route is very much, then the green time will be increased in length. For example, in the green time is 30 second, if the volume during the rush hour is increased, you can increase to 40 seconds. This is the advantage of the SCATS System that we are adopting.

Mr. Hong Wan Shik, Director, Transportation Planning Section of Pusan Could you tell me how much it cost to prepare this kind of system?

## Mr. Tham Kok Seng, Executive Engineer of Kuala Lumpur

We have introduced this system last year, so we did in the city center we introduced about 20 signals, that under this SCATS System. The cost for this system is very

expensive. Maybe it costs about 2 million Malaysian Dollars.

## Prof. Krisda Arunvongse, Governor of Bangkok

We has a bidding on this computerized control, real time traffic control in Bangkok about a year or so ago, and a British system, it is the same thing that you have, won for 143 intersection, but Bangkok, it cost us 250 million Bahts, about ten billion US Dollars. We have bidding or not bidding we are expanding it to 400 intersection because in the original bidding we had a contract that they would have to stand for the same price in the next bidding if we decide between one and a half years.

## Chairman Akasaki

I would like to ask once again for input from all of you. The delegate from Pusan proposed the "Asian-Pacific City Summit Working-Level Conference on Transportation Issues." This proposal aims to further deepen the shared understanding of transportation problems we have gained through the Summit, and at the same time study the problems at the deeper level. The delegate from Guangzhou already mentioned his support of this idea, and I would like to ask how the rest of you feel about it.

## Mr. Keiichi Kuwahara, Mayor of Fukuoka

In principle I agree. I understand that similar proposals have been made for all of the sessions, not only for transportation. I would like to suggest that other issues, such as the environmental problems, also be covered and reports presented at the next Summit to serve as a base for future discussion.

### Chairman Akasaki

What about the delegate from Oita?

## Mr. Keinosuke Kinoshita, Mayor of Oita

I think it is a good idea.

#### Chairman Akasaki

Following the initial proposal by the delegate from Pusan and approval and comments by the delegates from Guangzhou, Fukuoka and Oita, I would like to formally list the proposal in the report on this session. Is that acceptable to you all? Thank you. Another point that I would like to ask for your opinions on is whether this Summit is an independent meeting, or will be continued in future meetings. This question may be raised in the general meeting as well. Do you have any comments, Mr. Kuwahara?

## Mr. Keiichi Kuwahara, Mayor of Fukuoka

I feel that this Summit has been both significant and effective, and would greatly like to see it continued in the future. If possible. I think it should be rotated each time, so that each of us serves as host. I would like to hear your opinions on this idea.

#### Chairman Akasaki

Another questions is how often... every year? every other year? every three years? I think every year would be very difficult.

## Mr. Keiichi Kuwahara, Mayor of Fukuoka

Now that we have tried hosting the Summit, I can tell you that it is quite a chore. There is also considerable advance work in selecting themes and assuring that presentations will be as effective as possible. My personal feeling is that about once every two years would be good.

## Mr.Li Ziliu, Mayor of Guangzhou

I quite agree with the opinion of Mayor Kuwahara. The summit was held through the efforts of Mayor Kuwahara and many people of Fukuoka City, and it has had fruitful results. I hope the significance of this summit will be widely noticed.

Now, I would like to make a proposal about the future Asian-Pacific City Summit. Since this is a very big event which require a lot of work, I suggest that each city host the future summits in turn, every other year. If all of you agree, Guangzhou will be very happy to play host for the next summit. With your approval, we will make every effort to achieve great results.

With the excellent example set by Mayor Kuwahara, I firmly believe we will be able to achieve great success if we work together.

### Chairman Akasaki

Two of the participating mayors have commented on the success of this first effort, made possible through the preparation and work of the city of Fukuoka, and expressed interest in seeing the Summit continued in the future. It has been proposed that the Summit be held once every two years, and that the host city rotate each time.

The delegate from Guangzhou was offered to host the second Summit, with your approval. Is this acceptable to all of you?

(Applause)

In that case the proposal is accepted, and we look forward to the support of the city of Guangzhou. It appears that we have some time left. Are there any other items for

## Mr. Hong Wan Shik, Director, Transportation Planning Section of Pusan

With the suggestion from the Mayor, we have decided to hold a summit every two years, with participating cities taking turns. The meeting with the staff engaged in practical business, which we suggested before, could be a help to continue the summits in the future. Any theme is acceptable, whether it be transportation or environmental issues. If a summit is held once every two years, it would be best to hold a practical level meeting in the year between summits. During this time we will exchange opinions on policies and projects, and report the results in the next summit. What do you think of this idea?

## Chairman Akasaki

My personal feeling is that because this Summit was held for the first time in Fukuoka, we will have to ask the personnel here in Fukuoka to continue to look after affairs for some time to come. Mr. Kuwahara, are you willing to handle the Secretariat until the next Summit?

## Mr. Keiichi Kuwahara, Mayor of Fukuoka

If it is acceptable to you, I am willing for the city of Fukuoka to accept the role of communicator permanently.

(Applause)

#### Chairman Akasaki

Thank you. That would be a great assistance.

I would like to ask the Secretariat, located here in Fukuoka city, to handle the preliminary investigations of the proposal made by the delegate from Pusan.

I am very pleased with the spirited discussion and the participation by the delegates after the presentations in this mutual study period. I would now like to call an end to the open discussion period. I don't think Professor Yoshida had enough time before, so I'd like to request him to comment again now.

### **[COMMENTATOR]**

#### Prof. Nobuo Yoshida, Fukuoka University

Today has been a very educational opportunity for me. I have read through the reports submitted by each participating city, and based on the opinions and proposals presented today, would like to organize the points related to transportation and comment on what I believe will be necessary for resolution of many of the transportation problems shown

in Table 1. At the end of the material I distributed you will find Table 7. I would like to start with discussion on Table 7. You will see that there are eight circles in the table, but the first five are quite different in character from the last three, so I would like to ask you to draw a separating line between the two groups.

I would like to begin with the hierarchical structure of the roadways and railways, as discussed in today's presentations and reports. All of you used the term "network" frequently, and I feel this will make a good starting point.

To describe the structure briefly and formally, the roadway network consists of the expressways, national roads, prefecture roads, municipal roads, bicycle paths and walking paths, each type with its own role. The division of these diverse roadways vertically by their roles is the most basic networking approach. When these roadways are combined horizontally with the railway network as transportation, this is one of the most basic categories.

Second is the point that, as most of us already are putting into practice, roadways are not upgraded immediately. According to the reports by the participating cities there are still too few radial arteries, and work has generally started on beltways, and the roadway structure is still not caught up with the growth in the number of cars, in spite of bypasses or the seven three-dimensional intersections described by the delegate from Guangzhou. For example, Los Angeles is taken as representative of the American automobile culture, and roadways are highly developed, but even there a subway is operating. Even in Detroit, where the most famous automobile plants are located, there is discussion that the railways must be brought into the middle of the city. It is clear that our plans must take into account a combination of roadways and railways to answer future needs.

Third, and again already being put into practice, is cooperation between various transportation organizations. A diverse selection of transportation exists, such as subway, rail, bus, ferry, taxi, motorcycle, and even bicycle, but inter-modal transportation remain extremely difficult—there are still problems in changing vehicles smoothly. This is not only due to the hardware involved, but also to the fact that the fare structures are different between, for example, railway and bus, or bus and ferry. In each case the high initial fares are charged, increasing the financial load on the user.

Fourth, as is clear to all of us, is the need for transportation systems that can be used easily and inexpensively by people without cars, such as children and the elderly. These systems include subways, new transport systems, LRT, comfortable buses and such.

Fifth is a new approach to transportation management, as is already being put into effect. This includes the so-called "green wave", where traffic lights are controlled dynamically to provide optimum traffic motion. Another approach is to notify cars

of traffic congestion ahead of them, such as the parking status signs used here in Tenjin. By notifying drivers of which parking lots are empty, it reduces the number of cars wandering in search of empty spaces. These five items are already being implemented, and have been described in the presentations at this Summit.

Sixth is the transportation demand management system which is attracting so much attention today. The economy continues to expand rapidly, and the structures of the society and economy are growing more complex. As a result, the first five measures are no longer able to resolve congestion and other traffic programs. The concept of controlling the amount of transportation requires, although the word control may be too strong, will require changing the awareness of the city residents and restructuring transportation demand to prevent excessive demand. In other words, as described by the cities of Bangkok and Kuala Lumpur, transportation planning must be reworked together with changes in land use and city planning. Pusan and Guangzhou mentioned the use of restrictions on the number of cars that can be held, or taxes, to make it more difficult to use cars. Cities like Bangkok and Pusan restrict cars entering the city, or implement other policies like Singapore to reduce the negative aspects of traffic demand as far as possible.

Seventh is the fact that subways and municipal expressways require staggering capital investment. A common worry of all the participating cities is where the capital for these projects will come from. There seem to be two methods. The first, as proposed by Guangzhou, it to apply development profits in what they call the "third market." This return of development profits, in the form of subways and expressways, will increase land prices in the region, and thereby increase the assessed worth of the resources, and the questions of evaluation and investment recovery are extremely difficult. This is probably why I know of no such trial in Japan, and in fact why I believe that the method is not applicable to Japan.

The second method of capital procurement was also mentioned by Guangzhou, which is the theory of the first and second markets, or the BOT method as it is called here. This stands for build, operation and transfer, and one outstanding representative example is the Harbor Crossing undersea tunnel connecting Hong Kong and the Kowloon Peninsula in Hong Kong, which I believe was the first example of this type of project. Trading firms, banks and construction companies formed a syndicate and procured the required capital. After construction (build) the syndicate group collected usage fees (operate), and when the investment was recovered returned the facility to the local community (transfer). This approach will also be used for the tunnel under the Dover Straits between France and Britain, which opened September last year.

And now I would like to turn to the valuable proposal made by the delegate from Pusan, which has already been mentioned numerous times, of the Asian-Pacific City

Summit Working-Level Conference on Transportation Issues. I understand this proposal to indicate that we should exchange information and gain wisdom with each other to resolve the problems our cities face. I believe the idea of resolving our problems together, instead of individually, has great merit. To add my personal suggestions to this proposal, I feel that proper support for a meeting at the working level will require a permanent organization. I would like to propose that this organization be called the Asia-Pacific City Traffic Research Organization.

One thing that I felt through all of these presentations and reports is that there is no ultimate answer to the transportation problems cities face. The key to a successful program will include a master plan for the city transportation system, implemented over time through a master program, with the cooperation of the residents, as pointed out by the delegate from Pusan, and in the long run this will require the training of personnel able to carry it out.

Thank you for your time.

## [CHAIRMAN'S COMMENTS]

## Chairman Akasaki

Thank you, Professor Yoshida. Your comments have been extremely interesting, and I am sure they will be highly significant in future city transportation policy. Professor Yoshida has presented eight points concerning transportation policy, closing with a proposal for the establishment of an Asia-Pacific City Traffic Research Organization. You have agreed to the initial proposal by the delegate from Pusan, and now I would like to ask how you feel about this new proposal to create a permanent support organization. (Applause)

Since you all express support, I will begin preparations for the organization.

At the Consolidatory Session this afternoon I will present a report on the content of this Subsession 1. I will mention three major development that occurred in the course of the session. First is the active and highly significant exchange of opinions that occurred, working toward a resolution of transportation problems. Second, the recognition that resolution of city problems, including transportation problems, will require deeper mutual cooperation and understanding between cities. For this reason, it was decided to make the City Summit a continuing event in the future. And third, the proposal of the Asian-Pacific City Summit Working-Level Conference on Transportation Issues by the delegate from Pusan, and the unanimous agreement by the delegates present here today with that proposal. It was suggested that we urge other participating cities to participate in this function as well. These will be the three major points of my report.

I would like to ask for your approval, and your willingness to leave the details of

the form of presentation to me. Would you express your approval by applause, please? (Applause)

Thank you. I accept your support gratefully.

This concludes Subsession 1.

In closing, I would like to thank all of the participants for their cooperation and active contributions. Thank you.

(Applause)

# Subsession 2 City and Housing

## Chairperson (Mr. Eiichi Eto, Director, Guidance Dept., Fukuoka City)

We now will commence Subsession 2. The 7 participating cities in this subsession will be, Nagasaki, Auckland, Fukuoka, Ho Chi Minh, Kitakyushu, Shanghai and Singapore. We would like to have Mayor Motoshima from Nagasaki act as chairman and Professor Terukazu Takeshita from Kyushu University Faculty of Engineering to act as commentator. Your understanding in our nomination would be greatly appreciated. Mayor Motoshima, we wish you would chair this subsession, please.

#### Chairman Motoshima

My name is Hitoshi Motoshima. I will be acting as chairman of this session.

I hope this discussion can help to create a good balance between city development and the residential environment. Thank you for your cooperation.

To ensure smooth proceedings, presentations will be given in alphabetical order following our city. Mr. Matsumoto will give a presentation for Nagasaki City.

## **PRESENTATIONS**

Mr. Hiroaki Matsumoto

## Mr. Hiroaki Matsumoto, Director, City Development Department

When hearing the name Nagasaki, most people think of it as "a city with many slopes" or "a hillside city" and imagine a romantic atmosphere, which stimulates their longing for travel. This feature, however, is a large problem for those of us in charge of the administration of the city. Today I will talk about 'Living on the Hillside'.

Shown in this slide, Nagasaki is surrounded by mountains 300~400 meters high, with a bay located in the center. Flat lands are located only around the bay and at the opening of rivers to the sea. The downtown is diversified from this flat zone to hillside areas and valleys. Currently hillside areas constitute approximately 70% of the total space of the downtown, forming an unusual city structure. Moreover, most of the hillside areas are residential areas.

It is in the period of high economic growth from 1955 to 1975 that houses started to be constructed on the hillside.

This slide shows the changes of the downtown areas. The upper left is 1953, the upper right is 1963, the bottom left is 1973, and the bottom right is 1980. It shows very

well how the downtown, or the residential areas, have expanded from around the bay to the hillside.

In this slide, you can see the structure of the downtown. Mountainous areas were originally cultivated fields. Houses had been constructed along a path in the fields from the bottom to the top, without any systematic plan and order. Consequently people cannot access most of the houses by car. I think this is a very unusual situation, unique to Nagasaki. The town structure causes many serious problems. First of all, the disaster prevention ratio is low because emergency vehicles cannot smoothly access many sites. The many steps cause much inconvenience in daily life for physically handicapped persons. As for other services, trash collection is dependent on manpower.

This scene, where horses are carrying construction materials, is common in Nagasaki. It is said that construction costs in hillside areas is  $20\sim50\%$  higher than on flat lands, because of the additional transportation fees.

One of the most serious problems is the decrease in population of the younger generation in hillside areas. This is caused by an incompatibility with the automobile society. Although the national census in 1990 shows the aged-people ratio of Nagasaki is 12.7%, it is over 20% in some hillside areas. In addition the population has continued to decrease steadily.

If the aged-people ratio continues to increase at this pace, new investment activities cannot be expected. It is easy to assume that only deteriorating vacant residences will remain in these areas as the result. Actually, in one area, there is one vacant unit for every six housing units.

To get advice to settle this problem, Nagasaki City sponsored the International Conference on Hillside Cities in November 1989, co-sponsored by the UN Regional Development Center. 300 people from 15 nations around the world participated in this conference to discuss plans to create a comfortable residential environment which matches the conditions of each city. This conference was a good opportunity, and Nagasaki has started to execute concrete projects for improving the city structure.

Major problems of the hillside towns in Nagasaki are; there are only narrow paths and steps which cars cannot navigate, and deteriorated wooden houses are crowded. In other words, the priority must be to improve roads and houses. However, considering the geographical restrictions and the daily life of the people who currently live in these areas, large-scaled land reclamation is very difficult to execute. Consequently, the best way may be to gradually improve the residential environment through arranging daily-use roads and parks as well as effectively inducing construction plans by private companies.

The upper figure shows the current conditions, and the lower one is a future plan. In the plan, effective land utilization will be promoted especially in crowded areas,

through transforming current deteriorated residences into three- or four-storied units. The extra land reclaimed from the rearrangement will be converted into daily-use roads, parking spaces and parks. We hope the environment will be considerably improved by this plan.

To improve a city structure, the citizens' cooperation is indispensable. The success of improvement projects depends on the enthusiasm of the citizens for the projects. At present, the improvement project mentioned before is promoted in some districts. At the start of the project, we set cooperation and participation of the citizens as one of the base conditions.

Take the Juzenji district for instance. We set up the City Building Information Center, as shown in this slide, to explain about the project, collect local information, and to exchange opinions with the citizens. Fortunately, the residents are very positive to this project, and they set up an organization to promote it effectively.

Administrative organizations recognize the importance of citizens' participation in improvement projects. Actually, however, citizens have not had chances to participate in such projects. Public organizations used to make a plan to keep the minimum conditions, and only agreement with the plan was left for citizens.

In the future, residents will participate in the projects from the planning process, while suggesting concrete ideas based on their daily lives. We believe it will make the project a great success. Although it is still in a trial stage, Nagasaki City would like to establish a system where the government and local citizens work together, in the improvement projects for hillside areas. Thank you for your attention. (Applause)

### Chairman Motoshima

Thank you very much, Mr. Matsumoto.

#### 

Mr. Les Mills

#### Chairman Motoshima

Now we would like to hear from Mr. Les Mills, the Mayor of Auckland City.

## Mr. Les Mills, Mayor of Auckland

Honorable Mayor of Nagasaki, distinguished city representatives, ladies and gentlemen, Ohayo Gozaimasu, good morning to you all. As a word of introduction, I'd like to say that New Zealand and Auckland enjoys a very strange and distant geographic location. We have a small population, the city itself having a million. We have a climate that is very suitable to farming, and for over 100 years, we've been a knit exporter of farming product around the world.

This has lead to quite an affluent society. And it impacts on the expectation of our citizens on their housing. Most New Zealanders not only expect to own a house, but

believe it is a priority for central government, banks, local authorities and other contributing organizations to ensure that their wish is fulfilled. While in reality, that goal is achieved by the time honored means of securing bank loan finance, the from-the-cradle psyche that property means security is translated into over 70% of New Zealanders either owning or buying a home.

In comparison with other countries, this is an enviable statistic. However, underlying this achievement is a history of sufficient housing development land to satisfy the still relatively small population and, in international terms, a very competitive price for land and housing.

Although there's been some recent escalation in values, most Aucklanders have realized their home-owning goals by paying US Dollars 70,000 to 80,000 for the property, with the land value accounting for about a third of the cost.

The home is typically a detached dwelling of 100 to 200m<sup>2</sup> on a 500 to 800m<sup>2</sup> site. It will be single or two story and surrounded by generous areas of private open space. Summed up, the majority of homes may not be mansions, but they are comfortable and usually contain all of the amenities required for a comfortable lifestyle.

There are three major participants in the housing area. Central government, the private sector and local councils. The role of central government has been to provide subsidized housing for those people who cannot afford to pay for their own accommodation. Traditionally, central government has done this by providing the housing (about 9% of the country's housing stock) at a low rental. Recently, central government's policy has changed. It now provides financial assistance to help people on low incomes to buy their own homes or provides rental subsidies.

The private sector has always been the major provider of housing. The significant majority of houses are individually designed buildings constructed by small building firms. There are however a few large group-housing firms which undertake housing development on a larger scale. The number of such projects is increasing.

Local council's prime influence on the housing market is through their planning controls. These controls are used in three ways. Firstly, to identify and program the location and rate at which rural land will be brought into residential urban development. Secondly, to relate the intensity of residential urban development to the ability of urban infrastructure, particularly roads and drainage, to service development. And thirdly, to establish a minimum safety, health and amenity standard which all buildings must comply with. Within these parameters, it is left to market forces to determine what development takes place and the different form and styles of housing.

Auckland's planning strategy is one which encourages a wide variety of different lifestyles and consequently different residential types. We are also planning to ensure that there is good infrastructure to service our land so that this does not become a constraint

to good residential development.

In the past, Auckland has taken more direct initiatives in the housing arena, particularly by urban renewal programs. However our experience has been that while the city provided an important initial catalyst to such development, Auckland's buoyant private sector economy carried through the urban renewal. Consequently my council believes that this should be mainly left to the private sector and not become a burden on the council's resources.

New Zealanders traditionally live in low density suburban housing areas. The average density of New Zealand housing is 15 to 20 houses per hectare, or 40 to 60 people per hectare. Almost all New Zealand houses use timber frame construction with timber, brick or fiber-cement cladding and galvanized sheet steel or concrete tiles as roofing. Recent rises in world timber prices are leading to the development of steel framed houses. Average house construction costs are between US \$ 400 to 500 per square meter. The majority of Auckland's one million population are accommodated in low rise detached urban housing. We are fortunate that we have retained a high quality in our residential suburbs, both in terms of the standards of the residential buildings themselves, and in the community facilities which are provided in our neighborhoods, and include parks, schools, shopping centers and community building.

Historically, Auckland has been able to grow and spread reasonably unchecked because of the abundance of available residential land. However, we are now approaching the stage where land is becoming more scarce or important for retention as farmland. Consequently, Auckland City Council planning strategy has been moving to policies of urban consolidation, encouraging medium density development, particularly along our major traffic corridors and close to major commercial and employment centers. We have been fortunate in inspiring a number of major developer to respond to this challenge. The manage to achieve a desirable concentration of housing density and people whilst still retaining the high amenity and environmental quality expected in Auckland.

Auckland is increasing diversifying. We are a modern metropolitan city approximately 150 years old. We have a broad range of cultures and a mix of people. Increasingly we see a diversification in the lifestyle aspirations of our people. This has reflected in our style or housing. Consequently, the council has encourages, through its planning strategy, a broad range of different housing styles, from the traditional detached dwelling to modern townhousing and apartments from small self-contained units to more expensive accommodation suitable for larger families.

We are now seeing a range of major housing estates, both those aimed at the working population and those focused on retirement accommodation. These housing areas provide a range of residential units, all supported by communal open space facilities and buildings. Typically, they may contain communal tennis courts, swimming pools or even recreation

centers. In addition, retirement villages contain communal dining rooms and specialist medical and private hospital facilities. In each case, it is the marked which has funded and developed such housing. The Council's role has been to provide the development opportunity to encourage this form of development.

Over the last few years, Auckland has seen a marked increase in the number of apartment buildings being constructed in the central business district. These apartments have been created both by the conversion of empty office buildings and by the construction of new purpose-build residential buildings.

These inner city apartments have all been private sector initiatives with strong encouragement from the council by way of property rating concessions. They have been built with a mix of owner-occupiers, investment unity, including a number of Asian investments, and student accommodation. The Auckland University is located within the central business district. This injection of people into the downtown area has been an important contribution to the revitalization of Auckland's Downtown to keep it as a busy place of interest, entertainment and excitement after hours.

There is growing interest in the development of serviced apartments within the central business district.

Auckland was settled in the mid-1850's onwards. There are a number of distinct heritage areas within the city, which still retain the traditional building stock. These areas are much sought after in the market and a premium price is paid for restored colonial villas. The council has introduced special planning control and incentives to retain and enhance the special character of these areas.

70% of New Zealanders own or are buying their own homes. Over two-thirds of rented houses are owned by the private sector, while the remaining one-third of homes are owned by the public sector for rental.

From the late 1930s, the central government of New Zealand has accepted responsibility to assist those who cannot afford housing. Recently, the government has changed its policy, and no longer sees itself as a direct provider of housing. The government's new policy is to provide house funds by way of subsidy.

Local government owns about 15,000 rental houses, or about 1% of New Zealand's housing stock. Auckland City Council has a minor role in providing subsidized housing. It owns about 2,800 rental units.

The people of New Zealand are proud of their homes. They invest heavily in home ownership. About one-third of all borrowing in New Zealand is for housing funds. Local government has a duty to ensure that such a major investment is secure. It does this by implementing planning strategies to ensure that suitable land is available, property developed and amply supplied with water, sewage and roading. That the housing is a good standard and all the community services are provided for its citizens' well

being.

Thank you very much. (Applause)

### Chairman Motoshima

Thank you very much, Mr. Mills. A housing unit of US \$ 70,000~80,000 is 7 to 8 million yen in Japan, at the conversion rate of JY100 for \$1. The fact that one third of it is for the land itself is very interesting for us.

Mr. Hiroshi Suefuji

### Chairman Motoshima

Now we would like to request Mr. Hiroshi Suefuji, the Deputy Mayor, to give a presentation of Fukuoka City.

## Mr. Hiroshi Suefuji, Deputy Mayor

Thank you, Mr. Chairman. My name is Suefuji, the Deputy Mayor of Fukuoka City. Before starting my presentation, I'd like to make one request to the chairman. We have only 10 minutes for the presentation. I must read my paper very fast in order to read it until the end within 10 minutes. So I'd like you to give me extra two and a half minutes.

#### Chairman Motoshima

I would accept your request and ask the chairperson to pay attention to the time.

### Mr. Hiroshi Suefuji, Deputy Mayor

In Japan, local administration in the area of housing is characterized by policies implemented in close connection with the "subsidized project system" and other systems, under which the national government provides financial assistance. In my presentation, I would like to briefly introduce to you various systems based on national housing policies, and what has been achieved through such systems up to the present.

Japan's national housing policies began with the emergency housing supply in 1945, immediately after World War II, which brought massive destruction of housing. Once the housing in emergency was supplied, systems which would become the main pillars of the present national housing policies were established one after another.

First, a Housing Loan Corporation system was established in 1950. Under this system, long-term, low-interest loansat an annual rate 1 - 2% lower than that of ordinary banks and a 25 - 35 year payment periodare offered for housing construction and purchase. This system, mainly for the middle class, has promoted house ownership among the public.

Secondly, a Public Housing system was established in 1951 to provide housing at low rent to people in relatively lower income brackets. Under this system, local governments, including Fukuoka City, directly provide rental housing in cooperation with the national

government.

In 1955, the national government founded the Housing and Urban Development Corporation, commencing the supply of both rental and owned housing to solve housing shortage in large cities. Through such systems, efforts have been made to ease housing shortage for urban dwellers who have moved to large cities as Japan's economy progressed. Other measures have also been taken to expand housing units and lots.

To cooperate in actively promoting housing construction, the national and local governments have drawn up a plan for housing construction for every five years, that is a Five -year Housing Construction Plan, since 1966. Under this Plan, goals are set in terms of the number of housing units to be built and housing quality to be achieved during each five-year period, along with measures to be implemented accordingly.

To give you some example, in the 1966 - 1975 period, Japan was recovering from war devastation, and signs of economic growth were beginning to appear. As housing shortage was acute during this period, various efforts were made to increase the quantity of houses with a target to provide "one house for every household" and "one room for every person."

In the 1976 - 1985 period, a focus shifted from quantitative expansion to qualitative enhancement, since the housing shortage had nearly been overcome. An attention was given to the number of rooms per household and the size of each room. Housing standards and residential environment standards were formulated, describing ideal housing quantity. Based on these standards, necessary policies were implemented to improve housing quality. From 1986 until the present, efforts have been made to further improve housing quality in accordance with revised housing and residential environment standards. Meanwhile, housing needs. In line with economic affluence of the people, diversified housing needs must be adequately dealt with.

As well, various kinds of housing policies are necessary, taking advantage of regional characteristics. In addition, to respond to the aging of the Japanese society, which now makes a remarkably faster progress than those of other countries, the supply of barrier –free and aid-attached housing should be necessary. Therefore, efforts are being made to fulfill such needs.

Fukuoka City has been making efforts in cooperation with the national government to accomplish goals set in respective periods, while striving to meet the City's own challenges.

To illustrate the housing situation in Fukuoka City, in 1973, the total number of housing units in the City exceeded the total number of households, indicating that the City achieved the goal of "one housing unit per household." Since then, housing construction has been continuing in Fukuoka at a rate sufficient to maintain the number of housing units above the number of households. In this sense, the City has a favorable housing

situation, in terms of quantity.

One of the reasons Fukuoka has more housing units than households is that the number of housing units includes vacant old houses and houses that are unavoidably vacated to enable smooth relocation to other cities due to transfers and other reasons, and that such unoccupied houses have been increasing as a result of economic development. While Fukuoka has sufficient housing, quantity-wise, there is still much room for improvement in terms of quality.

In 1976, the national government established the Minimum Housing Standards, which stipulate housing standards that allow people to spend a healthy and cultural life. In the Standards, the minimum size of a housing unit for a four-member household is set at  $50m^2$ , consisting of three rooms, a kitchen-dining room, a bathroom and a toilet.

In Fukuoka City, we have implemented policies so that all housing units satisfy the Minimum Housing Standards; however, a considerable portion of rental housing does not satisfy the Standards. One of our current tasks is to improve these housing units. In a survey conducted regarding citizens' opinions of housing, 34.5% of residents in Fukuoka City said they were either "extremely dissatisfied" or "somewhat dissatisfied" with their current house or housing environment, in view of diversifying values and changing lifestyles.

Fukuoka's other challenges in the area of housing are related to questions as to how to implement housing policies in a society that is expected to age rapidly in the future, and how to secure residential areas in the central part of Fukuoka City, where the replacement of housing units by commercial and office buildings has diminished the number of urban dwellers, gradually depriving the city center of its vitality.

To address these challenges, Fukuoka City has determined to pursue our housing policies in accordance with the basic principle of "creating a healthy and spiritually enriching housing environment and realizing a comfortable space in Fukuoka City toward the 21st century." Accordingly, we have established the "6th Fukuoka City Five-year Housing Construction Plan," covering fiscal 1991 to 1995. To secure a sufficient quantity of housing and enhance housing quality, the Plan upholds the following objectives in the promotion of housing policies and measures: Formation of a quality housing stock and a favorable residential environment; and balanced distribution of permanent residents in the City, in response to the decreasing population in the central area, that is one of urban problems facing Fukuoka City; andhousing supply in response to an aging society.

Now I would like to talk about some of the housing policies adopted by Fukuoka City, starting with the construction of municipal housing estates.

At present, Fukuoka City directly manages about 30,000 low-rent housing units, mainly

for lower-income citizens. Such municipal housing accounts for about 6% of all housing units in the city.

Municipal housing includes low-rent housing for people with an annual income from 0 to 4.9 million yen, that is those in the lowest of three income brackets; and quality rental housing, developed together with roads, parks and other public facilities, in deteriorated areas previously crowded with antiquated houses.

Both types of public housing are built in collaboration between local and national governments. We plan to supply a total of 3,000 units from 1991 to 1995, in accordance with the Five-year Plan.

Concerning land, which is closely related to housing supply, Fukuoka City saw a 64 % hike in land prices in the five years from 1986 to 1991, due to an increase in speculative land transactions triggered by the national government's low-interest policy since 1986. In response, the national government and Fukuoka City have restricted land transactions by, among other measures, designating land transaction monitoring districts in 1987. As a result, land prices quickly began to stabilize in 1991, though they still remain high.

Because of high land prices in the city center, citizens wishing to own homes move out to the suburbs where land is relatively less expensive, resulting in population sprawl. At the same time, the supply of rental housing of ideal size is hampered in the central area.

To solve these problems by attracting people back to the city center, where the population is decreasing, and by creating an environment which encourages permanent residence there, Fukuoka City, in cooperation with the national government, promotes projects aimed at covering a portion of construction costs to entice private land owners to build quality rental housing with public subsidies and at reducing rents to enable tenants to live in quality housing for a low rent. Such projects concern rental housing targeted at middle-income citizens, and both lessors and lessees.

We also carry out projects to develop roads, parks and other public facilities, renovate the cityscape and improve the residential environment in urban districts within the city area where idle public lots and former factory sites are found, so that quality housing can be constructed at such locations.

While we have implemented these measures in Fukuoka City, we estimate that our population will continue to rise in future and reach 1,415,000 in the year 2001. We plan to prepare residential sites to meet such an increase by promoting active and advanced land use in the suburbs and areas less developed or not developed up to the present, as well as by developing the coastal area. We are planning to construct by landfill an artificial island in the eastern coastal area of Fukuoka City. "Island City," consisting of port and R&D facilities and a residential area harmonizing with

nature, will be a new urban space for the 21st century.

Concerning housing quality, it is now time to consider comprehensive housing policies by responding to various housing needs with emphasis on local community building, amid the diversification of people's sense of values and lifestyles, coupled with the implications of an aging society.

In the future, we in Fukuoka City will continue striving to meet these challenges, while systematically developing housing policies by taking advantage of the City's local characteristics, thereby transforming our city into a focal point of exchange in Asia, taking advantage of its geographical location near the sea.

Thank you very much. (Applause)

## Chairman Motoshima

Thank you very much, Mr. Suefuji.

As mentioned in the presentation, it is very important to promote comprehensive housing programs, putting importance on local communities.

Mr. Vo Viet Thanh

#### Chairman Motoshima

Now, we would like to request Mr. Vo Viet Thanh, Vice Chairman of Ho Chi Minh-City, to give a presentation.

## Mr. Vo Viet Thanh, Vice Chairman

Good morning. Mayor of Nagasaki, distinguished participants and ladies and gentlemen, I would like to talk about the housing situation in Ho Chi Minh City. I have my interpreter read the paper because of the limited time.

## Mr. Pham Xuan Hoang An, Press Officer-Interpreter

Ladies and Gentlemen, It is my pleasure to speak with you briefly about the housing situation in Ho Chi Minh City.

Ho Chi Minh City is an important center of culture, science, technology, and business in Vietnam. It has a population of more than 5 million (making it the largest city in Vietnam) and an area of 2,100 square kilometers.

The city is endowed with numerous waterways with access to the sea, which makes it a convenient gateway to Asia-Pacific region, one of the fastest growing regions in the world. In addition, a good transit network provides easy access to all parts of Vietnam from Ho Chi Minh City.

High-rise buildings, providing decent and affordable housing, are only found in central urban areas. Average per capita housing area in HCMC is still very low, 6 sq. m/person. For the poor, the housing situation is more desperate. Makeshift slums number about 100,000 of which some 24,000 are temporary shanties set up along canals and

river banks. Lack of proper sewer and water systems results in serious environmental and health problems in these slums. This type of urbanization is a depressing aftermath of years of war that forced thousands of villagers to abandon their homes in the countryside and take refuge in the city. These earlier migrants, plus newer migrants, coming from the countryside in search of economic opportunity, make up the population of HCMC's urban poor.

In order to try to meet the demand for affordable housing for the city's poorest, four years ago, the city created a partnership housing program targeted at the urban poor. Raising funds from a variety of sources, government and private, these joint efforts have resulted in the poor either renting of buying through installments 11,000 subsidized homes. Part of the subsidy for this program was paid for by a progressive rental fee system in government housing that charges according to ability to pay, so that the rich are able to help subsidize the housing of the poor.

The city is developing housing in accordance with a master plan, which integrates both rich and poor in the same newly built residential quarters, thereby eradicating segregation by income. The difference between the homes of the rich and the poor, if any is area and home amenities.

Assisting the poor in securing better housing is not simply an act of altruism, it also helps solve environmental, social and health problems. Solving these problems is not, of course, solely the government's responsibility, rather the whole society must take responsibility to solve the housing problem. As a result, a public fund has been established to help finance 5,000 homes for those who cannot afford to buy or rent, even at a subsidized price. These subsidized homes, toted as "Homes in Token of Gratitude," are part of an expanding problem that is widely supported from people of all walks of life.

As the city does not yet have an efficient mass transit system, all new housing developments must guarantee easy access to public facilities and commercial centers in order to reduce unemployment and commuting times.

For the near future, the government will focus on investing in suburban infrastructure in order to gradually encourage urban populations to move out to the suburbs. The government will also help those who move to the suburbs to secure land for homes that they can design themselves, in accordance with local zoning requirements.

The government will continue to reserve the right to manage and distribute land in order to ensure appropriate land usage and prevent exploitation by a few speculators. The measures set out above satisfy the city's budget constants to finance infrastructure construction, welfare programs, environmental protection. At the same time, these measures provide housing for the needy, who for generations may have dreamed of a stable residence but were never able to afford one.

Within the framework set by the master plan for urban revitalization, improvement of living standards, and improving the urban environmental situation, the city encourages and facilitates people in remodeling their homes. Along these lines, HCMC residents have built 66,000 homes on their own, while state-run construction companies built 56,000 units for sale. Housing needs of the city, however, demand that construction of higher quality housing be expanded in the years to come.

From the point of view of the resident of HCMC, a house is not just a basic necessity of life, but it is also a place we call home for different generations of a family. A loving home is a also vitaly important to rearing healthy children. It is clear that the condition of housing has a direct impact on the environment, health care, and society. If housing problems are handled well, these associated issues will resolve themselves as well. Therefore, the HCMC government has a keen interest in using appropriate policies to build good housing for its citizens.

## Mr. Vo Viet Thanh, Vice Chairman

Ladies and Gentlemen, I have only been able to briefly present what our city has achieved to date in its effort to provide HCMC residents with adequate housing. There is much demand that has not yet been met and there is much work that is left to be done. I hope that this session and future contacts will result in helpful suggestions to address the issue of housing as well as other problems associated with the process of mass urbanization.

Thank you very much for your attention. (Applause)

## Chairman Motoshima

Thank you very much, Mr. Vo.

We understand the conditions of Ho Chi Minh City and the nation very well. We would express our respect for your sincere efforts to improve the current severe housing conditions. We would be very happy if we can contribute through activities like this conference.

## Chairman Motoshima

Now, we'd like to hear from Mr. Takashi Deguchi, the Deputy Mayor of Kitakyushu City.

## Mr. Takashi Deguchi, Deputy Mayor

Thank you for the introduction. I'd like to make a presentation of Kitakyushu City, under the theme "The City and Houses."

In the basic plan, Kitakyushu City decided on five images of the city for the future. Two of them refer to housing: a pleasant residential city rich in greenery and waterfront,