

DOCUMENT RESUME

ED 163 301

CG 012 918

TITLE Hearing Before the Subcommittee on Federal, State and Community Services of the Select Committee on Aging, House of Representatives, Ninety-Fifth Congress, First Session, on Aging in the World of Tomorrow (Part I). Report No. 95-108.

INSTITUTION Congress of the U.S., Washington, D.C. House.

PUB DATE 27 Sep 77.

NOTE 74p.; Parts may not reproduce clearly due to small type

AVAILABLE FROM Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402

EDRS PRICE MF-\$0.83 HC-\$3.50 plus Postage.

DESCRIPTORS \*Community Services; Federal Legislation; \*Futures (of Society); Hearings; \*Older Adults; \*Planning; \*Retirement; \*Social Problems

IDENTIFIERS \*Congress 95th

ABSTRACT

The minutes of the hearings of the Subcommittee on Federal, State and Community Services focused on the aging in the world of tomorrow. Testimony covered the economic, educational and social impact of an enormous increase in the proportion of old people who will compose the United States' population. Some contacts were pointed out between the U.S. and England regarding treatment and support for the elderly by the government. (BN)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED163301

# AGING IN THE WORLD OF TOMORROW (Part I)

---

HEARING  
BEFORE THE  
SUBCOMMITTEE ON  
FEDERAL, STATE AND COMMUNITY SERVICES  
OF THE  
SELECT COMMITTEE ON AGING  
HOUSE OF REPRESENTATIVES  
NINETY-FIFTH CONGRESS  
FIRST SESSION

SEPTEMBER 27, 1977

Printed for the use of the Select Committee on Aging

Comm. Pub. No. 95-108

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION



THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

U.S. GOVERNMENT PRINTING OFFICE  
WASHINGTON 1977

For sale by the Superintendent of Documents, U.S. Government Printing Office  
Washington, D.C. 20402

CG 012918

## SELECT COMMITTEE ON AGING

CLAUDE PEPPER, Florida, Chairman

EDWARD R. ROYBAL, California  
FRED B. ROONEY, Pennsylvania  
MARIO BIAGGI, New York  
WALTER FLOWERS, Alabama  
IKE F. ANDREWS, North Carolina  
JOHN L. BURTON, California  
EDWARD P. BEARD, Rhode Island  
MICHAEL T. BLOUIN, Iowa  
DON BONKER, Washington  
THOMAS J. DOWNEY, New York  
JAMES J. FLORIO, New Jersey  
HAROLD E. FORD, Tennessee  
WILLIAM J. HUGHES, New Jersey  
MARISSYN LLOYD, Tennessee  
JIM SANTINI, Nevada  
TED RISENHOOVER, Oklahoma  
ROBERT F. DRINAN, Massachusetts  
DAVID W. EVANS, Indiana  
HELEN S. MEYNER, New Jersey  
MARTY RUSSO, Illinois  
STANLEY N. LUNDINE, New York  
MARY ROSE OAKAR, Ohio

WILLIAM C. WAMPLER, Virginia,  
*Ranking Minority Member*  
JOHN PAUL HAMMERSCHMIDT, Arkansas  
WILLIAM S. COHEN, Maine  
RONALD A. SARASIN, Connecticut  
WILLIAM F. WALSH, New York  
CHARLES E. GRASSLEY, Iowa  
JAMES ABDNOR, South Dakota  
THAD COCHRAN, Mississippi  
MATTHEW J. RINALDO, New Jersey  
MARC L. MARKS, Pennsylvania  
RALPH S. REGULA, Ohio

ROBERT S. WEINER, *Staff Director*  
JAMES A. BRENNAN, *Assistant to the Chairman*  
EDWARD F. HOWARD, *General Counsel*  
ROBETTA BRETSCH, *Minority Staff Director*

## SUBCOMMITTEE MEMBERSHIP

(CLAUDE PEPPER, Florida, Chairman of the Select Committee on Aging, and WILLIAM C. WAMPLER, Virginia, *Ranking Minority Member*, are members of all subcommittees, ex officio.)

### SUBCOMMITTEE ON FEDERAL, STATE AND COMMUNITY SERVICES

MARIO BIAGGI, New York, *Chairman*

WILLIAM J. HUGHES, New Jersey  
MICHAEL T. BLOUIN, Iowa  
JAMES J. FLORIO, New Jersey  
HELEN S. MEYNER, New Jersey  
MARTY RUSSO, Illinois

RONALD A. SARASIN, Connecticut,  
*Ranking Minority Member*  
JAMES ABDNOR, South Dakota

ROBERT B. BLANCATO, *Majority Staff Director*  
THOMAS F. McDONALD, Ph. D., *Minority Staff Director*

(III)

## SELECT COMMITTEE ON AGING

CLAUDE PEPPER, Florida, *Chairman*

EDWARD R. ROYBAL, California  
FRED B. ROONEY, Pennsylvania  
MARIO BIAGGI, New York  
WALTER FLOWERS, Alabama  
IKE F. ANDREWS, North Carolina  
JOHN L. BURTON, California  
EDWARD P. BEARD, Rhode Island  
MICHAEL T. BLOIN, Iowa  
DON BONKER, Washington  
THOMAS J. DOWNEY, New York  
JAMES J. FLORIO, New Jersey  
HAROLD E. FORD, Tennessee  
WILLIAM J. HUGHES, New Jersey  
MARIEYN LLOYD, Tennessee  
JIM SANTINI, Nevada  
TED RISENHOOVER, Oklahoma  
ROBERT F. DRINAN, Massachusetts  
DAVID W. EVANS, Indiana  
HELEN S. MEYNER, New Jersey  
MARTY RUSSO, Illinois  
STANLEY N. LUNDINE, New York  
MARY ROSE OAKAR, Ohio

WILLIAM C. WAMPLER, Virginia,  
*Ranking Minority Member*  
JOHN PAUL HAMMERSCHMIDT, Arkansas  
WILLIAM S. COHEN, Maine  
RONALD A. SARASIN, Connecticut  
WILLIAM F. WALSH, New York  
CHARLES E. GRASSLEY, Iowa  
JAMES ABDNOR, South Dakota  
THAD COCHRAN, Mississippi  
MATTHEW J. RINALDO, New Jersey  
MARC L. MARKS, Pennsylvania  
RALPH S. REGULA, Ohio

ROBERT S. WEINER, *Staff Director*  
JAMES A. BRENNAN, *Assistant to the Chairman*  
EDWARD F. HOWARD, *General Counsel*  
ROBETTA BRETSCH, *Minority Staff Director*

## SUBCOMMITTEE MEMBERSHIP

(CLAUDE PEPPER, Florida, *Chairman of the Select Committee on Aging*, and WILLIAM C. WAMPLER, Virginia, *Ranking Minority Member*, are members of all subcommittees, ex officio.)

### SUBCOMMITTEE ON FEDERAL, STATE AND COMMUNITY SERVICES

MARIO BIAGGI, New York, *Chairman*

WILLIAM J. HUGHES, New Jersey  
MICHAEL T. BLOIN, Iowa  
JAMES J. FLORIO, New Jersey  
HELEN S. MEYNER, New Jersey  
MARTY RUSSO, Illinois

RONALD A. SARASIN, Connecticut,  
*Ranking Minority Member*  
JAMES ABDNOR, South Dakota

ROBERT E. BLANCATO, *Majority Staff Director*  
THOMAS F. MCDONALD, Ph. D., *Minority Staff Director*

(11)

## CONTENTS

	Page
Opening statement of Chairman Mario Biaggi.....	1
Prepared statement of Chairman Mario Biaggi.....	2
Statement of Representative Ronald A. Sarasin.....	4
Statement of Representative Michael T. Blouin.....	5

### CHRONOLOGICAL LIST OF WITNESSES

Gordon, Theodore J., president, the Futures Group.....	6
Sheppard, Dr. Harold L., director, Center on Work and Aging Americans Institutes for Research, Washington, D.C.....	18
Murphy, Patrick, president, Police Foundation, Washington, D.C.....	31
Scammon, Richard, director, Elections Research Center, Washington, D.C.....	38
Binstock, Dr. Robert H., visiting professor, Public Health Services Admin- istration, Harvard University.....	45
Taylor, Humphrey, deputy chairman and chief operating officer, Louis Harris & Associates, Inc., New York City.....	51

### APPENDIX

Appendix 1. Chronological list of witnesses prepared statements:	
Theodore J. Gordon.....	59
Harold L. Sheppard.....	68

(iii)

# AGING IN THE WORLD OF TOMORROW

TUESDAY, SEPTEMBER 27, 1977

U.S. HOUSE OF REPRESENTATIVES  
SELECT COMMITTEE ON AGING,  
SUBCOMMITTEE ON FEDERAL, STATE  
AND COMMUNITY SERVICES  
Washington, D.C.

The Subcommittee on Federal, State and Community Services met, pursuant to notice, at 9:10 a.m. in room 2212 Rayburn House Office Building, Hon. Mario Biaggi (chairman of the subcommittee) presiding.

Members present: Representatives Biaggi of New York, Blouin of Iowa, Hughes of New Jersey, Meyner of New Jersey, and Sarasin of Connecticut.

Staff present: Robert B. Blancato, majority staff director; Thomas F. McDonald, Ph. D., minority staff director; Ms. Clementine Anthony; secretary; and Ms. Kathy Sheehan, research assistant.

## OPENING STATEMENT OF CHAIRMAN MARIO BAGGI

Mr. BAGGI. Good morning. The meeting is called to order.

As chairman, I welcome you to the Subcommittee on Federal, State and Community Services which is beginning its hearings on "Aging in the World of Tomorrow?"

The fact that we are a rapidly maturing society is a demographic reality. Consider these facts: In 1900 only 4 percent of our population was elderly. Today the figure is 10 percent. By the year 2025 we may have 55 million elderly, fully 20 percent of the population.

The life expectancy in 1900 was 49 years of age. Today it is 73. By the year 2025 it may reach 85. By the year 2000 there will be 150 elderly women for every 100 elderly men. Widows will outnumber widowers by 6 to 1.

Within the elderly population itself the percentage of 75 and over has risen from 29 percent in 1900 to 38 percent in 1975. By the year 2000 it will reach 45 percent. The percentage of the elderly 85 and over will more than double between 1960 and the year 2010. These figures demonstrate that the graying of America is a present as well as a future reality.

Today we will be focusing on the social, economic, and political implications of this phenomena and our findings should prove helpful in developing the policies for the future.

Economically we can look for greater demands on the Federal Government to meet the essential needs of the elderly, especially the so-called "frail elderly." This economic strain will be heightened by re-

duced number of workers being forced to support greater numbers of retirees under social security and private pensions.

Socially we look to great abuse of the institutionalization of the elderly. The trend is starting. Today for every one person living in an institution there are three living with their children. We will also be forced to deal with longer periods of leisure time for our senior citizens.

Politically the political power of senior citizens will increase. Already we are aware that the elderly vote and their voting percentages are higher than other groups. In the 1972 Presidential election almost 60 percent of the elderly voted; more than 14 percent greater than voters under 30. Better education combined with better affluence and social awareness may make the senior citizen of the future a stronger political force.

Yet, greater cohesiveness and leadership within the aging community is necessary to increase their national influence.

The foresight hearings today are designed to help us develop these and other recommendations for future policies impacting on the elderly. We as a Nation must move away from merely reacting to crises and begin to anticipate our future needs.

Greater foresight could have averted some present-day problems such as the fiscal condition of the social security system.

The House Select Committee on Aging was created in 1974 to study the problems of the elderly. Already our committee has influenced the passage of important legislation to benefit senior citizens.

Our most recent accomplishment was the passage of legislation to eliminate mandatory retirement in the Federal workplace and raise the mandatory retirement age to 70 in the private sector.

Our committee and especially our distinguished chairman, Mr. Pepper, provided the leadership in enacting this landmark legislation. Yet the committee and particularly my subcommittee recognize that we must also look to the future. The future of aging is in many respects the future of America. Aging is an ongoing process, it affects us all. Therefore, so must the future of aging affect us all.

Having people live longer is not enough. They must be able to live with dignity and with respect which they deserve.

At this point, if there is no objection, I would like to insert my prepared statement into the record. Hearing none, it is so ordered.

[The statement follows:]

PREPARED STATEMENT OF CHAIRMAN MARTO BLAGGI

Good morning. As chairman of the Subcommittee on Federal, State and Community Services of the House Select Committee on Aging, I am pleased to chair this hearing on "Aging in the World of Tomorrow". The precedent for conducting foresight hearings was established in 1974 when Congress declared foresight a main responsibility of the committee. The material acquired from these hearings will be presented to the standing House committees which have legislative jurisdiction over Federal programs for the aging. The subcommittee will also publish a report of the findings of these hearings when they are completed later this Congress.

This hearing today is the first of a three-part series of hearings on the future of aging. For the purposes of clarity and unity, this hearing will use 65 and over as the definition of aging. This first hearing will present a broad brush picture of the world of tomorrow, emphasizing especially the demographic changes that will occur in the population over the next 50 years and the economic, social, and political implications that will follow.



Statistical studies of our population tell us that we are maturing. For example, in 1975 the median age was 25. In 2000 it will be 34. In 1900, 4 percent of our population was elderly. Today, there are 22 million persons over the age of 65, approximately 10 percent of our population. By 2060, there will be close to 40 million elderly persons over the age of 65, approximately 16 percent of our population. By 2025, there may be 55 million persons over the age of 65, which may constitute 20 percent of our population.

Medical technology, higher living standards, and better health care have enabled more of our citizens to reach the age of 65. A person born in 1900 could expect to live to be 49. A person born today has a life expectancy of 73 years. The life expectancy is expected to inch upwards and by 2025, it may reach 85. Not only are more people reaching the threshold of the aging years, they are old for a longer period of time. It is projected that as much as 44 percent of our aging will be over 75 in 2000. Some social scientists are already referring to the aging population as two groups: the young-old, those between 55 and 75, and the old-old, those over 75.

Obviously, this aging population will have economic, social, and political impacts. The demographics and the implications will be analyzed in detail by the witnesses here today. However, let us focus on some of the more obvious implications.

As the population matures and expands, there are going to be more people that need the essentials of life, such as housing, food, clothing, and medical care. An expanded productive economy will be necessary to meet these needs. As the population ages, more people will reach the retirement age. If the current trends of declining birth rates and early retirement continue, the result will be that less workers will be available to support more retirees in the future. The questions are: how far can the smaller workforce go in supporting a large number of retirees? An example is our Social Security System. As we all know, the system is in deep financial trouble. Social Security benefits are financed by payroll taxes contributed by the workforce, employers and the self-employed. Declining birth rates, coupled with increasing retirement rates have resulted in less workers supporting the system. A few years ago, the ratio of workers to social security beneficiaries was 4 to 1; today, the ratio is 3.2 to 1; by the year 2030, the ratio will approach 2 to 1. Social security paid out \$3.2 billion more than it took in in 1976 and it will pay out \$4.5 billion more than it will take in this year. If 3.2 workers can't support the system today, how can fewer workers per retiree support it in the future? Last week the House of Representatives overwhelmingly passed legislation to curtail mandatory retirement by eliminating it in the Federal Government and raising to 70 the age at which one can be mandatorily retired in the private sector. By enabling more people to work longer, this should ease the social security burdens. However, much more needs to be done. It very well may be that we will need additional laborers to supplement the 18- to 64-year olds who traditionally make up the workforce. In light of such possibilities, we may want to reexamine our retirement policies, especially those that encourage or facilitate early retirement, to determine if they are in our best interest. One study estimates that if everybody 55 and over were retired in 2000, at least 20 percent of the population would be directly affected; however, if people waited until 65 to retire, only 10 percent would be affected. We must also explore our attitudes toward the traditional chain of education, followed by work, followed by retirement, and the possibility of mixing into that pattern sabbaticals, further education and retraining, shorter workweeks, and second and third careers.

With the growing numbers of persons who will be in the old-old bracket, we can expect a growing "frail" population. This may mean a population which will have to be serviced by comprehensive programs much more extensive than those we have today. Traditionally, the state of the economy determines the level of services that can be provided. We must try to anticipate the needs and explore the possibilities of funding, including private foundations, for the services that may be needed to meet those needs.

It is probable that families will be smaller in the future. An increased life expectancy coupled with expected low birth rates will directly affect the institution of the family. There will be an increasing female majority among the population over 65. Estimates show that by the year 2000 there will be 150 women for every 100 men and widows will outnumber widowers by 6 to 1. New living arrangements, such as group living will probably develop.



4

We are already experiencing a trend toward the deinstitutionalization of our elderly. Today, for every one person living in an institution, there are nearly three others living with a child. The family has always played a supportive role in the care of the aging parent. However, we can expect that families will want more options in settings and types of care available for an aged family member whose health is failing. Nursing homes may be necessary for a part of the population but many families may seek ways of maintaining an older person at home, either in the older person's own household or in his children's.

We must examine the living patterns that we expect to develop so that we will have the facilities necessary to accommodate those patterns.

While the elderly do not necessarily constitute a unified voting block, the potential to develop into a growing political force is there. Traditionally, the elderly have a high voting percentage. In 1972, almost 67 percent of the elderly voted in the Presidential election, fully 14 percent greater than the voters under 30. Issues such as the extent to which Government services are distributed will likely spur the unification necessary for senior power. In addition, the elderly of tomorrow will be more educated, have lived in greater affluence, and will have witnessed or participated in political activism unlike their predecessors. They will evaluate candidates and issues more closely and they will command the highest attention of public officials, who will need their vote to survive.

The advantages of foresight hearings must not be overlooked. I cannot help but think that perhaps our Social Security System would be in better shape if we had taken the time some years ago to look ahead.

The House Select Committee on Aging has directed its efforts toward programs designed to assist the elderly on such issues as health care, retirement security, housing, and services. The committee will continue those efforts and through these hearings will be enabled to plan for the future. In other words, we will be able to follow the theory that "forewarned is forearmed."

I would like to make two proposals. The first is that all legislation presented to the House of Representatives be accompanied by a foresight impact statement. This should enable us to make more responsible decisions. The second proposal I would like to make is that we establish a Cabinet level Department for the Aging. This would insure that the elderly and their needs will receive, on a continuing basis, attention from the highest levels of the executive branch. The elderly are a growing population. The future of aging in many respects, is the future of America. We must begin today to prepare for tomorrow.

Mr. Sarasin.

#### STATEMENT BY REPRESENTATIVE RONALD A. SARASIN

MR. SARASIN: Thank you, Mr. Chairman.

Today we are beginning a series of hearings on "The Future of Aging." The future we will talk about is not some far-off time, however. Everyone who is alive today will be 65 or older in the year 2025. We are quickly shifting from a young population to an old population.

Medical advances against diseases and control of the aging process itself will only hasten this shift. It would be disastrous not to look at this transformation and plan to meet it accordingly.

All too often, however, Congress has not been reactive, and exercised leadership by hindsight. It is very much like the king who ran from his palace shouting: "Show me where my people are going so I can lead them." The catchup government, as we have painfully learned, is irresponsible and costly both in human and fiscal terms.

This subcommittee is taking a different tack. We are attempting to be proactive, look ahead and see what is in store for us. We are exercising the foresight responsibility Congress took upon itself several years ago.

Indications are that tomorrow's elderly will be different from today's in numbers, proportions, and character. If it is our responsibility

3

to look after the Federal, State, and community services offered to the elderly then we had better look ahead today to plan for those services tomorrow.

No one is unreasonable enough to demand certain facts about tomorrow's elderly. However, there are trends and futuristic thinkers who have developed a technology that does look at trends, that does forecast, and that does draw pictures about alternative futures. A good number of these future thinkers are with us today, and I look forward to their testimony about the elderly.

These foresight hearings give us a chance to reflect for a brief moment on what the world will be like, what our values will be, and what alternatives we have. It is then up to the decisionmakers to help bring the most desirable world about. Specifically for us, it means planning and providing adequate and humane services for tomorrow's elderly.

Today we are taking the first step into the future. I look forward to this and subsequent hearings on "The Future of Aging." After all, the future of America's elderly actually begins today.

Thank you, Mr. Chairman.

Mr. BLAGG. The gentleman from Iowa, Mr. Blouin.

#### STATEMENT BY REPRESENTATIVE MICHAEL T. BLOUIN

Mr. BLOUIN. Thank you, Mr. Chairman.

I would like to take this brief opportunity to commend the chairman of this subcommittee for scheduling these foresight hearings. As you well know, foresight hearings are rare creatures in the Congress. We tend to look at programs while they are going on, or even after they have ended, but it is very rare that we take the time to consider a course of action for the future.

I hope that this subcommittee will provide the leadership to focus the attention of Congress in this area.

Currently senior citizens constitute less than 15 percent of the Nation's population. Yet in less than 50 years that figure may grow to 20 percent of the population. As more and more people reach this milestone, it will become more and more important for us to carefully examine and consider the effects of what we do, on the elderly.

It has become apparent in recent years that the elderly are a growing political force in this Nation. There is a sense of political activism and concern over certain issues which dramatically affect the elderly. Issues such as retirement, rising fuel cost, fixed incomes, transportation, delivery of services, and so on. It is essential that we get ahold of these issues now and understand them before they become major problems for 1 out of every 4 Americans.

In an effort to help me understand these concerns and give the senior citizens of my part of the country a direct input into my staff, we have added a senior intern by the name of Martha Thomas, a native of Dubuque, Iowa, a 69-year-old longtime community activist who will be with us for a couple of weeks in our Washington office followed by several months of assistance in our district offices. Martha will give seniors a knowledgeable and experienced staff person to express their concerns to as well as someone who will voice these concerns directly to me.

I would urge other Members of Congress, who have yet to take this step, to establish that kind of internship in their office. I would hope that our committee would continue to urge the respective committees and the Congress to make headway on legislation to establish the senior intern program as a permanent fixture in the House.

Mr. BIAGGI. I want to thank you, Mr. Blouin.

You might like to know that I have a member of my staff that makes your Martha look like an ingenue.

Mr. BLOUIN. Would you care to explain that for the record, Mr. Chairman?

Mr. BIAGGI. A gentleman of some 75 years of age. As a committee, we are looking forward to learning from the scholars in the field of aging, looking for guidance, and hopefully at the conclusion we will be able to promulgate a program that will be able to deal with the anticipated problems.

The first witness is Mr. Theodore Gordon. Mr. Gordon is president of the Futures Group, a spinoff of the Institute for the Future. He established himself in the futures field with the publication of two major works: "Report on a Long-Range Forecasting Study" and a book entitled: "The Future."

He has been the principal investigator in research studies sponsored by the Office of Technology Assessment and the National Science Foundation. The Futures Group has just finished a significant six-volume project called: "A Study of Life Extending Technologies." Mr. Gordon, good morning and welcome.

#### STATEMENT OF THEODORE J. GORDON, PRESIDENT, THE FUTURES GROUP

Mr. Gordon. Mr. Chairman, gentlemen.

It is indeed a pleasure for me to be here this morning. Your inquiry into the potential numbers and condition of the elderly is indeed important in my view, for several reasons.

First, the number of elderly persons seems certain to continue to grow as you have all recognized this morning.

Second, this group has certain needs which are now only dimly recognized and served, and which could be changing in the future.

Third, the impacts of the changing age distribution in our society in general are not yet well understood, but could be very important not only to the elderly, but to society at large.

Thus, your inquiry could affect the happiness and dignity of the elderly and help capture some of the opportunities of the coming demographic shifts and help avoid their pitfalls. I commend you for this inquiry.

Indeed, as you have suggested, we have just finished a study for the National Science Foundation for their Applied Research Directorate, the RANN Group. This study was funded at a level of about \$300,000 and extended over a period of 18 months.

This work is generally directed toward identifying what technologies may be expected in the near term that could have the effect of extending life expectancy. Then inquiring about the consequences of

those technologies on demography, the social aspects of the economy, and values in general in society.

To summarize, we found three important things. Life expectancy is indeed increasing; there are new biomedical technologies on the horizon that will accelerate this trend; and changing age distribution can well have significant economic and social impacts.

Incidentally, I might mention that while the final report has not been published in its final form, I have draft copies of the report available for the committee and its staff.

[See appendix 1, p. 59 for Mr. Gordon's report, "The Results of a Technology Assessment of Life-Extending Technologies".]

We designed the study to focus on near-term biomedical capabilities which would extend life and to search for the implications of these technologies. We concentrated on adult life. We omitted accidents, we did not examine suicide prevention technology, although we considered suicide from the standpoint of its effects on values as lifespan increases.

We addressed the situation in the United States, primarily, although we also looked, at least in a preliminary fashion, at the consequences of these life-extending technologies on other countries, the world at large.

We considered, as I mentioned, only technologies that were near at hand, coming into general use in research and development, or which were now considered to be biomedical goals. In other words, we didn't try to stretch out into the next century to ask what was there, we really asked about what was really almost in hand and what consequence it would have.

As is well known, new life expectancy at all ages has been increasing from 48 years in 1900 to 72 years in 1975. This is life expectancy at birth, these are the figures which are most often quoted.

However, life expectancy at advanced age which was our concentration here has shown much less dramatic improvement. In 1900 a man at 60 could expect to live some 14 more years. In 1976 a man of 60 could expect to live 17 more years. In other words, the improvement over that time is only 3 years. Life expectancy at birth has increased as a result of improvements in infant mortality and curing of many diseases of childhood. Diseases of middle age and advanced age, heart disease, cancer, stroke, have been much more difficult to conquer and it is these diseases specifically that we are talking about here. Furthermore, the aging process which is poorly understood, seems to place an upper limit on lifespan.

As we looked into the biomedical technologies we found that there were three general strategies that were being pursued:

First, research into prevention, diagnosis, and treatment of heart disease, cancer, and stroke. Disease control.

Second, and a quite different line of research, research into the cause for aging itself with the possibility in the minds of the researchers of slowing the very process of aging.

And third, research into the relationship between social conditions, aging, and death.

The effects of these technologies could be viewed as either increasing the number of people who live to older age, we call that squaring of



changes would include the development of more parallel jobs, shared work, part-time work, shortening of the workweek, serial careers:

We found that retirement age would have to increase about 6 years by the year 2000 in order to balance the inflow and outflow of the social security fund.

We worked with the American Council of Life Insurance. They convened several special panels for us to study the consequences of these changes on insurance which was very helpful.

Even without life extension the aged will have more political clout, however, we do not know whether this clout, this potential, will translate into political power. The notion of how values change with age is not clear at all.

Raising retirement age—

Mr. BIAGGI. What do you mean by that?

Mr. GORDON. Well, the people who we had looking at that particular part of the study recognized well the number of aged increased, and that the aged will have particular views, but it is not at all clear whether that brings political cohesiveness or not, whether they will act as a political bloc.

Mr. BIAGGI. Can I give you a practical experience?

Mr. GORDON. Certainly.

Mr. BIAGGI. I think my colleagues will share my views.

I don't know of any legislation that is brought out to the floor of the House of Representatives for consideration affecting the elderly that isn't always passed almost unanimously. That can only be the result of a recognition of first, the merit of the issue. There are many things that have merit that don't see the light of day, but also the political clout, and there is a reason, is more so today than ever before.

I witness my own mother. She was never involved in politics until she got involved in the senior citizens group. When I ran for office she wanted to know what I stood for.

Mr. GORDON. And that's clout, right.

Mr. SARASIN. That's perception.

Mr. BIAGGI. There is sufficient testimony and evidence to the fact that the seniors are organizing and they have very substantial, very effective representatives in every legislative forum. They participate with a zeal because it becomes a very important part of their lives.

I don't know that those of us in public life aren't happy about it. We see that progressively we are providing more responses to the needs of the senior citizens. The Select Committee on the Aging is certainly evidence of the fact that there is great recognition and, as I said in my opening statement, the committee has been responsible in many ways for increased benefits of the aging simply by expressing its view and its constant advocacy under our chairman and by the proposals that we submit. So if you have any doubts about their political cohesiveness, let me disabuse you of them.

Mr. GORDON. Thank you.

Let me just summarize as really all I meant by my statement is that it is very difficult to forecast as the size grows what that will do to political activism of the group. In fact, I know of no way to really get at that from a theoretical standpoint.

Mr. BIAGGI. They live it on a day-to-day basis.

Mr. GORDON. We found that raising the retirement age could bring significant changes in the family, it would change the relationship in



2025 or from about 6 percent to about 10 percent. With acceleration of disease-curing technologies represented by our squared case, the number of people over 65 seems likely to grow to about 1.2 billion people by the year 2025 or about 14½ percent of the world's population.

One effect of disease-curing technologies which we find so promising is to increase world population. In our demographic model we found that current trends suggest world population will grow from about 4 billion to about 7.7 billion by the year 2025.

Introducing these new technologies would increase world population by 2025 to 8.3 billion or some 600 million more people. Of the 600 million more people, 400 million would be in the less developed countries and 200 million in the developed countries.

Focusing again on the United States, now in asking about the economic consequences of these changes, we found that the social and economic impacts attributable to these new technologies seem likely to be minimal prior to the year 2000. Of much more importance to the economic and social conditions is the assumed retirement age which goes with these changes. We felt that this issue was significant for the study since the technologies we investigated would be likely to have the effect of increasing the vigor and diminishing the symptoms of aging of people as they approach today's retirement age. With vigor at a particular age changing, clearly retirement ages might change also. This results in changes in the labor force size which are quite significant.

We formed the impression that retirement age would be likely to increase for several reasons:

First, polls have indicated that many retired people, when asked, say they would rather be working.

Second, the feelings of anomie and uselessness which sometime come with retirement apparently accelerate death.

Third, both social security and pension funds would benefit appreciably by increasing retirement age only a few years.

Fourth, discrimination on the basis of age after 65 seem to us at the time of the study, about a year ago are likely to be considered illegal in the near future.

For all of these reasons we pursued the consequences of increasing retirement age. We thought it likely and important to investigate.

Mr. BACOR. Those are some of the very reasons that we offer in the advocacy of the application of mandatory retirement.

Mr. GORDON. Yes. I commend you for that, sir.

Mr. BACOR. By the way, the American Medical Association in its study, concluded that forced retirement impacted negatively on life expectancy as well as health. To paraphrase it, if you are forced to retire you are almost condemned to die or it accelerates the rate of death.

Mr. GORDON. It is the feeling of uselessness that goes with that.

The effect of delayed retirement would include an increase in GNP, diminishing of dependency ratio, reduce burden on social security, improve socialization among the elderly, and, most significantly, a potential problem in the provision of jobs for all of those who wish to work.

With respect to this latter point we formed the impression that the nature of the work would change in these circumstances, the



changes would include the development of more parallel jobs, shared work, part-time work, shortening of the workweek, serial careers.

We found that retirement age would have to increase about 6 years by the year 2000 in order to balance the inflow and outflow of the social security fund.

We worked with the American Council of Life Insurance. They convened several special panels for us to study the consequences of these changes on insurance which was very helpful.

Even without life extension the aged will have more political clout, however, we do not know whether this clout, this potential, will translate into political power. The notion of how values change with age is not clear at all.

Raising retirement age—

Mr. BIAGGI. What do you mean by that?

Mr. GORDON. Well, the people who we had looking at that particular part of the study recognized well the number of aged increased, and that the aged will have particular views, but it is not at all clear whether that brings political cohesiveness or not, whether they will act as a political bloc.

Mr. BIAGGI. Can I give you a practical experience?

Mr. GORDON. Certainly.

Mr. BIAGGI. I think my colleagues will share my views.

I don't know of any legislation that is brought out to the floor of the House of Representatives for consideration affecting the elderly that isn't always passed almost unanimously. That can only be the result of a recognition of first, the merit of the issue. There are many things that have merit that don't see the light of day, but also the political clout, and there is a reason, is more so today than ever before.

I witness my own mother. She was never involved in politics until she got involved in the senior citizens group. When I ran for office she wanted to know what I stood for.

Mr. GORDON. And that's clout, right.

Mr. SARASIN. That's perception.

Mr. BIAGGI. There is sufficient testimony and evidence to the fact that the seniors are organizing and they have very substantial, very effective representatives in every legislative forum. They participate with a zeal because it becomes a very important part of their lives.

I don't know that those of us in public life aren't happy about it. We see that progressively we are providing more responses to the needs of the senior citizens. The Select Committee on the Aging is certainly evidence of the fact that there is great recognition and, as I said in my opening statement, the committee has been responsible in many ways for increased benefits of the aging simply by expressing its view and its constant advocacy under our chairman and by the proposals that we submit. So if you have any doubts about their political cohesiveness, let me disabuse you of them.

Mr. GORDON. Thank you.

Let me just summarize as really all I meant by my statement is that it is very difficult to forecast as the size grows what that will do to political activism of the group. In fact, I know of no way to really get at that from a theoretical standpoint.

Mr. BIAGGI. They live it on a day-to-day basis.

Mr. GORDON. We found that raising the retirement age could bring significant changes in the family, it would change the relationship in

the family between elderly people and younger people. Increasing labor force participation of the aged may heighten competition for jobs. That's a particularly difficult area and I will come back to that before my testimony finishes. And of course, increasing retirement age increases interest for planning for midcareer and continuing education.

We formed the belief that for the next 25 years the technologies that we studied would have the effect of extending middle age rather than extending old age. Of course the key to this is the condition of—of course this is the key to the condition of society that exists in this time that we are talking about, it affects health costs, welfare burden, productivity, socialization, national vigor, old-young relationships.

At first consideration it would seem that net national health costs would increase as the result of this squaring of the survival. However, if those technologies are achieved by preventative means rather than therapeutic means then the opposite may be the case, health care costs may drop. For example, the discovery of the linkage between nutritional factors and certain diseases could increase longevity at a very low cost, very low health cost.

Here are some of our specific recommendations:

We felt that it was worth studying to help reach an understanding of the changing complex interrelationship between retirement age and the nature of work, particularly the nature of work surrounding the age of retirement. We believe that changes in retirement age will cause fundamental differences in our economy and the way older people live and view themselves.

We felt that detailed information should be collected and made available to other researchers about economic contributions and consumption levels made by older people.

We felt that various agencies of the Government should include in their policy-thinking, estimates of the consequences of their actions on the age of retirement. This recommendation is particularly relevant to policies followed by the Department of Labor and the Social Security Administration, the Armed Forces and State and local governments. Policies which affect retirement age can add profound and lasting consequences on the nature of our economy. When most policies tend to diminish retirement age the inevitable consequence will be increasing dependency ratio and isolation of the aged. There may be other policies, which affect dependency ratios directly rather than through retirement age. These should be pinpointed and understood in terms of their likely consequences for the American society.

These include, for example, policies which delay entry into the labor force, shortening the workweek, introduce sabbaticals or intermittent retirement and so on.

We felt that additional studies should be applied to questions of international impacts of life-extending technologies and the changing social dimensions which might accompany these technologies. We gave it only a cursory review. Such impacts were suggested here but were viewed to be beyond our work. World population, of course, is a problem that faces us now and these technologies which we favor obviously will have the impact of increasing the world population. Therefore, this additional study I feel is warranted.

We felt finally that Government estimates of the cost of developing biomedical technology should include from the outset estimates of the

cost of producing these technologies and distributing them in society. We want to go beyond pricing R. & D. and suggest that we price the application of the results of the R. & D. should it be successful.

For example, R. & D. in the prosthetic devices of one sort or another might result in very large social expenditures later on to apply those devices to ill people to extend life, whereas research into nutrition for example, could be applied across the board and rather inexpensively with the same kind of life-extended consequence.

We felt that, emphasis in research on life-extending technologies should be given to those which promise to be inexpensive, not only for immediate, but for the secondary cost as well.

I am very pleased to have the chance to talk with you this morning, gentlemen. Can I answer any questions about this work?

Mr. BEAGG: Thank you very much.

A distinguished Johns Hopkins biologist predicted in a recent speech that by the year 2000 most people will remain vigorous until the age of 90 or 100. Others say that biologists are on the verge of facilitating the life span of 200 years. Do these predictions square with your research and if so, what implications that you have found? If not, why is there a discrepancy?

Mr. GORDON: We classed researchers into three general classes.

The immortalists, that is those researchers who felt that the life span could be extended perhaps even through immortality. The incrementalists, that is those researchers who were trying to cure disease, or detect a disease early or to find some kind of therapy that let us cope, and the mensuralist, that is those people who felt that aging is a social phenomenon, or at least accelerated by a social stress, as a example, and therefore they concentrated on the social aspect of how the aged live and the feedback of that on to the aging process.

To deal with the immortalists now, in answer to your question specifically we found that there were a number of separate lines of research proceeding simultaneously to get at the underlying causes for aging.

Some of the work dates back decades, literally decades. Many of these people who are doing the fundamental work on life span extension had laboratory animals which demonstrated the validity of their principle. But we established that there were many different principles being pursued in peril. There is no fundamental understanding, sir, of the process of aging. What is it that causes aging to exist and these people are pursuing it from that fundamental basis.

There are those researchers who find the cause for aging diet. Life span extensions has been demonstrated by lowering the temperature of organisms. The immune mechanism is blamed for some as the cause for aging. We become immune to mutations in our own body of our own selves and our immune mechanism sets up to kill those mutations.

The pituitary gland is blamed by some cross linking in the nucleus of a molecule itself, of proteins within the cell is blamed by others as the cause for aging. They are all approaching the problem from different points of view and all can demonstrate or most can demonstrate some kind of success.

This is a typical situation where a break through can occur quickly and almost unexpectedly.

For our work we viewed these kinds of technologies as much less certain than technologies of the other sort. We put these off into the latter part of this century and all of the number that I gave you did not include this kind of breakthrough. You must see that if this breakthrough were to occur it wouldn't be felt in society for 100 years because probably it would be most effective when applied to young children and those children would age and the effects on society would be quite late.

But for the other technologies, maintain your hope, because it seems they are coming in the nearer term.

Let me comment specifically on the numbers that you mentioned just now in your question. We do not agree with those forecasts. Life expectancy at birth we think will climb to about 78 by the year 2000 and 86 by the year 2025. Those numbers are a result of assumptions we made about the effect of these technologies. Other people's assumptions can be valid also. This is an uncertain area. I think the basic principle that we agreed to is that these technologies are near in hand and their effect on the life span of currently middle aged persons will be felt by the year 2000 and shortly thereafter.

Mr. BLAGG. I think you made reference to it and the factors there is research going in two directions. Research always has to be funded, where should the Government put its money in relation to life span extending technology or research or dealing with diseases or both?

Mr. GORDON. I think this should be mixed.

The possibility of teaching an understanding of the basic cause for aging is so appealing that we certainly ought to support that kind of view, but the other is nearer term and, of course, has the potential for alleviating a great deal of suffering and should be pursued as well.

Let me mention one argument that the immortalists made to us. In talking about funding, some of them said, listen, this is the area that ought to be funded and it ought to be funded because you are right and you find the cause for aging in our research, then we have automatically taken care of those other diseases that are associated with aging. So we have the whole thing in our hands.

Mr. BLAGG. Of course, you know which is first, the chicken or the egg.

Mr. GORDON. Indeed, sir. Indeed.

Mr. BLAGG. You say that, if the present death rate continues by the year 2000 our population of those who are 65 years and over will increase from 21 million to 30 million and by 2025 to 45 million. Are you taking into account the fact that the crude death rate in 1975 unexpectedly dropped to the lowest level ever recorded in the United States?

Mr. GORDON. Yes, sir, that's an interesting phenomenon.

We picked it up in our study; I believe before it was generally known we saw that change and it comes from technologies—we believe—technologies of the sort that we are talking about here. That is, disease curing technologies who think the origin is twofold although I must say that we are not certain of this but we think it is because of the decreasing death rate due to heart disease and accidents.

Mr. BLAGG. Is it likely that the death rate will continue to drop dramatically so that even your projections are much too low?



Mr. GORDON. Well, not likely, but I wouldn't ignore the possibility.

Mr. BIAGGI. Well, as you said, this ratio drop is phenomenal and at one time unlikely. What is your contemplation?

Mr. GORDON. Well, there is nothing certain about this kind of study. It is a reasoned position given what we know, given trends that are underway now. This is what we think is a plausible kind of future.

Certainly the future can vary on either side of that and in some potentially surprising ways. For example, if there were a breakthrough in aging research—an instantaneous breakthrough—imagine a 50-year pill for 25 cents that could be taken by anyone with no biomedical side effects. I imagine that it would have a very good market and it would certainly change the results of this study here because we did not anticipate that kind of technology.

Sure it is possible that we are wrong in some of these forecasts, but I think it is a plausible future that can be the basis of policy planning. It has that kind of perspective for us.

Mr. BIAGGI. You also stated the percentage of the population 65 years and over will grow from 10 percent to 14 percent by the year 2025. Do you suggest that with continuing success in overcoming disease may reach even as high as 22 percent?

Are we in fact going through a population transformation, a serious change from a young to an old society?

Mr. GORDON. Well, of course, one of the concomitants of these figures which you have just read is an aging society.

In our work we assumed a continuing low birth rate and with birth rate remaining low and with the additional growth of people over 65 and that age cohort, the inevitable result is an aging center of gravity of population.

Mr. BIAGGI. If I recollect correctly, you said there might be impact more on the middle aged?

Mr. GORDON. Yes, sir.

See there are two ways to view these additional people that we are talking about as over 65. Are they biologically 65 years olds as we know them today or are they biologically 55 or 45 years olds as we know them today.

Mr. BIAGGI. You are stereotyping, right?

Mr. GORDON. Of course, we are stereotyping, but, it is an image of society that we are trying to convey here.

Are we extending old age or are we extending middle age. In reviewing the technologies we formed a view that the kind of society that we ought to include in our thinking as being most likely is one in which middle age is a standard and not old age, or at least we have the prospect of having a vigorous 65-year-old population.

Mr. BIAGGI. I think I can anticipate the answer to this question, but for the record anyway, how should lifespan expanding technologies be funded?

Mr. GORDON. Well we are talking about technologies that—the research into technologies that extend life; that is, search for the cause for aging. Most of the work is being funded by the Federal Government now, but we found some work being funded by private industry also.

There is a great deal of interest in this and I think that it is worth continuing the funding by the Federal Government and also worth

considering increasing the level because of the promise of those technologies.

Mr. BIAGGI. Mr. Sarasin?

Mr. SARASIN. Thank you, Mr. Chairman.

Is there going to be anything for the people that we are talking about in place? If we extend life and we have a greater elderly population, are we doing them a favor at the present time? Should we be thinking more about trying to improve the quality of life at present?

Mr. GORDON. Well, of course.

The way you posed the question it is an "either/or" and I'd like to answer we ought to be doing both.

I mentioned that there is a feedback between the condition of life and aging and death. That's very true. The feelings of uselessness, feelings of social isolation accelerate that and any kind of social structure that we build that encapsulates the aged or isolates the aged is clearly something that ought to be removed. They are a viable, important part of society and we will all be there ourselves.

On the other hand, if we would take a vote and put it on that basis of given today's circumstance who would opt for increased lifespan, the voting would be heavily in favor, I think. So I would suggest that both aspects of your question ought to be pursued of clearly extending life in a society that doesn't recognize the value of an elderly life is a vacuous pursuit and both have to go forward.

Mr. SARASIN. In your statement, do I detect a bias toward nutritional research as the answer to the problem?

Mr. GORDON. Indeed. It is a bias that I did not start with in the study.

Mr. SARASIN. I don't mean that as a negative comment.

Mr. GORDON. No; but you are right. I formed a bias in the process of the work. I didn't start the study with that bias, but I formed the bias in the process of the work.

We are very ignorant of the relationship between what we eat and the environment in which we work to health and disease. The ignorance is astounding to me and I formed the impression, as you astutely detected in my remarks, that this is a very promising direction for research to go in terms of its effect on health.

What is the relationship between what we eat and how we age and what diseases we contract. The data is suggestive of relationship but the fundamental knowledge that is required is absent.

Mr. SARASIN. We keep reading about people in the Soviet Union who live to 140 or 150 and there is Nicholi with his 180-year-old mother.

Mr. GORDON. Both eating yogurt.

Mr. SARASIN. Both eating yogurt. What does that tell you? I'm sure you have looked at that very carefully and I'm sure you paid more attention to it than the average person would.

Mr. GORDON. We did not look at it carefully.

What it suggests to us, though, in our oursory thinking about it, was that lifespan, maximum lifespan, has some flexibility to it. If the data are correct, and there are people who are 140 years old, that means that there are circumstances under which people can live, including that nutrition and environment which can extend maximum lifespan from what we know it in this country to be to 40 percent more. That gave us



some hope that the kinds of research being done on aging as a phenomenon has a prophecy.

Mr. SARASIN. In that particular situation you see a stretching out of old age or do you see a stretching out of middle age?

Mr. GORDON. Do you mean in the period from 100 to 140?

Mr. SARASIN. I guess if you get to 100 you are safe.

Mr. GORDON. I can't answer that. I do not know the answer obviously.

You are not going to stay a 50-year-old for 100 years. Clearly there is going to be deterioration at the time, I believe. Even though some of the researchers that are trying to get at the basic fundamental cause for aging feel that their work has the potential not only for arresting aging, but even in some aspects reversing it.

In other words, bringing back into production certain cells that have been taken out of production. That's a view that is not well supported by many people in the field, but nevertheless there are people who feel that there is even that potential for reversing. I don't hold much hope for it personally.

I would tend to think of biological versus chronological aging. That is kind of the stretching out where we extend middle age for longer periods of time as diseases are cured and we find more of the reason for aging. Then, of course, toward maximum age, as we approach that, whatever that becomes then the aging process, I believe, is an inevitability for us.

Mr. SARASIN. Are there areas in the world where just the opposite of your experiences—

Mr. GORDON. Where people die younger?

Mr. SARASIN. Where people die very young and not because of a poverty situation.

Mr. GORDON. I might mention that our consultants in this study really required us in one of our early discussions to add a scenario for the United States.

We had been talking about—until that time—about extending current practice, adding new kinds of biomedical technologies, curing of the aging process and other techniques that would have the effect of increasing life expectancy. They asked that we add one in which life expectancy would diminish in the short term.

As the result of environmental degradation and other factors to see what the consequences of that would be on demography and social context, so they were much concerned when they made that suggestion to us that there was at least a possibility that despite medical advances and despite increased knowledge about aging, the society that we have built for ourselves and I view that in the broad context, the environment in which society operates might have the effect of desquaring the curve, causing a decrease in life expectancy. So there is that possibility.

As for specific examples in the world, I'm afraid I don't have that information. There are places in the United States where certain diseases are more prevalent than other places, and that has been well publicized.

Mr. SARASIN. Aside from the diseases, do you think the realities would be that we would see an increase in retirement age and social security, for example? There has been a suggestion made, and I haven't had a chance to look at it very carefully, but if the age be raised from.

65 to 69, and that, of course, has immediately drawn an outcry of how terrible that is. Would that not in fact, be realistic?

Mr. GORDON: I want to make a distinction between age at which people draw pensions of one sort or another and real retirement age.

It is easy enough to get data on when people draw pensions, because there are people paying money as the result of that and too often there is an equating of the age at which people draw pensions to retirement age when in reality, what happens is people draw pensions and then get other jobs or move somewhere else or do a different kind of work. So if we are talking about retirement in the sense of not working any more, I think clearly that age will increase.

With respect to age at which first pensions are drawn, I think that age will increase as well, and it has beneficial economic consequences as I suggested. The amount that it has to increase is relatively minor in order to realize those consequences.

We will have to search—you gentleman will have to search for ways of doing that without being unfair to the people who are counting on the early retirement.

Mr. BRACCI: At that point we will hear from those senior citizens who have demonstrated their political clout.

Mr. SARASIN: Actually the chairman is most interested because of the rapid aging rate with the Members of Congress.

Mr. SARASIN: Mr. Braggi is only 27 years old.

Mr. BRACCI: No, I'm 70.

Mr. SARASIN: Do you see a changing pattern in dependency as people grow older. I wonder if you could expand on that?

Mr. GORDON: We define dependency ratios as the ratios to the labor force to the total population size.

We assumed in our numbers here that entry into the labor force would not be much changing so that the number of those dependent who are young remains more or less percentagewise as we know it now. The big change in dependency ratio at the aged side came about not because of the biomedical technologies, but because of changes in assumption about retirement age and the swing was very large.

We had scenarios where dependency ratio dropped below 1, for example. As the result of delayed retirement, as I recall the numbers, the dependency ratio dropped from where it currently is to below 1 when we assumed that retirement age would be delayed on the order of 5 years by the year 2000. It is about that, that's not quite it, but is about that.

Now, as dependency ratio drops, the economy becomes more vigorous because there are more consumers and the capability to produce increases because there are more potential workers. The question which needs additional research, and we suggested this research, is whether or not there will be jobs. That is a terribly difficult question, but a key question, to answer. The reason it is difficult and yet key is as follows:

In this same time period, while life is being extended through the mechanisms I discussed, we will also have increasing automation and robotization because of advances in electronics, for example. There will be other social forces at work; for example, participation of women in the labor force. We expect to be maintained at a high level. Will there be sufficient jobs then in the presence of these kinds of changes?

When we are saying that the benefits of the delayed retirement are so great for the individual as well as for society, will society be able to cope with the work requirements? That remains unanswered, but important. And it is this which gives rise to the dependency ratio.

Mr. SARASIN: Do you see any problem beyond that with the current action in Congress in removing the cap on retirement or just raising it in the private sector?

Mr. GORDON: Well, I think that is a necessary step and leads us certainly in the direction that I am suggesting here.

When we did this study we presumed that such action would be taken because it seemed so inherently logical and unnecessary.

Mr. BIAGGI: Congress will always be responsible.

Mr. SARASIN: Thank you very much, Mr. Gordon. I think your testimony has been most enlightening for those of us on the committee.

Mr. Chairman, thank you.

Mr. BIAGGI: Thank you.

Mr. GORDON: Gentlemen, let me extend my invitation again should you want additional information from that study or want to talk to us again, we would be delighted.

Mr. BIAGGI: I am sure we will do so.

The next witness is Dr. Harold Sheppard. Dr. Sheppard is the senior researcher for the American Institutes for Research, and director of the Center on Work and Aging. From 1959 to 1961, Dr. Sheppard was the research director and the staff director for the first Senate Committee on Aging. He has written extensively on the issue of work and retirement. The books that he has written include "Industrial Gerontology" and "Too Old To Work, Too Young To Retire." Another book, "The Graying of Working America," is in the process of being published. His works are considered classics in the field of aging.

**STATEMENT OF HAROLD L. SHEPPARD, DIRECTOR, CENTER ON WORK AND AGING, AMERICAN INSTITUTES FOR RESEARCH, WASHINGTON, D.C.**

Dr. SHEPPARD: I welcome this opportunity to testify this morning, Congressman, and one of the first points I want to make is in the last paragraph of my formal presentation which says:

One of the primary purposes of indulging in intelligent portrayals of what lies in the future is to prepare society and individuals now for the various kinds and degrees of adjustment that will have to be made by the time that future becomes the present. Futurism is not a 'fun-and-games' exercise for dilettantes or abstract intellectuals pursuing ideas for the sake of ideas. It is an indispensable necessity for responsible decisionmakers who are concerned with the best interests of their society and economy.

So I want to congratulate the committee for holding these kinds of hearings and my major hope is that the members of this committee, when they act in their roles in the legislative committees as opposed to this committee, which is nonlegislative, that they will apply the viewpoints and facts and projections that are presented in these hearings.

My summary comments regarding the future of aging in America will focus primarily on the economic dimension, especially regarding employment as requested by the subcommittee staff. Let me point out that I am going to be dealing with this subject within sort of the context of three major criteria.

One of them having to do with the composition of the demographic changes; second, the costs, or to put it another way the supportive capacity of the economy; and, third, that vague and intangible area called values, including the stress we put on health in our society. I don't think it is a fashion and it is nothing we are going to change. It has great implications for this whole issue.

We are not talking here about waiting until a person hits 65 or 70 or 75 to improve his or her health, we are talking about improving the health status of infants, teenagers, young adults, and middle-aged people all of which then lead to a greater population of people living older than "we had expected them to live." That's what the story is all about and some of the points I want to concentrate on here.

It is fascinating that if you take a look at the Census Bureau projections for the population 65 and over just to the year 2000—you look at the publications they put out in 1970, they said that in 2000 there would be 28.8 million people 65 and older.

Then 5 years later they put out another report, it was a catching up with the mortality rate changes and said, no; it is going to be 30.6 million. Then within 1½ years they had to come out with another report which shows that it is going to be—in terms of projections now—31.8 million people 65 and over by the year 2000.

Mind you, some 7 years ago—in fact only 5 years ago because they repeated the same figures in 1972—only 5 years ago they said there would be 28.8 million people 65 and over and the most recent publication from the same Bureau says it would be 31.8. That's a 3 million underestimate just 5 years ago. I insist at the risk of being accused of sticking my neck out too far that that's going to be sort of a constant error phenomenon because we are not wiring in enough the improvements in the mortality rates at the upper ages.

Let me come back to the demographic development.

Mr. Biaggi. Would it also be another fact of the continued improvement of health in all of those zero, age zero writeup on some life expectancy?

Dr. SHEPPARD. Yes. Well, the difference in the estimates done 5 years ago versus now have to do with the fact that mortality rates in the upper age groups have declined primarily, which is the sort of thing that Dr. Gordon mentioned, reduction in cardiovascular ailments as an influence on mortality and accidents and the cardiovascular reductions that occurs essentially, if I am not mistaken, among men. I won't get into many of the explanations for that, they have to do with some of the items that Dr. Gordon mentioned. I will come back to them later.

I mentioned that one of the criteria I want to deal with has to do with the demography although I insist that the body count approach to the topic of aging is not sufficient. We also need to know about the changing social and cultural definitions of what is meant by "old." What is meant by "aging" and the "aged."

In this connection I believe we are in the midst of a redefinition of what is old and what is aging. It will not be the first time in the history of Western society. I had occasion a few months ago to read something about census data in Florence, Italy, in which "working age population ended at the age of 50."

Anybody over 50 then was called old and not by in large considered eligible to be working, too decrepit. On the other end of the scale, re-



member in our own society you looked at labor force statistics of 50 and 60 years ago the tables said "Population 10 and over engaged in the labor force." Now, it is 16 and over if you look at the Labor Department reports, just a few years ago it was 14.

We are constantly in the midst of redefinitions of what is old and what is the age at which people quote, "ought to be entering the labor force."

Another thing, certain age groups in our society are beginning to resist being labeled and therefore treated negatively as old, especially insofar as that term evokes negative connotations. Before too many years come to pass and I think long before the year 2025 it is quite possible that persons 60 to 65, compared to the 60 or 65 year olds say of 10 or 20 years, will not accept the label again to the degree that society continues to use the term negatively.

Some of the reasons for this have to do with the improvement in educational levels, the discrepancy between the people 55 to 64 vis-a-vis their mean education today is not too different from the mean educational level of people 25 to 34 today, but if you go back just 10 years ago the discrepancy was much wider.

The other critic factor involved, of course, is the health factor which Dr. Gordon has mentioned to the degree that terms such as "old" and "aged" connote substantial detriments in physical and mental activity. The application of those terms to such persons will be more unrealistic and irrational than they are today.

One more point about this proposition of expression here and it is one of my favorite obsessions in hobbyhorses.

In terms of demography we simply have to get out of the statistical reporting and the linguistic habit of using this category of a 65-plus population. It is a sloppy category especially when carrying out not only research, but policymaking decision regarding this field or problems of aging.

An 85 year old is not the same as a 65 year old any more than a 45 year old is the same as a 25 year old, at least not yet. Nevertheless, persons 65 years old are lumped into the same category as persons 85 and older in most of these statistical reporting services.

Now, I have a table here, table one that indicates that the 65 to 69 population as a proportion of the total 65-plus population in 1975 was over 36 percent but by the year 2000 will go down to only 29 percent. The other end of the scale, take a look at the 85-plus population. In 1975 there was only 8 percent of the total 65-plus population but by the year 2000 they will make up at least, I say, 12 percent of the total so-called aged population.

I say at least because I expect by the year 2000 we will find that we have been today underestimating what the final figure will be by the year 2000.

Incidentally, between 1975 and the year 2000 the number of people 85 and over will have increased by 106 percent. I don't think it is much more than 40 percent for "the young aged" 65 to 69.

All of this means that the so-called "older population" will be getting older, not really larger. Now, one of the economic implications of this shift in the age composition of the older population is that the cost of supporting that population will be mounting to a level and at a rate higher than indicated by the typical study that simply takes that 65-plus population classification and multiplied by some estimated per-

capita cost to arrive at an estimate of the total aggregate cost to the society and the economy of providing for that group. The cost will be greater, in reality, and the question arises what steps are we taking now to prepare for those additional costs.

An increasing population in the very old age group, those who I think by and large we can agree cannot be expected on the whole to be in the labor force will require additional expenditures for a wide variety of costly services and these will typically have to be borne by Federal, State, and local government tax sources.

In the future a lower proportion of this very old age group will have children that could be counted on to support them and by the way, such children as there will be will themselves be in their sixties. More and more you are seeing 60-year-olds with 85-year-old parents—

Mr. BIGGI. But they will still be working?

Dr. SHEPPARD [continuing]. Still alive. They will be forced to continue working is the punch line in this whole address.

As a rough index, the ratio of 60- to 64-year-olds through the 85-plus population will be changing dramatically.

Can we expect those 60- to 64-year-old children to be able to pay for much of the support services for their even older parents especially if we continue current retirement age policy, if most of those 60- to 64-year-olds are retired and are out of the labor force.

Can we afford to be complacent now, I mean working out projections of various payroll taxes and taxable salary basis as well as cost estimates of private pension plans. Only 23 years from now, never mind 20-25 which is nearly 30 years from now, those projections do not take into account the increased aging of the 65-plus population classification.

This question is especially critical if current retirement age policy prevails or if retirement at even earlier ages than now prevalent is characteristic of the time between now and the year 2000.

From an economic standpoint the cost of supporting a growing population of nonworking persons 60 to 65 and older will have to come from the working population, and would require an ever-growing economy with a productive capacity providing the resources for that support.

I am not as optimistic, apparently, as Dr. Gordon is on the future of our productive capacity and I don't think—when you take a look at productivity, rates of productivity increase for example, at least since World War II and table 6 indicates that, you find that during the most recent past years the annual average productivity increase is one-half of that of the post-World War II period and it suggests that the growth in the capacity may not be commensurate with the needs. The future of aging in America as in other industrialized societies is in a very large part contingent on the future of our productivity base. That will be determined in turn, but the costs of such important items as energy and resources in that future, costs which will grow not only because of any shortages, but also because more countries that are beginning to compete with us for access to and control over whatever that supply will be.

Numbers of people, to repeat, are not the only consideration involved in this. For example, the so-called older population, as they reach what we now call retirement age, accept retirement incomes at a level typical of retirement incomes today, even if measured as a proportion of pre-retirement earnings. Will, for example, the remaining working popu-



lation continue as in the past to honor the social contract between generations?

Now, this brings me to one of the points made in the summary report by the Futures Group, namely, that the average retirement age may have to be delayed to prevent great economic problems. Even without any radical life extensions.

Mr. BIAGGI. Doctor, I would like to interject at this point, in dealing with the premise that you made in the light of what we have learned as a committee, and it may not be in fact sustained, and that is that people will be retiring at 60. In fact, you were present when we referred to the legislation that the House just passed which should abolish mandatory retirement. All the indications are that people will work, if they are permitted to work beyond the accepted age, and the impact on the economy will not be as large as you suggest.

I believe that in light of the ever-increasing life expectancy that adjustments will be made in the pension system; that adjustments will be made in entire retired income area as a matter of absolute necessity and as a matter of logic.

If we stay at the current status, the current age then I would agree that the impact would be monumental.

Dr. SHEPPARD. The legislation you are referring to passed by the House and we are praying that the Senate will pass it, does make a slight dent in the problem. I am all in favor of it. The number of people who actually wait to retire until the mandatory retirement age is not very great, but it still increases, therefore, the opportunity for those who want to, and are able to work beyond that so-called compulsory age, to work.

Mr. BIAGGI. You are right.

Dr. SHEPPARD. The critical issue, I believe, is the issue of early retirement prior to 65. That's going to be the issue and that is the hotter potato to deal with these days because that gets into some issues involving the desire of people to retire as early as 60. It gets into issues and I think it will change at least at State and local government levels because part of their pension problems have to do with early retirement, but without any actuarially reduced pension.

The same thing in the private pension field. A Banker's Trust study recently showed and from 1950 to 1975, I believe, there was an increase in the number of plans with rather early retirement and with no actuarial reduced pension level. This can't go on forever especially when you are in a demographic society.

Mr. BIAGGI. Well, I think the whole pension picture is being reviewed across the board and it is like killing the goose that laid the golden egg. It is going to blow up in our faces. But we have had testimony which confirms what you have stated that many people retire before the maximum age.

Now, the question was do they do that so they can prepare for something else rather than just be sent out to pasture?

Dr. SHEPPARD. Well, this is the fascinating area of research controversy among researchers. There is one group that concentrates on the role of raising the retired social security benefits as an inducement for the legal labor force. I think concentrating on such factors as health status, previous unemployment experience, and the nature of

the work they are performing, the lousier the job, even if it is paying \$6 an hour; the greater the desire to get the blank out of there and I have done some empirical work among workers on that.

People as young as 40, if they are in a job that is called unenriched or deprived in terms of intrinsic content, I think something like 50 percent of them in my study said they would retire immediately if they could be sure of getting enough money as opposed to the same age group working in much better jobs, all blue collar workers incidentally.

I am very much interested in this whole field of improving quality of worklife, not only because of productivity reasons, but because I think it will have an impact on the retirement rate, however imperceptible, but everything will help.

I also think that some of these demographic factors themselves such as an increase in percentage of the young-old with parents still alive will be a factor, retarding the current trend toward early retirement. I still haven't looked enough, however, into the research done by the economists who concentrated on the role of social security benefits and even private pension benefits as incentive to get out of the labor force.

Now, as you know, there are some countries which at various times and for economic reasons have given incentives to people to stay in the labor force. Norway, for example, the last time I looked this up gives a 2-percent bonus to workers who will continue working, per year, after the age of 67.

Now, we have something like that under social security, a big 1-percent bonus which I don't think anybody knows about and which isn't enough anyway to induce workers to stay in the labor force.

By the way, I'd love Congress to find out how many workers really know there is that 1-percent, quote "bonus to stay in the labor force for each year after 65."

Finally, Congressman, because so few people have come to our side, I want to indicate my general support for the statement made, and that is certainly the intent of the statement made by the Secretary of Commerce, Juanita Kreps, who started a lot of fuss when she made some statement in recent weeks.

I don't know how many people know that she is one of the greatest experts in the economics of aging. That wasn't the publicity given to her when she was nominated and confirmed, but we worked together in the field. We are either coauthors so naturally I have to come to her defense.

The real challenge is how do we move toward that day—how do we implement the process of raising average retirement age? I didn't say it is going to be done in some cute, simple, mechanistic manner, I am quite aware of all of the institutional obstacles and emotional reaction to that, but I also say in my prepared statement that before the end of this century people who will be moving toward what we call retiring age will take another look at the economic dimension, never mind the psychological side, and say, "Hey, can I afford to retire at 60 and live for another 17 or 18 years on the pension level I am not so sure will continue to keep me in half the style to which I want to be accustomed?"

Mr. SARASIN. Are you saying then that there is a group case to be made for increasing the retirement age for social security?

Dr. SHEPPARD. Yes, I'm not saying I know how it can be done immediately, but once we recognize the need then I think we should put our brains to work on developing the implementational side.

One point I want to emphasize is that it all comes down to the inconvenient fact that for most of us unless we chose millionaire parents or won a precious lottery ticket, employment is and will continue to be the best way of assuring an adequate income. Given the joint effect of such factors as demographic change, progress in health status, inflation, and sluggish growth in the productive base of an economy, including the growing costs of providing energy and resources to maintain that productive base and the growing recognition of the constitutional and moral grounds for not using year of birth as the condition for making hiring and retirement decisions for older Americans, my scenario for the future of aging in America would include a gradual but definite shift in age-at-retirement policies in the United States, towards raising average retirement age.

I also think, incidentally, that other industrialized countries like our own will be in the throes of reconsidering and changing age-at-retirement practices and for the same reasons.

Now, there are other alternative futures but I am not going to mention them here unless there is more time, but there are more Strange Lovian and I don't think they are going to take place. They are just cute to discuss but not plausible enough realistically.

Mr. BIAGGI. Thank you, Dr. Sheppard.

The Secretary of Commerce, Keps, certainly made a very provocative suggestion when she indicated we might have to raise the age of eligibility for social security to 68. I want you to know that it has reverberations around the world and I mean literally around the world.

Dr. SHEPPARD. I was in a plane to Europe when I read it, yes.

Mr. BIAGGI. That's literally around the world.

What is interesting is, that she has that background and it is amazing.

Dr. SHEPPARD. May I mention also, Congressman, that she shared a very significant study that ties in with what the Futures Group has done for the National Science Foundation on the implications of the stationary population for the aged of America and I would recommend that the staff get ahold of that report. It is a series of important significant economic documents, as part of the total and part of which we relied on in writing our book on the coming crisis in retirement age policy in America, that book you referred to called "The Graying of America." It is a very important document.

This is another indication of her background in this field.

Mr. BIAGGI. You raised the point that also has to deal with the impact, the potential impact of that point. It would seem to me that we have pension systems, that is social security and health programs and they might well be jeopardized with the increased life expectancy.

Today the elderly I think are competent in the knowledge that these systems are productive even though perhaps not as adequate as they might. How do you think they would react or let me put it a different way. Can the elderly of tomorrow feel as secure?

Dr. SHEPPARD. That's a tough question. That's a profound question. I think.

Mr. BIAGGI. I am asking it of a man of depth.

Dr. SHEPPARD. Thank you. I'll stick my neck out again. If you are talking about people in their sixties, early sixties—

Mr. BIAGGI. Well, they are middle aged.

Dr. SHEPPARD. They are middle aged now, right.

The very old, let's say arbitrarily 80 and 85 or older, I believe again it comes down to different contingencies. If we have a productive capacity which includes, I believe the necessity for involving many of the people in the labor force whom we have not considered being in the labor force today, those young aged, I think they can look forward to a great deal of security.

I might point out and I should have said this at the beginning, I do have my valued bias as follows: I am concerned that we provide a truly respectable and humane level of living for the truly aged of this country. The only way that I can see that we can guarantee that and I guess, if you want to, you can say I'm speaking of my own future, I'm worrying about my own future when I get 80 or 85; it will require that there be this large productive base of people working to make possible that humane level of living when I get into my eighties, eighty-five. I'm concerned about that generation of people who will reach that age long before I do is how I got into this field, before I started reaching upper middle age.

So given that scenario then I would say they have nothing to worry about, but again it assumes or requires that we make some basic policy changes regarding retirement age and it assumes that we will not get too far down the level of that support base I am talking about which really depends on access to energy and resources but not too exorbitant a cost.

Mr. BIAGGI. I perceive, as I listen, in the year 2025 a very large segment of population being elderly and almost with relation to that socialized Utopian approach by government because I don't think the private sector can deal with it, so the responsibility will be government's to deal with those elderly, frail elderly, if you will, the non-working elderly.

I think it will be a tremendous burden but it is one that we cannot deny.

Dr. SHEPPARD. I would like to believe that we will be willing to share with the nonworking elderly which means perhaps a reduction in the rate at which we are—the working population—including our material well being, because we might have to make a few little sacrifices. To some people they might be considered major, only one car instead of two and things like that.

Mr. SARASIN. Will the chairman yield?

Mr. BIAGGI. Yes.

Mr. SARASIN. What do you see as the impact not on the frail elderly population but on the younger working population who look at that prospect. That is something we are really not paying any attention to either. Are they going to be willing to make those sacrifices?

Dr. SHEPPARD. I have been frustrated, Congressman, in trying to get information from any survey group that has already done that work. I have been more frustrated in my efforts to get some research money to do it myself.

I should mention, if I'm not mistaken, the American Council on Life Insurance however, has been doing a series of periodic surveys



that partly gets at this issue. They have been doing them periodically and they have it by age groups.

I am further interested, however, in what would happen to those opinions if you had some orientation program about what this all means instead of just knocking on somebody's door and saying: "Hey, are you willing to pay \$150 more starting next year to take care of that increased aging population and maybe \$300 the next year and so on."

I mention specific dollar figures because I have seen some studies like the one done by Lou Harris for the National Council on Aging and I serve on that research advisory committee, which asks them sort of vague questions like: "Do you think the American population should support the older population?" Now, who is going to say "no" to that?

Mr. BIAGGI. Until the time comes to pay.

Dr. SHEPPARD. Well, they didn't get specific enough, that's right. Are you willing to pay more than you are paying now out of your take-home pay to provide for the elderly. You have to be specific as to the dollar amounts or as a proportion of income.

Mr. BIAGGI. I get a rising sentiment from young people who don't see any reward or benefit from the moneys they are contributing at their early age and they look forward to decades of contribution with no benefit and many of them choose not to enter the social security system.

Dr. SHEPPARD. Do you mean they have an option?

Mr. BIAGGI. Well, they haven't been trying.

Dr. SHEPPARD. If they have the option they don't choose to enter it. Well, again I would like—I would hope that the Social Security Administration start a public education program about what is social security, what is it all about and how does it finance and I mean tell it the way it is. Also, if I may just add another point, I think a lot of the emotionalism and controversy about the so-called test or earnings test is partly due to the misunderstanding among the American people about the nature and the original purpose of the retirement test and I fault the Social Security Administration for not adequately educating the American people about why it was put in in the first place and why it has to be kept in even though you might change the dollar level.

But my main point is that I feel that we are in store for or at least we have the need for a massive public educational program about the nature of the social security system and partly to delay the fears. I know one study I saw by the Council of Life Insurance showed a rather large percentage worried about the status of the social security system. If I am not mistaken, the younger the age group, certain of the age groups are making the greatest fear. They ought to confirm what they are saying.

Mr. SARASIN. They would not be able to be paid by the time they came around?

Dr. SHEPPARD. Well, they know that it is based on transfer of payments from the working population at the time they are retired then they ought to be concerned about making sure that there are a lot of people working to pay for their pensions.

Back to my original theme or sermon.

Mr. SARASIN. Just with that last comment when you say that today's working population should be concerned that there be a large number of people working when they retire.

Where do you see those jobs coming from, and I ask this because there is a great deal of pressure here to somehow provide all of these government jobs, which is another transfer payment with the idea that you can provide all of these jobs for people, productive jobs at taxpayers' expense. I just wonder if you see that as a solution to the problem or even part of the solution or if we should be trying to do more to create an incentive for jobs in the private sector?

Dr. SHEPPARD. Well, if I can give a wishy-washy answer, Congressman, I think we have to do both, but I don't think we are doing enough of either. I happen to believe that in looking at some input-output tables put out by the Commerce Department that were published in the employment and training report to the President by the Labor Department, it shows the number of jobs directly created in the private sector as the result of purchases by State and local governments of goods and services from the private sector.

From 1963, when they started doing these kinds of statistics or these kinds of studies, through 1975 and 1976 it shows that the greatest rate of growth in private sector jobs can be traced to the purchase of goods and services by State and local governments, greater than in the other activities going on that help make private sector jobs.

Now, there is a balance that has to be struck, but one of the lessons I draw from that kind of analysis is that if we do want to help the private sector, maybe we ought to help the public sector a little. I am also in favor of a lot of the private-direct employment incentives for creating more jobs as well as some of these tax changes that help boost purchasing power. I won't get into the question of how do you do that without aggravating inflation problems. Maybe we will just have to make up our minds which is more important.

I have been, in this connection, working as a sort of technical adviser for the Committee of Economic Development, a group of businessmen who are coming out with a report soon on problems of disadvantaged workers including older workers. That's basically why I'm on that outside consultant group staff.

These things are among the recommendations, the mix of recommendations by that group. Incidentally, that is a business group and they came out in favor of abolishing—I think I am saying this before I am supposed to, it is not released yet. Off the record—they are coming out for abolishing mandatory age despite groups like the Business Roundtable and the Chamber of Commerce and so on. So don't let them scare you, those other groups.

Mr. SARASIN. When you can point to the figures that indicate the growing stable of the governments that are doing more in purchasing from private sector, that—are you saying then that that is the reason to add more people to the public sector employment roles? Is it their purchases or the purchases of government itself?

Dr. SHEPPARD. It is the purchases of the government of goods and services from the private sector.

Mr. SARASIN. You are not talking about government employees?

Dr. SHEPPARD. No; I'm not talking about the effect of purchasing power of the individuals.



Obviously there is a balance that has to be struck. I don't think we have reached the balance.

I mention this statistical finding, though, because we have been indulging too much of either/or thinking, that is, is either the private sector or the public sector that we are going to invest in and that helping one hurts the other. It is not completely true if these figures mean anything and I hope they mean something.

There is another aspect to this though, Congressman. There is another alternative future: namely, maybe we would have to have more work sharing if worse comes to worse. I don't like to think of that, so that we have less inequity in the distribution of job opportunities among the generations and I am certainly against using the date of birth of a person's birth certificate as a criterion for determining whether he or she should have a job, back to the mandatory retirement age issue.

Mr. SARASIN. Yes.

How do you define work sharing?

Dr. SHEPPARD. Well, there are a variety of patterns here and, again, one of the best documents I have seen is an internal document of the Labor Department.

There are some experiments going on in Wisconsin, too, which the Labor Department is keeping tabs on.

People working say, 30 hours instead of 40 hours and some age groups perhaps splitting it 50-50. Some of the reduced flex-time workplaces involve more than one person working in what used to be called one person's job. More voluntary part-time employment and I emphasize the word "voluntary" and a large part of that market for voluntary part-time work is in the upper-age group. That is assuming they have some other resources.

I think we are—Dr. Gordon mentioned some other scenarios involving also this notion of intermittent in-and-out-of the labor force, he called them sabbaticals. Since Dr. Juanita Kreps has been writing on that for about 15 years herself and is very much interested in that, I really am in no position to futurize about what those patterns will be when it comes to work sharing. It might be a temporary phenomenon.

Mr. SARASIN. Doctor, if larger numbers of people have more time for themselves, what is the future of voluntarism? Will this be a growing sector of our culture and how many services will be offered through that means?

Dr. SHEPPARD. If you had told me you were going to ask me that question I would have come prepared for an answer.

What you are saying is if more people have more time will there be greater opportunity for voluntarism. So far I have been working on the philosophy that the list of our unmet needs in this country is so great that we can use all the volunteers we can get our hands on. At the same time a lot of those unmet needs should be filled by the people who need the money, they should be performed or carried out by the people who need the money and that comes out to the issue of creating jobs for income reasons.

Again, I think there is enough in it for both the true strictly defined volunteer who does not work for an income as opposed to the part-time person who voluntarily works part time but for income.

I am in the midst of another project for the Department of Labor trying to find out if worse comes to worse what are all the unmet public needs? We are doing this by going to local communities and every time our field staff comes back our list gets longer and longer. I have told them to stop.

Mr. SARASIN. Are you running into the practical problem of the public service unions, the other organizations that are out there saying you can't do that work with either low-paid or this type in receiving people, you must meld them into the work force which is there. Do you see that problem?

Dr. SHEPPARD. Well, this project we are not looking for it so we have not found it, but naturally being active in this field of research on public employment we have run across that argument and the argument of substitution which is a serious problem certainly when State and local governments are in great fiscal trouble, it is hard for them to—it is hard to criticize them for filling say a traffic ticket giver-outer, a position with a new person after having laid off someone who has been doing that for 5 years. It is hard to criticize them for wanting to use that money and instead of rehiring that formerly employed person. But that's what's called substitution problems.

Mr. SARASIN. We see that a lot in the CETA program and also the Welfare Reform Committee which is getting into this area of submitting point four jobs and what kind of jobs are they going to be which has yet been answered, by the way.

Thank you, Mr. Chairman.

Dr. SHEPPARD. We are getting into today's problems instead of the future and you don't want to worry about today's problems.

Mr. BLAGGI. We have been joined by the gentle lady from New Jersey, Congresswoman Helen Meyner who is a most valuable member of this committee and she provides the balance in the gender of this committee today in its more humane approach.

Mrs. MEYNER. Thank you, Mr. Chairman.

Speaking of gender I wanted to talk about women in the future. We know that more and more women are joining the work force, it has doubled recently. We know that women usually outlive men, the statistics are very high and I assume that elderly women will make up a big part of the working segment. Are there any implications to this. Have you thought about how this fits in to the future? Is there anything specific that we should be looking at or thinking about?

For example I know that women on social security get less benefits than men. That is an inequity that we are trying to correct.

Dr. SHEPPARD. Well to the degree that they have become full time members of the labor force and do get equity in the kinds of jobs they do get into with commensurate pay, a lot of that discrepancy should disappear.

My focus has been primarily on the fact that in that very old age group I talked about earlier, say the 85-plus group that are disproportionately going to be women, and I haven't played around with any calculations, but certainly by the year 2000, 23 years from now, we are talking about women now in their sixties, we can't expect them to have had much work experience as the basis for having adequate social security income. Many of them will be widows and they don't get completely the same amount as before when their husbands were

alive. So the challenge of supporting that ever-growing very old population which is getting bigger than they thought it would get, that was part of my earlier presentation, the challenge that is going to be even greater when you keep in mind we are talking disproportionately about women.

One other aspect of women in the labor force that I would like to mention and that is when many of us talk about this change in the demographic composition and use these arbitrary categories, the working age population versus nonworking age population to get a dependency ratio, it is very often pointed out that the rising labor force participating rate of women will be an offset to much of the early retirement phenomenon and the large number of old people who retire and they don't die.

I have not seen the study yet that indicates that the rate of increase has come to the point when it will be a complete offset. In fact, one of the recent reports by the Congressional Budget Office on the short-term and long-term financing problems of social security makes the point that we cannot count completely on this rising participation rate to be a complete offset to the support costs. That's another dimension I think is important.

I don't know if I have answered your question or not?

Mrs. MEYNER. Yes, I think you have made some good points. It is a little early to tell, really, what the situation will be by the year 2000. Thank you.

Dr. SHEPPARD. Can I give one story that had taken place in 1976 and 1977 instead of the year 2000 or 2025.

There is a system of church-run homes for the aged in California which finances itself primarily by taking life contracts at the time the person enters the home, preponderately, these are women.

Recently the home or the church speaking for the home has had to go to court asking for the right to renegotiate the contracts, the life contracts because among other reasons these women are living "too long", longer than they expected and they can't afford to keep supporting them. Now, that is just a microcosm of what I think is happening.

Mrs. MEYNER. Can a man live too long, Dr. Sheppard?

Dr. SHEPPARD. Well, I am using the words "too long" in quotes.

Mr. BIAGGI. On that point there was some testimony, I do not know whether you were here, Dr. Sheppard or Dr. Gordon, but there was a marked reduction in deaths on the part of men, now the question that came to my mind was is there a corresponding increase in deaths in the same cause among the women?

Dr. SHEPPARD. Well, I have the figures in here but—

Mr. BIAGGI. My thinking is now that they are out in the work force in larger number and that they are subjected and exposed to the stresses and strains of the men who are providing these women with a life of comfort.

Dr. SHEPPARD. I want to believe that there is another positive dimension for the women's liberation movement, namely, that some of the work stress will be reduced, but I have not seen it yet at least in my own private life.

[See appendix 1, p. 68 for Dr. Sheppard's prepared statement.]

Mr. BIAGGI. Thank you very much, Dr. Sheppard.

Our next witness, Mr. Patrick Murphy is currently president of the Police Foundation in Washington, D.C. Patrick Murphy was a career policeman. In 1945 he entered the New York City Police Department as a patrol officer, that was 3 years after I entered it. He was more successful. He became the police commissioner at that time. He introduced innovation when innovation was an operation other than the norm, and he distinguished himself internationally as the result of his executive abilities.

He has also served as the chief police executive in New York City, Detroit, Washington, and Syracuse. In 1968 he was appointed by President Lyndon Johnson to be the first Administrator of the Law Enforcement Assistance Administration. I am delighted to see my old friend and colleague.

**STATEMENT OF PATRICK MURPHY, PRESIDENT, POLICE FOUNDATION, WASHINGTON, D.C.**

Mr. MURPHY. Thank you very much, Mr. Chairman. The job has gotten tougher since you and I walked the streets.

Mr. BLAGER. I understand.

Mr. MURPHY. Mr. Chairman, I am honored by the invitation to appear before the distinguished subcommittee looking into the topic, "Aging in the World of Tomorrow."

Nothing this Congress can do and nothing that we who work in criminal justice can do that is more important than assuring the welfare and particularly the safety of older Americans. The Nation's older citizens have earned the right to be safe and secure on the streets and in their homes.

As one who has had the privilege of serving as Chief Police Administrator of four American cities, I have witnessed those occasions of tragedy when older Americans were the victims of deception, fraud, burglary, and violent crime. Nothing can be more wrenching for an older person than to be the victim of crime or, to suffer the fear of crime brought on by an attack on his friend or neighbor. As president of the Police Foundation I have been able to observe how little research exists on the problem of crime and the elderly.

So today I am pleased to have the opportunity to discuss the problem of crime and the elderly and to speculate about what the future holds both in terms of the severity of the problem and of the needs of local, State, and Federal services to respond to that problem.

I commend the subcommittee for its approach in these hearings. Although the prediction of the future is difficult, it is well worth the effort if by doing so we can help prevent unnecessary human suffering.

You have asked that I review projections of the population of older Americans in the early 21st century and forecast their possible implications for crime and the need for police services. With the help of the Police Foundation staff, I have completed such a review and have found that many unanswered questions stand between us and any reliable opinion on what the future will bring.

The demographers estimate that the number and percentage of citizens 65 years of age and older will slowly increase between now and the end of the century going from 10.5 percent of the population in 1975 to 12.2 percent in the year 2000. The next quarter century



will see a much larger increase reaching 17.2 percent of the population in 2025.

From these numbers one could forecast that the amount of crime against the elderly would increase proportionately. However, the problem is more complex than that. Crimes are disproportionately committed by young persons between the ages of 15 and 24. To see the whole picture, we would need to know how many young people there will be in the population, but projections of younger populations are much harder to make because birth rates for the decades ahead are unpredictable.

There is reason to believe that the number of young persons in the general population will decrease significantly between now and 1990 though the number and proportion of inner-city young people is likely to fall much more slowly. The predictions beyond the short-term are speculative.

Perhaps though, neither the number of older persons nor the number of young persons would have a critical bearing on the nature of the future crime problems of the elderly. The evidence we have about the problem that now exists suggests that:

One: Crime is not a problem for all older persons. National victimization studies show that in general, older people are less likely than other persons to be the victims of crime.

Two: The problem occurs in large cities, in particular parts of those cities, often transition neighborhoods where large numbers of older people live side by side with large numbers of young people. Typically, there are few middle-aged persons to maintain a balance of order. In these neighborhoods the elderly are victimized at very high rates.

Three: Older persons are disproportionately the targets of particular crimes such as purse snatching and fraud.

Four: Fear of crime or the personal trauma of being a victim are much more serious for older persons than they are for the young or middle aged.

I believe, therefore, that the crime problem of older Americans is much more likely to be influenced by the nature of our cities in the 21st century than by the proportion of the population in one or another age group. To understand the nature of the problem we would need answers to a large set of questions:

How will our cities grow? Will the middle-aged and middle-income move back into them, or will the current population movements into rural areas continue?

How will the increasing costs of energy affect our cities? Will the demand for city housing increase? Will the poor and the elderly be pushed into or left in suburban ghettos while more mobile and affluent citizens return to the city?

If there are to be broad population movement, will they follow the same processes of past decades, in which the elderly seem disproportionately to be caught in changing neighborhoods?

Will the proportion of older persons living in age-homogeneous and safer communities continue to increase or level off as the number of elderly persons increases?

Will older persons develop more mechanisms for influencing the law-abiding values of the young or will there develop increasing friction between young and old for available public resources?



As these questions suggest the level and types of crimes committed against the elderly in the future may well depend primarily upon changing economic and social forces rather than upon changes in the resources and tactics of the police and other agencies in the criminal justice process.

Forecasting future resources needs of the police must await a better vision of the future. A useful first step, though, would be to understand better what police can accomplish with the resources already at their disposal. Although there has been little systematic research on the effectiveness of police responses to the problem of crime against the elderly, there are a number of approaches which offer promise and which warrant examination by means of structured experimentation. Stated in the form of hypotheses for research, they are:

That neighborhood team policing or an American version of England's home-beat officer program brings police officers into closer contact with older members of the population, reduces their fear of crime, and more effectively identifies persons who victimize them.

That better educated and more professional police officers can be trained to respond to older crime victims in ways which reduce their trauma and fear.

That communities and buildings can be designed to better safeguard their older residents.

That better public education on the dangers of bunco artists and con men can reduce the vulnerability of older citizens to white collar criminals.

That community groups and the police department can develop means to protect older citizens against retaliation by young offenders when they call for help from the police.

That police efforts to assist older citizens can be more effective when they are made part of the duties of the department as a whole rather than the responsibility of a single unit.

There are undoubtedly other propositions, Mr. Chairman I am sure you know of some, which also deserve to be tested. We believe however that these questions and propositions point out some of the more important assumptions linking social and economic phenomena to the special crime problem of the elderly and, in turn, to the impact that police services can make upon that problem.

I know that I, and my colleagues at the Police Foundation, will be most interested in the testimony of other witnesses during these hearings. We need their useful perspective on the broader social issues which we consider so important to the problem of crimes against the elderly.

I have two recommendations to offer at this stage of your inquiry. The first is to continue to support this sort of research. The work of the select committee has helped to focus attention on the lack of knowledge in this field. I encourage you to push forward.

One thing is certain, we must have better data on victimization of our citizens, including the elderly.

My second recommendation therefore is that the Law Enforcement Assistance Administration be asked to reconsider its recent decision to suspend the victimization surveys which produce this information. I served as a member of the panel of the National Academy of Sciences which reviewed LEAA's victimization survey program. We recom-

mended improvements in survey techniques, but we strongly supported continued funding for this important work.

Mr. Chairman, this concludes my prepared remarks. I will be happy to attempt to answer any questions you, or other members of the subcommittee may have.

Mr. BIAGGI. Thank you, Mr. Commissioner.

This is a very thoughtful statement and it poses very different questions. Your statement has obviated some of the need for questions that I have prepared for you, but one question that has always bothered me in relation to the elderly, crime against the elderly you made reference to the ghettos in the cities where they seem to be occurring mostly.

What we are saying in other words is where we have poverty and where we have young there are crimes against the elderly. Well, I do not want to sound medieval but I was young a long time ago and I lived in the ghetto. There were a lot of young people, they were mischievous and yes, many of them committed crime. The one thing they didn't do was commit crime against the elderly. I have been searching for the answer: Why this time? Why this generation?

Mr. MURPHY. Mr. Chairman, I wish I could provide you with a better answer concerning this increase in violent crime that we see across the Nation; in a relatively short period of time the murder almost doubling nationally and such a high percentage of this violent crime being committed by young people.

We know that more of it is by young people against other young people, but I share your concern and inability to understand why this frightening increase of attacks and even homicides against older people by very young people. I wish I had some explanation. I think my statement has suggested, at least suggested that there is an enormous need for improving our whole law enforcement and criminal justice system, because to be blunt about it we are not very effective in identifying these offenders and dealing with them at an early stage.

You are well aware of the recent change in New York State concerning juvenile records, the records of juvenile offenders. I think that is long overdue.

We have had the unfortunate situation of judges facing adolescent and adult criminals and being unable to refer to a juvenile record in proposing sentence. But we have much room for improvement on the police side, the law enforcement side as well as in the criminal justice side where we all know the overcrowding is so bad, the overload of cases, that many of the offenders, repeat offenders, even violent repeat offenders, some of them of tender age are falling through the cracks of the system are back out on the street again committing violent crimes.

So there is room to improve the system but I cannot explain. I am as frustrated, I believe, as you are in trying to explain why young people attack elderly in the increasing numbers, I think that is occurring.

Mrs. MEYNER. Mr. Chairman, would you yield for a moment?

Mr. BIAGGI. Certainly.

Mrs. MEYNER. Would not some of the answer be, Commissioner Murphy, that there is very high unemployment among our young people, particularly in urban areas? They get desperate, they don't have a job, they have nothing to do and older people are easier targets—they are not going to fight back; they can't run.

Wouldn't part of the solution to the problem be to somehow find jobs even in the public or private area for a lot of these young people?

Mr. MURPHY. I certainly believe that.

In all of my experience where we see the worst of our social and economic problems concentrated in the city, there you would see our worst crime and our worst violent crimes. As a matter of fact, in this city, in New York, in Detroit the census tracks of the inner city have 50 and 100 times the rate of violent crime that some of the census track on the outer rim of the city have.

I do not claim to be able to make that connection between these social and economic ills, unemployment, drug addiction, alcoholism, broken homes, all of those things that seem to be found together. I do not know why there is a connection, but certainly there is some relationship we see over and over again in every city that I am familiar with.

Mr. HUGHES. Would the chairman yield also, just on that point?

Mr. BRAGG. Mr. Hughes. Mr. Hughes is from New Jersey also.

Mr. HUGHES. I have not seen the demographics that would bear it out, but it has been my own experience that older people seem to have, in increasing number, become prisoners in deteriorating areas because they do not have the resources to leave.

They quite often become caught up in their own commitment to a given area. They are also hesitant to leave a home, perhaps of some 40 years even though the neighborhood has changed considerably.

Do you also find that to be the case?

Mr. MURPHY. I think so and I think some of the studies reported in your earlier publications indicate that older people have more fear generally speaking and I think it is compounded by the crime experience in the neighborhood.

Also, I believe it is very much influenced by the communication that is coming to them whether that be through the news media or otherwise. In other words, again in a publication one of the committee reports refers to the problem of fear which may begin to run away, that has become greater than the real problem would seek to warrant. Not that I suggest for 1 minute that we should be lackadaisical about any level of crime, but fear is a problem.

What I am trying to say is that the news media has some influence too and the whole attitude about a neighborhood whether it is deteriorating, whether it is on the skids. There is a real problem of morale of people in the neighborhood. Of course many older people, as their neighborhoods deteriorate choose not to leave the neighborhood and they become the victims.

Mr. HUGHES. Even though we have become a fairly mobile-transient society I think that older people attach more significance to the word home than some of the other groups.

Mr. MURPHY. Yes. I think that is understandable.

I am middle-aged myself, but I notice my own changing attitudes about those things and I think that people just do not like to leave the neighborhood where they have always gone to the same grocery store or church or synagogue, where they know the neighbors.

Mr. HUGHES. Thank you, Mr. Chairman.

Mr. BRAGG. Well. I would like to get back to the gentlelady from New Jersey, her point about positive unemployment.

I would like to say that I think poverty is relevant, part of the poverty today could be almost described as affluent as compared to the poverty of decades ago. There was not any Government participation. People in fact went hungry, I mean literally hungry with no hope and no resource available. I'm aware that there was violent crime and there was crime, but the difference is that the elderly were not victims of crime to the degree which we have today. Today they are the prime targets of criminals. That's why I search, I am aware of the proverbial problems of today, but, by making a comparison I am unable to find the answer to the question that I pose in connection and you apparently have the same difficulty in finding the reason for this phenomenon.

Mr. MURPHY. Well, let me say in response to that comment or question that in all fairness I think—with all of the weaknesses in our reporting systems, we know more about crime today. It is being reported more thoroughly and more accurately.

As concerns the level of violence in our cities, I don't think, inasmuch as we are inclined to believe these are the most violent times, they really are not the most violent times in our cities. My forebearers, my name will tell you what my background is, my forebearers in New York City were very violent people.

In fact, the history will record that there were parts of the Irish ghettos of New York in the 19th century where the police refused to wear their uniforms. That's how bad the level of violence was, but within less than 100 years of that that group had elected a president and most of them have gone to the suburbs to another congressional district.

So today they scream at me, including my two brothers who are retired members of the department, Congressman, about why more crime in New York and coming into all of the neighborhoods of the city. So I share your concern that the level of violence we are experiencing today directed against elderly people is frightening, it is a frightening phenomenon and we must address to social and economic causes, certainly, but my more immediate concern, I have a bias, naturally being in the field, is that we learn how to deal with that violent offender at the earliest possible moment and that the longest term incarceration is the only solution we see to it, that is what we must have as the short range solution to this problem.

Mr. BIAOGI. Mr. Sarasin.

Mr. SARASIN. Mr. Chairman, I wonder how much of the problem of victimization of the elderly is related to the lack of a loving and touching relationship between the young people and the older people in today's society, existed in prior societies, just a few years ago.

Now we either farm out our elderly or leave them where they are and the parents and grandchildren go off to the suburbs somewhere and you do not have the attitude that a young person would have if, well, I don't want anybody touching my grandmother, and I'm not going to touch theirs. There are no grandmother-grandchild relationship or at least not very many. Maybe that has to do with the problem.

Mr. MURPHY. I suspect and I am no expert, but I certainly suspect some of the problems of the automobile and our affluence are just this thing, the generation gap and the separation.

Today I understand there are many, many more people in nursing homes or not living with the family, pathetically, let me say from my own, at least experience, I know the Congressman's experience that



where you will go into a home in the city where your elderly parents of affluent children, affluent children who are not properly supporting them. It is another tragedy and I think a manifestation of the problem you describe, Congressman, that somehow we become a society where we tend to separate ourselves by age and the family structure that provided protection in the past is broken down.

Mr. SARASIN. Thank you, Mr. Chairman.

Mr. BIAGGI. One more question.

Is it fair to say, given the circumstance of today and absent any productive research, that the elderly of the Nation in increasing numbers of the elderly of our Nation would be doomed to the same type of existence or the same type of fear they have with relation to their personal safety?

Mr. MURPHY. I think as another dimension of the whole urban crisis now is just not good. I am discouraged by the outlook.

I see it only worsening, I'm sorry to say that. I wish I could be more encouraging, but I do not see much room to be encouraging.

Mr. BIAGGI. Your background has been a lifetime in every dimension, it is suggested in research beside what the National Police Foundation is doing and this committee is doing, what other areas of other agencies or organizations are doing in working in this area?

Mr. MURPHY. I referred earlier to the problem in our courts.

I think the breakdown in our law enforcement-criminal justice system for several years now has been in the courts. I am not shooting a scatter shot at the judges. I am not saying there are bleeding heart judges, or corrupt judges and that's the whole problem, although I have experienced both types. But I think the problem is an inability because of the overload to deal with their work in the prosecutors offices and the courts.

The police constantly complain, and on the other hand the prosecutor—about all of the arrests that they make that the courts do not handle properly. The judges and prosecutors will sometimes say well many of the arrests that the police make are not high quality arrests. They do not have sufficient evidence for prosecution. But the basic difficulty is that many of these young violent repeat offenders are slipping through our hands because we are not working closely enough together. The police departments and the prosecutors offices and I am very encouraged by this new computerized system in the prosecutors office here in Washington, the so-called promised system which is helping both the prosecutors and the police to do a better job of identifying the repeat offender and dealing with him promptly. I think there is room for a lot more research around that whole process.

Mr. BIAGGI. A case at point.

You may be familiar with the Timmons brothers in the Bronx. I think between them they committed several hundred crimes, homicides and all the way down; and they never really did any prison time.

Eventually they got involved with rape and assaulted robbery of an 80-year old woman in the park. The community became aroused and the senior citizens became aroused. What they did, in fact, is every time a Timmons boy would perform this act and was scheduled to appear before the court they appeared in great number and they made their presence known simply by walking in. We are talking about those 60, 70, and 80 years of age walking in with canes and whichever.



There was a trial and there was a severe sentence and he has been taking out of circulation which shows that judges behave just like anybody else and they respond to attention, to pressures, whichever. It is society's pressure really more than the level of such. But you are right; the criminal justice system simply is not working to support potential—I could not agree with you more.

Mrs. MEYNER. I have no further questions except to thank Mr. Murphy for giving us a great deal of food for thought.

Mr. BIAGGI. Mr. Hughes?

Mr. HUGHES. I have no further questions.

Mr. SARASIN. No further questions, thank you.

Mr. BIAGGI. Commissioner, I want to thank you for your contribution.

Mr. MURPHY. Thank you.

Mr. BIAGGI. Our next witness is Mr. Richard Scammon who is presently director, Election Research Center here in Washington. He has served as a political analyst for both ABC and NBC Television Networks. He is currently on the board of the American Arbitron Association and his books include: "America at the Polls," "This U.S.A.," "The Real Majority," and "The American Voter."

Mr. Scammon, welcome.

**STATEMENT OF RICHARD SCAMMON, DIRECTOR, ELECTIONS RESEARCH CENTER, WASHINGTON, D.C.**

Mr. SCAMMON. Thank you, Mr. Chairman.

I have no prepared statement and I understand the subcommittee is concerned with general profile of the future for the American aged. I feel primarily, elections and political research and I will just outline, if I may in a minute or two, what I think this is likely to be and then respond, if I may, to such questions as this may generate.

Elderly people are an increasing share of the American elected. If anyone of you three were to alienate totally the aged population in your district you would not come back.

Mr. BIAGGI. Don't say it! Don't say it!

Mr. SCAMMON. You would not even get through the primary, I would bet.

In 1976 voters over 50 accounted for 40 percent of the votes and I say over 50 rather than over 65 because at the age of 50 they should begin to think more about what is going to happen than what has happened to them in the past.

I should think that like any minority though this is a very large one the efficacy of the aged voter depends basically on three things:

It depends first on pure numbers because if a minority is small enough it can still have some influence, but obviously if still diminishes as the numbers diminish.

Second, it depends upon constancy and by constancy I mean as with any minority the degree to which people in the minority are prepared to make that minority the sole reason for their voting behavior.

You all know from your own experience the problem you have with the constancy of people much concerned about abortion and about gun control and without looking at your own mail sacks I am sure you get very strong feels on both sides of these two questions.

Now, because ageds over 50 from 40 percent of the active voting public there are also many other things, they are rich and poor and farmers and city dwellers and Jews and Protestants and Catholics and all the rest. There are many things which tug at their interests and cause them to vote the way they do.

In the last election, for example, for President the older voters split about evenly between Mr. Ford and Mr. Carter as did the whole country.

The constancy increases with the perceived danger to the interest of the group which is true of course of the aged, it is true of Italian-Americans, it is true of anybody. If somebody were to propose a constitutional amendment that no person over 60 would be able to vote this would get, I think, 100 percent constancy response.

On the other hand there are many other issues which are highly technical, very detailed and which attract the attention of relatively few people. One I may mention, Mr. Chairman, because it was raised about the willingness of young people to continue to support the increased social security taxes, a level of social security payments to the aged. When I lecture at organizations like the American Association of Retired Persons I very frequently get the reverse question: why should we pay school taxes, we people past 50. Our kids are grown, they are gone. Why do I have to pay for my neighbor's four kids, which I think is a nice tradeoff of social responsibility in terms of who is going to pay taxes for what.

The last of these three things that affect elderly voting is, of course, organization. As many of you have perhaps seen in recent months, years in the Congress, as the party ties have weakened nationally, as the Houses becomes a more democratized smaller body, the weight of pressure and the weight of organization becomes more and more important.

The AARP now, I believe, has passed its 10 million member mark and are quite active as really, the last week's work in this House, are quite active politically.

For the future I would guess the same plus, the weight of the elderly voter is going to increase in the United States. I suppose that in political reporting there was never as phony a story as the 1972 story about young America taking over the political process. The revolution was going to leave on track nine at high noon—there was no track nine, there was no high noon there was no revolution and there were very few young voters.

What has happened is that the electorate is graying, not younging, the percentage of people in the higher age group who vote is already measurably higher than it is to those under 30 and I would think for members and candidates the demographics of realism will be tested very severely in this matter of the aging by being modified by these factors of numbers and constancy and organizations. The numbers will certainly be there. The constancy will be there as there may be threats against economic well-being, physical well-being of the aged and the organization usually wishes to bring one and two together.

I would think that in the year 2000, I would have to consult with my former colleagues in the Census Bureau, but certainly I would think that the percentage of voters in the election year of 2000 over 50 would be measurably higher than the 40 percent which it was last fall.

Let me conclude there, Mr. Chairman, and invite such questions as this may generate in your minds about your future.

Mr. BIAGGI. Our futures are assured because we have the senior citizens.

You make a very concise presentation and I firmly believe a very accurate one.

I think your analysis of where they go with relation to constancy is the critical one.

Mr. SCAMMON. As with any minority.

Mr. BIAGGI. That's right.

How do you think Secretary Kreps' remark with relation to increasing the age to 68 would impact on the senior citizen population?

Mr. SCAMMON. Well, if she ran for Congress she would lose, but she isn't running for Congress and being in the bureaucracy she can—

Mr. BIAGGI. It would be that kind of issue that could have them coalesce into a single group?

Mr. SCAMMON. Yes, I would think so because I know of no social security recipient or potential social security recipient, which means me, who feels that social security is a welfare scheme.

They may be actuarially wrong but I would say 99 and 44/100's percent of the potential recipients of social security feel that they have made an investment in a system where they were promised certain returns for their payments. They do not regard it as a means test, handout, welfare substitute. They regard it as something they are entitled to even if they are earning money on the side as I believe another part of this House has now raised the earning ceiling to \$6,000, if I read the press correctly at least in its present proposals.

They think of this as a right, not something that they are going to sit in some dirty old office and apply for simply because they are starving. They do not think of it as a welfare system.

Mr. BIAGGI. Well, I think they have worked for it, they have earned it.

Mr. SCAMMON. That's right. I think if Secretary Kreps were to try to pin this albatross on the administration, the administration would suffer.

Mr. BIAGGI. Well, I have got that side of the coin dealt with, how about the other side of the coin, you listened to all the experts testify this morning and say that some adjustment must be made in light of the ever-increasing life expectancy.

Mr. SCAMMON. Because of the financial problem?

Mr. BIAGGI. Sure.

Mr. SCAMMON. Take the school tax off the aged.

In other words, if you are going to do one, do the other. I, for example, hope to get my social security in a few years from now. I could equally argue, my daughter, my one child has finished school. Why should I pay a dime for the public schools as an act of selfishness.

Mr. BIAGGI. No, I'm not—

Mr. SCAMMON. I know your point but what I am saying is that the transfer here is so real that if you want to take away by extending 3 years or by telling me that there is an economic difficulty involved here, let's go the other way.

Mr. BIAGGI. Let's get it straight.

I don't want to take it away—

Mr. SCAMMON. No, I understand.

Mr. BIAGGI [continuing]. The suggestions are made.

Mr. SCAMMON. Let me put it this way that once you begin to equate benefits with specific payments then I might raise another point—I am not going to get as much out of social security as I put into it. I think this is a fair statement, I think everybody in the middle-class is normally going to draw less than somebody who has not earned as much during their career yet I ought to get full actuarials of the payments.

Once you go into this mare's nest, I am speaking now in terms of the people who are actually recipients of the money, I think you would end up with more difficulty as indeed this House has probably found in trying to reform the welfare legislation and has found and will find in trying to reform the tax legislation. There are just a tremendous number of problems.

Mr. BIAGGI. You will concede it is a problem?

Mr. SCAMMON. Anything involving money is a problem or its absence, particularly.

Mr. BIAGGI. Mr. Sarasin?

Mr. SARASIN. Do you see, as has been mentioned before that if social security would take an activist role in trying to explain their role what they really do and how the system really works that that might have some effect on the standing of the people are recipients or are about to become recipients?

Mr. SCAMMON. I am not really sure, Congressman, that protest here which is to be relieved by this action is so much among the recipients and the near recipients as it is among younger people who say why should my social security tax go up, up, up and the ceiling on which I pay go up, up, up to support the elderly.

There, I think you could point out that if your four kids want an education and want my money to help educate them, do it the other way.

I would not think that your real problem of an education is not so much for those who are about to receive the money, they want to receive the money. I do not think they are concerned with the educational circumstances. But you do certainly have a problem, as the chairman pointed out to another witness, with respect to those who are in their twenties and thirties, forties who are going to be paying increasing social security taxes on ever increasing income ceilings to support this program.

Now, whether or not social security, PR in cosmetics would do any good there, I do not know.

Mr. SARASIN. One of the great comments, which I am sure made to all of us especially by a younger person is that they are never going to see all the dollars they put in and if they took that money and put it into an annuity they would be better off, but of course, they overlook the fact that there is also a disability coverage and a number of other benefits, widows and orphans and so forth that are in there that can really provide an estate.

Mr. SCAMMON. I hate to go back to the school system, but we never get the money back that we put in on most public programs, certain individuals.

It would have been much cheaper for me to educate my one child privately and take back every dime I have paid to Montgomery County, Md., for school tax. I don't think I ought to do that. I think

the education of children is more important than whether or not I pay extra money for this purpose. I would say the same argument with respect to the elderly.

Mr. SARASIN. I had a college professor that once said thank God we don't get all the government we pay for.

Mr. SCAMMON. I think that would be right.

Mr. SARASIN. Thank you, Mr. Chairman.

Mr. BIAGGI. Mrs. Meyner?

Mrs. MEYNER. Thank you, Mr. Chairman.

Mr. Scammon I think we all have to be careful because someone told me recently that there are three ages of man. There's youth, middle age, and "my, you look great."

Mr. SCAMMON. There is a comment by an aging candidate for the House of Commons who referring to his younger opponent said: "I would rather be in my second childhood than my first" and this might apply too.

Mrs. MEYNER. I would just like to propose to you a rather broad, philosophical question.

As we all know older people for a long time got short shrift in our society. People began to realize as you pointed out very realistically, that senior power was growing. There were more seniors voting and politicians became very aware of it. We certainly are not holding these hearings and there is not a Select Committee on the Aging for political purposes. A great many of us care very much about our senior citizens and realize that more should be done for them.

But, as you know, any group in society that thinks it is getting someplace is going to want more and more and more for itself. We know that.

Do you think there is any danger that the pendulum will swing and too much emphasis will be put on people over 65 or 70?

I know that's a tough question—

Mr. SCAMMON. Well, as I get closer to that age I try and disassociate myself—

Mrs. MEYNER. I mean, a lot of older people are wanting services. affluent older people that can afford these services, but because they are senior citizens they feel they ought to get them free.

I disagree. I feel that senior citizens ought to pay school taxes, but where do you draw the line? I get a lot of mail in my office saying, why should I pay, just as you pointed out, but I think they are a part of society and will have to take both the good with the bad.

Mr. SCAMMON. Let me put it this way as we all know and certainly you who are members know full well the pressures upon you or the pressures from any group are constant.

The first thing any pressure group learns is the quick ability to identify the national interests with its own interests. I have found none who would come out and say well, I know this is only in my interest, I know it is against the national interest, but I am for it anyway.

The mind is much too quick for this and it soon arrives to the formula that what we are proposing, whatever it may be to benefit me is for the national interest.

If you are speaking of the affluent aged, no, I would not think they would have any particular claim on the Government; however, one must recognize that for older people at least to level that once is



usually substantially to do so to what they had known during their working years or in most cases this is the case, and if the programs can be useful to them, fine. Those who need it, if they can afford it let them pay for it themselves, of course. I would apply this all the way down the line to any program. Medicare—medicaid as well as medicare, for example, if you can pay for it, you should. But this is just a personal judgment.

On the political side to which I was originally addressing myself the pressures, of course, on you from almost every group known to man, will I am sure simply increase as people try to meet these terrible dangers, particularly inflation, they try to protect themselves against emerging themselves against emerging difficulties with which they are faced, whether it is crime in the street for the aging, whatever.

Mrs. MERNER. Well, it is what happens to all of us here, every group we meet with leaves us with two messages.

One, cut down on Federal spending, but two, help us to get some Federal funds for our use or our particular problems.

Mr. SCAMMON. Well, again in speaking of political questions round about, when I talk and try to develop is the concept of the ambivalent American who is always for programs that help him and not much concerned with the other. Our western friends who voted so heavily for Mr. Ford in the last election were very conservative and so it came to the job and the need for water then the Federal Government was immediately importuned to cause the heavens to rain upon them.

Let me lay out this for you all, you have seen it a thousand times at your own offices.

Mrs. MERNER. Thank you. Thank you, Mr. Chairman.

Mr. BIAGOR. Mr. Hughes?

Mr. HUGHES. Thank you, Mr. Chairman.

I found your testimony extremely enlightening. I think you have touched upon an area that gives a lot of us some concern and that is the attitude that quite often is prevalent. What really is in it for me?

When you talk in terms of education, I suppose those that are childless would have the same argument as to why they shouldn't be supporting education.

Mr. SCAMMON. Or many Roman Catholics that are required to pay a school tax and in addition required to pay a rapidly increasing fee to parochial schools.

Mr. HUGHES. I think there is a point, I am not saying we have reached it, where perhaps we do ourselves a disservice for just thinking in terms of individual or just group needs. I frankly think that it is important that seniors continue to play a very important role and that includes contributing to community needs. There are ways that I think we can relieve some of the burdens of our aged and address some of the problems, short of removing them entirely from some of the programs that they should participate in as part of the national state, or community effort. I hear the same thing as you do.

Mr. SCAMMON. I am sure you do.

Mr. HUGHES. In fact, it is amazing to find that in many of the communities you will find school bond issues going down where you have heavy concentrations of senior citizens. It is also frightening to see the low numbers of young people coming out for school board elections. But the seniors participate and do often make a difference. I think that we have a great deal of good leadership now in many of the

communities, and the seniors have often taken the much broader view that education is important and that they do have a responsibility as part of the community. Also, I think it is part and parcel of efforts to bring older people more into the mainstream of the community, and to eliminate the kind of isolationism that has taken place in many areas.

I think it is important to include seniors more in the decisionmaking process, more in the mainstream of activity, whether you are talking about taxes, or whether you are talking about other programs.

Mr. SCAMMON. The point which I was making about the school taxes, which I am perfectly happy to pay and I am sure every senior citizen in America is willing to pay, providing it is not thrown back to him constantly that the young people are bitching because they have to pay for the upkeep of the elderly. We all pay for things for which we have no immediate and personal gain. The people behind you in the picture, for example, are paid for by all of us. We have no immediate gain from this. We have a long-range gain, but I am distressed sometimes to hear the argument or to hear the viewpoint that young people will refuse to pay social security taxes or if they had the option would opt out of the social security system, because they are the narrow point of the pyramid, you know, supporting such a vastly increased number of elderly people, and I must confess that as a quasi-demographer I would doubt this.

But with the rapid increasing two-earner families and the rapid movement of women in the labor force and the types of our integration policy on the other side, I would think that as far as the labor force is concerned the admission of illegals and women—maybe I had better say women and illegals was—would raise this base much higher than many people fear it may become.

Mr. HUGHES. Well, I think you have triggered something else that I have seen some indication of and that is the feeling on the part of a lot of young people that they are carrying much of the load of social security system.

I think it is so important that we defuse that attitude of conflict between young and older Americans about who is doing what and who is carrying what responsibility. I do not think that that is a healthy attitude—

Mr. SCAMMON. It is not.

Mr. HUGHES. Fortunately, I think that such a feeling is in the minority. I think that most older people and most young folks know that there is a great deal of responsibility involved by just being a citizen in this country.

Mr. SCAMMON. I would hope so, I would hope so.

Mr. HUGHES. Thank you.

Mr. BIAGOR. Thank you, Mr. Scammon.

Mr. SCAMMON. Thank you, Mr. Chairman.

Mr. BIAGOR. Dr. Robert H. Binstock.

Dr. Binstock is Stulberg professor of law and politics at Brandeis University. He is presently on sabbatical at Harvard University as visiting professor at the school of public health services administration.

Dr. Binstock has written and lectured extensively in the field of aging. He has also participated in symposia on aging in America's future.

Dr. Binstock, we welcome you.

**STATEMENT OF DR. ROBERT H. BINSTOCK, VISITING PROFESSOR,  
PUBLIC HEALTH SERVICES ADMINISTRATION, HARVARD UNI-  
VERSITY, BOSTON, MASS.**

Dr. BINSTOCK. Thank you, Mr. Chairman. My apologies to you and the members of the committee for not having a written statement.

If you look closely, you may be able to see that the suit I have on this morning isn't a suit. It is one coat from one suit and pants from another. That's how hastily I mobilized myself to get here.

At any event, I will try to be brief. I have been asked to deal with social implications of the aging of the population. Rather than take a global view of all of the social problems, many of which we can well anticipate, I would like to focus in on a priority set of issues.

In some ways getting to the political realm a bit, perhaps taking a little issue with my illustrious predecessor here at the table. I do not want to go over the ground about the aging of populations. I think we have well established that this is a worldwide phenomenon in industrialized countries.

I would just like to call attention to the particularly important point for social implications of the enormous increase in the number of old, old people we are going to have.

The reason I do that is because as Mr. Gordon's testimony at the outset indicated, we do have life-extending research possibilities coming into fruition probably over the next 20 years.

The implication of that for the quality of life is not so good. The reason I say that is because we do not have very good technology or research underway to deal with such disabling conditions as organic-brain syndrome, chronic brain syndrome. As a consequence, we are going to have more people around proportionally and in numbers than we do now who have chronic brain syndrome.

That is one of the reasons, one of the main reasons we begin to talk about the quality of life very, very seriously at a fundamental level.

Now, this and other concerns to the quality of life have led us, the Federal Government, our State and local governments and the society in general to elaborate an incredible agenda of commitments to helping older persons.

Mr. Sarasin, you may recall that I testified before the full committee back in early August and made the point that the House select committee has identified 135 Federal programs affecting the elderly and that does not say anything for the 80,000 governments at the State and local level and what they have committed themselves to. As he will recall, I made the point, then that we cannot financially, let alone logistically and bureaucratically, even begin to deal effectively with all of these things we have said we want to do.

So there is a question of priority.

Now, what I would like to focus in on in terms of the future is the very critical area of the social implications of ill health because we are going to have more people around with ill health as a consequence not only of the demography, the birth and longevity issues, but further changes in life extension technology.

Now, we know that the social implications of ill health are enormous, both for the individual and for the individual's family and I think

both of those should be stressed. We know that for the individual ill health means a loss of self-esteem, a loss of social status, a loss of a capacity for work no matter how many laws there are about your being able to keep working. A loss in the level of income, a loss in the range of social contacts and a loss in the quality of an overall life style.

For the individual's families there is a direct impact on the families and member's own physical health, whether it is a spouse or the adult children. The nature of family relationships the contacts within the family, its living arrangements, its economic status, and its social activities.

Now, it is this picture of the implications of ill health that has lead us to stop making these academic distinctions between health services and social services and begin to talk about a continuum of supportive services. Where you draw the line between health and social support is something people might want to debate on the head of a pin, but there is arrangement needed.

Now, the temptation to underestimate the nature of the problem is readily understandable. There is what we call the 5-percent fallacy. We read statistics on the institutionalized elderly today that 5 percent of the elderly are institutionalized because of disabling conditions such as chronic brain syndrome. That is misleading. It is true at any given moment, if you could stop the clock and have an instant replay you would have 5 percent of the elderly population. But if you phrase the question: What are the odds that you or I will be in an institution before we die, the answer comes out 1 in 5.

In other words, at the present time 20 percent of our cohorts of elderly persons are going to end up in an institution before they die.

Now, let's add to this to get a really larger percent of the picture that it has been very reliably estimated by our leading experts such as Elaine Brody of the Philadelphia Geriatric Center, that in actual fact 70 to 80 percent of the supported care provided for older persons in this country including institutions and outside institutions is provided by their own families, OK, that is even including in that institutional picture, 70 to 80 percent of the supported services are provided by adult children.

Now, if we think of that in terms of certain current trends which have been alluded to today the implications are enormous. We have already talked about the increased labor force participation of women. That means that those adult children mostly who are daughters who are providing that care are going to find it harder and harder to provide that care much as they may want to, just because of the logistics of the situation.

More importantly the British historian Peter Lasliid has identified that is it not the industrialization of a society or its technology or all of these global pictures that lead to the break up of family support and kinship networks in supporting the aged. What it is is trends in such things as divorce, separation, rates of remarriage or nonremarriage and what those trends do to weaken family ties. It so happens that we are going through the exact trends in this society right now that he has identified in all sorts of societies over the last several centuries throughout the world that tend to weaken kinship ties and the capacity and the ability of families to support their older persons.

Now, I briefly paint these things out because it strikes me if I had to pick a priority social implication and policy implication of the aging



of the population it would be that as we have this increasing number of older persons when we count from 50 to 80 and people count from various ages today, it is clear we are going to have more people who are disabled by things we can not do much about and are unlikely to for some decades like chronic brain syndrome.

As we reach into this period we are going to have less of a natural support system in society than we have now because of the terms I have just alluded to. People will want to help out their parents, everything indicates that that is true and indeed data show that people do not like to have to rely on bureaucracy. They do not want to dump their parents or their uncles or their aunts on bureaucracy, but they may not be capable giving the kinds of household living arrangements and work arrangements that we seem to be developing.

So I would suggest that as this committee wraps up this set of hearings and moves toward thinking about the future, the area to concentrate might very well be policy not that would show 135 things we might try to do, but policy that might help to keep that family in tact and help it to do what it wants to do. It may be incentive to help the families stay together. It may be boarding hospitals so the family can get away for a weekend and make it more manageable to have mother-in-law living with them and still make life bearable to all of them.

It may mean more day-care places where people can have their parents in decent shape while they are off at work. And with due respect to the Chairman and to Mr. Scammon, I would like to conclude my remarks at this point by suggesting that I do not think Congress is going to be pushed to do this or any other thing by senior power.

I would not stack up the case of my mother against your mother except to say—

Mr. BIAGGI. My mother is a scrapper.

Dr. BRISTOCK. My mother is a scrapper also, but she is fighting for day-care for children, which is a point I want to make, not to the aging even though she is 75.

The point is that if you go down Mr. Scammon's analysis and his own point about numbers, constancy, and organization there at the present time the aging are not ahead of a homogeneous group all voting the same. As he pointed out in the last election it was about 50-50.

We have no indication that we are going to have a diminution of this heterogeneity but the population is going to get more diversified from everything that Mr. Gordon has studied and everything else we know.

So unless we get to the point of the illustration he suggested as a constitutional amendment or the point where we say we had better round up all these old people where we can serve them all conveniently in one place I do not think you are going to get a cohesive age vote.

Nobody is organizing that vote now except at the very local level in very specific districts. I would not agree that Juanita Kreps would lose unless she ran into very specific kind of district that we would describe, people who are very very eagerly looking forward and on the brink of poverty to their social security checks.

The reason I make these points and maybe we will talk about them some more is that I am concerned about two things in the distorting political picture of the aging.

One is a backlash that I see emerging. The more I read in the press about the political elout of the elderly, including this morning's paper on the putting down, the more I begin to see the language slipping over



into and implying that these people are ripping us off. I have seen those words, the "Social Security Ripoff" by syndicated columnists, the more people are implying that whatever older people have must be what they want because they are so powerful they get anything they want out of Washington.

Mr. BIAGGI. I do not believe that is a fact.

Dr. BINSTOCK. No, it isn't.

Mr. BIAGGI. And also when they talk about rip-offs, I don't believe that those writers are referring to the elderly who come on to their benefits at the age of eligibility. There may be some other conditions, but I do not think that is the area to which they refer.

Dr. BINSTOCK. Well, some of them are not as careful as you are, Mr. Chairman, but the other point, aside from the backlash is that I do not want the Members of Congress to feel that they are going to be pushed to do what needs to be done.

I appeal to you to take the same kind of leadership you have shown at this mandatory retirement bill and do it through concern, the kind of concern you have.

Mr. BIAGGI. I think notwithstanding we may say a lot of things in good humor, but the real motivating force is the American situation.

Dr. BINSTOCK. I agree, Mr. Chairman.

Mr. BIAGGI. I think most people recognize that. We like to aliven some of these hearings with injection of humor on occasion, but I have only one comment I would like you to respond to.

Given the break down in the family and the increased age of parents or the young children or their children in the sixties on the desire to really keep the family together, given the fact that that is not happening the burden has to shift somewhere. I can only see the inevitable, the government as the last resort. I do not know just how many dollars would be available for senior citizens if it got to that point because it is a very touchy area, but to encourage or elevate some of the problem that a family might have, what is your reaction to revision of the income tax law which would provide for an additional deduction for household for the senior 65 or older?

Dr. BINSTOCK. I certainly think that is a very reasonable and meritorious possibility to explore. Certainly far better on its face than many of the deductions we have at this point and I think that is exactly the kind of illustration or the incentive to help the family to do what he wants to do what we were talking about.

Mr. BIAGGI. Mr. Sarasin?

Mr. SARASIN. One of the statutory changes that has been made in a lot of States has been to insulate the family from financial responsibility for the parents. I do not know if that will ever change again, but it certainly means the large numbers of people are now receiving welfare payments for nursing homes which I guess in the welfare area that is the largest expenditure of dollars, to maintain people in nursing homes.

Prior to these changes that use to be the responsibility of the family and the nursing home was an area of sort of the last resort, you maintained that elderly person in the family unit as long as you could.

I wonder if you would comment just on that phenomenon. Do you think it is good or bad or where we should go?

Dr. BINSTOCK. I think it is an extremely important issue you raised Mr. Sarasin.

There is considerable work underway now which has not gotten to the conclusive point and may never, but it may get to the decision-making point; to try and analyze the comparative costs of providing people the services and supports they need to remain in the community whether with their families or some semi-independent of their family and in institutions.

The truth is if you look to see what is done in institutions, it is to do exactly what you do when you help maintain an older person in the community, in a household. Really implicitly what we have is the notion that there is some sort-economy of scale by doing it in nursing homes.

That may be problematic and it may be that it is even more costly given the abuses in our system which we may never be able to correct, to do it on an institutional basis. So the main comment I would be able to come up with is that I think we ought to keep a very careful eye on work that is being done in this area to see if in fact, there are lots of myths about institutions and if we can't smoke out the notion that maybe what we have been using institutions for is to get rid of our own responsibilities and guilt and to not really to save money for society or for ourselves.

Mr. SARASIN. If we are not going to go backward and place the financial responsibility back on the children of the elderly, does it make sense to move in the other direction that actually provide a financial incentive for the same children to keep the elderly person in the family as has been suggested quite often?

Dr. BRISTOCK. I think it would especially if we could do it without trying to put a bureaucracy of service delivery in place first.

In other words, if we could phase in the payments and the incentives whether they are tax deductions or otherwise to the family. As a service delivery system a much, much better one than we have now gradually gets phased in. We may have to sacrifice for a short time some awkward situations where there are no services in place, so we would want to phase to this very carefully, but I fervently believe that we could move toward something like a free market supply-in-demand situation on that if we provided the incentives to the family to purchase services within the community.

Mr. SARASIN. So then the nursing homes would be out trying to compete for those—

Dr. BRISTOCK. They may try to compete, but I think we could design the incentives so that the nursing homes might not be the ones that they would be allowed to use for the incentives, for the deductions or repayment money for—in other words, we could put an emphasis in the design, the purchase of services that kept people in the community rather than dumping them in institutions.

Mr. SARASIN. You stated earlier that the future outlook wasn't really all that good. I do not know exactly how you phrased it, but the impression I was left with was certainly the quality of life would not be particularly good either for the elderly or for the rest of society trying to deal with the problems of handling the question of the elderly.

Dr. BRISTOCK. If you look at the old olds, yes. I agree with the earlier testimony of several witnesses that we are in effect going to be extending middle-age into chronologically later years, that is, people will be healthier in their sixties and in their seventies.

However, we are going to have more people in their eighties and it is there that I am particularly addressing myself to the old old.

For that issue and for those people things are going to be tough, so I think we will have less problems in the social area and this kind of functional area than we have had through the decades of the 1960's and it may be well into the seventies, but we are going to have just as many problems and probably more transferred now higher up the age range with the life extensions.

Mr. SARASIN. Do you think that an effort to deal with those problems, the retirement age, social security retirement age should be extended, raised?

Dr. BINSTOCK. If it can be done in a politically viable way. That is the tough nut to crack.

We saw how Juanita Kreps was jumped on the second she even muttered a word on it and I think it is going to have to be introduced very slowly, carefully. Perhaps if the education Dr. Sheppard talked about, perhaps it is just the capacity to find what people are stating the issue in slightly different ways. I think it will have to be a very careful, slow campaign before it becomes politically viable.

Mr. SARASIN. Thank you, Mr. Chairman.

Mr. BIAGGI. Mrs. Meyner?

Mrs. MEYNER. Yes, Mr. Chairman.

Dr. Binstock, as you know we have voted on the elimination of mandatory retirement and all of us who work on that bill thought it was a good piece of legislation. I discovered going back to my district in New Jersey on Saturday at a luncheon with the president of Princeton some opposition by members of the administration of that university, some faculty too. You would have thought I had just done away with tenure.

I just wondered what you think, as a member of the academic world, frankly, of that legislation?

Dr. BINSTOCK. Well, fortunately I do not have to speak for universities, but as a member—as a gerontologist first, a political scientist first and as a university administrator second, I would say it is a terrific thing, but they are scared out of their wits because of the question of higher salaries, people getting raises through longevity and they always get 7-percent increases, 5-percent increases and of course the higher up you are the bonus goes for your salary, plus as you have been reading the point about all of the affirmative action programs for women, minorities and so on, it is going to clog up the spots.

Now, I suspect what this will do is raise, sooner than would have happened the question of doing away with tenure in universities. I am all for tenure, I was not until I got it, but I am all for it again.

And we will not get into speeches on that, but the truth is that that is what is going to have to give there and I am all for it giving because that is the principle embodied in mandatory retirement.

Mrs. MEYNER. Do you feel this legislation will mean the end of tenure?

Dr. BINSTOCK. I think eventually it will, yes.

Mrs. MEYNER. That is a very interesting point. Thank you very much.

Dr. BINSTOCK. You are welcome.

Mr. BIAGGI. Mr. Hughes?

Mr. HUGHES. No questions.

Mr. BIAGGI. Thank you, Doctor.

Dr. BINSTOCK. You are welcome.

Mr. BIAGGI. Our last witness is Mr. Humphrey Taylor.

Mr. Taylor is chairman and chief operating officer of Louis Harris & Associates, Inc. He is also chief executive of Louis Harris Associates International of London, England. Louis Harris International has conducted surveys in 44 countries around the world. During his survey field Mr. Taylor worked for the Government in Tanzania and Paraguay. He has published many articles in his survey research and public policy and is broadcasted frequently on radio and television.

Mr. Taylor, welcome. Before you start I must make you aware of the time in which we live. We respond like Pablo's dog to bells. The first set has gone and we expect the other set will run in the next 4 or 5 minutes. We will go sometime beyond that. We ask your forgiveness by posing a time limitation, but these are the facts of life.

**STATEMENT OF HUMPHREY TAYLOR, DEPUTY CHAIRMAN AND CHIEF OPERATING OFFICER, LOUIS HARRIS & ASSOCIATES, INC., NEW YORK CITY**

Mr. TAYLOR. Mr. Chairman, I must thank you first of all for promoting me, I am actually deputy chairman, not chairman.

I would also like very briefly if I could to express Lou Harris's personal apologies for not being here, unfortunately he was invited prior to this visitation here by the Majority Leader Wright to speak to the Democratic caucus which is where he was this morning.

In view of the time constraint I won't say all of the things I was intending to say.

Mr. BIAGGI. If you have a written statement we will accept that in the record.

Mr. TAYLOR. I will submit that later if I may, I knew I was coming only last night, so it is not exactly readable.

I think most of you are aware of this study which we carried out in 1974 and which we published in 1975, "The Myth and Reality of Aging in America" commissioned by the National Council on Aging and funded by the Burgen Foundation.

Very briefly I think there were two very important sets of findings in this study.

One of them concerned—

Mr. BIAGGI. Mr. Taylor, Mr. Sarasin made the suggestion that we recess rather than adjourn in fairness to you and to the issue, so we do exactly that.

So we will recess.

[A recess was taken from 12:20 noon until 12:30.]

Mrs. MEYNER [now presiding]. Mr. Taylor, I apologize for that brief break which will help to not lower our voting record.

I think it might be better, if you would not mind, for you to start from the beginning because it would give us a chance to catch up.

Mr. TAYLOR. Fine. I was just in fact starting to mention this study which is the study called "The Myth and Reality of Aging in America" which we carried out for the National Council of the Aging in 1974 and it was published in 1975.



It was an extensive and substantial survey based on interviews of over 4,000 people including 2,700 people over the age of 65 and I am told by many experts that this is still a very major source of data in its field. Dr. Sheppard's comments, notwithstanding.

As the title suggests a considerable part of the survey was designed to measure attitudes to older people, to their abilities and to their life styles and to compare these perceptions with reality and with the answers of older people themselves.

It was the enormous discrepancy that existed between the public perception and the actual experiences of old people which we identify as the "myth" and it is a very damaging myth which I have little doubt is still substantially true today.

If there is time I was going to quote for about 2 or 3 minutes from Mr. Harris' statement.

Mrs. MEYNER. Certainly if that is all right with you, Mr. Sarasin?

Mr. SARASIN. Surely.

Mrs. MEYNER. There is plenty of time. Take all the time you like.

Mr. TAYLOR. Fine.

When he presented the study to the public in 1975 Lou Harris made a statement and perhaps this is the key of the topic. He ran them through a series of the characteristics of how the elderly were perceived and how the elderly themselves replied and less people say that perhaps the reprise of the elderly should not be trusted we demonstrated that in reply to those series of questions they did give us honest and in many cases answers embarrassing about themselves, so we believe these answers should be taken at their face value by and large.

Sixteen percent of the total public thinks that senior citizens do not have enough clothes to wear while only 3 percent of senior citizens themselves say that this is a very serious problem.

A substantial 28 percent of the public feels that the elderly are suffering from not having enough friends with only 5 percent of the 65 and over age group reporting that this is the case and even 50 percent of the public feels that older people live in constant fear of crime. The actual number is 23 percent, very substantial, yes, but not nearly as high as is estimated.

Again, 50 percent of the public think older people are in poor health. This compares with 21 percent of the senior citizens reported that they are infirm, again, high, but not nearly as bad as the public thinks.

A substantial 37 percent of the public thinks older people have not enough to do to keep busy, but only 6 percent of those 65 and over say that this is a case for their own lives. A high 54 percent of the public thinks the elderly have a sense of not being needed, but only 7 percent of the 65 and over age group actually feel that way themselves.

A substantial 60 percent of the public thinks that elderly people suffer from loneliness and that this is a very serious problem, but no more than 12 percent of the 65 and over age group feels the same about themselves. And on an even grosser level that senior citizens are inert, the senior citizens themselves say such charges are nonsense as far as they personally are concerned.

Only 29 percent of the public thinks that mature citizens are bright and alert and 68 percent of the mature citizens themselves feel that they are. Only a slightly higher 73 percent of the people under 65 feel they are bright and alert themselves, hardly any difference in self-perception.

Only 35 percent of the entire public thinks that senior citizens are good at getting things done, but a much higher 55 percent of the senior citizens feel that way compared with only a slightly higher 60 percent of the population under 65 in that perception themselves.

Only 21 percent of the public thinks that older people are open-minded and adaptable but a much higher 63 percent of the mature citizens group feel they are compared to 67 percent amongst those under 65.

Does all of this mean that senior citizens have it much easier and indeed do not suffer from poor housing, inadequate incomes, fear of crime, not having enough medical care, not enough job facilities, not having enough money to live on? No, indeed. By objective standards much obviously needs to be done in all these essential bread and butter areas to improve the lot of the elderly. But many of them, I must add, they are not necessarily indigenous problems for the 65 and over second to the population.

Many Americans unfortunately still suffer degradation despite the growth of affluence and privilege and recent run-away inflation has not made the situation better, but possibly understated the case.

The key fact in all of this is that most people over 65 are very much alive and well. They are decidedly not prepared to view themselves as individuals who are rotting away and will soon rid society of the added load they put upon the rest of us. They are not only alive and well, but they want to live better and they want to be more active and they want to contribute to society above anything else.

To put it in the fewest possible words most people think of the over 65 as useless old people when in fact most of them are able and willing to be useful if society will allow them to be.

This fact points to two urgent necessities: The need to change public perceptions of the elderly and I believe this can only be done if the media, particularly television, portrays older people in a completely different life.

As I am sure you have been told before, television programs only rarely include any old people and many of those who are shown are characterized as senile and bubbling stereotypes.

The second urgent need to which the survey pointed, will soon, as the result of your work last week, be largely met when the bill for abolishment of retirement in the Federal Government and raise the mandatory retirement age to private employees when 70 becomes law.

This is of course, very much in line with our latest Harris survey published only yesterday showing by 38 percent to 32 percent of the majority for abolishing mandatory retirement in the Federal Government and by 60 percent to 31 percent of the majority for raising the mandatory retirement age to 70 for private employers.

Before leaving this 1974 study there are some additional findings which I should mention briefly.

An overwhelming 97 percent of the public, perhaps the largest majority we have ever found for almost anything believe that social security payments to the elderly should automatically increase as rises in the cost of living increase. The study finds no support for an arbitrary limitation on this increase.

Eighty-one percent of the public agreed with what I think fairly should be characterized perhaps as a general statement, but nevertheless they agreed with the statement that the Federal Government has the responsibility to use general tax revenues to help support older people.

Also, it is important to stress that while most older people believe their condition in life is better than the general public believe it to be, the term "most" may be deceptive.

We found 15 percent who admitted to not having enough money to live on and this translates into some 3 million needy people.

Moving on from the survey I would like if I might try to keep personal observations based partly on my experience of watching the political pressures here and in England and on surveys in both countries.

A major difference shown by the different answers given to broadly similar questions in the two countries is very striking. The most recent American example, Gallup survey published on August 14 asked what people thought was the most important problem facing the country today and asked for spontaneous replies. I will read them to you:

First, the high cost of living. Second, unemployment. Third, energy problems. Fourth, international problems. Fifth, crime and lawlessness. Sixth, moral decline, lack of the rate of spending. Next, dissatisfaction of the government. Next, excessive government spending. Next, drug abuse, race relations to poverty and other answers.

Nowhere was there any mention of specific policies for the elderly.

I turn to the same questions in a recent British survey. Here are the answers:

"First, inflation rising prices." The same. "Second, unemployment." The same. "Third, the economic situation generally. Fourth, helping old people's pensions;" and that includes of course, social security. That comes before education, before housing, before taxation, or taxation cuts for industrializations, strikes, crime, health and welfare, Northern Ireland or any other major problems.

What these basically show is that the elderly and policies which are designed to help them are a major political issue in Britain, one of the most important issues but not here in the United States.

There are, I believe, some clear reasons for this difference. Twenty-one percent of the British electorate are over 65 as compared to 15 percent here so they offer more votes to be won by candidates. There are differences in national attitudes, obviously, to government involvement and government run welfare systems with the British much more deeply committed to them since the war-time beverage report and here of course a much stronger, perhaps you could characterize it as a prosperous decade, which in the past if not today prompted the belief that if the people had not provided adequately for their old age, it was their own fault.

But more important than either of these is I think the recent political history of the issue of the elderly in Britain. In 1964 the Labor Party was returned to power after 30 years in the wilderness. A major part in that platform and in their campaign record was offering a better deal for the elderly and government pensions.

Surveys and journalists alike reported that this part of their platform was a major factor in winning votes, not just from the elderly themselves, but from people of all ages and since 1964 no British political party has dared to ignore the issue and all parties have vied with each other to offer better or more attractive policies. As far as I am aware, nothing comparable has happened here.

I should add that I am not suggesting that British policies are necessarily good for the country and even in some cases for old people themselves. I am merely trying to explain why the issue of the elderly has become a major political issue there.

Two apparent side effects of British policy seem to me undesirable. The more the Government has shouldered the financial burden of supporting the elderly, the less their relatives, sons, and daughters have prepared to do so. Furthermore, more and more older people, particularly older women, live alone.

Interesting enough, in our 1974 survey here for the Council on Aging we found that 45 percent of older people were single, divorced, separated, or widowed and that four out of five of these people, many of whom of course live alone, were women.

The other unfortunate side affect of the British policy brings me back to where I started: The cost or condition of the elderly is essential and widely debated political issue given to frequent attention in the media, there is a tendency to deal with the issue as purely one of compassion bringing suffering to helpless old people who are sick, poor and incapable of doing anything to help themselves and are merely a burden on society. While this has resulted in high Government pensions and improved local and central government services, it has also reinforced the unfortunate stereotype of what most people believe old people are like. The same stereotype which our survey demonstrated to do force and which in many cases prevents people over 65 from playing a more active, useful, and fulfilling role in society.

Thank you.

Mrs. MEYNER. Thank you, Mr. Taylor, I thought that was an especially comprehensive and fascinating bit of testimony.

The section in the beginning where you point out that the public's concept of the life of an older person is much drearier than their own, also England's outlook on the elderly is very different from ours in the United States judging from what you said.

What are they doing in Great Britain that we should be doing here and what are we doing here that perhaps would be helpful? What are some things that we can learn from each other?

Mr. TAYLOR. Well, I am not a great expert on it.

I think that certainly the mandatory retirement issue is one by the United States—

Mrs. MEYNER. If you were a senior citizen of 70 years and you had a choice of living in London or New York, which one would you choose?

All right, Brighton and Miami?

Mr. TAYLOR. Leaving aside the issues such as crime, I think—well, take the question of mandatory retirement. I believe this is a tremendous step forward, the evolution of mandatory retirement on the basis of our data.

I am not aware of any other country that has moved in this direction. This clearly seems to be one area where there is a lead here.

One area where both countries are woefully weak is in this question of the portrayal of the elderly on television and in the media where I think in both countries they are probably equally bad.

I think that because they are a hot political issue a number of things have been done by local councils in Britain. I am not fully aware of all of the things that are being done here, but some of the same things may be being done here.

There is one little study, well, one major study which has been carried out in England which by the way has not been conducted here. Old people, because they do not have enough money, in Britain are often forced to choose between either heating their homes adequately in the winter time or feeding themselves adequately. As the result, very large numbers of them live in very cold housing, unheated hous-



ing, or underheated housing in the winter. A recent study showed that 10 percent of old people in Britain have dangerously low body temperatures during the winter months. That may or may not be a problem here. I hope I have answered your question.

Mrs. MEYNER. The elderly have traditionally voted in larger percentages than other groups, as we have heard here this morning and as we all know, yet their national influence or their political influence does not really reflect real power, not yet. Why do you think that is? What is the missing ingredient?

Mr. TAYLOR. Well, one of the things is that the older people get the more set they get in their voting behavior and somebody who has voted Republican or Democrat is unlikely to change in his later years and clearly, they are subject to all the other pressures, therefore, they do not vote as a group, they have not been organized as Mr. Scammon said earlier.

I think myself, they are more—the issues of the elderly are more effectively treated by appealing to the whole electorate rather than appealing specifically to the self-interests of the elderly.

Mrs. MEYNER. Thank you, Mr. Taylor. Mr. Sarasin?

Mr. SARASIN. Thank you, Mrs. Meyner.

Mr. Taylor, I too have found your testimony to be very illuminating. I wonder, when you talk about the great percentage of Americans who have felt that it was a Federal responsibility to use general tax revenue for the care of the elderly and social security and so forth; was the question asked whether or not the philosophy of social security should be changed? At the present time, it is an earned-right system; if you participate you can take part in it. If you don't take part in it, but if you go to general tax revenues, I think the very real question would have to be asked: Whether should that apply in each test and make it essentially a welfare system. I was wondering if you asked any questions in that area?

Mr. TAYLOR. We didn't, I'm afraid, sir. I could speculate on that if you want a speculation.

Mr. SARASIN. Do you have any speculation?

Mr. TAYLOR. Well, I really don't about the answers on tax revenues, there is perhaps based on a feeling of guilt perhaps based on knowledge of one's parents and so on.

There is an increasing tendency to feel that the state has a general responsibility for older citizens of whether they may have contributed or not contributed in social security. That is certainly the way things have happened in Europe and I think perhaps in some respects, but not in others, the United States, it is probably going to happen here.

Mr. SARASIN. As that group of people gets to be a larger segment of the total population, how much burden has been seen in the rate of inflation that exists in such countries as England and the United States?

Mr. TAYLOR. Well, I think you put your finger on a very important—can there be increases in pensions paid by the British Government has been one of the factors which led to an increase in inflation. If everything was equal there would be less inflation.

One partial solution, of course, which I think was touched on earlier is that many people go on working later as the result of early retirement you would generate all kinds of additional financial and economic

benefits which count away the increasing numbers of dependent elderly. I certainly do not have an easy solution to the problem.

I liked very much the suggestion from the previous witness, much more attention should be given to the ways of keeping people out of institutions, tax incentives to pay people for being in the home and placed in the family and community. It seems to me both socially and almost certain financially desirable.

Mr. SARASIN. I wonder how much of our policy results in the stoking of fires of inflation when we index all of these things and then say that there is a problem out there, we have to provide more dollars and so we go out and borrow the money to do it and try to solve the problem, then look again and say, oh, the problem is increasing we had better increase those payments. I do not know what the answer is either, but we are certainly not slowing that wheel down at all.

Mr. TAYLOR. I think it is almost a question of politics which people like you are elected to perform.

Mr. SARASIN. Thanks.

Mrs. MEYNER. Thank you very much, Mr. Taylor. We appreciate your waiting and it was really excellent testimony.

[The hearing was adjourned at 12:55 p.m.]

APPENDIX I

PREPARED STATEMENT OF THEODORE J. GORDON

THE RESULTS OF A TECHNOLOGY ASSESSMENT OF LIFE-EXTENDING TECHNOLOGIES

Gentlemen: It is indeed a pleasure for me to address the Committee this morning. Your inquiry into the potential numbers and condition of the elderly is important, in my view, for several reasons:

The number of elderly persons seems certain to continue growing.

This group has certain needs which are now only dimly recognized and served and which could well be changing in the future.

The impacts of the changing age distribution in our society are not yet well understood but could be very important not only to the elderly, but to society at large.

Thus, your inquiry could affect the happiness and dignity of the elderly and help capture some of the opportunities of the coming demographic shifts while avoiding their pitfalls.

The Futures Group recently performed a research study which bears directly on these topics. This work was performed under contract to the Applied Research Directorate (RANN) of the National Science Foundation; it was funded at a level of about \$300,000 and extended over a period of 18 months. It was a technology assessment of life-extending technologies and was designed not only to explore the technologies which could provide extended life, but to reach a deeper understanding of the impacts of these developments. We found that life expectancy is increasing, that new biomedical technologies would accelerate this trend, and that changing age distribution could have significant economic and social impact. In the next half hour or so I plan to summarize the principal findings of our work. (The final version of the report has not yet been published, but I have a limited number of copies of the draft report and would be glad to provide copies to you and members of your staff, if it would be helpful to you.)

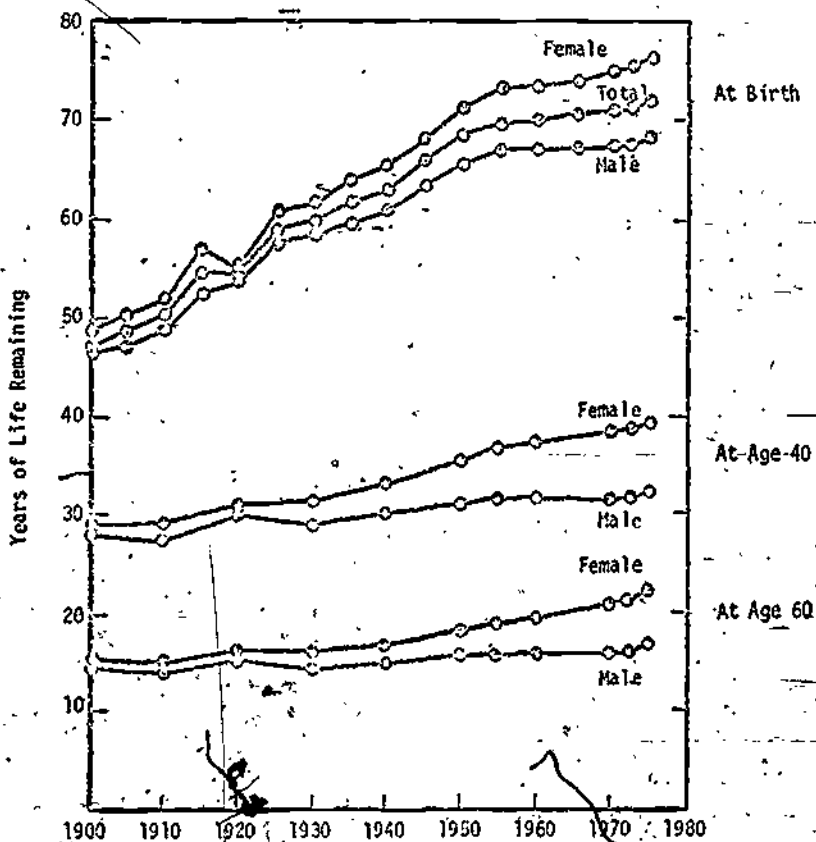
The study was designed to focus on near-term biomedical capabilities which could extend life and to search for implications of these technologies. We concentrated on extension of adult life rather than the life expectancy of infants or children. We omitted accidents as a cause of death, not because of their lack of importance, but because the strategies for dealing with accidents and the consequences of these strategies seem to be of a basically different sort and would have diluted our effort had they been included. Similarly, we did not examine suicide prevention technology, but considered suicide from the standpoint of values and frequency. We addressed the domestic situation primarily; however, we examined, at least in cursory form, the effects on demography of the use of life-extending technologies in other countries. As for time domain, we considered only technologies which were near at hand, coming into general use, in research and development, or which were now biomedical goals. The impacts which we examined concentrated on the next few decades, but in parts of the study we considered demographic impact through the life span of the people who would use the new technologies (Exhibit 1).

## EXHIBIT 1

## SCOPE OF THE STUDY

Near-term biomedical capabilities which extend life and their implications.  
 Omit accidents.  
 Suicide, from the standpoint of values and frequency.  
 The United States primarily.  
 Time domain: From present until demographic impacts of technologies—  
 tabulate.

## MEAN LIFE EXPECTANCY



SOURCE: Historical Statistics of the United States, Washington, D.C.: U.S. Government Printing Office, 1961, and Statistical Abstract of the United States, 56th Edition (Washington, D.C.: U.S. Government Printing Office, 1975), p. 62.



As is well known, mean life expectancy at all ages has been increasing. Exhibit 2 shows that life expectancy at birth has grown dramatically since the beginning of this century, changing from 48 years in 1900 to approximately 72 years in 1975. The growth in life expectancy at advanced age has been less dramatic. For example, in 1900 a man of age 60 could expect to live some 14 more years; in 1976, a man of age 60 could expect to live some 17 more years. Life expectancy at birth has increased as a result of improvements in infant mortality and curing of many diseases of childhood; the diseases of middle age and advanced age (heart disease, cancer, and stroke) have been much more difficult to conquer. Furthermore, the aging process, which is poorly understood, seems to place an upper limit on life span.

To examine the biomedical technologies themselves, we interviewed 25 experts around the country who were engaged in research which, if successful, promised to affect life expectancy. We found that there were three general strategies being pursued:

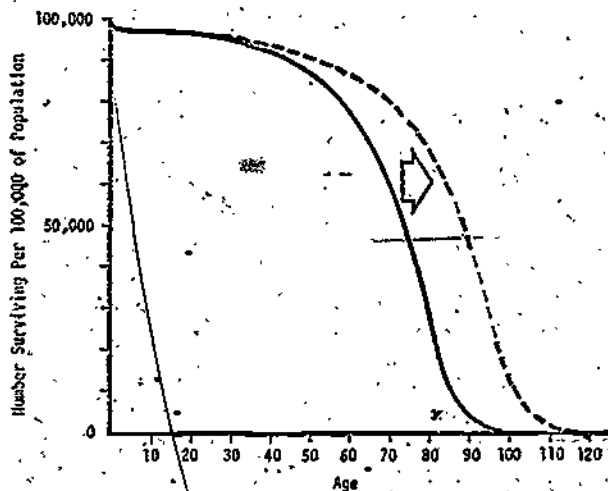
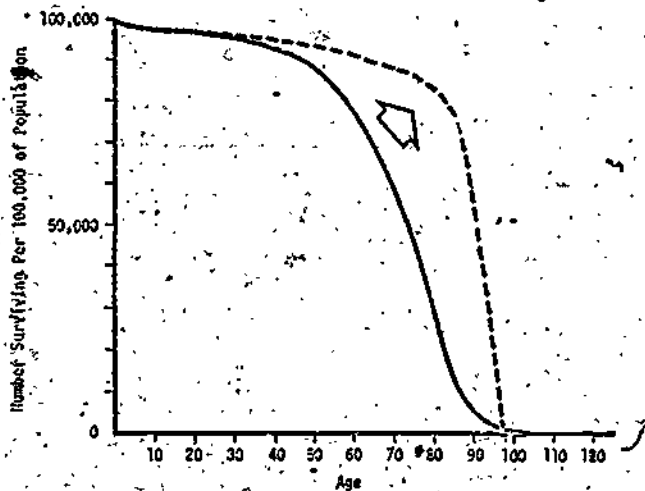
Research into the prevention, diagnosis and treatment of heart disease, cancer, and stroke.

Research into the cause for aging itself, with the possibility of slowing the rate of aging.

Research into the relationship between social conditions, aging and death.

The effects of these technologies could be viewed as either increasing the number of people who live to older age (squaring the survival curve) or increasing the maximum age to which people live (life span extending). The kinds of societies that are produced by these two types of technologies are quite different. In the case of curve squaring, more people of middle age live to old age, but death rate inevitably accelerates as maximum life span is approached. For the technologies which have the sole effect of increasing life span, more individuals live past what is regarded as maximum age today (Exhibit 3).

EXHIBIT '3



Effect of Curve Squaring Technologies

Effect of Life Span-Extending Technologies

## EXHIBIT 4

## TYPICAL SQUARING TECHNOLOGIES

Cardiovascular disease prevention, diagnosis, and treatment technologies.  
 Cerebrovascular disease prevention, diagnosis, and treatment technologies.  
 Malignant neoplastic disease prevention, diagnosis and treatment technologies.  
 Nonhiologic prostheses.  
 Technologies that improve the environment, such as those that reduce stress.

## EXHIBIT 5

## PRINCIPAL CONCEPTS AND APPROACHES TO CONTROL OF AGING

Effect of diet; lipofuscin accumulations; lowering temperature; free radicals; the immune mechanism; abnormal oxidation; the pituitary; cellular replication errors; loss of tissue elasticity; membrane damage; cross-linking; cell division limit.

Exhibits 4 and 5 describe typical squaring technologies and aging control technologies. In examining these classes of technologies with our consultants, we conclude that curve squaring technologies are much more likely in the short term than life span extending technologies. The former go beyond advances in dealing with key diseases and include public health and education, improved nutrition (in the sense that what we eat apparently affects the probability of contracting certain diseases), and environmental control and improvement.

The life span extension technologies will require breakthroughs and it would be surprising if aging control is demonstrated for human beings over the next two decades. This is not to say that we believe control of aging is impossible or unlikely; quite the contrary, we think that many of the lines of research which are being pursued are promising. However, this work is being conducted at a very basic level and there is no shared perception about the basic mechanisms for aging. Thus, scientists engaged in this work are following many different leads. Demonstration and validation of one or another of these theories will take time.

In studying the impacts of life-extending technologies we considered demographics, economics, insurance and social security, health care costs, societal change, interest groups and politics, and values and ethics. With respect to the latter subject, the Institute of Society, Ethics and the Life Science served as a subcontractor to the Futures Group.

## EXHIBIT 6

## DEMOGRAPHIC EFFECT—UNITED STATES

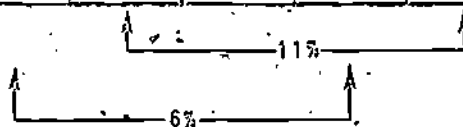
	Base			Squaring Technologies	
	Total Population (Millions)	Over 65 (Millions)	Percent	Over 65 (Millions)	Percent
1976	214	22	10	22	10
2000	276	33	12	38	14
2025	329	46	14	74	23

**EXHIBIT 7**  
**DEMOGRAPHIC EFFECTS—WORLD**

	Base			Squaring Technologies	
	Total Population (Millions)	Over 65 (Millions)	Percent	Over 65 (Millions)	Percent
1975	3900	227	5.8	227	5.8
2000	5900	425	7.3	475	8.0
2025	7700	760	9.8	1200	14.4

**EXHIBIT 8**  
**DEVELOPED AND LESS DEVELOPED COUNTRIES**

	Base Population (Millions)			Squared Technologies Population (Millions)		
	Total	LOC	Dev.	Total	LOC	Dev.
1975	3900	2800	1100	3900	2800	1100
2000	5800	4600	1200	5900	4700	1200
2025	7700	6400	1300	8300	6800	1500



Exhibits 6, 7 and 8 summarize demographic effects in the United States and the world. In these charts the base case (life expectancy at all ages remain as it is at present) is compared with a case involving progress in disease curing technology. For the United States current trends suggest that by the year 2025 the number of people over 65 years of age will have risen from 22 million to 46 million, or from



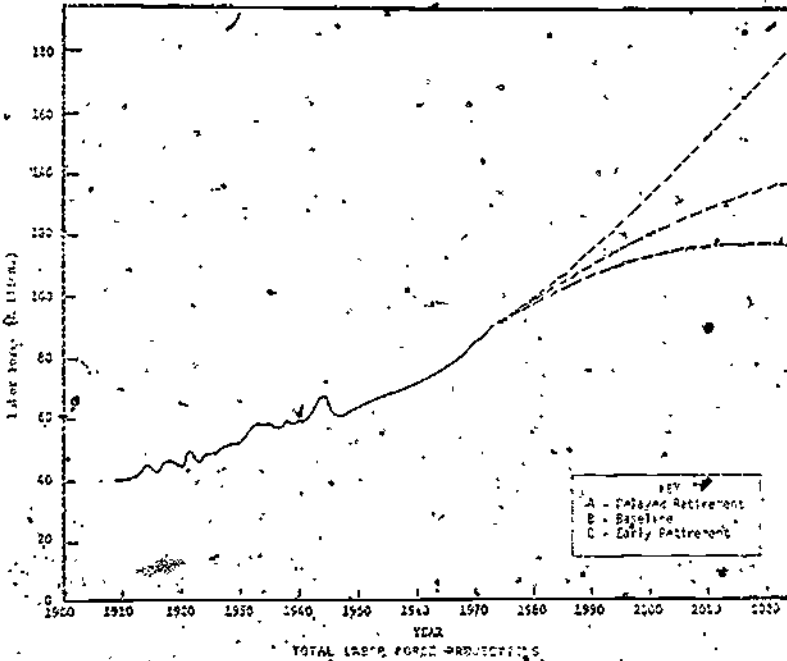
10 percent to 14 percent of our population. If squaring technologies come to fruition, as we suspect, by 2025 there are likely to be 74 million people over 65, comprising 23 percent of our population. By the year 2000, assuming that the squaring technologies have been introduced, life expectancy at birth seems likely to rise to about 78 years and by 2025, life expectancy at birth will rise to 86 years, (versus 72 years in 1975).

Taking a world view, the number of people over 65 years of age seems likely to grow from 227 million in 1975 to 760 million by 2025, or from 5.8 percent of world population to 0.8 percent. With acceleration of disease curing technologies represented by our "squared" case, the number of people over the age 65 seems likely to grow to about 1.2 billion people by the year 2025, about 14.4 percent of world population.

One effect of the disease curing technologies will be to increase world population. In our demographic model we found that current trends suggest world population will grow from about 4 billion at present to 7.7 billion by the year 2025. With the new curve squaring technologies, world population by 2025 will be some 8.3 billion, or 600 million people more than the base case. Of these 600 million, 400 million will be in less developed countries and 200 million in developed countries.

Focusing again on the United States, the social and economic impacts attributable to the new technologies seem likely to be minimal prior to the year 2000. Of much more importance to economic and social conditions is the assumed average retirement age. We felt this issue was significant for this study since the technologies we investigated would be likely to have the effect of increasing vigor and diminishing the symptoms of aging, in addition to affecting survival rates. With vigor at a particular age changed, clearly retirement rates might also change. Exhibit 9 shows the size of the labor force which would result from three

EXHIBIT 9



assumptions about retirement age. "Delayed retirement" assumes an average delay of 10 years by the year 2000. "Early retirement" assumes that retirement rates are, on the average, accelerated 5 years by the year 2000. As can be seen, these assumptions have a great effect on labor force size.

We formed the impression that retirement age would be likely to increase for several reasons:

• Polls have indicated that many retired people, when asked, say they would rather be working.

• Feelings of anomie and uselessness which sometime come with retirement apparently accelerate death.

• Both social security and pension funds would benefit appreciably by increasing retirement age only a few years.

• Discrimination on the basis of age, after 65, seemed to us likely to be considered illegal in the near future.

The effect of delayed retirement would include an increase in GNP, diminishing of the dependency ratio, reduced burden on social security, improved socialization among the elderly and—most significantly—a potential problem in the provision of jobs for all those who wished to work. With respect to this latter point, we formed the impression that the nature of work would change; these changes could include the development of more "parallel" jobs, shared work, part-time work, shortening of the work week, and serial careers.

We found that retirement age would have to increase about 6 years by 2000 in order to balance inflow and outflow of the social security fund.

We worked with special seminars convened by the American Council of Life Insurance to explore the consequences of life extension on insurance. Panels of academicians helped us identify a range of social impacts; interviews with people from various interest groups helped us reach an understanding of the perceptions of these impacts. We formed these impressions:

• Even without life extension, the aged will have more political clout; we do not know whether this clout will translate into actual political power.

• Raising the retirement age could bring with it significant changes in the family; for example, if increasing retirement age diminishes rate of entry of young people into the labor force, how long will the family be considered obligated to support children?

• Increasing labor force participation of the aged may heighten the competition between the young and the old for jobs.

• Interest in planning for mid-career and continuing education should increase.

We formed the belief that for the next 25 years the technologies we considered will have the effect of extending middle age rather than extending old age. Of course, this is key to the condition of a longer lived society. It will affect health costs, the welfare burden, productivity, socialization, national vigor, and old/young relationships.

At first consideration, it would seem that aggregate net national health costs would increase as a result of curve squaring technologies. However, if the curve squaring technologies are preventative rather than therapeutic, the opposite may be the case. For example, discovery of the linkage between nutritional factors and certain diseases could increase longevity at very low cost.

Some of our specific recommendations were:

• Studies be conducted to help reach an understanding of the changing complex interrelationships between retirement age and the changing nature of work. We believe that changes in retirement age will cause fundamental differences in our economy and in the way that older people live and view themselves.

• Detailed information be collected and made available to other researchers about economic contributions and consumption levels made by older people.

• Various agencies of the government include in their policy thinking estimates of the consequences of their actions on age of retirement. This recommendation is particularly relevant to policies followed by the Department of Labor, Social Security Administration, the armed forces, and state and local governments. Policies which affect retirement age can have profound and lasting consequences on the nature of our economy. When those policies tend

to diminish retirement age the inevitable consequence will be increasing dependency ratio and isolation of the aged. There may be other policies which affect dependency ratios directly rather than through retirement age; these should be pinpointed and understood in terms of their likely consequences for American society. These include, for example, policies which delay entry into the labor force, shortening of the work week, introduction of sabbaticals and intermittent retirement, and so on.

Additional study be applied to questions of international impacts of life-extending technologies and the changing social dimensions which might accompany these technologies. While such impacts were suggested in this study, they were beyond the initial scope determined for this work; nevertheless, they appear to be important, perhaps urgently so.

Government estimates of the cost of developing biomedical technologies should include from the outset estimates of the cost of producing those technologies and distributing them in society. Emphasis in research on life-extending technologies should be given to those which promise to be inexpensive not only for immediate but secondary costs as well.

PREPARED STATEMENT OF HAROLD L. SHEPPARD

My summary comments regarding the future of aging in America will focus primarily on the economic dimension, especially regarding employment, as requested by the subcommittee staff. But first, it will be necessary to mention some of the context within which projections about the future must be made.

One context has to do with demographic developments, although I do not think that the "body count" approach to the topic of aging is sufficient. We also need to know about the changing social and cultural definitions of what is meant by "old," what is meant by "aging" and the "aged." In this connection, I believe that we are in the midst of a process of redefinition. It won't be the first time in the history of Western society.

For one thing, certain age groups in our society are beginning to resist being labeled and therefore treated negatively as "old"—especially insofar as that term evokes negative connotations. Before too many years come to pass—and long before the year 2025—it is quite possible that persons 60–65 years old—compared to 60–65 year-olds of, say, 10 or 20 years ago—will not accept the label—again, to the degree that society continues to use the term negatively. Some of the reasons for this shift have to do with the marked educational achievement level of persons 40 to 50 years old today, compared to the same age group 10 or 20 years ago, and even compared to younger persons today. When today's 40–50 year-olds move into their 60's before and by the end of this century, the gap between their educational level and that of persons in their 30's will be much more narrow than the corresponding comparison in 1977 would show.

Furthermore, we can expect the 60–65 year-old population—even in the year 2000, let alone 2025—to have a health status above that of 60–65 year-olds in the 1960's and 1970's. To the degree that terms such as "old" and "aged" connote substantial decrements in physical and mental activity, the application of those terms to such persons will be more unrealistic and irrational than they are today.

One more point about this proposition I'm expressing here: In terms of demography, we must get out of the statistical reporting and linguistic habit of using the category of the "65-plus population" when carrying out research and policymaking decisions regarding the field or problems of aging. An 85 year-old is not the same as a 65 year-old—no more than a 45 year-old is the same as a 25 year-old person. And yet, persons 65 years old are lumped into the same category as persons 85 and older.

Table K indicates that 65–69 population as a proportion of the total 65-plus population in 1975, was over 30 percent, but by the year 2000, they will make up only less than 20 percent. Their numbers will have increased—assuming no further improvements in mortality rates, an assumption we can no longer accept without question—by only 9 percent. On the other hand, take a look at the 85-plus population: In 1975, only 8 percent of the total 65-plus population, but by the year 2000, nearly 12 percent of the total so-called "aged population." And their numbers will have increased by 100 percent. The actual figures and proportions may turn out to be greater by then if mortality rates for persons now in their 60's continue to decline as they have in the past few years.

All of this means that the so-called older population will be getting older, not merely larger. One of the economic implications of this shift in the age composition of the older population is that the costs of supporting that population will be mounting to a level, and at a rate, higher than indicated by the typical study that simply takes the 65-plus population classification, and multiplies by some estimated per-capita cost to arrive at an estimate of the total aggregate cost to the society and the economy of providing for that group. The costs will be greater, and the question arises, what steps are we taking now to prepare for those additional costs?

An increasing population in the very old age group—those who will very clearly not be expected, on the whole, to be in the labor force—will require additional expenditures for a wide variety of costly services, and these will typically have to be borne by Federal, State, and local government tax sources. In the future,

a lower proportion of this very old age group will have children that can be counted on to support them. And such children as there are will themselves be in their 60's. As a rough index of the number of children 60-64 years old for every 100 persons 85 and older, let me point out that in 1977, there were 459 60-64 year-olds for every 100 persons 85 and older. Over the next 23 years, by the year 2000, that ratio will plummet to 270, and will increase but only slightly thereafter. (Table 5.)

Can we expect those 60-64 year old children to be able to pay for much of the support services for their even older parents—especially if most of those 60-64 year-olds are retired and out of the labor force? I doubt it very much. Increasingly, under such retirement age policy conditions, the high cost of supporting an 85-plus population will have to be borne by Federal, State and local governments.

Can we afford to be complacent, now, in working out projections of various payroll taxes and taxable salary bases, as well as cost estimates of private pension plans, only 23 years from now—never mind 2025, which is nearly 50 years from now—if those projections do not take into account the increased aging of the 65-plus population classification? This question is especially critical if current retirement age policy prevails, or if retirement at even earlier ages than is now prevalent is characteristic of the time between now and the year 2000.

From an economic standpoint, the costs of supporting a growing population of nonworking persons 60 to 65 and older will have to come from the working population, and would require an ever-growing economy with a productive capacity providing the resources for that support. The fact that the annual average productivity percentage increase over the most recent past 10 years is one-half that of the post-World War II period suggests that growth in that capacity may not be commensurate with the need. (Table 6.)

The future of aging in America—as in other industrialized societies—is, in very large part, contingent on the future of our productivity base, and that will be determined, in turn, by the costs of energy and resources in that future—costs which will grow not only because of any shortages, but also because more countries are beginning to compete with us for access to, and control over, whatever the supply will be.

Numbers of people, to repeat, are not the only consideration. Will, for example, the so-called older population, as they reach what we now call retirement age, accept retirement incomes at a level typical of retirement incomes today—even if measured as a proportion of pre-retirement earnings? Will, for example, the remaining working population, continue as in the past to honor the social contract between generations?

I have been told, in this connection, that one of the congressional committees has voted for, or is seriously considering, a previously unplanned increase in tax rates, in the taxable base for the working population, and a previously unplanned reduction in retired worker benefits as a proportion of previous earnings. This would appear, at least on the surface, as if the labor force, economic and demographic developments—under existing retirement age policies—are requiring that both the younger working generation and the older nonworking generation must make sacrifices. Under existing retirement age policies, the working population would have to pay more than previously planned, and the nonworking older group will have to accept lower retired worker benefits than previously planned.

This brings me to the point made in the summary report by the Futures Group, namely, that the average retirement age will have to be delayed to prevent great economic problems—even without any life extension. And I would add that even if new technologies and health practices only make it possible for more people to live to an extended old age (as opposed to increasing the so-called life-span), and if there are no upward changes in retirement age, additional support burdens on the remaining working population will be in store for them. Retirement income problems for the nonworking elder population will also be aggravated—again, if current retirement age policy is maintained, even more aggravated if average retirement age is reduced further.

It all comes down to the inconvenient fact that for the vast majority of us—unless we chose millionaire parents, or won a precious lottery contest—employment is and will continue to be the best way of assuring an adequate income. Given the joint effect of such factors as demographic change, progress in health status, inflation, and sluggish growth in the productive base of an economy—including the growing costs of providing energy and resources to maintain that productive base—along with the growing recognition of the constitutional and



moral grounds for not using year of birth as a condition for making hiring and retirement decisions for older persons, my scenario for the future of aging in America would include a gradual but definite shift in age-at-retirement policies in the United States, toward raising average retirement age. I also think that other industrialized countries like our own will be in the throes of reconsidering and changing age-at-retirement practices, and for the same reasons.

Of course, there are other alternative future regarding this issue, but I do not believe that our population's aspirations, expectations, and values would allow for those other options to be adopted.

My final comment is this: Our society's value system is such that we will want to provide the very best of retirement life and conditions for our fellow aged citizens, including our own parents and relatives. When we speak of the future, we obviously must include ourselves among the aged of 25 years or so from today. And those retired citizens themselves can be expected to demand the very best. If that is the case—and I believe it will continue to be the case in the next several decades—it means, in my opinion, that there will have to be fewer retirees than any straight-line extrapolation method would project that is, if current retirement age trends continue. We will not reduce such a population through euthanasia. That, too, is part of our value system. Instead we will reduce such a population by redefining who is "aged," and by redefining what we now label as the "working age" population.

Thus, in order to assure a truly decent retirement existence, future populations in at least the 60-69 year old classification will have to be induced to remain in the labor force. And in order to assure themselves a decent retirement life, we might expect that group itself to demand the right to continue working, and not to be forced or even seduced to retire as young as 60 or so, and thus face the prospects of at least 18 to 20 years, on the average, of living in the risk-laden status of retirement. Healthy, 60 and 65, or even 70-year-olds in the future, will probably prefer to defer complete retirement in order to assure a decent income when they do retire. Government will have to provide incentives to such persons to remain in the labor force, for budgetary reasons.

I certainly do not claim that the shift will be mechanically achieved. Furthermore, many institutional and implementation problems will be encountered. But one of the primary purposes of indulging in intelligent portrayals of what lies in the future is to prepare society and individuals now for the various kinds and degrees of adjustments that will have to be made by the time that future becomes the present. Futurism is not a fun-and-games exercise for dilettantes or abstract intellectuals pursuing ideas for the sake of ideas. It is an indispensable necessity for responsible decision-makers who are concerned with the best interests of their society and economy.

Accordingly, I want to congratulate this committee for holding these hearings. I only hope that in their work in legislating committees, the facts, projections, and viewpoints presented here will be applied in a fruitful manner.

TABLE 1.—Population 65-69 yr old, and 85 plus, as proportion of total 65 plus population, 1975, 1990, 2000

	1975	1990	2000	Percent increase 1975-2000
65 to 69 (percent).....	36.3	34.2	28.9	+8.9
85 plus (percent).....	8.2	9.7	11.8	+106.1
Total 65-plus population (in thousands).....	22,330	29,824	31,822	+42.5

SOURCE: Census Bureau, Population Estimates and Projections, series II, p-25, Nos. 601 and 704.

TABLE 2.—Number of persons 62 and older as proportion of all persons 21-61, 1977-2025

	Percent
1977.....	26.1
2000.....	26.5
2010.....	28.7
2015.....	32.2
2020.....	36.9
2025.....	41.3

NOTE.—Proportions will be greater if fertility rate is below 2.1 births per woman, and if 62-plus population is larger than currently projected.

TABLE 3.—Number of persons 21-61 for every 100 persons 62 and older, 1977-2025

	Percent
1977	382.0
2000	377.0
2005	373.6
2010	348.3
2020	271.1
2025	242.3

TABLE 4.—Population 85 and older as proportion of total population 62 and older, 1977-2025

	Percent
1977	30.6
2000	38.1
2005	38.0
2010	34.6
2020	30.4
2025	32.4

TABLE 5.—Number of 60 to 64 year-olds for every 100 persons 85-plus, 1977-2025

	Percent
1977	459
1990	369
2000	270
2010 <sup>1</sup>	324
2025 <sup>1</sup>	313

<sup>1</sup> Estimated by H. L. Sheppard.

TABLE 6.—Average annual rate of productivity increase, 1947-56, 1956-66, and 1966-76

	Percent
1947-56	3.75
1956-66	3.38
1966-76	1.78

SOURCE: *Employment and Training Act of the President, 1977*, table G-1. Figures exclude data on farm productivity.