

Hawaii 2000: Past, Present and Future

**Report Prepared for the Office of Planning,
Department of Business, Economic Development and Tourism
By**

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The view expressed in this report are solely those of the authors and not necessarily those of the Office of Planning, Department of Business, Economic Development and Tourism or the University of Hawaii

Contents

Preface	1
Introduction	2
Organization of this Report	2
Part One: The Hawaii 2000 Conference	3
A. Overview	3
B. The Sectors	4
1. Economy	4
2. Environment	7
3. Education	8
4. Health, Culture and Lifestyle	10
C. Alternative Hawaiis	12
D. “Hawaii 2000” as a Forecast of Hawaii in the Year 2000	13
Part Two: The State of the State and Trends for the New Millenium	17
A. Introduction	17
B. The Realities of Hawaii 2000	19
1. Hawaii’s Economy and Future Outlook	19
2. Government and Politics	22
3. Education	26
4. Environment and Natural Resources	30
5. Culture	32
6. Quality of Life	33
C. Global Trends and Scenarios for Hawaii’s Future	37
1. Telecommunications and Computerization	37
2. Globalization of Commerce and Trade	38
3. Bioengineering and Genetic Manipulation	39
4. Increased Impact of Environment and Climate Factors	39
5. Devolution of Governance and Empowerment of Stakeholders	40
Part Three: Lessons Learned for the Future of Hawaii	41
A. Some Positive Outcomes of the “Hawaii 2000” Process	41
B. Failures of the Hawaii 2000 Process	43
C. Lessons Learned Then	45
D. New Lessons to be Learned	46
E. Four Scenarios of Hawaii’s Future	48
Scenario 1—Business as Usual/Continued Growth	48
Scenario 2—Collapse	49
Scenario 3—Sustainable Society	49
Scenario 4—Hi-Tech Transformation	50

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Taking Stock – The Millennium Project

In 1970, the administration of Governor John A. Burns supported a project to solicit public opinion on what Hawaii should be like in the Year 2000. This public participation project --involving over 2,000 residents from all walks of life--resulted in a report entitled *Hawaii 2000*, which set forth a remarkably prophetic vision of what the State should look like at the turn of the millennium.

Earlier this year, we asked the University of Hawaii Social Science Research Institute (SSRI) to review the *Hawaii 2000* process and outcomes. Simply put, we asked them to examine what went wrong, what went right, and what we can learn about the process.

We are pleased to present the result of their investigation which was conducted along four interrelated dimensions: 1) a synthesis of the visions of the 1970 task groups; 2) the preparation of a quantitative assessment of the current state of the State versus the vision put forward in 1970; 3) the identification of emerging trends which may affect the State over the next 30 years; and 4) the construction of potential future scenarios.

In retrospect, the vision set forth in *Hawaii 2000* was extraordinary. Its implementation fell far short of expectations, however, primarily because of the lack of a mechanism for guiding Hawaii toward the preferred future as part of the 1970 visioning project as well as Hawaii's economic downturn of the last half of the 1990s.

As to where do we go from here, SSRI strongly recommends that a new visioning process be initiated early in the upcoming year. The focus of this process should be on what participants representing a broad cross section of viewpoints and ideas see as a "preferred future" to be pursued over the next 30 years. While the State through

the legislature should support this process, SSRI further recommends that the organization and deliberations of this new visioning project should be firmly in the hands of the private sector.

David W. Blane

Director

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Hawai'i 2000, Past, Present, and Future

Introduction

The coming of a new millennium has been so psychologically daunting to us in the west that it has been as if we were nearing a horizon beyond which we cannot see. As such, attempts to do serious futures thinking have been done on an ever-shorter scale the closer we get to 2000. Now that Y2K is right around the corner, it is high time to take a peek over the horizon, and assess what is in store for us in the upcoming century, in order to create the 21st century more effectively along our preferred lines.

Any look into the future should start by taking stock of past efforts to do the same, so that we might "stand on the shoulders of giants" and avoid reinventing the wheel every time we make this effort.

Part One: The Hawaii 2000 Conference

In 1970, thousands of men and women throughout the State, of all ages, cultures, professions, educational achievements, income levels, and on all islands participated in some aspect of the year-long event known as "Hawaii 2000." Not only was there a series of diverse "Hawaii 2000" activities statewide, but there were equally diverse and independent activities carried out on and for the futures of the counties of Kauai, Maui, and the Big Island.

There were presentations of the idea before a joint session of the Hawaii State Legislature, a year-long formal public lecture series on various future-oriented themes, scores of radio and television programs and newspaper articles and features, various high school and university futures courses, and hundreds of talks about the process and the future in general by members of the Advisory Committee with professional, civic, business, educational and public interest groups on every island. There was a statewide publicity campaign which produced future-oriented advertisements for buses, newspapers, radio and television which featured the tag line, "Hawaii 2000: Somebody better care about tomorrow."

More than five hundred citizens (some chosen, others volunteering) worked for half a year on one of ten task forces, aided by both local and overseas consultants, preparing reports in ten substantive areas. These reports were then debated and revised at a huge, three-day Hawaii 2000 conference held at the Ilikai Hotel.

A small sampling of the pre-conference activities, the complete reports of all of the ten task forces, as well as the three county 2000 groups, and a list of all of the participants in these thirteen task forces, the observers reports and a concluding chapter on "alternative Hawai'i's" (with supplemental commentary between each of these sections) were included in a volume, edited by George Chaplin and Glenn Paige, and published by the University Press of Hawaii in 1973 as *Hawaii 2000: Continuing Experiment in Anticipatory Democracy*, now out of print.

Hawaii 2000 reveals an inspiring picture of the world that the participants wanted to create over the next 30 years. If we examine what their aspirations were in 1970, we can learn some lessons about how to envision the future more effectively. But even more importantly, we might learn some lessons about the difficulty in creating it. The dominant theme of the H2K visioning was "quality of life," in all of its forms. Still, we can break that idea down into more specific categories as we review the hopes and dreams of Hawaii 2000.

Economy

Limited Population

"An economy which is called upon to provide a decent standard of living for only 700,000 obviously cannot provide the same standard of living for a population twice that large. [We]. . . have to face up to the problem of preventing population growth."¹

Interestingly, the participants of Hawaii 2000 rejected the idea of massive economic growth as a solution to their problems. They preferred to have a limited population to insure enough for all.

Minimum Standard of Living for All

Number one on their list of attributes for a desired economy of the future was, "The provision for a minimum decent standard of living for all citizens. . . In 1970 dollars the amount for a family of four should be about \$10,000."² In today's dollars, that amount is over \$36,200.

This theme was repeated in other sections as well. In the lifestyle section, they took it as a given that we would see "A full implementation of the right of every contributing member of a community to the basic necessities of life."³

They argued for this kind of economy in terms of maximizing human freedom. They wanted "to provide each individual and community with as much free choice in life-style and social organization as is conceivable (under conditions of high interpersonal and intercommunity security) and to provide each with a fair share of the needed resources to implement such free choice."⁴

Reduced Economic Disparities

In addition to creating a bottom that no one must fall beneath, economic equity was seen as another important principle for the building of a future society. Item #4 of desired conditions under the chapter titled "Hawaii's People and Life-Styles 2000" was: "Appropriate worldwide economic development through global bureaucracies

¹Hawai'i 2000, p, 242

²ibid., p. 244

³ibid., p. 151

⁴ibid., p. 158, emphasis added

with appropriate internal justice and external constraints, to ensure a dramatic reduction in current disparities in world standards of living."⁵

As you can see, they articulated this principle not just from a local, but also from a global perspective. Reducing economic disparities was considered to be necessary for the creation of a better world. ". . . We shall not have a healthy world nor a stable one if it remains divided between the haves and the have-nots."⁶ (p.246)

Reduced Working Hours

They were extremely optimistic when it came to looking at the future of working hours:

"By 2000, America, if not the whole world, will be approaching the point where most of the people may well be within the class of freemen. This free society will be based not upon the slavery of other men but upon the enslavement of the machine. Technology will free all but a small percentage of the population from work most of the time. Work days will be shorter, work weeks may be only a couple of days, long vacations will be more common, workers will start on their careers later in life and retire earlier than at present, free to seek an avocation. Everyone, whether he works or not, will receive a guaranteed annual income."⁷

"One thing seems certain. The economy in 2000 is going to provide some people with more leisure than they ever had before. The important human question is what will they do with it?"⁸

Increased R&D and a World-Class University

"We should continue and intensify our efforts to attract to the state more companies concerned with research and development. . . Again, this is a clean industry and its employees are highly paid.

"Absolutely essential to this growth, however, is the presence of a truly great university. The University of Hawai'i has made considerable progress toward this goal in recent years. The direction needs to be accentuated and accelerated."⁹

A Diversified Economy

"The Hawaiian economy should be more diversified than is now the case. Lack of diversity is the single greatest weakness in our economy now."¹⁰

⁵ibid., p. 150

⁶ibid., p. 246

⁷ibid., pp. 290-291

⁸ibid., p. 250

⁹ibid., p. 248

¹⁰ibid., p. 244

It seems as though recent developments would not have surprised the participants in Hawai'i 2000, as they write that tourism "is an industry which is very sensitive to a decline in the [national or global] economy."¹¹

Finally, they noted that diversification is sorely needed, because as of 1967, 55% of Hawaii's gross state product came from only 3 industries: military, agriculture, and tourism.

As for ways to diversify Hawaii's economy, they suggested a number of things, including more diverse agricultural products, jewelry making, increased fishing and sport fishing, and making Hawai'i a communication center of the Pacific.

"Tourism, as we know it today, will be transformed over the next thirty years into what can be termed creative leisure. It will be a new kind of travel experience because the future traveler, particularly the American, will, by and large, differ from today's tourist. First, he will have increased leisure. . . Second, he will have a different attitude toward traveling, in that while he seeks relaxation and pleasure, he will be more interested in the educational content of his travel experience. . . Given this new type of consumer-travel, Hawaii's tourist industry will need to change and adjust."¹²

"Many of Hawaii's export products in 2000 will therefore be prepackaged services. . . The canned services industry of the future (computer programs and self-instructional courses) will be quite similar to the present canned entertainment industry (books, films and records). The advantages of such industries in Hawaii can be well imagined--high salaries, creative work, pollution-free production, and stimulation of the region's social, political, cultural, and economic activity."¹³

"Hawaii's future commerce, therefore, will be almost exclusively exporting skills and know-how to Pacific and world markets. . . However, we will face immense competition from other states, not to mention countries such as Canada and Japan; indeed, by 2000 Japan may be largely an exporter of sophisticated technical products and technological know-how, leaving to other Asian countries the export trade in manufactured goods, which she now produces and sells."¹⁴

"The broad base for Hawaii's service economy will be the knowledge industry. . . We may emerge as the Geneva of the Pacific, playing an intermediary role between the financial markets... ."¹⁵

Summary

The participants in Hawaii 2000 clearly believed in creating a future that involved less growth, more economic security and equality, less work, and a more diverse economy that we would today call "knowledge based." It was an optimistic and bold set of

¹¹ibid., p. 244-245

¹²ibid., p.342

¹³ibid., p.347

¹⁴ibid., p.348

¹⁵ibid., p.350

aspirations for the economy, although, alas, the present has fallen far short of their expectations.

Environment

Population-- Bigger or Smaller?

The task force of the conference on "The Natural Environment 2000" echoed the economics group's concerns about population increase. Whether the islands can sustain a higher population than 750,000 depends on our collective success (or failure) in bringing ourselves into accord with the natural world, they believed. In other words, population growth should be slowed as much as possible until we have a stable, healthy environment and are aware of our impact upon it.

Environmental Enlightenment

". . .The ultimate goal is to return as much of Hawaii's natural environment as possible to its most beneficial state: cleansing the air and water of harmful substances and their sources, and maintaining an abundance of oxygen-producing plant life; keeping water in a desired state of purity, recycling wastes, utilizing biodegradable materials, and preventing release of poisons into the sea and air or onto the land; reclaiming shorelines and marshes from urban invasion and returning them to uses least likely to inhibit natural ecological functions; and to restrict the large-scale introduction of new products and practices into the environment until their full impact on natural life systems is thoroughly tested and understood."¹⁶

The primary obstacle to achieving this state, they felt, was lack of understanding of how our environment works, and a lack of awareness of environmental issues among the public. Enlightening ourselves to these two issues was of paramount importance.

Cooperative Land Use Planning

'The State and federal governments, together with the major landed trusts and principal agricultural concerns, own over 80 percent of Hawaii's land. Because the great bulk of land is held in so few hands, there is growing motivation for public and private landowners to join in cooperative planning efforts that effectively subordinate property boundaries to the greater interest of coordinated regional land-use patterns."¹⁷

The problem, they felt, was that the government was vulnerable to being pressured by private interests to act in the name of short term profit rather than long term environmental quality.

Taxation and Land Use

"Taxes on agricultural land, particularly ranches, have forced owners to sell marginal acreage to speculators and developers or to move into urban land development themselves. Properties that are zoned for agriculture or open space, which may be shown on a county's long-range general plan for eventual urban use, are given a designation called 'unimproved residential,' assessed and taxed accordingly. Thus,

¹⁶ibid., p. 187

¹⁷ibid., p. 187

the landowner is often forced to proceed with urban development, although the economic climate, community need and public land policy are against it."¹⁸

Clearly, they felt, tax policy should not encourage land usage that is detrimental to the environment and the community.

"[T]he practice of land speculation ceases to be an individual's inalienable right when a point is reached that the practice works to the overwhelming disadvantage of the populace at large in the face of mounting population pressures and growing disruption of nature's essential functions. Again, the fact that the greatest portion of Hawaii's land has so few owners makes it possible to consolidate all that land and adjacent waters into a giant foundation with shares held proportionally by the contributing owners."¹⁹

"Existing neighborhoods might in time be relocated entirely. It is not inconceivable that Honolulu's urban concentration would eventually shift away from the shore and the mountainsides to selected valleys, where self-contained communities in compact vertical structures would line the extremities. The valley floors would remain as great natural parks, with all human amenities and services confined within the perimeter. The waterfront that is presently occupied by commercial, residential, and industrial buildings could be reclaimed."²⁰

"Cities in the next thirty years will experience a transportation revolution."²¹

"It is conceivable that a generation hence cities will be webbed with grade-separated, multilevel arteries. Free of the automobile as we know it, streets may become 'people places' served only by mini-buses."²²

"We predict that electric vehicles will replace the internal-combustion-powered automobiles, and electronic highways will be constructed to move more cars per lane per hour, and to increase safety."²³

Summary

This group was enormously concerned about the deteriorating quality of the natural environment, but was made even more worried by the lack of knowledge to assess cause and effect in our island's environmental condition. In the end, their proposals centered around a precautionary approach, which says that until the environmental danger of some action can be well understood and studied, we should not act.

Education

¹⁸ibid., p. 190

¹⁹ibid., p.193

²⁰ibid., p.195

²¹ibid., p.262

²²ibid., p.262

²³ibid., p.263

Total Freedom to Learn

By the year 2000, the Education 2000 Task Force hoped that we would have a society that was marked by a total freedom to learn. This requires a guaranteed minimum income for all, the end of compulsory schooling, the provision of learning opportunities for everybody of all ages, learning available for job retraining and academic advancement and personal growth, and central state funding to provide these things for all.²⁴

Curriculum and Access Improvements

They wanted teaching materials to be deliverable to people wherever they were, and they wanted there to be curricula that suited each individual's needs and learning styles. Educational buildings should be open all year round, rather than just certain hours of certain seasons. Schools should incorporate the latest in multimedia technologies, simulations, and games, to enhance learning about complicated situations.

Learning Connected to Life

There was hope that by the year 2000, learning opportunities would be connected to significant activities in the world of the student, not just schooling in a certain building, separated from the rest of life. It was hoped that people would be able to go to school as needed for retraining in new fields, which come and go more rapidly than ever. Learning should not just be for academic advancement, but should include creative expression of all kinds.

"There is grave danger in any establishment of formal education, for schooling 'easily becomes remote and dead-- abstract and bookish.' It tends to become concerned with learning the symbols in which the accumulated knowledge of society is preserved while ignoring the real cultural experience for which the symbols stand."²⁵

Learning for Human Understanding

Learning should take a conscious focus on how we get along with one another, and as such, we should break taboos on teaching about religious beliefs in school, and the way we relate to each other sexually.

They felt we should also incorporate the practice of democracy into the study of it, and not compete with each other while learning, but cooperate, and thereby no longer worry about "cheating."²⁶

Focusing Away from Credentials in Teaching

"We must have the courage to resist the statistical despotism of the accrediting associations which measure the quality of an institution by the percentage of faculty

²⁴ibid., P. 290 to 310

²⁵ibid., p. 293

²⁶ibid., p. 290 to 310

with doctoral degrees. We must make every effort to retain and reward those who have demonstrated their ability as teachers and their capacity to continue to grow intellectually, without regard to degrees earned. Socrates, Buddha, and Jesus of Nazareth never earned degrees, nor could they qualify for teaching certificates."²⁷

Increasing the Variety of Educational Opportunities

While it was believed that central state funding was necessary to insure that everyone had equal educational opportunities, bold steps needed to be taken to encourage decentralization of schooling and diverse experimentation in educational programs. Avoiding a central administration of school institutions was considered to be crucial.

Summary

Overall, the focus of the vision of education in 2000 was on freedom in its broadest sense-- not only the freedom from so many restrictions and laws about schooling and advancement within schools, but freedom to learn about anything the heart desires. Most importantly, providing people with the means to exercise that freedom was of central importance. Only in a leisure society where people are largely freed from the necessity to work can such freedom of educational experience be possible.

Health, Culture, and Lifestyle

Freedom to Live

All people should be guaranteed access, regardless of economic income or social standing, to "public goods" such as housing, transportation, ocean and beach resources. To repeat, "The [challenge] then is to provide each individual and community with as much free choice in life-style and social organization as is conceivable (under conditions of high interpersonal and intercommunity security) and to provide each with a fair share of the needed resources to implement such free choice."²⁸

Freedom to Move

Transportation was envisioned as a "free good." Separate traffic types could reduce congestion and provide better transportation options. Advances in technology would produce electric vehicles and alternative energy use. Policies would deny streets to cars and contribute to transportation alternatives that "contribute to a safe, flexible, reliable service."

A Non-Racist World

"We believe, with those prophetic voices of the first decade of the twentieth century (ranging from W.E.B. DuBois to W.C. Sumner) that the problem of race is the

²⁷ibid., p. 302

²⁸ibid., p. 158

preeminent social challenge of the twentieth century, that it has not been solved, and that it poses the fundamental threat to any orderly transition to a desirable future or futures-- or even to any future."²⁹

As such, the most basic requirement to deal with race is: "A substantial reduction in the prominence of one's ancestry (racial or cultural) as a determinant in one's choice of group memberships."³⁰

Engaged, World Citizenship

"Will the world become like an army, or will there be full freedom for the differing communities in which people will wish to live? How do we implement individual and group freedoms for citizens of the world? Our basic answer to this question is that a person must become a citizen of each of his important social groups. Citizenship entails full participation in and commitment to each group, and also a full quota of commensurate rights and the protection of these rights."³¹

Freedom to Belong to Diverse Communities

"We anticipate, however, that Hawaii 2000 will have achieved a wide range of diverse communities to constitute the social settings in which individuals carry out most of their activities. Membership in any of these communities will be by choice."³² Indeed, our diversity and relative harmony of such diversity is considered to be one of Hawaii's greatest assets, all wrapped up in the aloha spirit.

Freedom to Compete in Electoral Races

We have seen "increasing costs in campaigning, thereby in effect disenfranchising those without the economic wherewithal to wage successful election campaigns. We should devise ways and means to make possible equal participation in the elective process for those who do not have the means to subsidize increasingly expensive contemporary media publicity campaigns."

Freedom of Individual Identity

"It is highly unlikely that by 2000 we will be a 'golden people' a true melting pot, free of conflicts. The dream of complete acculturation and homogenization of the various racial groups in Hawaii will not be achieved by 2000. Rather, our ethnic groups will still retain some measure, although diminished, of their own identity, providing a series of balanced contrasts, and it is to be considered that the survival of these differences may be a source of cultural enrichment to be maintained."³³

"The historical traditions and racial configuration in Hawaii have produced values that are peculiar to Hawaii. Many of the old values have been forgotten. They may need to

²⁹ibid., P. 148

³⁰ibid., p. 151

³¹ibid., p. 152

³²ibid., p. 156

³³ibid., p.168

be reexamined and when appropriate reintegrated into the society of 2000. This is not to say that we are to revive the old Hawaiian society and attempt to integrate social rules and regulations into the very complex society of 2000. Rather, we should consider an attempt to reconstruct old values which can be rebuilt into newer social structures and provide newer mechanisms for relationships among people, very much as the old Hawaii has been blended into our architecture, music, and dress. For example, it may well be that we could profitably study the Hawaiian concept of 'ohana...."³⁴

"Ho'oponopono means 'setting to right of wrong' and provided an opportunity for problems to be brought into the open in the presence of all the people involved in the problem. . . A statewide computerized ho'oponopono via television might be created for the future."³⁵

Summary

It should be clear by now that people dreamed boldly in this conference, and described an amazing future of deep democracy and meaningfully defined freedom. But they didn't stop there. They went on to describe a series of possible futures for Hawai'i that helped display the variety of views of the future prevailing at the time.

³⁴ibid., p.169

³⁵ibid., p.170

Alternative Hawaiis

In order to put the preceding aspirations in context, it is useful to briefly review the numerous alternative Hawaiis described in *Hawai'i 2000*.

Alternative 1: Hawaii as Ideal State

This is a "dream come true" portrait of a Hawaii "without racism, poverty, unemployment, crime, slums, pollution, mental illness, moral degradation, and family disintegration. Future versions of rugged farmers and skillful fishermen draw sustenance from land and sea. . . Happy visitors from near and far throughout the globe share Hawaii's charm and acclaim it as the pride of the American nation."³⁶

Alternative 2: Hawaii as Revolutionary Battlefield

This Hawaii is "a battlefield for protracted struggle. The poor, the racially oppressed, the psychologically scarred, the pure-minded youth, and the cast-aside aged, conduct constant warfare against formidably entrenched businessmen, landlords, politicians, bureaucrats, media controllers, police, militarists, teachers, and other assorted authority figures."³⁷ In this Hawai'i, what emerges is a Castro-style Marxist revolution which puts Hawai'i under "the nuclear umbrella of a reconciled China and Russia, with the encouragement of revolutionary Japan."³⁸

Alternative 3: Hawaii as True Kingdom of Aloha

By granting preferential treatment to persons of Hawaiian or part-Hawaiian ancestry in all areas of social life, the aloha kingdom would attempt to "achieve greater harmony among men and between man and nature. It need not revert only to fishing and subsistence agriculture but might progress to the highest levels of future scientific, technological, biological, informational, and humanistic arts. It might produce concepts of ownership far beyond polemical nineteenth and twentieth century rhetoric." This might require "separation from the Union or an achieved permissiveness in the US Constitution to free states for radical social innovation."³⁹

Alternative 4: Hawaii as Coconut Republic

In this alternative future, Hawaii is a clothing-optional playground of amusement and gambling. "All the chemical euphorias of the world would be readily at hand; the finest medicines would restore health, obliterate venereal disease, and control births. . . Tax-free shopping would be at its best for the affluent of the world-- and for the poor, there would be produced little 'dream Hawaii' packets either to spur achievement motivation to join the fun or to dull the pains of existence through creative fantasy."⁴⁰

Alternative 5: Hawaii as Ecological Commonwealth

³⁶ibid., p. 466

³⁷ibid., p. 466

³⁸ibid., p. 467

³⁹ibid., pp. 467-468

⁴⁰ibid., p. 468

"This would require a truly radical departure from conventional concerns (capitalist, socialist, or communist) with power and property to focus upon man's relationship with the natural environment as the highest form of good. . . Men in Hawaii could decide to make their islands the world center for experimental man-environment symbiosis. . . It would be fitting that Hawaii with its breathtaking inheritance of natural beauty and its resonance with the nature-enhancing traditions of Japan should seek to become a world pioneer in the ecological reorientation of human thinking."⁴¹

Alternative 5A: Postindustrial Technology-Nature Symbiosis

". . . Hawaii might support not one but ten or twenty million people. Synthetic food, vitamins, and biological products rather than subsistence agriculture would sustain them. They would live in densely packed high-rise apartments, crammed at the bases of our mountains, or in floating cities on the sea. Mountain slopes, floors of valleys, and shoreline areas would be freed of all but minimal man-made structures. .

"⁴²

Alternative 6: Hawaii as National Park

In this alternative, Hawaii either petitions for federal assistance in becoming a "national park," or the "whole state might be deeded by action of its own citizens, with national concurrence, to the United Nations as the first major 'world park.' . This naturally suggests the idea of a future Hawai'i as the world headquarters of the United Nations-- combining the functions of a world park and the informational processing requirements of future world political, social, economic, and cultural institutions."⁴³

Alternative 7: Experimental Hawaiis

"In such a society, continuous, pluralistic, relatively small-scale experiments would be encouraged by legislative action and supporting public opinion on a wide range of political, economic, social, cultural, environmental, and intersocietal matters. Overall creative monitoring would be by a futures-enhancing public leadership, held more accountable than today for facilitating anticipatory democratic innovations. Aspects of alternative Hawaiis, some briefly sketched above, might be allowed. . ."⁴⁴ Small pilot projects of many possible different Hawaiis would be started to encourage social innovation in a variety of formats.

Conclusion

These were some of the alternative Hawaiis envisioned in 1970. What visions of the future are there now? Are any of these more or less feasible now than in 1970? More or less desirable? More or less overdue?

"Hawaii 2000" As A Forecast Of Hawaii In the Year 2000

⁴¹ibid., pp. 468-469

⁴²ibid., p. 470

⁴³ibid., pp. 470-471

⁴⁴ibid., p. 471

It is not the duty of futures studies accurately to predict the future (though several of the task forces did in fact use the term "prediction" to characterize their forecasts of expected future developments). Indeed, at least one task force recognized that "Values change. In 1985 we may prefer some other alternative for 2000 than we do in 1970. In 1985 we may see new consequences for 2030 of the alternative futures in 2000."⁴⁵

Another task force also addressed the problem of rate of change, and the likely increase in the rate of social, environmental, and technological change: "One possibly useful approach to prediction is to take the past as a paradigm for the future, but we cannot simply think of 1940 as thirty years earlier than 1970, just as 1970 is thirty years earlier than 2000. Arithmetically this is correct, of course, but the average rate of development in the next thirty years will be at least two or three times that of the preceding thirty years. Instead then, we should use the year 1910, or even the turn of the century, as a datum point for predicting 1970. The appalling difficulties immediately become apparent: our world today is so wildly different from that of seventy years ago. It is hard to see how anyone could have envisioned the world of universal radio and television, computers, air travel, antibiotics, and nuclear power, to name just a few technological common places of today. In a tantalizing way, however, the threads were there in 1900 for an especially sensitive mind to see...."⁴⁶

And a third concluded: "We must allow our children and grandchildren and their progeny as many possible alternatives for dealing with environmental matters as their greater knowledge and different values will dictate. These options, then form the nucleus of this paper."⁴⁷

Nonetheless, many of the statements of a probable and/or preferred future for Hawaii contained in the task force reports were amazingly accurate as forecasts of developments to come.

Here are some of the statements which come very close to describing technologies or processes which actually exist in Hawaii in 2000. Note that the statements of future preferences usually come from more than one task force, and that the page numbers refer to Chaplin and Paige, "Hawaii 2000".

"The last third of the 20th century will be regarded as the onset of the electronics age, much as the last half of the 19th century is considered the steam age." (256)

"The kind of computer that originally occupied a whole floor of an office building can become a desk-top or even a pocket-sized machine, and . . . large computers can have undreamed of potentials." (256)

⁴⁵ibid., p.161

⁴⁶ibid., p.255

⁴⁷ibid., p.183

"Small size and small power requirements will also lead to extremely flexible personal communications, with pocket radiotelephones linked to the regular telephone system only a very few years away." (257)

"We predict that improved equipment and simpler techniques for computer information storage and retrieval will lead to generations of personalized, potentially pocket-sized computers. Through these, the individual citizen will have instant access to vast stores of information. (257)

"Advances in information retrieval and display will permit the physical dispersal of a great deal of professional and business work away from the great cities. We even predict that more people will work at home, and that advances in holography and television will permit socializing without the participants' actually gathering physically in one place." (262)

A worldwide electronic communication network will be possible on a worldwide basis "because of the system of satellite-linked communications that will be available." "With additional satellite development, persons who want to will be able to regularize face-to-face communication of a worldwide basis. This means that place-of-residence and place-of-work... will become increasingly independent decisions. However, in line with our earlier value choices, we do not believe that Hawaii 2000 should become only a collection of apartments in which almost all social interaction takes place by means of electronic transmission." "We anticipate that Hawaii 2000 will have achieved a wide range of diverse communities to constitute the social setting in which individuals carry out most of their activities. Membership in any of these communities will be by choice." (156)

"People on remote islands not having a resident doctor may have a console hooked up to a medical diagnostic system based in Hawaii which would enable them to decide to give treatment or wait for medical assistance to arrive." (337)

"Of particular importance will be improvements in control of materials properties, in 'microdesign' of tailor-made materials; and in development of quantitative or semi-quantitative means of selecting materials." (279)

"A major concern for society will be the right of the individual to be ill and die as a result of his own action or inaction." (282)

"The enforcement difficulties of Prohibition and now of marijuana laws make it unlikely that control of manufacture and distribution of drugs of this kind will change matters much in the future." (283)

"Progress in genetics suggests that it will soon be possible to alter human genetic makeup, and perhaps even to change the course of human evolution. For our society this has very serious implications that will have to be faced before 2000."

"At this time it is theoretically possible to produce genetically identical human beings by asexual means. This process, known as vegetative, or clonal, reproduction, has been accomplished in frogs. These same experiments are being attempted with mammals and there are no theoretical reasons why they should not be carried out with human cells." (284)

"Our conclusion, therefore, is that our ability to feed any population present in 2000 will be easily within the grasp of mankind as far as science and technology are concerned." "At the present projection, overpopulation is our major problem--not starvation." (287)

"Finally, there will be a standardization of containers, so that they can be transferred quickly among rail, road, water and air vehicles." (264)

"Studies indicate that there is a distinct trend in America today toward a realignment of governmental functions that will have the ultimate effect of returning many problems-solving activities from the federal government to the local level." (185) "This would serve to support the contention that greater individual involvement should be encouraged in community matters" (185) (This may be possible because of) "the trend toward more leisure and changes in the attitude of work for work's sake." (186)

The State of the State and Trends for the New Millennium

Introduction

This paper is a very modest attempt to assess the state of the state as Hawaii moves into the next millennium and to identify scenarios for Hawaii's future based on global trends that are already having an impact on the State. The authors of this paper do not believe that analyses such as this will have any significant impact on Hawaii's future. Rather, a broad-based participatory planning process aimed at assessing the state of the state and developing a new vision for Hawaii's future will be required if the quality of life is to be improved for Hawaii's people.

This paper has been written with *Hawaii 2000*, a participatory planning effort initiated to develop a preferred future for Hawaii thirty years ago, as a backdrop. The paper attempts to assess the degree to which some of the visions of *Hawaii 2000* participants have been realized. It also includes an assessment of concerns that were not considered by the participants in *Hawaii 2000* but are important issues today.

Section one of this paper is an assessment of the state of the state using a series of indicators drawn from state and national sources. These indicators are used to assess the state of the state in terms of

- The Economy and Near-term Future Outlook;
- Government and Politics;
- Education,
- Environment and Natural Resources,
- Culture, and
- Quality of Life.

Where possible, comparisons are made with the state of the state in 1970 or as close to 1970 as data would allow. Using largely quantitative indicators, comparisons are also made with the state of other states.

Sadly, the current situation in Hawaii is not very good compared to what was envisioned in 1970 or by comparison with other states in the United States. While some readers may want to blame the current state of affairs on the economic slump of the 1990s, it appears by some measures that there has been a decline in the standard of living in Hawaii since 1970. The education system has not lived up to the aspirations envisioned in 1970. Environmental degradation is more of a concern today than it was in 1970, and the state is devoting fewer financial resources to resource management than other states. By some measures, the standard of living has declined in financial terms and financial security for Hawaii's people has also declined.

On the plus side, a Hawaiian Renaissance has countered the decline in Hawaiian culture anticipated by Hawaii 2000 participants. Hawaii's people are living longer than people in most other states and for most segments of the population mortality rates for most major diseases are lower. Hawaii also has lower violent crime rates than other states while property crime rates are quite high by national standards. If improvements in the standard of living are to be made, it is unlikely that simply waiting for the economic situation to improve will reverse many of the trends identified below. It is also unlikely that Hawaii will be able to take advantage of the new opportunities discussed in section two: Global Trends and Future Scenarios.

The future scenarios discussed in section two are based on a number of global and local trends that are already having an influence in Hawaii:

- Telecommunication development and computerization
- Bioengineering development and genetic manipulation
- Globalization of commerce and trade
- Increasing impact of environmental factors (particularly climatic variability)
- Devolution of political power and the empowerment of stakeholders

In section two of this paper, these trends are woven into a series of scenarios that could be realized as Hawaii moves into the next century. These scenarios include both opportunities to improve the quality of life in Hawaii and threats to the current way of life. None of these scenarios are in any way inevitable—they are only possible futures for the State.

Moving from the state of the state today into the future, the people of Hawaii will face critical decisions that will shape their future in the face of global trends identified in this paper and trends about which we have not even imagined. If the people of Hawaii are going to move into a brighter future, an extensive effort will be required to:

- Identify trends as they emerge;
- Analyze those trends in terms of the current state of affairs;
- Identify critical decisions that need to be made by the public and private sector;
- Establish a process to make those decisions; and
- Develop a mechanism to ensure those decisions are implemented.

If *Hawaii 2000* failed, it did so because no mechanism was established to guide Hawaii toward the preferred future. A number of initiatives were developed as a result of *Hawaii 2000*, but few have endured. If the quality of life in Hawaii is to be improved in the face of the global trends emerging now, a broad-based continuous effort similar to *Hawaii 2000* will be required, and a commitment must be made by those involved in the process to ensure the preferred future is realized.

I. The Reality of Hawaii 2000

1. *Hawaii's Economy and Future Outlook*

Hawaii 2000 gave a great deal of attention to the quality of life in Hawaii and saw the economy as a means of improving the quality of life. Economic diversification and the future potential for high technology were themes in 1970, but participants in *Hawaii 2000* wanted to limit population growth and improve the standard of living for Hawaii's people.

In the past decade much more emphasis has been put on the performance of Hawaii's economy, improving the business climate, and attracting foreign investment. This may be a result of the decline in economic growth in the 1990s and its implications for government revenues. It may also be the result of increasing attention to global economic competitiveness in the business world and improving efficiency in the public and private sectors. Whether down-sizing or right-sizing will result in an improved quality of life for the people of the world remains to be seen.

From an economic perspective, the quality of life for some people in Hawaii has actually declined since 1970. Median household incomes in real terms are lower, more people are living in poverty, and the number of very wealthy people has increased. Taxes for individuals remain high, and, despite a recent decline, the cost of living remains high compared to the rest of the U.S. Big plantation agriculture has declined while diversified agriculture has grown. Tourism remains a large segment of the state's economy and any future growth in tourism will probably result in more low paying service sector jobs. There are indications that the high technology sector is growing and this may result in higher household incomes.

There are signs that Hawaii's economy may be recovering from slump of the 1990s, and the economic recovery in Asia may provide opportunities for businesses in the state. Growth in businesses providing goods and services to Asia and the Pacific along with Hawaii's ethnically diverse population with strong ties to the Asia-Pacific region may provide opportunities to improve the quality of life for Hawaii's people. Taking advantage of these opportunities will probably require vast improvements in Hawaii's education system and improvements in quality of life to retain the people who will provide those goods and services.

A recent survey shows that 76% of Hawaii residents are either very satisfied or somewhat satisfied with life in Hawaii, despite the fact that 89% of them reported experiencing financial pain in the last year. It appears that for most residents, quality of life is not strongly connected to traditional economic indicators.

1.1 Economic Growth and Distribution of Income

Hawaii has been experiencing very sluggish economic growth since 1990 with increases in the Gross State Product estimated at about 1% through 1998, as compared to 4.5% from 1960-1990.⁴⁸ Unemployment has been relatively high; the unemployment rate subsided from 6.4%, in both 1996 and 1997, to 5.8% in 1999.⁴⁹

Much of the decline in Hawaii's economic growth has been attributed to a decline in tourism and investment in the tourism industry. Hotel occupancy had already fallen from around 81% statewide in 1987 to only 72% in 1993, when Japan's recession first became evident. The number of hotel jobs remained at about 38,000 through 1997 with a preliminary 1998 estimate of just over 37,600 jobs. Hotel rental revenues fell sharply as the drop in Asian travel unfolded and hotel occupancy, which had rebounded to around 77% during 1995, sank to 72% in 1998.⁵⁰

1.2 Business Climate and Taxes

The local press and mainland magazines have characterized Hawaii as having a poor business climate and high taxes. High taxes and a burdensome regulatory environment appear to be the most frequently cited examples of the poor business environment. The latter is difficult to quantify, but the tax burden is not. On a per capita basis, Hawaii residents paid \$2,606 in state taxes in 1997. Per thousand dollars of income, this placed Hawaii the second highest in the nation or over 1.5 times the national average.⁵¹ Whether recent changes in the tax structure may result in a decrease in average annual per capita tax paid remains to be seen. By contrast, Hawaii's property tax burden has been relatively low: Hawaii residents ranked 35th in their property tax burden in the U.S.⁵²

1.3 Recent Signs of Economic Turn Around

Bank of Hawaii reports that recent economic indicators in the second quarter of 1999 confirm that the economy is recovering from the slump of the 1990s. The Council on Revenues has revised its projects upward for real personal income. The Bank also reports that tourism rentals are on the increase.⁵³

1.4 Globalization of the economy-

Hawaii's economy, like economies around the world, is becoming more and more tied to the global economy. Our dependence on tourism and export-driven growth probably makes this trend inevitable. Whether this will lead to a better quality of life or an increase in low-paying jobs remains to be seen.

⁴⁸ <http://boh.com/econ/aer/1998/index.asp>

⁴⁹ <http://boh.com/econ/aer/1998/index.asp>

⁵⁰ (<http://boh.com/econ/aer/1998/index.asp>)

⁵¹ <http://www.taxadmin.org/fta/rate/97taxbur.html>

⁵² www.tfhawaii.org/statmenu.html

⁵³ <http://boh.com/econ/frameset.asp?name=news>

1.4.1 Changes in Levels of Foreign Investment

In real terms, foreign direct investment in property, plant, and equipment of businesses (other than banks) increased from \$1.4 billion in 1977 to a high of \$15.4 billion in 1994 and dropped to a little over \$14.3 billion in 1996.

Japanese investment constituted about 55% of the foreign investment in 1987 and 84.7% in 1996.⁵⁴

1.4.2 Increase in Imports and Exports

The real value of imports to Hawaii from foreign countries and other parts of the US have increased steadily from \$4.74 billion in 1970 to \$11.53 billion in 1997. The value of exports in real terms increased from \$1.3 billion in 1970 to a high of \$1.56 billion in 1993 and dropped to \$1.39 billion in 1997, about what they were in 1970.⁵⁵

1.5 Increase in Economic Diversification

According to the Bank of Hawaii, some economic diversification is taking place: Neighbor Island job growth (2.1% in 1998) is showing strength. Self-employment seems to be growing in Hawaii, corroborated by increases in proprietors' income and individuals' quarterly estimated state tax payments.⁵⁶

In real terms, the value of agricultural crops produced in Hawaii dropped from \$970 million in 1980 to \$381.7 million in 1997. Over the same period, the value of crops produced other than sugar and pineapple increased from \$160 million to \$219.9 million.⁵⁷ Oahu's agricultural job count increased by 16.7% in 1998.

1.5.1 High Technology Industry Development

According to the Governor's Office, Hawaii's high technology companies generated \$1.8 billion in gross revenues in 1998 and employed more than 16,600 people in manufacturing, computer and software services, science, research and development, engineering services, and communications. "Companies such as Digital Island, Square USA, Cybercom and LavaNet are examples of software and internet-based technologies that are responsible for most of the industry's growth."⁵⁸

⁵⁴ *State Data Book 1998*, Table 24.17 with dollars adjusted using implicit price deflator on expenditures on gross state produce with 1992 dollars as a base year.

⁵⁵ *State Data Book 1998*, Table 24.01 with dollars adjusted using implicit price deflator on expenditures on gross state produce with 1992 dollars as a base year.

⁵⁶ www.boh.com/econ/aer/1998/index.asp.

⁵⁷ *State Data Book*, Table 19.04. with dollars adjusted using implicit price deflator on expenditures on gross state produce with 1992 dollars as a base year.

⁵⁸ <http://gov.state.hi.us/>

Another indicator of technological development in Hawaii is the number of patents issued to Hawaii residents. Patents issued to Hawaii residents increased from 46 in 1987 to a high of 106 in 1993 and dropped to 93 in 1997. In 1997, Hawaii ranked 48th out of 50 states in the number of patents issued.⁵⁹

1.5.2 Economic Potential and Ethnic Diversity

Hawaii' culturally diverse population with strong ties to Asia and the Pacific Islands has been cited as an asset for future economic growth. Based on the latest estimate, no ethnic group makes up more than 23.3% of the total population and four of the 11 major ethnic groups represent more than 10% each. Almost 75% of Hawaii's people are of Asian and Pacific Island decent.⁶⁰

2. Government and Politics

2.1 Hawaii 2000 participants acknowledged that state and local government in Hawaii were different than in other states. They also viewed state and local government as an important means to a better quality of life in Hawaii. They emphasized greater citizen participation and giving citizens a greater voice in public affairs. Participants in Hawaii expected the size and cost of government to change by the year 2000 but did not foresee anywhere near the amount of growth in government that has actually occurred.

Attitudes toward state and local government have changed in Hawaii in the last thirty years, and most of that change has come in 1990s. Citizen participation in the political process has declined, and calls for smaller and less expensive government have increased, as has pressure for more efficient and effective government at the state and county levels.

There have been efforts to increase citizen participation at the county level. There have also been proposals for reforms of the regulatory process and the civil service system at the state level. However, many people remain cynical about the state government's ability to make changes in the face of political pressure from labor unions⁶¹, the business community and other special interests. Attempts to cut the cost of state government in the past five years have been made at the departmental level and a few attempts have been made to prioritize programs and increase efficiency.

2.2 Decline in Citizen Participation in Elections

⁵⁹ *State Data Book 1998*, Table 17.27.

⁶⁰ DPED Statistical Report 77, p. 12

⁶¹ According to the AFL-CIO, Hawaii had the highest percentage of union workers (27%) of any state in the US, almost double the US average. *State Data Book, 1998*: Table 12.39 and notes.

There has been a marked decline in the participation of Hawaii's citizens in the electoral process: only 50% of registered voters voted in the 1998 primary compared to 71.2% in 1976; only 68.8% of registered voters participated in the 1998 general election compared to 85.1% in 1976.⁶²

2.3 Growth in the Size of Government in Hawaii

Statistics on the number of people employed by government are somewhat confusing. The number of State government workers employed at any time during the year increased from 30,600 in 1970 to a high of 65,000 in 1994 and declined to 64,950 in 1998.⁶³ County employment increased from 9,660 workers in 1970 to 16,850 workers in 1998. Federal government employment was 33,380 in 1970 and 30,400 in 1998.⁶⁴ The number of full-time equivalent state workers at the end of 1998 totaled 43,505.538 FTEs, a decline of 2,098.497 FTEs from 1994. There were 41,281 full-time and 4,625 part-time state employees (FTEs) at the end of 1998 and 4,625 part-time employees.⁶⁵ There were an additional 18,080 casual hire employees, most of whom worked for the Department of Education at the end of 1998.⁶⁶ The number of people employed by county governments at any time during the year increased from 9,660 workers in 1970 to 16,850 workers in 1998.⁶⁷

In real terms, State Government operating expenditures increased from about \$3.46 billion in 1986 to \$5.5 billion in 1996. The largest increases were in public welfare which grew in real terms from \$438 million in 1986 to a little over \$ 954 million in 1996 which was about 17 percent of the State's operating budget. Grants-in-aid to the counties declined in real terms from about \$24.9 million to about \$2.6 million over the same period.⁶⁸

2.4 Ineffective and Inefficient Government

The Maxwell School of Citizenship and Public Affairs published the results of a study entitled "Grading Governments" in *Governing* magazine in 1999. The report graded states in terms of Financial Management, Human Resource Management, Information Technology, Capital Management, and Managing For Results. The report gave Hawaii an overall average of "C-" along with seven other states, with Alabama being the only state to receive a lower grade. Hawaii received a "B-" for capital

⁶² *State Data Book 1998*, Table 8.05.

⁶³ *State Data Book, 1998*, Table 9.37.

⁶⁴ *State Data Book, 1998*, Table 9.37.

⁶⁵ *State Data Book 1998*, Table 9.41

⁶⁶ *State Data Book 1998*, Table 9.42

⁶⁷ *State Data Book 1998*, Table 9.37

⁶⁸ *State Data Book 1998*, Table 9.07 with dollars adjusted using implicit price deflator on expenditures on gross state produce with 1992 dollars as a base year..

management, an “F” for information technology and a “C-“ for the other three categories.⁶⁹

The Grading Government project concluded, “Hawaii has a government that purposely uses one-time special funds and low estimates to balance the state budget, when in actuality its expenditures far outpace its income.” According to the report, Hawaii has the highest debt load in the country “because of its carefree spending attitude and its capital expenditures; has one of the most rule-bound personnel systems in the country; and is a high-tech flop.”⁷⁰

The Grading Government report fails to acknowledge that in other states, municipal governments issue their own bonds, whereas in Hawaii the state government floats bonds for the county governments. Nevertheless, Hawaii had the 6th highest per capita state debt of the 50 states at the end of FY 1996, the latest year for which comparable figures are available.⁷¹ Debt service payments by the State increased from \$259.0 million in 1986 to \$607.5 million in 1996.⁷² In constant (1992) dollars that amounts to an increase of from \$354.8 to \$558.4.⁷³ State general obligation bond debt increased from \$2.62 billion in 1985 to \$5.60 billion in 1997.⁷⁴ This is equivalent to an increase of from \$367.5 billion to \$511.4 billion in constant (1992) dollars.

The Government Performance report states: “While other states have been focusing on oversight for information systems, Hawaii has been moving in another direction. The budget for its Information and Communication Services Division is 40% lower than it was in 1992.”⁷⁵

The State government seems unable to make changes in the tax structure and government operations. At the end of the 1999 legislative session, the Governor accused the Legislature of being unable to make any hard decisions about taxes and government reform.⁷⁶ According to Governor Cayetano, “there has been resistance to almost every change we have proposed - to civil service, or retirement benefits, and to the kind of cost items that make it difficult for us.”⁷⁷

The Government Performance report states: “The influence of unions on personnel management here goes far beyond pay levels; there are frequent confrontations between labor and state government on arbitration dockets and in the state courts. As the result of one loss in arbitration, the state now must give probationary employees

⁶⁹ www.maxwell.syr.edu/gpp/stategrades.htm.

⁷⁰ www.governing.com/.

⁷¹ *1998-1999 Book of the States*, p. 262.

⁷² *State Data Book 1998*, Table 9.07.

⁷³ Dollars adjusted using the implicit price deflator for expenditures on gross state product, Table 14.01, *State Data Book 1998*.

⁷⁴ *State Data Book 1998*, Table 9.35.

⁷⁵ www.governing.com/.

⁷⁶ *Star Bulletin* 4/16/99.

⁷⁷ *Pacific Business News*, 2/8/99.

the same rights to grievances as all others, an odd approach to the whole concept of probation.”⁷⁸

2.5 Calls for Smaller and Less Costly Government

The participants of the Hawaii 2000 conference recognized the need to move to a decentralized, limited government. Today, political leaders and people in the business community have called for a reduction in the size of state government as a means for reducing its cost and increasing its efficiency. Although Government salaries in Hawaii were slightly below the national average in 1995, Hawaii ranked 13th of the 50 states in the number of public employees per ten thousand population at the state and local level in 1994, the latest year for which figures are available.⁷⁹ Budget crises at the state and county level have fueled calls for cuts in the size of public services. Hawaii’s ranking may be lower today than it was in 1994, but cuts in the public service between 1994 and 1997 amounted to less than 1.2%.

2.6 Good Governance in Hawaii

2.6.1. Food Stamp Program One of the Best in the County

"For the fifth straight year Hawaii's food stamp program has been rated as one of the very best in the nation," said Governor Cayetano. "As a result of the exceptional level of efficiency practiced by our DHS maintenance workers year after year, the department has received a total of \$6,728,792 in award money over the past five years."⁸⁰

2.6.2 Citizen Participation at the Local Level

The City Charter of Honolulu was revised in 1973 and a nine-member Neighborhood Commission was established to give opportunities for more citizen participation in government. The Commission developed a Neighborhood Plan outlining a uniform system of neighborhood boards on Oahu. Neighborhood boards were then formed in accordance with the Plan. The City and County of Honolulu’s Neighborhood Board structure provides tremendous opportunities for citizen participation in government.⁸¹

The City and County has instituted a Development Plan and Sustainable Community Plan Revision Program, and a *21st Century Oahu* vision process at the local level. Both of these efforts provide additional opportunities for citizen participation.⁸²

Hawaii County is undertaking an update of the County's General Plan document. The General Plan Revision Program, which is expected to take approximately two years to complete, will be done by the Planning Department staff along with other agencies

⁷⁸ www.governing.com.

⁷⁹ *1998-1999 Book of the States*, p.335.

⁸⁰ Governor’s Office News Release 99-085.

⁸¹ <http://www.co.honolulu.hi.us/Depts/nco/office.htm>

⁸² <http://www.co.honolulu.hi.us/Mayor/vision/>

and with the community's input. The General Plan provides the direction for the future growth of the County.⁸³

Kauai County has also embarked on a general plan update entitled *Kaua'i 2020*. *Kaua'i 2020* is intended "to design a process by which the communities of Kaua'i and Ni'ihau can effectively participate in the update of the General Plan and have it become a practical guide for the development of their communities into the 21st century. This document also will serve as a comprehensive vision for the island and will include goals, policies, and recommendations."⁸⁴

2.6.3. State Reform Efforts that have worked

In 1994-1995, the Department of Labor and Industrial Relations began developing a strategic plan through a participatory planning process that involved employees from throughout the department. DLIR's effort is aimed at making the department more client oriented and responsive to the needs of the people served by the Department.⁸⁵

The Environmental Health Administration established an Environmental Management Advisory Group in 1998 to involve representatives from interest groups throughout the state. EMAG has worked with EHA to develop a strategic plan aimed at improving environmental management and improving communication with the public.

The Economic Revitalization Task Force provided an opportunity for the business community and other interest groups to identify initiatives to revive Hawaii's faltering economy. Despite the failure of many of the proposed changes in tax structure and government operation, a number of new initiatives were identified that may provide a starting point for a broader strategic planning process.

Molokai has been designated an "Empowerment Community" and will use a \$250,000 Federal grant to develop a ten year strategic plan to protect natural resources and help people in the community remain strong and healthy.⁸⁶

The Legislature enacted a statute that requires agencies to develop rules to set a limit on the amount of time agencies have to review land use and other permit and approval applications. The Office of Planning is working with agencies to facilitate the completion of this process by the end of 1999.

2.6.4. Initiatives that May Improve Government in Hawaii

⁸³ <http://www.hawaii-county.com/planning/feedback.htm>

⁸⁴ <http://waimea.hawaiian.net/kgpu/index.html>

⁸⁵ <http://www.aloha.net/~edps0/direc.html>

⁸⁶ *Sunday Honolulu Advertiser* 10/3/99: B-1.

Lt. Governor Mazie Hirono has established a Slice Waste And Tape program to reduce the burden of government regulation on the people and businesses of Hawaii. The Lt. Governor's Office plans to accomplish by this using a number of different strategies: Improving Public Access to Rules; Eliminating Obsolete Rules; Reviewing and Overhauling the Rule Making Procedures; Reducing the Burden of Rules.⁸⁷

The Department of Human Resources Development has embarked on a Civil Service modernization effort. The Department "has just completed its first, data gathering, phase. Conversations with the Governor, Mayors, Legislators, County Councils, State Directors, County Personnel Directors, managers, supervisors, employees, the unions and public interest groups from the private sector have taken place since the start of the project. There were well over 200 formal meetings conducted with over 4,000 stakeholders since June. In addition to these 200+ meetings, there were countless other team and staff meetings."⁸⁸

3. Education

Education and changes in the educational system in Hawaii were part of the vision of *Hawaii 2000*, and the state of Hawaii's public education system has been a major concern in the last thirty years. Improvements in the quality of life for Hawaii's citizens envisioned in 1970 depended heavily on the quality of public schools and the University of Hawaii. Taking advantage of many of the economic opportunities that will be open to Hawaii in the next century will require an educated workforce and a world-class education system.

3.1. Educational Expenditures

As shown by the indicators discussed below, Hawaii's population is slightly more educated than other states. However, primary and secondary student performance in Hawaii has not been outstanding by national standards. Compared to the US average, teachers' salaries in Hawaii have declined over the past thirty-seven years. Salaries for Hawaii's public school teachers averaged \$36,986 for the 1996-1997 school year, which placed the state's average at 26th in the nation. This compares to a ranking of 12th for the 1959-1960 school year.⁸⁹

In the last fifteen years, education spending has almost doubled. State spending on public primary and secondary education increased from \$450.3 million in 1986 to \$894.4 million in 1995 and decreased to \$863.1 million in 1996.⁹⁰ In constant 1992 dollars, this amounts to an increase of from \$616.8 in 1986 to \$793.2 in 1996, an increase of a little less than 29 percent.⁹¹

⁸⁷ http://swat.state.hi.us/about_swat.htm.

⁸⁸ <http://www.state.hi.us/hrd/newcs.html>

⁸⁹ *1998-1999 Book of the States*, p. 387.

⁹⁰ *State Data Book 1998*, Table 9.07.

⁹¹ Dollars adjusted using the implicit price deflator for expenditures on Gross State Product from *State Data Book 1998*, Table 14.01.

State spending on higher education has declined by almost 30% in the 1990s while tuition has greatly increased for resident and out of state students. Enrollment at UH Manoa has decreased in recent years, probably as a result of higher tuition. Enrollment at the state's private universities, however, has increased. Funding from contracts and grants at the State's only research university campus has increased by 30% in the past eight years.

3.2 Class Size and Student Performance

In 1999, Hawaii's graduating seniors had SAT scores of 482 verbal and 513 quantitative with 52% of graduating senior taking the SAT. The national average was 505 verbal 511 math, but with only 43% of graduating seniors taking the SAT.⁹² Our below average test scores may be explained by the higher percentage of Hawaii students taking the exam.

The student-teacher ratio is slightly higher than the national average. The student teacher ratio in Hawaii's public schools was 17.3 students to each teacher based on enrollment during the 1996-1997 school year. The compares to a national average of 17.1.⁹³

3.3 Educational Qualifications of Teachers

Hawaii's public school English teachers are much better trained in their field than their colleagues in other states, while Hawaii's math teachers lagged behind their colleagues in other states. Hawaii ranked 42nd out of 50 states and the District of Columbia during the 1993-1994 school year in the percentage of intermediate and high school math teachers that had math as a major or minor in college. Sixty-two percent of Hawaii's teachers had a major or minor in math compared to a national average of 80%.⁹⁴ Hawaii ranked 2nd in the percentage of intermediate and high school English teachers (90%) with major or minor in English.⁹⁵

Hawaii had the highest percentage of public school system employees that were teachers (as opposed to administrators, teachers' aids or other employees) of any state in the US in the Fall of 1997 with 62.2%. This compares with a national average of 52.2%. Hawaii had the lowest percentage of instructional aids with 5.2% of total employees.⁹⁶

3.4 State Spending Patterns for Higher Education

⁹² <http://www.collegeboard.org/press/senior99/html/satt2.html>

⁹³ *1998-1999 Book of the States*, p. 386.

⁹⁴ National Center for Education Statistics 1993-1994 Schools and Staffing Survey, Table 3.6 and Figure 3.6).

⁹⁵ National Center for Education Statistics 1993-1994 Schools and Staffing Survey, Table 3.6 and Figure 3.7.

⁹⁶ National Center for Education Statistics, *Statistics in Brief*, April 1999, Table 3.

3.4.1 College Enrollment and Educational Attainment of Population

Enrollment- The number of students enrolled at the University of Hawaii (all campuses) increased from 42,525 in 1988 to 45,337 in 1998. The total number of students enrolled at Chaminade, Hawaii Pacific and Brigham Young increased from 11,790 in 1993 to 13,296 in 1997.⁹⁷

Student enrollment at UH-Manoa is down by 17%, and statewide, there has been more than a 10% loss in total faculty.⁹⁸ Enrollment at UH Manoa declined from 18,424 in 1988 to 17,013 in 1998.⁹⁹

Residents with College Degrees-Hawaii ranked 22nd among the 50 states in the number of people with a bachelor's degree or more education. Twenty-four percent of Hawaii residents had a BA or better. The national average was 24.4%.¹⁰⁰

3.4.2 Declining State Support and Increasing Tuition Costs

The UH General Fund budget was \$352.8 million in 1995. In 1998, the UH budget was less than \$260 million, a reduction of almost a full third. Tuition costs for full-time undergraduates at UH Manoa increased 97% in the last four years. Tuition at the Community Colleges increased from \$384 for residents and \$2,556 for non-residents in 1996 to \$492 for residents and \$2,880 for non-residents in 1998.¹⁰¹

3.4.3 Extramural Funding or Research

The value of extramural contracts and grants for research and other activities at the University of Hawaii increased from a little over \$124.8 million in 1991-1992 to over \$160.8 million in 1996-1997.¹⁰² In constant 1992 dollars, that amounts to an increase of from \$124.8 million to \$147.1¹⁰³. Federal obligations for research and development in Hawaii were \$150.7 million 1997, the same level as 1992.¹⁰⁴

3.4.4 Decline in State Library Resources

The number of full-time equivalent employees of the state library system declined from 623.55 in 1993 to 512.05. Average library hours per week decreased from 58 in 1993 to 53 in 1998.¹⁰⁵

⁹⁷ *State Data Book 1998*, Table 3.21.

⁹⁸ UHPA Board Notes, 9/10/98.

⁹⁹ *State Data Book 1998*, Table 3.18.

¹⁰⁰ *State Data Book 1998*, Table 3.06b.

¹⁰¹ *State Data Book 1998*, Table 3.20.

¹⁰² *State Data Book 1998*, Table 17.26.

¹⁰³ Dollars adjusted using the implicit price deflator for expenditures on Gross State Product drawn from *State Data Book 1998*, Table 14.01.

¹⁰⁴ *State Data Book 1998*, Table 17.24.

¹⁰⁵ *State Data Book 1998*, Table 3.24.

3.5. DOE's High Technology Programs

The Department of Education developed an educational technology plan in 1994 and 1995 entitled *The Hawai'i Connection*. The vision embodied in that plan states: "In Hawai'i all learners are empowered to fully participate in the global village. Our mission is to design and implement a system that provides universal access to the global village for Hawai'i's lifelong learners."¹⁰⁶

The Department of Education's Office of Information and Telecommunications Services has established Advanced Technology Research (ATR). ATR "researches and disseminates information on new and emerging technologies that support the instructional and administrative operations of the public school system. The section provides technical consultation in the implementation of new technologies. ATR also coordinates and emerging technologies."¹⁰⁷

According to Hawaii DOE Technology Data, 100% of Hawaii's schools have network capacity, 96% of Hawaii's schools have cable, 60% of rooms are networked, and 52% are equipped with networked computers. Even a new affordable housing development built through a non-profit partnership with Big Brothers and Big Sisters and Ka Hale A Ke Ola Homeless Resource Center has a fully equipped and staffed computer room with about 8-10 computer units.

The Department of Education's 1999-2000 E-School Courses offers on-line courses including Advanced Placement Calculus, Advanced Guidance, Adventures in Supercomputing, Advanced Placement Computer Science, The Art of Persuasion, Directed Studies - Computer Science, Earth Science, Entrepreneurship, Geometry, Global Studies, Modern History of Hawaii Political Science, Problem Solving, Project Student Environmental Action, Space and Cosmology, Shakespeare On-Line, Journalistic Writing: and Virtual View.¹⁰⁸

"The Magnet E-Academy is the Hawai'i Department of Education's initiative to develop and implement a program to provide relevant, challenging, and meaningful course offerings for students pursuing a career in the advanced technology fields. Students are provided the opportunity to enroll in advanced math, science, and technology courses as part of a 'technology magnet school' concept."¹⁰⁹

On a broader scale, according to the latest available data, the number of households in Hawaii with home computers and internet access was slightly higher than the national average. In 1998, 42.3% of households had computers whereas only 42.1% of households in the US as a whole. Twenty-seven percent of Hawaii's households had internet access, and the national average was 26.2%.¹¹⁰

¹⁰⁶ http://www.k12.hi.us/~challeng/Goals_2000/Exc_Sum.html

¹⁰⁷ <http://atr.k12.hi.us/about/mission.shtml>

¹⁰⁸ <http://atr.k12.hi.us/eschool/index.shtml>

¹⁰⁹ <http://atr.k12.hi.us/news/fall99/fall99pg1.html>

¹¹⁰ *State Data Book 1998*, Table 16.08a.

3.5.1 Innovative Programs at the School Level

- Students at King Kaumuali'i school have developed a web-based simulation project called Ahupua'a Adventure, as participants in Think Quest Junior, a worldwide web designing competition, where students may compete in teams against each other for scholarships and cash prizes. Based on native Hawaiian concepts about land, their website, Ahupua'a Adventure, is a game where a player needs to survive on the Kukui Trail. In the process of the simulation, a player learns about culture, history, legends, and environment of Kauai.¹¹¹
- Students at Moanalua High School are participating in Think Quest for high school students. On their website, "Design Paradise," players get a crack at balancing the needs of industry, environment, and population on Kauai.
- In 1999, students at Aiea Elementary School and King Kaumuali'i Elementary School once again took the Think Quest Junior Platinum award for their website, "Adventures of Lilo the Green Sea Turtle" in the Science and Math division. Enchanted Lake Elementary School was awarded a gold for its website, "Mars Madness" in that division. In the Social Sciences Division, Aiea Elementary School, King Kaumuali'i Elementary and Kapaa Middle School won the silver award for their website, "Aloha Paradise?"¹¹²
- Students from Sweden and Moanalua High School submitted a bilingual website tackling the V-chip and the ways prime television marketing and violence affects viewers. Directly soliciting opinions from fellow classmates and commentary from groups such as the National Coalition on Television Violence, the National Association of Broadcasters, and National Cable Television Association, this group took gold place for its efforts in the Think Quest competition.¹¹³

4. Environment and Natural Resources

Participants in *Hawaii 2000* gave considerable attention to the conservation of natural resources for future generations of Hawaii residents. They also recognized that Hawaii's largest industry, tourism, depends heavily on maintaining the beauty of its forests, clean coastal waters and outstanding beaches.

4.1. Value of Natural Resources

The 1999 Best Beaches in the USA rankings included seven of Hawaii's beaches in the top twenty. Waimea, Kaunaoa, Hanalei, and Kaanapali were ranked first, second,

¹¹¹www.thinkquest.org/library

¹¹²www.thinkquest.org/library

¹¹³www.thinkquest.org/library

fourth and fifth, respectively.¹¹⁴ Hawaii also ranks as one of the top-ten dive destinations in Rodale's *Scuba Diving Magazine*.¹¹⁵

Almost 85% of coral reef ecosystems under US jurisdiction are in the Hawaiian Islands. Over 25% of Hawaii's coral reef organisms are endemic. The economic value of the coral reef ecosystems in the main Hawaiian Islands is estimated at \$46.89 Billion.¹¹⁶

Hawaii's unique marine and terrestrial plants and animals are being heralded as a major advantage to the development of biotechnology in Hawaii. The Hawaii Biotechnology Group plans to launch a dengue fever vaccine in 2004 that could reach \$100 million market by 2008.¹¹⁷

4.2 Hawaii's Unique Environment

Unfortunately, Hawaii's record on environmental protection and natural resource management is not very good in terms of the value of its resources and the level of funding for environmental protections and resource management. Ironically, Hawaii's record is judged poorly by national and local environmental organizations in part because of the uniqueness of its resources: Hawaii has become known as the "endangered species capital of the world because it has so many plants and animals only found in Hawaii. Nevertheless, many of those unique species will become extinct and many of Hawaii's natural resources that make Hawaii an attractive tourist destination will disappear unless something is done. Moreover, global environmental change may result in an increase in the value of Hawaii's environmental resources and an increase in the threats to their survival.

Most of the world's coral reefs are being stressed by pollution and over-fishing, and the 1997-1998 El Niño resulted in unprecedented coral bleaching. Coral reefs in the Caribbean are suffering from diseases. Some scientists predict that increases in CO₂ concentrations and ocean temperatures will result in the demise of coral reef ecosystems throughout the world. If these predictions come true, the value of Hawaii's coral reef resources will increase and attract greater numbers of tourists and scientists.

Hawaii's marine and terrestrial resources are being cited as a major attraction for investment in bio-technology. A number of private companies have already developed treatments for diseases using organisms and compounds found in Hawaii's marine environment.

¹¹⁴ <http://www.petrix.com/beaches/>.

¹¹⁵ *Hawaii's State of the Reefs 1999*. Division of Aquatic Resources, Department of Land and Natural Resources, p. 35.

¹¹⁶ *Hawaii's State of the Reefs 1999*. Division of Aquatic Resources, Department of Land and Natural Resources, p. 9.

¹¹⁷ <http://www.hibiotech.com/html/rnd.html>

4.3 Degradation of Natural Resources

Over the past thirty years, Hawaii's rainforest has been degraded, largely from feral pigs; only about 10% of the remaining rainforest is protected.¹¹⁸ According to the Hawaii Natural Heritage Program, over 90% of Hawaiian lowland dry forests have been lost to fire, development, agriculture, or weed invasions. Other systems have been relatively unaffected (alpine deserts on the summit of Mauna Loa, for example, are very much as they were before humans). All told, perhaps half of the 150 ecosystem types are considered endangered, imperiled by human-related changes in the landscape. Most of the loss has occurred along the coasts and in the lowlands, where the majority of human habitation exists today.¹¹⁹

According to the Bishop Museum, Hawaii has more endangered species per square mile than any other place on the planet.¹²⁰ At the latest count, just over 200 different species, subspecies, or varieties of Hawaiian plants are on the US endangered species list. These include well-known plants such as silverswords, and the ma'o hauhele (Hawaii's state flower, a yellow hibiscus), as well as more obscure, but fascinating and beautiful plants such as the Kanehoa mint, tree violets, and the dwarf naupaka.¹²¹

According to DLNR's *Hawaii's State of the Reefs 1999* report, the ten most abundant fish species decreased in abundance by 40% between 1975 and 1998. The top ten aquarium fish species decreased by 59%.¹²²

The same report states that 25 miles of beaches on Oahu, nearly 9 miles on Maui, and an estimated 3-5 miles of beaches on Kauai have been lost due to hardening of the shoreline.¹²³ US Fish and Wildlife Service estimates that in 1996, more than one million tons of sediments were deposited in the nearshore waters of the main Hawaiian Islands. In three recent beach cleanups on the Waianae coast and Kaneohe Bay, volunteers pulled 7,000 pounds of marine debris from coastal waters.¹²⁴

4.4 Meager State Spending on Natural Resource and Environmental Management

¹¹⁸L.L. Loope, "Hawaii and the Pacific Islands. In M.J.Mac, P.A. Opler. C.E. Puckett Haecker, *Status and Trends of the Nation's Biological Resources*. Reston, Virginia: U.S. Geological Survey, U.S. Department of the Interior, pp 747-774, 1998.

¹¹⁹ <http://aloha.net/~hinhp/faq.htm>

¹²⁰ www.bishop.hawaii.org/bishop/HBS/endangered/endangered.html

¹²¹ <http://aloha.net/~hinhp/faq.htm>

¹²² *Hawaii's State of the Reefs 1999*. Division of Aquatic Resources, Department of Land and Natural Resources, p. 23.

¹²³ *Hawaii's State of the Reefs 1999*. Division of Aquatic Resources, Department of Land and Natural Resources, p. 23.

¹²⁴ *Hawaii's State of the Reefs 1999*. Division of Aquatic Resources, Department of Land and Natural Resources, p. 24.

Hawaii ranked 50th out of 50 states in funding for fish and wildlife management in 1994. Hawaii's fish and wildlife spending of about \$1.7 million was less than 25% of Rhode Island, the state ranked 49th.¹²⁵

In 1997, Hawaii ranked 37th out of fifty states in spending for the state's environmental agency's budget of about \$54 million. Of that amount, about 15% came from state general fund revenues, 13% came from federal funds, and about 72% came from special funds.¹²⁶

5. Culture

Participants in *Hawaii 2000* saw Hawaii's cultural diversity and the maintenance of that diversity as contributing to the quality of life in Hawaii. They also saw a general decline in language and other ethnic resources as a wave of the future moving toward a global culture.

As already indicated, Hawaii has an ethnically diverse population. Each of Hawaii's major ethnic groups brings unique ways of thinking and communicating, and a rich cultural tradition. Like natural biological diversity, the cultural diversity of Hawaii may contain resources that will be important in adapting to a more global society.

5.1 Attitudes Toward Hawaiian Culture and Sovereignty

The past thirty years have witnessed a cultural revival among Hawaiians and other ethnic groups in Hawaii. This revival has been accompanied by a renewed interest in Hawaiian language and history. A total of 1,145 students were enrolled in Hawaiian Language Immersion programs in the public schools system in 1996-1997. Enrollment increased to 1,351 in 1997-1998 and is expected to reach 3,397 by 2005-2006.¹²⁷ The cultural revival among Hawaiians has included the emergence of a sovereignty movement that could result in major changes in the relationship between the Hawaiian people and land resources in Hawaii

In a random sample survey of 3,975 residents of Hawaii conducted by SMS Research for the Office of Hawaiian Affairs between January 22 and July 8, 1999, 46.6% of Hawaiians and 41.5% of non-Hawaiians favored or partly favored the sovereignty of the Hawaiian people. A little over 32% of Hawaiians and 33.5% of non-Hawaiians opposed Hawaiian sovereignty.¹²⁸

In the same survey, 26.2% of Hawaiians and 23.2% of other residents said that land issues such as land rights and homelands was the most important issue facing Hawaiians today.¹²⁹

¹²⁵ *1998-1999 Book of the States*, p.

¹²⁶ *1998-1999 Book of the States*, p.408.

¹²⁷ *Native Hawaiian Data Book, 1998*, Tables 4.21 and 4.22

¹²⁸ *1999 OHA Public Opinion Survey* Table B-1.

¹²⁹ *1999 OHA Public Opinion Survey*, p. 11.

6. Quality of Life

As indicated in the introduction to this paper, participants in *Hawaii 2000* focused most of their attention to improving the quality of life in Hawaii. Many of the economic, political, educational, environmental indicators already discussed show that the quality of life in Hawaii has declined over the past thirty years.

Judgments about what factors are important to an individual's quality of life are clearly based on subjective criteria. Nevertheless, standardized indexes have been developed to help people decide where to live.

Local measures of standard of living and financial security show a more serious decline in the quality of life. The median income in Hawaii dropped between 1984 and 1997, and there are indications that the cost of living has declined only slightly over the same period. Other indicators show a decline in financial security including increases in the number of bankruptcies and foreclosures, an increase in the number of people with multiple jobs, and growing welfare rolls and costs. At the same time, the number of very wealthy people has increased.

Measures of longevity and health status and crime and personal security generally show that the quality of life in Hawaii is high compared to other states. However, several national surveys suggest that the quality of life in Hawaii is declining. For example, The State of Hawaii was ranked 9th on the Morgan Quitno quality of life index out of the 50 states in 1993. In 1998, Hawaii was ranked 30th.¹³⁰

6.1. Standard of Living and Economic Security

6.1.1 Decline in Household Income, Growing Income Disparities and Bankruptcies

According to the *State Data Book 1998*, the median income of Hawaii's households (in constant 1997 dollars) dropped from \$44,608 in 1984 to \$40,934 in 1997. The US median income increased from \$34,626 in 1984 to \$37,005 in 1997.¹³¹ The Hawaii median household income figures reported in the *State Data Book 1998* contrast sharply with the increase in the per capita personal income in the *Data Book* that rose from \$13,740 in 1984 to \$26,137 in 1998.¹³²

In constant (1992) dollars this is an increase of from \$19,884 in 1984 to \$23,913 in 1998.¹³³

¹³⁰ *State Data Book* Table 11.17.

¹³¹ *State Data Book 1998*, Table 13.12

¹³² *State Data Book 1998*, Table 13.08.

¹³³ Dollars adjusted using the implicit price deflator for expenditures on Gross State Product drawn from *State Data Book 1998*, Table 14.01.

According to the US Census Bureau, income disparities in Hawaii have grown in the last twenty years: the number of people with incomes below 50% of the national poverty level increased from 3.3% in 1976 to 5.4% in 1997.¹³⁴ In 1997, an estimated 13.9% of Hawaii's population was living below the US poverty level, which is about 15% lower than the official level in Hawaii. This compares with 13.3% for the country as a whole.¹³⁵ At the other end of income distribution scale there has been a substantial increase in the number of relatively affluent families. In 1982, 8,700 people in Hawaii had estates valued at \$500,000 or greater. In 1992, 32,280 people in Hawaii had estates valued at \$600,000 or more.¹³⁶

To balance their family budgets many Hawaiian households require supplemental income from working spouses or through second jobs. The number of people in Hawaii having more than one job increased from 48,000 in 1994 to 52,000 in 1996. As a percentage of the total workforce this was an increase from 8.7% to 9.4%. The national average in 1996 was 6.4%.¹³⁷

The stagnant economy has resulted in a drop in financial security for people and businesses. The number of personal Chapter 7 bankruptcies in Hawaii increased from 673 in 1988 to 5,157 in 1998. The number of business bankruptcies increased from 97 in 1988 to 155 in 1993 and dropped to 79 in 1998.¹³⁸

6.1.2 Cost of Living

Hawaii's cost of living has been considerably higher than mainland states for many years. The economic slump of the 1990s has brought some prices down. Honolulu consumer price inflation—actually, deflation—was -0.2 percent during 1998, -0.5 percent in second half 1998 on a year-over-year basis, and -1.6 percent, annualizing the semiannual increase between the first and second halves of 1998.¹³⁹

Hawaii home prices are now lower than in some West Coast cities, and the perception of value combined with new technology sector wealth has unleashed an investor buying boom in resort homes and lots.¹⁴⁰ However, for residents, the home picture is less buoyant. The number of mortgage foreclosure filings increased from 1,436 in 1993 to 3,626 in 1998.¹⁴¹

6.1.3 Growing Welfare Rolls and Costs

¹³⁴ <http://www.census.gov/hhes/poverty/hstoov22.html>

¹³⁵ *State Data Book*, Table 13.18.

¹³⁶ *State Data Book*, Table 13.23.

¹³⁷ *State Data Book*, Table 12.17.

¹³⁸ *State Data Book*, Table 4.17.

¹³⁹ www.tfhawaii.org/statmenu.html

¹⁴⁰ www.tfhawaii.org/statmenu.html

¹⁴¹ *State Data Book 1998*, Table 21.42.

The number of families receiving Aid to Families with Dependent Children benefits decreased from 19,207 in 1980 to 13,397 in 1988 and increased to 22,333 in 1997.¹⁴² The number of families receiving General Assistance grants from the State decreased from a monthly average of 1,085 in 1980 to 581 in 1988; the number of cases increased to 1,341 in 1995 and decreased again to 701 in 1997.¹⁴³ State spending on public welfare increased from \$322.5 million in 1986 to \$1,009.9 million in 1996.¹⁴⁴ In constant (1992) dollars, this is an increase of from \$441.8 million to \$928.2 million or 110 percent.¹⁴⁵

6.2 Longevity and Health Security

Aging of Hawaii's Population, Long Life Expectancy, and Low Mortality Rates for Most Diseases

6.2.1 Population Characteristics

Between 1970 and 1975, Hawaii's population grew at an average annual rate of 2.8% per year. The growth rate for the period 1995-2000 is projected to be 0.45 percent, the lowest since statehood.¹⁴⁶

In 1970, 5.7% of Hawaii's population was age 65 or older. In 1997, this percentage had grown to 13.2%, exceeding the national average of 12.7%. By contrast, Hawaii's population age 19 or less dropped from 39.3% in 1970 to 28.4%, slightly lower than the national average.¹⁴⁷

In 1970, life expectancy in Hawaii was 72.1 years for males and 74.8 for females. In 1990, life expectancy for males increased to 75.8 years for males and 82.1 years for females. For the US as a whole, life expectancy in 1990 for males was 71.8 years and 78.8 for females.¹⁴⁸

Life expectancy for Native Hawaiians was 74.3 years in 1990. This compares to 78.9 years for Filipinos, 82.1 years for Japanese, and 82.9 years for Chinese.¹⁴⁹

Mortality rates in Hawaii are below the national average. In 1997, Hawaii had 378.6 deaths per 100,000 population compared to the national average of 478.1 per hundred thousand. For the same year, the mortality rate for breast cancer and homicides were the only two disease categories for which Hawaii's mortality rate exceeded the US average.¹⁵⁰

¹⁴² *State Data Book 1998*, Table 11.01a.

¹⁴³ *State Data Book 1998*, Table 11.04a.

¹⁴⁴ *State Data Book 1998*, Table 9.07.

¹⁴⁵ Dollars adjusted using the implicit price deflator for expenditures on Gross State Product drawn from *State Data Book 1998*, Table 14.01.

¹⁴⁶ *Health Trends in Hawaii, Fourth Edition*, p. 5.

¹⁴⁷ *Health Trends in Hawaii, Fourth Edition*, p. 114.

¹⁴⁸ *Health Trends in Hawaii, Fourth Edition*, p. 124.

¹⁴⁹ <http://www.hhic.org/pdf/healthtrends/069.pdf>

¹⁵⁰ *Health Trends in Hawaii, Fourth Edition*, p. 126.

6.2.2 Health Care and Insurance

Hawaii ranked 1st in the nation in the percentage of people covered by health insurance in 1997. In 1993, about 89.9% of people in Hawaii had some form of health insurance. This rose to 92.5% in 1997.¹⁵¹

The cost of health care in Hawaii has increased less than the national average since 1984. Health care costs increased 102% between 1984 and 1997 compared to an increase in the US as a whole of 119%. Increases in consumer prices over all for Hawaii increased 66% for Hawaii and about 54% from the US.¹⁵²

6.3 Crime and Personal Safety

Honolulu ranked 34th out of 207 on *Money* magazine's 1997 Safest Cities list.¹⁵³ Hawaii ranked 41st out of 50 states in the number of violent crimes committed in 1997 with 278 per hundred thousand population compared to the US rate of 610.8 per hundred thousand. Hawaii ranked 6th in the number of property crimes per hundred thousand population—Hawaii had 5,746.0 per hundred thousand and the US as a whole had 4,311.9 per hundred thousand.¹⁵⁴

The number of sentenced felons in Hawaii correctional facilities increased from 1,414 in 1988 to 1,662 in 1998 with an additional 600 housed in three Texas correctional facilities. The number of un-sentenced felons increased from 484 in 1988 to 1,348 in 1998.¹⁵⁵

6.4 Traffic Congestion

Traffic congestion continues to increase on Oahu and some neighbor island communities are also experiencing gridlock at rush hour. The number of cars registered statewide has increased from 404,463 in 1970 to 915,753 in 1998. Despite efforts to encourage mass transit, the number of busses has actually decreased by 23% over the same period.¹⁵⁶

II. Global Trends and Scenarios for Hawaii's Future

¹⁵¹ *State Data Book 1998*, Table 15.13.

¹⁵² Calculated from tables on page 144 of *Health Trends in Hawaii, Fourth Edition*.

¹⁵³ <http://www.pathfinder.com/money/cities/index.html#complete>.

¹⁵⁴ *State Data Book 1998*, Table 4.11.

¹⁵⁵ *State Data Book 1998*, Table 4.20.

¹⁵⁶ *State Data Book 1998*, Table 18.06).

Thirty years ago, participants in Hawaii 2000 foresaw some of the global trends discussed in this section, and their influence was incorporated into the preferred future that resulted. Over the next thirty years, global forces will also influence Hawaii's future. While the genesis of these trends lies in history, some forces have only emerged or been recognized over the past five to ten years. Assessing how they will affect the State is a largely speculative exercise. The task is made even more complicated because the pace of technological innovation has far outstripped the pace of institutional adaptation. This has resulted in policies and investments which are inappropriate, near-sighted and, too often, quickly obsolete. We are experiencing "future shock."

Several global trends can be identified as playing important roles in future state planning. These forces are:

- Telecommunication development and computerization
- Advances in bioengineering and genetic manipulation
- Globalization of commerce and trade
- Global climate change (particularly climatic variability)
- Devolution of political power and the empowerment of stakeholders

Most of these global trends are widely accepted by people concerned with the future, and their global impact need not be explored in detail here. Rather, the following sections will focus on how these forces may affect Hawaii's economy, institutions and unique lifestyle.

Telecommunications and Computerization

Without doubt, one of the most exciting developments of the last decade has been the information revolution spawned by the explosive growth of the Internet. This revolution has, in turn, been made possible by very rapid advances in telecommunications and computer technology. Institutional and policy responses to the Internet have been very slow in recognizing or dealing with such issues as privacy, obscenity and criminal manipulation. However, there can be little doubt that the Internet will be a primary economic, educational, and research tool of the early twenty-first century.

For Hawaii, telecommunications and computerization will eliminate many of the distance and time handicaps that are associated with the states' remote location. Internally, the Internet is likely to accelerate trends in self-employment and open major opportunities for small-scale entrepreneurial activity based on increased access to global markets. Commerce will no longer need to be based solely on large goods-producing enterprises dependent on economies of large-scale production and transportation. Rather, the e-commerce of the next thirty years will make possible the emergence of a parallel economy of custom services and boutique goods.

For Hawaii, e-commerce will mean that many of our most promising young people will no longer be forced to relocate to the Mainland to earn a living. Indeed, self-

employment and electronic commerce may become a force for population growth in the Islands, as location-independent entrepreneurs from the Mainland and Asia are attracted by the unique lifestyle and beauty of Hawaii. This was envisioned by the participants of Hawaii 2000 30 years ago, and is still coming true.

Internet-based self-employment in Hawaii will be a two edged sword for the state. If a major attempt is not made to build Internet skills among all socioeconomic groups through the public educational system, a large and growing underclass may easily emerge. To be successful, efforts to build computer skills must be fully integrated with the education/library system and not limited to a few school computer labs and library terminals. All students will need to learn to use computers as part of their basic education skill building-- not as an adjunct or elective option. Given that low verbal SAT scores in Hawaii are at least partly attributable to ethnic and language diversity, language training using computer generated voice recognition and generation patterns may directly assist the academic performance of immigrant children.

Internet self-employment will also have other significant policy implications for the state. Readily identified issues involve health insurance and tax generation. Recent reports suggest that many self-employed entrepreneurs have inadequate health care coverage, or none at all. Not only is this group deprived of employer health care subsidies but often are very limited in their access to group insurance coverage. The result is often marginal coverage at prohibitive cost.

A second likely consequence of a large e-commerce sector in Hawaii is the potential erosion of the conventional tax base. There are already anecdotal indications that many self-employed Internet entrepreneurs use the anonymity of the Internet to escape, or minimize, their tax liability. Like cultivation of illegal drugs, parallel or informal economic activities are essentially invisible to conventional taxation measures. This possible threat to state revenues from e-commerce is potentially far reaching since it is probable that traditional goods/service industries in Hawaii are more likely to contract than to expand over the next thirty years.

Globalization of Commerce and Trade

Driven by the global reach of telecommunications networks and an increasing belief in the benefits of international economic integration, the next three decades will be characterized by a sharp decline in trade barriers and a rapid expansion in global trade. The new World Trade Organization, NAFTA, and the expansion of the European Community are but three examples of this globalization of the world economy.

For Hawaii, globalization means declining domestic protection for agriculture (witness the demise of Hawaii's sugar industry) but increasing access to foreign markets. The major beneficiaries in Hawaii are likely to be small exporters to niche markets in Asia. It is also possible that commercial activities might be stimulated through the Hawaiian entrepreneurs acting as intermediaries in the production and export of

goods produced elsewhere. This intermediation might be facilitated by the ethnic networks traditionally maintained between Hawaii's immigrant groups and their home countries. Such networks are particularly evident in the highly entrepreneurial Chinese and Filipino communities and, to a lesser degree, among AJA and Pacific Island groups.

A further potential implication of globalization is the movement of large companies to and from bases in Hawaii. For traditional Hawaiian firms like Dole, the lack of competitive agricultural production in the state implies either a relocation or diversification into other economic sectors (i.e. the C. Brewer move into chemicals and construction). For other traditional Hawaiian firms, limited growth opportunities at home have resulted in expansion into regional markets in Asia and the Pacific, or a merger with Mainland firms (i.e. Bank of Hawaii and Bank West).¹⁵⁷ On the other hand, there remains the (declining) possibility that large Mainland companies may see Hawaii, with its American legal system and currency and multi-ethnic networks, as a regional base for operations in Asia.

Bioengineering and Genetic Manipulation

Recent discoveries at the University of Hawaii have generated great hope that the state might become a research center for genetic bio-engineering. Without judging this promise, we would point out that the university is not currently equipped to function as a research center and, if current funding trends continue, it may not be able to fulfill even its basic educational mandate. This is particularly true in the cases of reductions in the graduate school programs and in research positions. While the Federal government may continue to support near-term research at the University, the ongoing deterioration of the University's educational infrastructure will eventually undermine the foundation of UH-led research activities.

Beyond the university, many high tech bioengineering activities are focused on agricultural crops that have little relevance to Hawaii's declining agricultural base but may be of international importance. Thus, Hawaii's bioengineering industry needs to be seen as a global exporter of technology rather than simply as a supporter of Hawaii agricultural producers.

Hawaii's environment is likely to benefit enormously from bioengineering work which is being done on the Mainland. It seems likely that over the next thirty years, super microbes will emerge which can be used to address the growing crisis in solid waste and sewage disposal. Indeed, it is conceivable that large-scale collection and treatment systems will be replaced by small scale/low risk systems implemented either at the household/ neighborhood level or through industry groups (e.g. hotel industry or medical waste disposal).

¹⁵⁷ Bank of Hawaii is an example of the former regional expansion while BancWest and Dole are example of Mainland integration.

Increased Impact of Environmental and Climatic Factors

Increased climatic variability and potential global warming could have fairly dramatic impacts on Hawaii. Although climatic variability is not a “new” phenomenon in Hawaii, there is growing evidence to suggest that variability is increasing and that climatic cycles may be changing. On the one hand, accentuated El Nino cycles will mean an increasing likelihood of episodic weather events like hurricanes and droughts. In addition to their impact on the built environment and settlement patterns, these events will potentially have serious effects on agriculture and coastal zone management.¹⁵⁸ On the other hand, increasingly extreme weather patterns elsewhere in the world may improve Hawaii’s attractiveness as a place to live and work.

In at least one aspect, global climatic change may prove a direct benefit to the state. It is becoming increasingly evident that one of the major victims of global warming will be the world’s tropical coral reefs. Under environmental stress from increased dissolved CO₂ and higher ocean temperatures, coral reefs in many parts of the world may die leaving areas as the Northwest Hawaiian Islands, which border temperate climatic zones, as the only remaining coral reef ecosystems. There are relatively few such areas in the world and it is entirely possible that a substantial eco-tourism market might emerge around this resource. Such development would need to be very carefully planned and would be quite different from anything that currently exists in the state.

Devolution of Governance and Empowerment of Stakeholders

Politics in Hawaii have always been somewhat unique due its ethnic groups and colonial history. Political power in the state government has always been centralized in the hands of a relatively small elite whose political power often rests with the active support of a particular ethnic group (and the indifference or acquiescence of other ethnic groups). Thus far, this system has perpetuated itself in Hawaii with the support of economic groups like labor unions whose members receive wage and employment benefits in exchange for political support. Currently, due to the states economic downturn, the system is under great internal stress and is vulnerable to fracture. The result is political indifference and an increasingly hostile and cynical attitude toward Government.

At many levels of Hawaiian society there is a growing recognition that the problem of special interest influence is unlikely to be addressed by Hawaii’s state government. In recognition that people cannot simply wait for the state to attend to political problems, we have seen the emergence of the Hawaiian Sovereignty movement, demands for reform of the Bishop Estate, and the ongoing struggle surrounding allocation of Waihole Ditch water. Moreover, groups like the Hawaii Elections Project are part of a rising national trend in advocating a total overhaul of the campaign finance system.

¹⁵⁸ For example, salt water incursion to fresh water aquifers.

Over the next thirty years, we expect a *de facto* reallocation of political power from state to local governments and from local governments to special interest groups. In particular, it seems possible that conflict resolution will be undertaken directly between stakeholder groups rather through the sometimes self-serving, back-room compromises often forged by government politicians and bureaucrats. We expect that this direct stakeholder self-empowerment will result in greater community tensions but more permanent and enlightened solutions to special interest concerns.

Lessons Learned For the Future of Hawaii

Some Positive Outcomes of the "Hawaii 2000" Process

It is clear that the lives of many of the people who participated in Hawaii 2000 were permanently changed in ways few such public processes ever change anyone. To this day, when participants in that process meet, they will often reminisce about those good old days and ways.

There were numerous specific outcomes from the Hawaii 2000 process. In 1970, the State Legislature created a Commission on the Year 2000, as well as a separate Commission on Population and Hawaii's Future. A State Office for Technology Assessment was also established at about the same time. In order to be able to assess the long-range social and environmental impact of proposed legislation, the Legislature in 1974 established a Scientific Advisory Committee, composed of people representative of the community, which was to evaluate bills referred to it by the Speaker of the House and the President of the Senate and render their judgments about their scientific and futuristic impact to the state House and Senate.

Once the Hawaii 2000 Commission was set up, and Commissioners appointed to it, the Commission began a series of activities. The first major activity was a process, similar to, but smaller in participative scope and closer in time horizon, which, during 1973-74, focused specifically on "Alternative Economic Futures" for Hawaii. Other activities included, in 1978, a workshop and publication, "Genetic Engineering and Test Tube Babies: Implications for the Future," co-sponsored by and held at Hawaii Loa College; in 1980, a Legislative Foresight Workshop for the Hawaii State Association of Counties Conference, repeated for the Kauai County Council the following year; in 1981, "Images of the Future: Hawaii's Alternatives", in two parts. One was a public opinion survey, "The Hawaii Public's View of Hawaii's Future, funded by DBED, and conducted by SMS, Inc. The second, funded by a grant from the Hawaii Committee for the Humanities, was a series of eight community study groups looking at alternative futures of society, culture and the arts, law and politics, economics, health and biomedicine, education, communications, and the environment. Each group made a public presentation of their scenarios at the end of the project, the most notable of which was a mock TV talk show written by Tremaine Tamayose and held at the Manoa Valley theater for the health and biomedicine group.

The Hawaii Research Center for Futures Studies (HRCFS) was created by the Legislature in 1971 and placed at the University for administrative purposes. Since that time, members of the Center have conducted thousands of future-oriented talks, workshops, and projects for the Hawaii State Legislature, County Councils, virtually all State agencies, and scores of private and nonprofit groups within Hawaii. The HRCFS won an award for excellence from the World Futures Studies Federation in 1996. Additional information can be found at <http://www.soc.hawaii.edu/future/>

Numerous future-oriented educational activities were held on the various campuses of the University of Hawaii as a direct outgrowth of the Hawaii 2000 process:

"The Next Billion Years" (1972), "Earth 2020" (1974), "Voyages into Ocean Space" (1976), and "Human Dimensions of Energy Management" (1978), public lectures and summer classes, funded by NASA, with the courses taught through the University of Hawaii. The "Earth 2020" sessions resulted in classes in futures studies being introduced in several state elementary and high schools.

New College and the Survival Plus Program were created (and then killed) at the University of Hawaii (1970-1972)

"Tune to the Future" a live and taped TV undergraduate credit course (1971-71), which won an award from the National Association of University Extension Programs

"America and the Future of Man" (an undergraduate credit course taught by newspaper and radio)

"Energy and the Way We Live" (an undergraduate credit course taught by newspaper and radio)

ECOPUSH conferences on Energy and the Environment by College of Engineering, 1973-74

The Hawaii Natural Energy Institute, established in 1974 and still here, exploring and developing a full range of renewable energy alternatives for Hawaii.

Hawaii Communication Futures Conference (1977), which featured a scenario-writing contest, and publications

The Alternative Futures MA Option within the Department of Political Science created in 1977 and still ongoing, with a one year internship offered through the Institute for Alternative Futures, in Alexandria, Virginia

The Mediacy Fair (1977), a six month-long series of seminars, sponsored by a grant from the Hawaii Committee for the Humanities, at the University of Hawaii on the future of literacy in an electronic age, which culminated in three day-long Mediacy Fair with overseas as well as local speakers and participants.

The University of Hawaii held two international futures conferences (1982 and 1984) and hosted the Secretariat of World Futures Studies Federation, 1984-1990

Pacific International Center for High Technology Research (PICHTR) (Founded in 1980 and still ongoing)

Pacific Telecommunications Council, (Founded in 1980 originally as a program of the Social Science Research Institute of the University of Hawaii. Still ongoing, with an annual conference in Honolulu, as a major force in telecommunication futures in the Pacific region)

The Charter of the City and County of Honolulu underwent a routine process of reconsideration and revising in 1972, with consultation from faculty and students in a political design course. One consequence was to designate, in the preamble to the new City Charter, that Honolulu is to be a "future-oriented city."

During the 1970s and 80s, the State of Hawaii developed iterations of a State Plan, with many Functional Plans for its various divisions. Under Governor John Waihee, the Office of State Planning undertook one of the most impressive futures scanning efforts in the nation, publishing a highly-regarded newsletter, "Future Wave." This was discontinued by the Cayetano administration.

Futures planning became an integral part of private initiatives in public planning in Maui, most notably the creation of the still ongoing Maui Economic Development Council from 1982

There were several other private initiatives of significance, including a report on alternative futures for Hawaii written by Bud Smyser, editor of the Honolulu Star-Bulletin, for the East West Center. Kent Keith, President of Chaminade University, and Ramsey Pedersen, Dean of Honolulu Community College, both wrote several scenarios for the futures of Hawaii. In the late 1980s, George Chaplin and Robby Alm edited a series of very optimistic and positive scenarios for Hawaii's future. Finally, during the mid to late 1990s, Mae Mendelson spearheaded an extensive series of future-oriented Ke Ala Hoku activities for youth in Hawaii, culminating in the Youth Millennium conference of October/November 1999.

Without doubt, the most important and long-lasting consequence of the Hawaii 2000 activities was the creation of a judicial foresight process which is well established nationally and is now spreading worldwide.

Members of the Hawaii State Judiciary participated in the Hawaii 2000 process and in 1972 convened a future-oriented conference for the Hawaii Judiciary which was in its own way every bit as successful in operation and influential impact as the Hawaii 2000 conference itself.

Throughout the 70s, the Hawaii judiciary held numerous in-house futures workshops and discussions, culminating in the 1980 Strategic Plan which included anticipating the future as one of five "Dimensions" of a judiciary. During the 80s, interns from the Alternative Futures Option of the University of Hawaii conducted short and long-range forecasting for the Judiciary as part of its planning division, publishing a quarterly newsletter on Judicial Foresight titled "Justice Horizons". This phase concluded with the Hawaii Judicial Foresight Conference, 1991.

Because of the national leadership roles which Chief Justice William Richardson played within the Congress of Chief Justices, and Chief Court Administrator Lester Cingcade within in the Council of State Court Administrators, the futures work within the Hawaii State Judiciary is entirely responsible for the current spread of judicial foresight which is now part of more and more judiciaries not only throughout the US (federal as well as state) but also now in many common-law jurisdictions worldwide.

Failures of the Hawaii 2000 Process

But Hawaii 2000 certainly was unsuccessful in many ways as well. Probably the greatest failure was the fact that no one involved took the process seriously enough, or acted on many of the recommendations presented. We naively felt that if enough people in this State said they wanted something, it would automatically come about. This was most certainly not the case.

Beyond this, while great sensitivity was given to ethnic/cultural balance in selecting conference participants, Advisory Committee members, and task force chairs and members, there was no consideration at all of gender balance. Issues of women and gender are entirely absent from the Hawaii 2000 records--an amazing blindness given the existence of "women's liberation" at the time, and the major transformation in gender relations over the next thirty years, including for example defining and outlawing sexual harassment and the role of Title IX in women's participation in sports.

Similarly, there was no attention whatsoever given to the changing role of people with "disabilities" (and no anticipation of what would, within twenty years, become ADA) .

Given the considerable attention to personal lifestyle issues by various task force reports, it is amazing there was no mention whatsoever of "homosexuality". And certainly no one expected that it, too, would become a major political issue in Hawaii by the end of the century.

While the importance of fundamental Hawaiian values for the future was repeatedly (and genuinely) mentioned by all task force reports, everyone--Hawaiian and nonHawaiian alike--seemed to assume, if lament, the continued decline of the presence and influence of native Hawaiian culture in the State of Hawaii. Hawaiian language, music, art, lifestyles--and perhaps even the Hawaiian people themselves--all were expected to fade gradually away and become, at best, nothing more than pale imitations for touristic consumption.

While most of the attendees would have welcomed the sweeping rise of the Hawaiian Renaissance over the next thirty years--the 1970 Youth Congress did, after all, issue a call for sovereignty--it seems no one thought it would or even could become the new reality it has become, and is yet still to become.

The only exception to that generalization (and it is a significant exception) is found in one of the "alternative Hawaiis" of Hawaii 2000 which called for "a futurist Hawaiian restoration, the establishment of a true kingdom of aloha." (467)

Nonetheless, these are grave and amazing failures of imagination on the part of everyone involved in Hawaii 2000 and, at the very least, this should warn us not to be too smug in our certainty of the next 30 years, whether that smugness derives from our failure to look ahead clearly, or our failure to be willing to look ahead at all.

Almost all of the institutions mentioned above as being specific legislative outcomes of the Hawaii 2000 process were eventually killed by legislative action, some within only a few years of their creation, while others lasted into the 1980s.

The first to die was the Scientific Advisory Committee which was diverted from its original purpose when the first "Arab Oil Crisis" hit in 1974. The State Office of Technology Assessment, the Commission on Population and Hawaii's Future, and the Hawaii 2000 Commission were each killed by the Legislature during one of the many budget-crunch periods of Hawaii's continuing slide to mediocrity. The amounts saved by such cuts were minor, but the symbolism of a State willing to go blindly into the future remains, along with the current and cumulative consequences of that blindness.

The Hawaii Research Center for Futures Studies remains, and it does so because it was officially adopted in to the University of Hawaii system, and made a regular budget item in the University's budget. However, even the Center is but a pale shadow of what it once was (and should be) because it was one of the first institutions offered up for cutting when the State began slashing its funding of the once proud University of Hawaii.

Most importantly of all, Hawaii 2000 was a creative failure. It did not result in the Hawaii 2000 that most of the participants in 1970 said they wanted. In fact, Hawaii in the year 2000 is quite far off the mark. Many people still yearn for the kind of world many of us thought in 1970 would most certainly be within our grasp by now.

Indeed, many people feel we are farther away from our desired Hawaii than we were in 1970.

Lessons Learned Then

What lessons can we learn from our successes as well as our failures? First of all, we should start by remembering and reflecting on the "lessons learned" section in "Hawaii 2000", Chapter 7:

"We think that the Hawaii 2000 experiment has expressed the following principles: emergence of the idea in the private sector, but attempts to realize it within the framework of overall public responsibility; the support of top-level political leaders, including the governor, legislative leaders, and other members of the legislature--but not political domination; encouragement of multipartisan participation by all parties and groups; primary emphasis upon local intellectual as well as organizational leadership and initiative instead of dependence upon outside authorities; balancing efforts to contribute global, national, and intersocietal viewpoints through consultants, speakers, and observers, as a defense against parochialism; encouragement of diversified citizen participation rather than exclusive reliance upon experts; openness to expanding participation rather than organizational constraint; responsiveness to demands for decentralization; preparation for program flexibility versus rigidity;

provision for external evaluation as well as self-assessment of significance; encouragement of youthful participation versus adult exclusiveness; and finally...the pursuit of multiethnic participation versus ethnic exclusion."(455)

"Focusing attention upon the year 2000, then thirty years ahead, may have had a constrictive effect. For some of us it was too far, for others too near. We may continue for awhile to use the phrase 'Hawaii 2000' but it should be understood as a general symbol for futures thinking rather than as a rigid time constraint. Eventually perhaps we should replace it with a term like 'Hawaii's futures.'" (456)

"We failed to obtain an integrated overview of alternative Hawaiis in the years ahead. The ten task-force approach produced a fragmented picture of Hawaii's future." (457)

"Another shortcoming lay in the fact that we did not generate enough ideas and practical programs about how we might make the transition from Hawaii today to Hawaiis of the future." (457)

"Another related but somewhat different problem was our consistent failure to bridge the gap, or to establish a meaningful dialog, between the creative futurists and what might be termed the 'critical presentist.'" (459)

"Our experience shows that most of us need training in the creation of alternative futures. Most of us are the creatures of an either/or, right/wrong, yes/no culture." "As analyzed by Gerald A. Sumida, of our total of thirteen task-force reports, only one (Kauai 2000) envisioned six alternative futures, two produced three, one imagined two, and nine contained only one alternative future each." (460)

"Although we tried, we failed to engage all the possible talent available to us." (460) "A more satisfactory outcome would have meant that Hawaii 2000 thinking would have benefited more from the ideas of men and women who feel less comfortable in standard English than in pidgin, Hawaiian, Japanese, Cantonese, Mandarin, Korean, Pilipino (Tagalog) Ilocano, Visayan, Pampango, Samoan, Portugese, and other languages of Hawaii's peoples." (461)

"But to gain the active contributions of all Hawaii's peoples regardless of background, age, or occupation would require more than just linguistic skills; it would require more widespread knowledge of the project, more energetic efforts in recruitment, and a belief among our people that participation would be beneficial. Thus Hawaii 2000 must be dedicated to extending its social outreach as an essential feature of anticipatory democracy." (461)

New Lessons to Be Learned

The "Hawaii 2000" process was indeed an extremely good one, and everyone involved in its conception and creation can be proud of it. Another future-oriented process of the scope and flavor of Hawaii 2000 is needed for the next thirty years and

beyond. But just as Chapter 7 states, next time, even wider and longer involvement is necessary, and in ways all people prefer and enjoy. Hawaii's citizens are active and busy, and so the next exercise in Anticipatory Democracy needs to be one that fully engages the minds and hearts of as many citizens as possible, especially those who are not likely to be drawn to, or to speak out during, a conference in a Waikiki hotel.

The Hawaii 2000 process did not result in a single, clear vision for the future of Hawaii. Indeed, it was left to the editors to develop eight brief, but tantalizing, and largely mutually-exclusive "Alternative Hawaiis". It is probably not possible to have developed, though the Hawaii 2000 process at that time, a vision of a Hawaii that a majority of the participants would have adopted--unless it had been expressed in the most vague and meaningless terms. Still less could a true consensus have been reached on such a vision--which is the preferred way to do things here.

But we do not know that is in fact the case. There was no attempt made at all to see if a single preferred future could emerge, if enough time and effort had been put into a good process towards that end.

Nor was the option of asking various groups who had their own preferred futures to develop their visions in more detail for everyone's consideration and possible adoption.

However, it is not necessary that a single vision emerge at all. Rather, various preferred futures could have been developed and put forward to be discussed and decided by normal political processes: Hawaii 2000 could have resulted in creating a future-oriented polity which routinely debates and votes their preferences among variously proffered alternative Hawaiis.

None of this happened.

But there were in fact scores of specific measures about which a majority decision, and perhaps even consensus, could have been reached, if the process had permitted it. Then specific benchmarks for progress towards those measures could have been identified, and a process of tracking movement towards them could have been created. We did not know of "benchmarking" in 1970. We do now, and any new process needs to be benchmarked and followed up accordingly.

The process should also result in drafts of specific legislation or administrative acts, and commitments by specific people should be made to follow through on having the legislation enacted and the administrators acting. This has been done in all successful examples of judicial foresight elsewhere, for example.

Moreover since the Hawaii State Constitution also allows the convening of a Constitutional Convention every ten years, while the Charter of the City and County of Honolulu similarly calls for periodic Charter review, this makes it easier to make necessary future-oriented changes in the structure of governance in Hawaii than in most other polities.

Futures studies must take its proper place in the educational curriculum at all levels. At the present time, none of our citizens is prepared to expect, or to participate in, "anticipatory democracy" because all schools at all levels continue to privilege the past and present, and utterly to ignore the only dimension of time that really matters--the future--in all courses and curricula.

The forces of global capitalism are stronger than anyone involved in the Hawaii 2000 process understood (or at least stated). No one reckoned that the period of economic expansion in the US that followed the Second World War, and still ongoing in 1970, was soon to come to a crashing end with the first and second "Arab Oil Crises", double-digit stagflation, and ever-doubling oil prices.

No one imagined that the "lesson learned" in Vietnam would be so aggressively denied and willingly forgotten, and that Ronald Reagan would successfully end the détente between the US and the USSR which Nixon had begun and Carter so carefully continued, by re-igniting the Cold War, while launching the US (and hence Hawaii) on a still-continuing exercise in Voo-Doo Economics which lauded--and handsomely awarded-- empty wealth and greed.

We all somehow thought the "Hawaii 2000" we wanted would somehow "just happen" since we all seemed to want it. It did not. Far from it.

It is now time for a new statewide, lengthy, and truly participative effort towards anticipatory democracy and envisioning a better Hawaii. But, while we do want to repeat, in their contemporary form and style, the things that made Hawaii 2000 such a success, we certainly want to avoid the mistakes which made Hawaii 2000 ultimately and fundamentally a failure.

The book, "Hawaii 2000," ended with this unfinished sentence as an enduring challenge to each of us:

" So there has been a conference, task-force reports, critical observer evaluations, and some imaginings about Hawaiis of the future! But better than anything that has been suggested for Hawaii 2000 thus far would be . . ." (472)

So, what might those suggestions be?

Dare we imagine anything better?

Will we work to create it?

Four Scenarios of Hawaii's Future

In order to get a handle on the inherent uncertainty of the future, futurists have developed a method known as scenario generation, where 4 structurally different yet plausible portraits of the future are developed. These scenarios provide internally consistent pictures of diverse futures, not to present one scenario as the "preferred future," but to help us take into account the wide array of possibilities that the future holds. Consider these scenarios as a starting point for thinking about Hawaii in 2030.

Scenario 1-- Business as Usual/Continued Growth

By 2020, Hawai'i was basking in the success of supply side economics. After the Democratic Party committed itself to implementing the Economic Revitalization Task Force proposals of the 1990s, things began to pick up again around here. Japan pulled out of its recession and tourism came back to normal. Unemployment was down as labor costs were restrained, and this helped us compete in a global economy of low wage workers worldwide.

An aging population became ever more elderly as wealthy retirees from Japan and the US mainland continued to move to Hawai'i, for its healthy, mild environment, and for its low tax rates on personal wealth. They supported tight police controls over the younger generation and built prisons as needed to maintain order. They also voted as a powerful political bloc which kept their generation in power through the teens and twenties.

The environment was kept in order, at least on the surface level. The Ala Wai was allowed to be filled with toxins, as long as the pollution wasn't noticeable from the walkways around it. Litter, so unsightly to tourists, was vigorously fought against, while the coral reefs continued their quiet decline.

Biotechnology expanded Hawaii's agricultural abilities, but was part of a high capital input style of agriculture that lent itself to corporate centralization rather than family farms.

Women continued to make economic and legal gains, but much like the civil rights movement of the 20th century, the gains were best for those with the financial ability to take advantage of them, while economic inequality continued to increase among all groups.

The educational system endured a long, slow decline in public funding, shifting inexorably towards a "user pays" approach which allowed people to fund their children's educations without having to provide for education collectively. UH never officially privatized, but the only departments still thriving were heavily linked to private corporate funding.

The gerontocracy, as the dominant political bloc was called, cited "Asian traditions" as the reason for keeping their political decision making powers centralized, and extolled the value of hard work to the young. They said that it was much harder, "When I was your age. . ."

Scenario 2-- Collapse

In the early 21st Century, Hawaii's economy went into a downward spiral. Cutbacks in health and human services led to a few highly publicized riots that started scaring tourists away. The worsening economic picture increased civil disorder and made Hawai'i an even less attractive tourist destination, creating a vicious depressive cycle. Finally, a major ILWU strike led to food imports rotting on the docks, and the government declared a state of emergency. Martial law was declared and just never quite went away. Desperate people turned to acts of terrorism, using the latest in biotechnology to wreak havoc on Hawaii's human health statistics.

As the economy began to crumble, marijuana cartels sprang up as the most profitable business in Hawai'i, operating on a semi-legal status that involved extensive governmental bribery. Plantation traditions were reinstated and ethnic conflict increased in reaction to an influx of cannabis plantation workers from Southeast Asia. Violence against women has also increased.

The educational system diverged into two systems-- an expensive training program for children of the rich, and a social control institution to keep the rest of the kids off the streets and out of trouble. Cynics noted that the latter system fit well with public school's initial 19th century functions of getting unruly farmer's children to obey clocks and follow orders to fit in to the rising industrial economy.

The Hawaiian sovereignty movement took advantage of the overall chaos to make armed claims of some of their ceded lands. They are holding these lands now by force, and are getting prepared to be attacked by the National Guard.

Rich sectors of the population have dedicated more funds than ever to maintaining the security of themselves and their property, and held on to governmental power, taking a larger share of a shrinking pie to keep from losing ground.

Scenario 3-- Sustainable Society

By greatly expanding on the efforts of small groups like the Ke Ala Hoku Benchmarking Project, communities came together in the 21st century to redesign Hawai'i along the lines of community and environmental health, with the expectation that by paying attention to these fundamentals, economic health would follow. Major efforts were made to clean up and preserve Hawaii's environment, reduce car

pollution and injuries through more mass transportation, provide more child care and youth programs, institute family friendly work and social policies, and insure health care for all.

These initiatives were propelled by a new batch of politicians who got elected with the help of the "clean money" laws, which allowed people of modest means to qualify for public financing of their campaigns and eliminated political debts owed to elite (campaign donor) groups. As Hawai'i came to look more like a paradise, people began actively welcoming tourists here, and the cultural divide between locals and tourists shrunk significantly. Both groups started spending more time hiking and planting.

As economic desperation lessened, the service economy became friendlier and tourism improved. The number of tourists was limited to prevent overcrowding, but because Hawai'i became one of the only clean environments left in the world, people paid top dollar to come here.

A shortened workweek eventually paid for itself in better supervised children and lower crime, higher worker productivity, fewer health costs, and a better tourist climate. Women all walks of life made great gains toward social and economic equality, getting elected in greater numbers and leading in environmental cleanup efforts.

The Hawaiian sovereignty movement received more than enough lands to form a Hawaiian nation, and the ancient methods of sustainable agriculture were reinvigorated. Others combined these methods with breakthroughs in biotechnology to allow many more people to make a living from the land, while preserving the land for future generations.

Many of these gains came about from a great expansion of the educational system, which has been working toward the bold goal of education for all who want it. Greater state funding and less state control has resulted in a proliferation of different educational institutions where new connections are being made between new technologies and cultural traditions.

The primary remaining task is to establish a maximum carrying capacity for the islands to preserve all that has been gained and not let it be destroyed by overpopulation or environmental strain.

Scenario 4-- Hi-Tech Transformation

Major breakthroughs in new technologies created by the Genentech® Bio-Science department of the privatized University of Hawai'i had sudden and sweeping impact before 2020. Genetic manipulation and assembly allowed people to grow plants that produced building materials of all kinds, and this new ability all but ended Hawaii's dependence on importing goods. The global economy was now nearly irrelevant.

Hawai'i went through a productive boom as people quickly started making things for themselves and organizing to produce goods they used to import. Production was so automated that most time was spent organizing the processes rather than "manufacturing" in the traditional sense. Many people were freed from the need to work traditional jobs, and the young in particular leapt ahead in nontraditional jobs.

Households took their new level of independence and withdrew more than ever from their communities. Virtual reality was a serious competitor for people's time, often more compelling than old-fashioned "reality." Crimes of cultural anomie became more common, but new productive technologies had a surprisingly easy time replacing property that was vandalized.

Electronic technologies that descended from the Internet made it possible to enact "e-democracy," a participatory system where people could vote through their computers on a variety of governmental issues, depending on their interest level and involvement. This was seen as a great way to improve representative democracy without the encumbrance of total, face to face direct democracy.

Young folks broke the gender barrier, and with it, old fashioned ideas about gender roles. If you can choose your gender, is anything certain?

Although education was largely privatized, a proliferation of computer technology led to a rapid increase in individualized learning. Most people don't bother with going to "class," and instead download a tutorial to their computer and learn what they need to learn whenever they desire.

The Hawaiian cultural renaissance of the late 20th Century continued to practice hula, kalo cultivation, and other traditional activities. They continued to help people stay in touch with the environment and the land, which was a much-needed activity when so many activities were "virtual."

Conclusion

Which of these worlds do you want to live in? Or would you prefer none at all, or some combination thereof? We can let the future roll over us and see what happens, or we can think deeply, creatively, and collectively about our futures, and work to create one of our choosing. As the speed of change increases, so we need to increase our foresight. It's time to look ahead, broadly and systematically, and make the world we want to live in.