A G E N D A

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1700 | FAX 503 797 1797

METRO

Meeting: **Future Vision Commission**

Day: Monday

Date: August 16, 1993

Time: 4:30 p.m. - 6:00 p.m.

Place: Metro Regional Center
Room 370
600 N.E. Grand Avenue, Portland, Oregon
(close to MAX line and Coliseum Transit Center)

AGENDA

1. Call to Order
3. Roll Call
2. Public Comment (*two minute limit please*)
4. Minutes
   Approval of August 3, 1993 Minutes
5. Members' Previous Vision Experience
6. Table of Contents
7. Summary Remarks
8. Public Comment on Items not on the Agenda
9. Other

Please let us know if you cannot make it.
Thanks!

h:\fvc\agenda

Future Vision Commission
TABLE OF CONTENTS
Notes from 8/3/93 Retreat

III. THE VISION / CONCEPT

Large - Fold-Out Map with Annotation

Social Equity
Peoples Lives, Values, Ideals
Privacy vs. Sociability
Aesthetics - Architectural / Landscape consistent with human values
What do we expect to see - What is the vista? (poetic)

What should we keep?
What should we change?
What should we add?

Gender, social class and social mobility
Citizenship in the city/state
Political Freedom
Value Diversity
Tolerance / Diversity

IV. TEXT ON 8 TOPICS (With Benchmarks) More Details

- Urban Form
- Urban Design
- Transportation - including new technology
- Rural Form
- Greenspace
- Water
- Telecommunications
- Air
- Housing (Density, Affordability)
- Education / Life-long and relationship to jobs formal/informal
- Economy
- Community Values and Aspirations
- Cultural Resources
- Benchmarks / Performance standards
- Energy
- Social Delinquency - Drugs/Crime

V. IMPLEMENTATION

- Problems
- Recommendations
- Public Outreach

- Resources to develop ideals
- Roles and Responsibilities
    - individual
    - corporate
    - government/governance

VI. RELATIONSHIP TO OTHER PLANS, DOCUMENTS AND PLANNING EFFORTS

VII. TECHNICAL APPENDIX (see Robert Liberty's letter of 7/13)

Carrying Capacity Report

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FUTURE VISION COMMISSION
Meeting Summary, August 3, 1993 Retreat

Members in attendance: Len Freiser, Chair; Lisa Barton-Mullins, Judy Davis, Mike Gates, Mike Houck, Wayne Lei, Robert Liberty, Peggy Lynch, Peter McDonald, Susan McLain, Ted Spence, Rod Stevens and Robert Textor.

Staff in attendance: Karen Buehrig, Andy Cotugno, Barbara Duncan, Ken Gervais and Gail Ryder.

The meeting was called to order at 9:10 by Chair Freiser and a quorum was declared.

Minutes of July 12, 1993

Correction: Robert Liberty was left off the attendance list of small group #2. The July 12, 1993 minutes were accepted. Members requested more detail in the minutes in the future. A time for "public comment" will be added to the agendas. A proposed list of meeting dates was introduced and accepted. Also mentioned but left out of the minutes was the agreement at the last meeting that members would talk to other people and bring their input back to the group.

Visioning Discussion

Chair Freiser stated that by the end of the day he hoped to have:

- an idea what the report will look like
- idea of what groups to work with
- what information will be required
- notes for a draft of Part 1 of a vision statement
- a tentative work plan

Members stated concern over the goal of deciding today what the document should look like, and stated that may be premature. Discussion followed on whether public input should come first, or should the Commission develop its own framework first and then take comment on that. Concern over time pressure was raised. Members agreed that with all the work already done, including the Oregon Benchmarks, it is not necessary to start from scratch. The mission is to write a vision for the region, to look at what the regional issues are. Discussion followed on the Charter, and how FV fits in with Region 2040.

Andy Cotugno gave an outline of how the different planning processes fit together. He stated that FV is the premise on which we do a Regional Framework Plan. The FV is to be complete by 1995 and the RF Plan is to be complete by 1997. The RF Plan would be Metro's component of how to implement the FV. The Charter and or state and Federal rules require various elements (with deadlines):

-Regional Transportation Plan (1995)
-Greenspaces Masterplan (done 1992, will be revisited)
-Urban Growth Boundary (done 1990, will be revisited)
-Urban Reserves (1994)
-Urban Design
-Density
-Water Supply Plan (1995)

In addition to the above, there are Federal air quality mandates:

-Ozone standards (1993)
-Carbon Monoxide standards (1995)

Andy Cotugno stated that Region 2040 will be answering part of these questions, do we grow up or out and what are the consequences. FV should not limit itself to 2040's topic areas though, areas such as education and economic opportunity need to be included in the FV.

Chair Freiser stated that the focus should be on the implications of the vision on land use. FVC needs to know what the qualities are in order to know what the implications will be. FVC is called upon to do a vision, not a series of regulations.

Members expressed agreement that this was not going to be a regulatory document. The Commission should speak to the seven elements spelled out in the Charter. The date to think about is not 1996 or 1998, but 2040.

Discussion followed regarding what values are important in the Portland Metropolitan region, what are the factors that give this area its unique quality of life.

SEE "FVC REGIONAL VALUES" DOCUMENT ATTACHED.

After the lunch break, there was a discussion regarding using other planning documents for ideas. It was established that there will be a bookshelf in the Metro Planning Department library (across the hall from meeting room 370) for the use the FVC. Documents of interest will be made available to the commission on that library shelf for review.

Ideas were mentioned for expanding the methods to reach and involve the public, which could include a performance and arts resources as public outreach. The concept of personalizing the year 2040 was mentioned several times, this might be accomplished by vignettes of life in 2040. Another idea was a cassette tape that would act as a driving tour of the region and how it might look in 2040.

Members wrote their ideas for a "Table of Contents" for the Visioning document, what should be included. These ideas were then complied by the group into a single Table of Contents.

SEE "FVC TABLE OF CONTENTS" DOCUMENT ATTACHED.

The meeting was adjourned at 4:00 p.m.

Respectfully submitted by Barbara Duncan

KG:bd
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FUTURE VISION COMMISSION
REGIONAL VALUES
Notes from 8/3/93 Retreat

- Pride of the region is justified
- Access to quality natural environment inside the city
- Nature needs to be within reach
- Relatively clean government
- Quality and diversity of arts
- Healthy economy
- Scale - relates to human ability to impact region
- Geography - mountains, rivers, hills
- Icons - the White Stag reindeer, Rose Gardens, Mt. Tabor, Oaks Park
- Neighborhood diversity - different lifestyle choices, but well blended
- Viable human activity centers balanced with quality natural environments
- Friendly people, spontaneous conversations

- Magnificent built environment
- Volunteerism / participation
- Old Town / Historic qualities
- Good community activities / festivals
- Time to enjoy and examine life
- Sense of civic responsibility
- Daily access to natural environment
- Natural beauty
- Modest size
- Economic / social ties to state - this is "downtown Oregon"
- Our sense of region needs to include Clackamas / Washington Counties, Vision should encompass that diversity

- Cultural diversity adds qualities to region
- Natural environment
- Quality public schools
- Sense of civic belonging
  fear: new developing areas are not part of a community
- People have a stake in their community
- Clean air, sweet water
- Neighborhoods, cities that are a place
- Clear distinction between urban and rural
- Access to many different places and activities, cultures and historic time periods
- Commitment to education
- Access to outdoor education

- Central City
- Access to U-Pick farms / Agriculture
- Pacific Rim connections
- Open space / Greenspaces
- Sense of small community / small town in a big region
- High level of citizen involvement
- Love downtown - Dislike dysfunctional suburbia
  Need to overhaul past mistakes
  Need to preserve critical resources

- Family
- Mobility of experience / go from city to rural and from mountains to beach
- Citizen voice counts
- Helping hand - citizens plus public agencies want to help each other
- Family has a broad interpretation - extended family - clusters of regional interest

BD h:\fvc\values

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Carrying Capacity Report

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FUTURE VISION COMMISSION MEMBER REPORT
PUBLIC OUTREACH

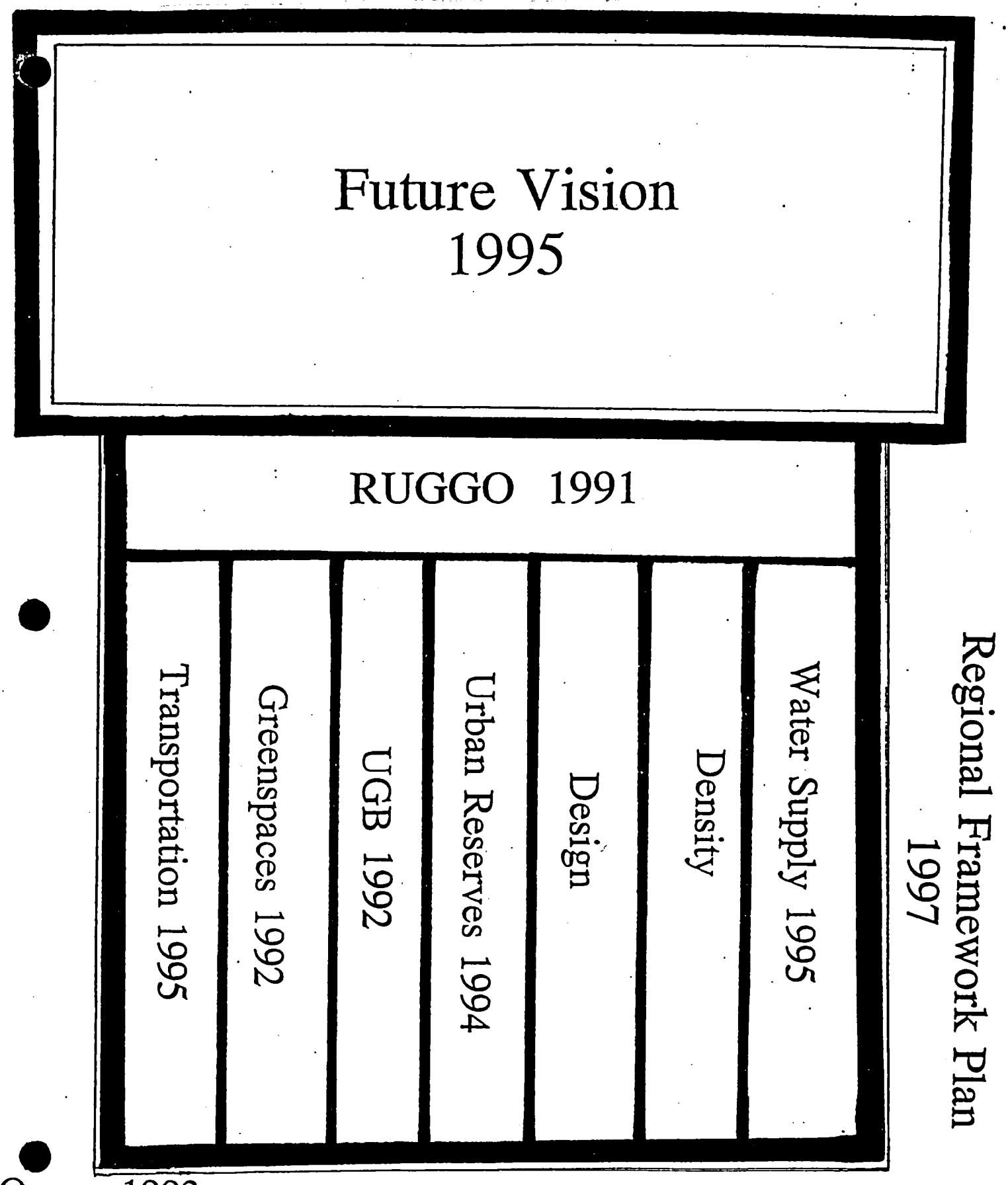
Members: Please list any opportunity you have had to mention the Future Vision project to others. Also, please list TV or radio spots which you see relating to this project and enclose any news articles we can add to our files. Additionally, if there is information you wish to share with others, please either enclose or list.

DATE	EVENT	DISCUSSION	NO. OF PEOPLE

MEMBER NAME/DATE OF REPORT

Addendum to 8/3/93 Minutes

Andy's flip chart showing relationship between Planning activities - not to scale



In the future, success will be formed around flexible format

"Madonna runs a positive trade balance," I began an informal briefing for congresswomen and congressmen. "Two-thirds of her revenue comes from outside the United States. Welcome to the new, soft economy – every bit as potent as the old, hard one."

Tom Peters

Syndicated columnist

Twenty-nine more points followed:

■ All nations are pursuing the same economic strategy. The global battle cry is "value-added, knowledge-based, export-led economy." It's going to be one heck of a scrap.

■ We deal from strength. Ninety-four percent of Americans work in industries that are more productive than Japan's.

The much-maligned service sector is a national treasure. Our global lead in services productivity is stunning. Our positive services trade balance is enormous and growing.

■ It's Asia, stupid. Sometimes I think we've ceded Asia's markets to the Japanese. Go (farther) West, young women!

■ This is an epochal change. If you're not confused, you're not in touch.

■ Churn is success. Economist Joseph Schumpeter called it "creative destruction." Progress is achieved through elimination (mostly inferior jobs) and creation (mostly valuable jobs).

■ Failure is our secret weapon. "Failure is Silicon Valley's greatest strength," wrote journalist Mike Malone. No failure, no progress.

■ Big-company job losses are just beginning. Corporate crash diets are painful but healthy.

■ Midsize growth companies are our salvation. They are creating jobs (mostly good) and have become export stars.

■ Immigration is a boon. Immigrant energy is spurring Silicon Valley, Miami and Los Angeles as it spurred the East and Midwest a century ago.

■ The "virtual corporation" is real. Disembodied companies, constantly changing shape and employing many contract and temporary workers, are a must in a volatile marketplace.

■ Brains are in. Heavy lifting is out. That's as true in manufacturing as in banking.

■ Education R Us. It had better be: The wage gap between the college grad and the high school dropout is enormous and growing.

■ Learning is a lifelong affair. Close the books when you finish formal schooling and your future is dim.

■ Community colleges are an unsung asset. A German-model apprentice system is not the answer to U.S. skills training. Beef up our potent community colleges instead.

■ Education needs overhauling. Forget the Japanese approach. We need to foster imagination, not rote learning.

■ Our widest lead over global competitors lies on research-university campuses. Nourish them.

■ Jobs and careers are changing. Lifetime jobs are dead. British management expert Charles Handy says 10 or 12 jobs and two or three different careers will be the norm.

■ Kiss the nanny state goodbye. The world does not owe us a living. What happened to the American spirit of self-reliance?

■ Benefit packages must mimic new job realities. We should encourage worker mobility. Part of the answer: pensions, training credits and health-care benefits retained by individuals, not controlled by corporations.

■ Research and development is key. If knowledge is economic power, then R&D is the engine of progress – for Nike and Time Warner, as well as Intel and Apple Computer.

■ High tech can take care of itself. Heed pioneer venture capitalist Don Valentine: "To Washington, I say, please do not help us. The world of technology is complex, fast-changing, unstructured and thrives best when individuals are left alone to be different, creative and disobedient."

■ Tomorrow's information-highway system is more important than yesterday's interstate-highway system. (That doesn't mean the government should build it.)

■ Biotechnology, which may become bigger than computers, needs friends. Right now, we're in the catbird's seat: Don't let health-care reform throw out the baby with the bathwater.

■ There's no place to hide. Want a brighter future for your children? Embrace free trade. NAFTA will cause dislocation, but stimulate a net increase in better-paying jobs. Besides, free trade is essential to global political stability.

■ Investing offshore means more jobs at home. A solid base overseas is the surest route to market (and export) development.

■ The world is more stable and prosperous because of the special Japanese-American partnership. Don't forget that.

■ If fear leads to loathing, we lose. Beware name calling (immigrants, trading partners) that makes us turn inward and mean-spirited.

■ We must reinvent government. The world economy demands worker and corporate flexibility. To help rather than hinder, government must also become agile.

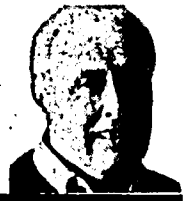
That ought to keep 'em all busy for a while!

Management expert Tom Peters, author of "In Search of Excellence," is a columnist for Not Just Another Publishing Co.

To: Future Vision 9/93

From Alice L.

What vision! What a future!



SOAPBOX · **Bob Thomas**

The "Stafford Triangle" is one of the prime bellwether indicators of the Portland metropolitan area's future. As the Triangle goes, so goes the ball game.

The whole metro area will undoubtedly be lost to the physical and financial ruination of subsidized growth, pushing not only inward with higher densities, but also outward by extending the urban growth boundary into "secondary" rural lands like the Triangle (lands conveniently dubbed not prime farm or forest land).

Who will pay most of the multi-millions in subsidies and lose the most in quality of life? Answer: the average tax and rate payers in the metro tri-county area, Joe and Mary Catch-it-all.

The next public meeting on bright future of the Triangle is from 1:30 to 4 p.m. Thursday, Aug. 19, at Clackamas Country Transportation Office at 902 Abernethy Road, Oregon City. Whether to extend the urban boundary into the Triangle now or a little later, and which abutting city will win most of the prize, are ultimately the only questions to really be answered. Don't miss this show of "deep concern" for our common welfare.

The Stafford Triangle is that rural area of unparalleled close-in remaining beauty that is circumscribed by the present boundaries of Lake Oswego, West Linn, Tualatin and the I-205 freeway (with potential extension up the slopes of of Pete's Mountain). The views from that section of I-205 of the hills, meadows and woodlands of the Stafford Triangle to the north, as well as of similar lands to the south, give that section of freeway its ambience of "bliss" rather than one of urban "suffocation" along most urban area freeways.

How long will the Triangle and similar tri-country rural zoned lands remain that way? Apparently not long. Recent history reveals a convergence of growth boosters into a conglomeration that is set to increasingly feed directly or indirectly upon the public trough to subsidize the spread of urban growth after the present public pacifying and duping charade of "visioning" exercises are concluded soon by the area's governmental entities.

It seems quite apparent that this conglomeration will then start implementing their own grandiose growth scenarios (with their business profits and bureaucrat empires subsidized at public expense) for the whole Portland metro area, while calling them the fulfillment of the public's "visions," desires and demands.

Observations lead one to believe the above conglomeration is comprised predominantly of most politicians and bureaucrats in the area, the new areawide imperial governmental overlay called Metro, the Port of Portland, Tri-Met, the area's utilities, the abutting cities, the three metropolitan-area counties, most metropolitan-area major businesses that benefit from subsidized growth, and in general all those wedded to eternal growth mentality organizations.

Eighteen months ago, their scenario was to accommodate 500,000 to 700,000 more people in the metro tri-county area by the year 2040. Thus, Metro's "2040 vision." Better yet, their "vision" was recently upscaled to attracting 500,000 additional residents in just the next 20 years while on the way to a total of 1.2 million newcomers by the year 2040. (Let's make it 2, 3, 4 or 5 million. The more the merrier. Progress.)

Whoop-de-do! We're moving right along. The Stafford Triangle and everything else like it in the whole metro area will be urbanized and filled in, with the exception, they tell us, of some cozy little parks and greenways to preserve "livability" (providing the developers feel magnanimous when striking their PUD bargains subsidized by tax- and rate-payers). Robert Redford will then produce and direct his final movie entitled "A Polluted Creek Runs Through It."

It will all be just ducky. We'll all be planning, growing, urbanizing and "developing" while preserving and improving all of our qualities of life. We must believe that we "Portlanders" know how to do this because, we're told, that in contrast to others, we value our quality of life. We're all "visioning" and "planning" this together with a sense of "community" and "place," in contrast to those has-been dummies in the states of California, Washington and elsewhere around the country.

Boy, we're unique, and we know how to do it! People are coming here because we've preserved an unspoiled habitat and a great quality of life. (Oh sure, they're coming here, like they are to the rest of the Northwest, to try to escape the ruination of growth elsewhere, only to be again yoked into the service of growth that engenders the same mess here.)

Metro's literature tells us to look with enthusiasm at all our relatively inexpensive, well-situated lands that bode so well for growth and a burgeoning economy. We should now all rejoice to know that we can finally grow, grow, grow — make lots of money and live happily ever after.

What a vision! What a future! Fill it in, push it out, and move it all about while choking on smog, traffic, taxes, politicians, appointed officials, bureaucrats, consultants to governments, public hearing and appeal charades, legal mine fields, lobbyists and all manner of growth boosters — this is the promised land!

Anyway, if you're a resident of any of the three metro area counties, don't squawk when your taxes and rates go through the roof and your quality of life goes through the floor to subsidize this areawide growth into the promised land. Let's all smile and whistle a merry tune as we do our duty to serve our subsidized growth boosting overlords.

Bob Thomas is a West Linn resident.

8/12/93 VTimes

METRO
600 NORTHEAST GRAND AVE
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TEL 503 797-1700

Future Vision Commission

Monday

August 16, 1993

4:00 p.m. to 6:30 p.m.

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Revised Agenda: Please Note Time is 4:00

4:00 p.m.	1.	CALL TO ORDER & ROLL CALL	Group
4:05 p.m.	2.	MINUTES	Chair
4:20 p.m.	3.	Introductory Remarks	Chair
4:25 p.m.	4.	Members' Previous Vision Experience	Group
4:55 p.m.	5.	Table of Contents	Group
5:55 p.m.	6.	Summary Remarks	Chair
6:00 p.m.	7.	Other Business	Group
6:15 p.m.	8.	Public Comment (2-minute limit.) on items not on agenda	
6:25 p.m.	9.	Comments about Agenda Items	Chair
6:30 p.m.	10.	ADJOURN	

Bibliography, as of August 16, 1993

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M E M O R A N D U M

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METRO

To: MPAC members

From: John Fregonese, Manager, Growth Management

Date: July 19, 1993

Subject: Evaluation of Regional Growth Alternatives

Attached is a list of indicators that Metro proposes to use to evaluate the regional growth alternatives. As you can see, it is divided into three categories: those that Metro staff will take primary responsibility, those that will be done by a consultant and those that will be facilitated by a consultant. These are based in large part on the discussions with the Metro Council and MPAC about their concerns and interests for the future of our region.

We are recommending that these descriptive indicators be provided to the public and policy makers to help support informed conclusions. However, it is likely that people will differ about the weight that they may assign from one indicator to another. It is also likely that although the information will provide useful facts and helpful analyses, the data will not provide "the" answer. Accordingly, citizens and policy makers will need to think about the information supplied and come to their own conclusions.

Currently, we are completing a request for proposal asking consultants to respond. We hope to have a consultant selected by the end of August and for their work to begin shortly thereafter.

Indicators Measured by Metro	
Air Quality	1a. Predicted air emission for vehicles using Mobile 5 software and Metro's transportation model. 1b. Predicted air emissions from employment and other stationary sources, using Governor's Task Force of Air Quality data. 1c. Predicted total air emissions form all sources compared with current conditions.
Open Space	2a. Predicted number of acres of natural areas acquired/protected and associated cost. Estimated by Metro staff, reviewed by local park providers. 2b. Predicted number of acres of active parks acquired. Estimated by local park providers, GIS assistance by Metro staff. 2c. Comparison of acres of public open space per capita now and in 2040. Estimated by Metro staff, reviewed by local park providers. 2d. Comparison of number of acres of higher elevation visible greenspaces now and in 2040.
Rural Resource Land	3a. Acres of agricultural land currently in production, proposed to be urbanized. Calculated by Metro staff, reviewed by Farm Bureau, other interested organizations. 3b. Acres of land presently zoned EFU, proposed to be urbanized. Calculated by Metro staff, reviewed by US Soil Conservation Service. 3c. Acres of forest land currently in production, proposed to be urbanized. Calculated by Metro staff, reviewed by interested organizations.
Sense of Place/ Community	4a. Number of cities separated from all others by a distinct edge of nonurban land. Estimated by Metro staff, reviewed by cities of the region.

Indicators Measured by Metro (continued)	
Transportation	5a. Forecast of cross region travel times at peak hour for transit and auto (with 1990 comparison numbers). Prepared by Metro staff, reviewed by local government, Tri-Met and ODOT staffs. 5b. Forecast of costs of transportation improvements by transit and road categories. Prepared by Metro staff, reviewed by local government, Tri-Met and ODOT staffs. 5c. Forecasts of traffic volume-to-capacity ratios. Prepared by Metro staff, reviewed by local government, Tri-Met and ODOT staffs. 5d. Forecast of the number of households with 1/2 mile of transit service. Prepared by Metro staff, reviewed by local government, Tri-Met and ODOT staffs. 5e. Forecast of the number of households that are auto dependent. Prepared by Metro staff, reviewed by local government, Tri-Met and ODOT staffs. 5f. Forecast of the continuing ability to move goods in and through the region completed by Port of Portland staff consistent with an intergovernmental agreement between Metro and the Port and reviewed by local governments and ODOT staffs.
Land Use	6a. Estimated average residential densities, now and in 2040. Estimated by Metro staff using GIS system. 6b. Estimated single family detached/multi-family ratio, now and in 2040. Estimated by Metro. 6c. Comparison of number of households that are auto dependent now and in 2040. Estimated by Metro staff. 6d. Comparison of number of households within a 5 minute walk or 1/4 mile of high quality transit. Estimated by Metro staff.
Noise	7a. Estimated number of households within: 200 feet of freeways without noise buffers, 100 feet of arterial streets, 200 feet of railroad mainlines and within the 65 dBa noise contour of an airport. Prepared by Metro, reviewed by local government, Tri-Met, Port of Portland and ODOT staffs.

Indicators Measured by Metro (continued)	
Energy Costs	8a. Estimated amount of fuel used by vehicles per day. Forecast by Metro staff using Metro transportation model, fleet mix, average fuel consumption assumptions. Reviewed by local government, Tri-Met and ODOT staffs. 8b. Estimated land use based energy costs (heating/cooling, illumination, mechanical equipment and industrial needs) provided by energy utilities.
Schools	9a. Estimated number of children of school age. Estimated by Metro staff, reviewed by school districts. 9b. Estimated number of new primary, middle and high schools needed and estimated facility costs. Estimated by school districts, coordination assistance from Metro staff.
Solid Waste	10a. Estimated solid waste impact. Estimated by Metro staff, reviewed by local governments and DEQ.
Seismic Safety	11a. Estimated number of households in seismically active areas. Estimated by Metro staff with DRC assistance. 11b. Estimated number of households housed in best seismically performing structures. Estimated by Metro staff with DRC help.

Indicators Measured by Consultant	
Water Quality	12a. Estimated cost of providing water for domestic and industrial consumption meeting new Federal Water standards. Estimated by water providers of the region, coordination and review by consultant. 12b. Estimated cost of providing sanitary sewer systems (collection and treatment) assuming best management practices. Estimated by sewer providers of the region, coordination assistance and review by consultant. 12c. Estimated cost of providing stormwater drainage and treatment assuming best management practices. Estimated by drainage providers of the region, coordination assistance and review by consultant. 12d. Comparison of existing surface water quality with estimated water quality in 2040.
Housing	13a. Estimate of future housing need by product type. 13b. Comparison of estimated housing need and regional growth alternative opportunities. 13c. Estimate of housing cost trends for each regional growth alternative.
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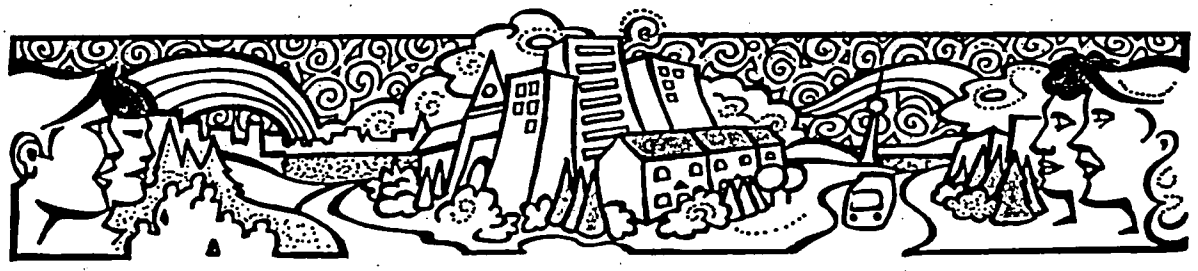
Other	17a. Assessment by random sample of citizens in focus groups of the impacts on sense of place, housing choice, equity, arts, property choice, social diversity and the consequences of regulation.

[1] Costs are intended to be total costs calculated based on a sustained, life-cycle facility costs, which takes into consideration the likely useful life of existing facilities and replacement costs. It should also assume that best management practices are used.



GTA 2021 - THE CHALLENGE OF OUR FUTURE

A Working Document

THE CHALLENGE OF OUR FUTURE

A Working Document

By the year 2021, the population of the Greater Toronto Area (GTA) is expected to increase by two million – this means that in about 30 years, six million people will call the GTA home. What will the GTA look like then? We have a chance now to shape that future, to ensure that it remains a vibrant and desirable place for us and for our children.

This report, *GTA 2021 – The Challenge of our Future. A Working Document*, is about challenges, opportunities and choices. Challenges to do things better than in the past – to avoid some of the problems which have faced other large urban areas. Opportunities to continue to work cooperatively with all local governments in the GTA to create a framework to guide future actions. Choices about how we want to live; informed choices made once we are aware of the costs and the implications of our decisions.

Our cars and transit systems are perhaps the most visible example of where choices must be made. Cars are everywhere. They are an important source of jobs, get us to and from work and are used for our daily chores. But their increased use has costs: rising pollution, loss of our valuable farmlands and recreational areas, lost time spent on congested roads. And what about our transit systems? While expanding them will reduce the need for cars, how can we afford to extend or improve these systems if we continue to want, and build, ever more sprawling suburbs?

While we don't often talk about our values or beliefs, they underlie all the decisions or choices which we make, as individuals and as governments. Values formed the basis of the consensus on urban growth management referred to in our earlier report, *Growing Together*. These values, *Social Equity*, *Enhanced Employment and Economic Vitality*, *and a Healthy Environment*, are more specifically referred to and explained in this report as is our belief that an ecosystem approach to planning will ensure that all values and concerns are considered before decisions are made.

This document has benefited from the advice of many provincial ministries, local governments and individuals. Working Groups of provincial and local municipal officials, together with other key resource people, are already at work preparing more detailed reports on the central issues highlighted in this document. These future reports will provide more detailed information and background to guide the actions we must take.

The provincial government is committed to providing leadership, as residents and governments within the GTA plan for the area's future. We've outlined a vision and will encourage discussion about this vision and the values upon which it is based. This discussion will lead to the creation of a strategic action plan. Successful implementation of this plan will not occur without the participation of all municipalities and people in the GTA. I welcome your comments and suggestions as we work toward achieving a sustainable future for our great area.

Ruth Grier
Minister responsible for the
Office for the Greater Toronto Area

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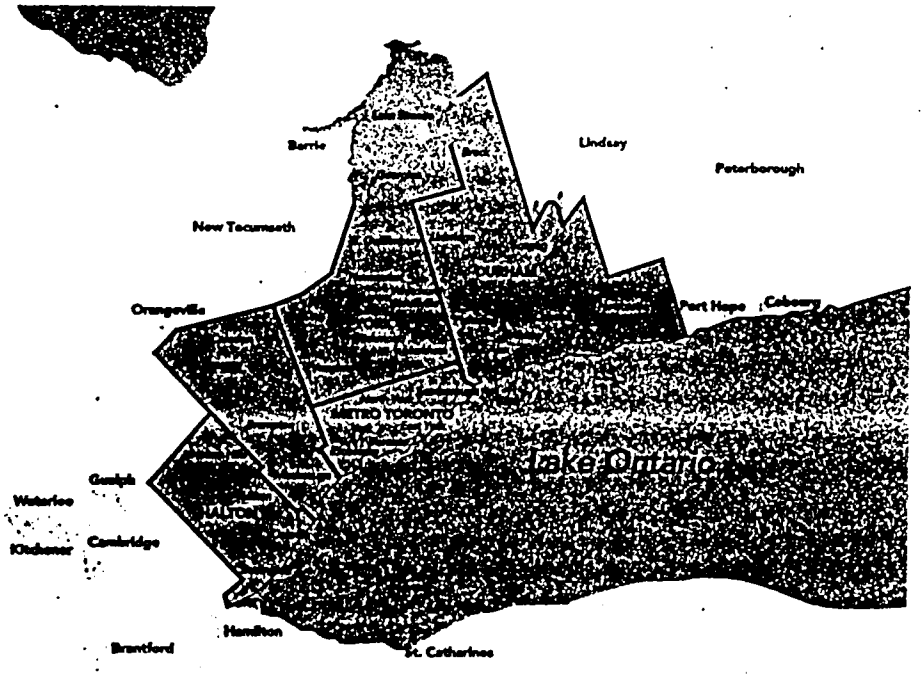
CHAPTER 1

INTRODUCTION



Almost four million people, 40% of the population of Ontario, live in what is commonly called the Greater Toronto Area (GTA). This Area comprises 30 area municipalities within Metropolitan Toronto and four regional municipalities – Halton, Peel, York, Durham.

The GTA has been one of the fastest growing urban areas in North America. A traditionally strong economy, a diverse multi-cultural population, and an attractive lifestyle have made the Area a magnet, drawing people from across Canada and around the world. Studies[1] conducted for the Province of Ontario and GTA municipalities have shown that the Area will continue to grow through natural increase and immigration, reaching a population approaching six million by 2021.

This population will require substantial new investments in housing and infrastructure, including water and sewer, waste management, transportation, and communications. Similarly, health care, education, recreation, and other human services must be greatly improved and expanded. Residents will not be adequately served unless these facilities and services are planned well in advance. In addition, many services must be adapted to new conditions and must accommodate a population of all ages with diverse cultural origins.

The Province's goal for the GTA is to create and foster a quality of individual and community life which is just and sustainable - socially, economically, and environmentally. To achieve this goal, the people of the Area must deal with issues which cross the borders of existing regional and local municipalities and the mandates of individual provincial ministries. These issues include the social, economic, and environmental effects of urbanization particularly that of urban sprawl, the

need to upgrade already overstrained infrastructure and human services, and the need to address the changing economic climate.

Meeting the challenges confronting the GTA will require action by all levels of government and by people in their own communities. Work to resolve these issues has already begun. In 1989, the Province commissioned three studies to examine urban development and environmental issues in the GTA. These were completed in 1990. Last year, the Province released *Growing Together*, which summarized these studies and the responses from municipalities and provincial ministries. This summary reported an emerging consensus among municipalities on the key challenges facing the Area.

The Province has been asked by municipalities and people in the GTA to play a more direct leadership role in maintaining and enhancing the existing quality of life in the Area. To do so effectively, there must be a shared vision which reflects community values and aspirations, and establishes goals for the people of the GTA and their governments.

This vision must be specific enough to enable tough decisions to be made and yet general enough to permit adaptations due to changing conditions. It must be stated clearly and tested with everyone whose lives and livelihoods will be affected. Only then can it be determined which actions will be necessary to support and sustain the shared vision.

This document articulates the Province's goal for the GTA. It describes the values which this government and others believe should underlie a growth management strategy and it suggests what the GTA could be like in 30 years if action is taken now. It does not contain precise details, but it does provide the basis for public debate to determine what people and governments want for their communities.

The final product, developed after full public participation, will be a strategic action plan for the GTA which clearly states government policy and which will guide decision making by provincial and municipal governments over the next 30 years.

Change in the GTA will not occur overnight. The creation of the strategic action plan is only the beginning of a process of change. The process will require a shared commitment over an extended period of time and its full effects will not be felt for many years. The people of the GTA, municipal governments, and the Province share an understanding of the challenges. There is much more to be done, but working together, a new vision for the GTA can become a reality.

1 Clayton Research Associates Limited, *Projections of Population and Households in the Greater Toronto Area*, (prepared for the Greater Toronto Coordinating Committee and the Regional Planning Commissioners Sub-Committee on Population Projections, October, 1989)

Hemson Consulting Ltd., *Employment Forecasts for the Greater Toronto Area to 2031*, (prepared for the Greater Toronto Coordinating Committee, October, 1989).

CHAPTER 2

A SHARED SYSTEM OF VALUES

The Province's goal is to create and foster a quality of individual and community life which is just and sustainable – socially, economically, and environmentally. To reach this goal, the Province believes that there must be a strategy to manage growth effectively in a co-operative relationship with the municipalities and in consultation with the people who live and work in the GTA. Successful strategies must be based on a system of values which is shared broadly in the community.

Values are the fundamental ideals and principles of our community. They reflect the qualities of life which are held in highest esteem, and which governments must respect and uphold. They are the foundation for the Province's goal and vision for the community the GTA can become. Commitment to a value system provides both guidance and continuity in meeting the challenges between now and 2021.

The Province believes that the three key values are *Social Equity, Enhanced Employment and Economic Vitality, and Achievement and Maintenance of a Healthy Environment.* The following is a description of what these values mean and how they are interrelated. The elements of these values are explained in greater detail in the figures and supplementary text that follows this chapter.

Social Equity

Social equity is based on broad principles of justice and compassion. Social equity results in improved social and economic relationships between people, as citizens and neighbours, as contributors to the economy, and as participants in community life. A positive social environment, which is necessary for social equity, enhances the diversity and depth of human relationships, including relationships between neighbours, between members of cultural groups or other human associations, and between members of larger, more diverse geographic or political communities. Equity between the generations is also important. It is not enough to consider the requirements of the present; adequate provision must also be made for future generations.

A positive social environment is important because it values the person and provides a sense of belonging and self-worth. It contributes to the continuity and cohesion of society. A healthy and equitable society is one which encourages participation in the decision-making processes of the community. It also requires public services necessary to promote the health, education, and social well-being of its citizens.

Enhanced Employment and Economic Vitality

A decent quality of life depends in part on the number and diversity of employment opportunities available. The economic health of an area affects the availability of such opportunities. A high value, however, must be placed on the protection of the environment, as we now realize that a healthy economy in an industrialized nation is not possible without a healthy environment. Therefore, enhanced employment and economic activity must also bring with it the opportunity to protect and improve the environment. Prosperity must be environmentally, economically, and socially sustainable.

Belief in a prosperous and equitable society requires that employment be provided in a broad range of high-quality jobs and that the costs and benefits of economic activity are shared fairly. Workers must receive an adequate return for their labour and investors must receive an acceptable return on their investment.

The structural changes taking place in the economy make it particularly important to provide stable employment opportunities and to diversify economic activity throughout the GTA. The economic health of urban centres in the Area is central to a healthy provincial and national economy. For the economy of the GTA to be healthy, it needs a diverse base to allow for adaptation to changes taking place globally. The economic climate must foster efficiency, productivity, and innovation.

The economic, social, and environmental character of an area is a reflection of the industries and businesses located within it. Companies that will provide stable and secure employment opportunities in safe and healthy work places must be attracted and retained. These companies must permit employees at differing skill levels to realize their full potential and compensate them appropriately.

Achievement and Maintenance of a Healthy Environment

The environment is composed of both natural and cultural components.

The natural environment includes land, air, water, plant, and animal life. It includes undeveloped natural habitats within urban areas. A clean and varied natural environment is valued both for its own sake and for its importance to the continuance and quality of human life. Significant natural features must not be maintained as "islands of green;" these areas require links to and support from other surrounding natural areas.

In the cultural environment, human activity predominates. The cultural environment includes the built urban environment (homes, industries, offices, infrastructure), agricultural lands, and resources such as parks, trails, heritage buildings, and archeological sites. It is essential that any change in the cultural environment contribute to its health rather than its degradation.

The people of the GTA depend on a healthy natural environment, a healthy cultural environment, and the harmonious interaction between the two to support a desirable quality of life. Good land stewardship, land use, and construction practices must be followed to avoid degradation or destruction of natural environments, agricultural lands, and local cultural resources. Land stewardship is essential to maintain the environment for future generations. In areas where past practices are no longer acceptable, remediation must occur. The cultural and the natural environment must be complementary.

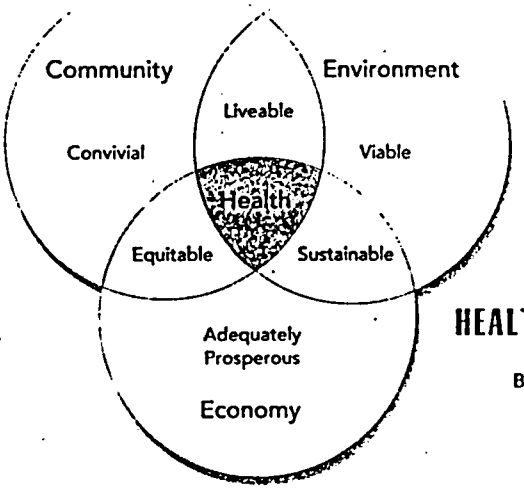
Integrating the Values

The three values of social equity, enhanced employment and economic vitality, and the achievement and maintenance of a healthy environment are interrelated. Social equity is not possible without a sustainable, productive economy. A sustainable, productive economy, in turn, is not possible if the environment is not healthy, if natural habitats are being degraded or squandered, or if infrastructure requirements are not adequately considered. Investments from a healthy economy enable the preservation and remediation of the environment. These values considered together form the value system upon which the vision for the GTA is based and upon which the strategy for achieving it will be built. People everywhere are becoming more aware of the interactions between society, the environment, and the economy, and are striving to keep them all in balance. It is not a coincidence that these or similar values are at the basis of many recent reports originating from both within the GTA and far beyond its boundaries. The *Towards a Liveable Metropolis* report from the Municipality of Metropolitan Toronto, for example, seeks a balance in all sectors between social well-being, economic vitality, and environmental integrity (see Figures 1 & 2 for excerpts). Recent growth management reports from the cities of Portland, Seattle, and Vancouver are based on similar values. These reports reflect their different histories of public debate and planning practice, but their similarities originate from increasing public and professional awareness of the need to draw together social, economic, and environmental planning.

There is general awareness that these values must form the basis of any growth management strategy. However, this realization has been arrived at through different routes. Perhaps the greatest attention has been focused on the idea of sustainable development popularized by the 1987 World Commission on Environment and Development (the Brundtland Commission). This concept seeks "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[2]

The healthy city idea, with individual human health as its basis, provides another way of looking at these values. This concept has been expanded from individual human health to include the health of the community. The healthy community model, illustrated below, was developed by York University's Dr. Trevor Hancock.[4] It illustrates the relationships between environment, economy, and community. Each component in his model must have certain characteristics to achieve community health. For instance, the community must be liveable, convivial, and equitable for the people who live in it; the environment must be viable, sustainable, and liveable; and the economy must be equitable, sustainable, and adequately prosperous. When the environment, the economy, and the community have all these characteristics and are in balance a community is said to be healthy.

In developing a strategic action plan for the GTA the Province must be aware of each of the underlying values and what they mean. Means must be developed to integrate these values into government policy and action to achieve the goal of creating and fostering a quality of individual and community life which is just and sustainable - socially, economically, and environmentally. If the Province is successful in achieving its vision, there will be a more equitable supply of affordable housing and public facilities and services; a strengthened economy able to provide a range of job opportunities throughout the GTA; and an environment which has been protected and restored. It is important that this value system be constantly referred to as the strategic action plan is developed and refined.



HEALTHY COMMUNITY MODEL

By Trevor Hancock

2 The Metropolitan Toronto Planning Department, Metropolitan Plan Review Report No. 15, *Towards a Liveable Metropolis, A Discussion Paper for the Metropolitan Plan Review*, Metro Toronto, May, 1991.

3 Gro Harlem Brundtland and the World Commission on Environment and Development, *Our Common Future* (Oxford University Press, 1987), p. 43.

4 Trevor Hancock, *Towards Healthy and Sustainable Communities: Health, Environment and Economy at the Local Level* (Toronto: York University, November 20, 1990).

FIGURE 1

"THE LIVEABLE METROPOLIS"

"The concept of liveability reflects an emphasis on quality of life within the context of a large and mature urban setting. Quality of urban life can be viewed in a number of ways: in the ability of individuals and communities to meet their needs; the functional integrity of natural systems, and the equality of opportunity to access resources, to pursue community, cultural and, lifestyle options, and to continue meaningful traditions. The promotion of these differing aspects of the urban community in balance are reflected in a 'liveable metropolis.'

Liveability is characterized by the following interacting components:

ENVIRONMENTAL INTEGRITY: clean air, soil and water, and a variety of species and habitats maintained through practices that ensure sustainability over the long-term. The manner in which natural resources are used and the impact of individual, corporate and societal actions on the natural processes directly influences the quality of urban life.

ECONOMIC VITALITY: a broadly based, competitive economy responsive to changing circumstances and able to attract new investment so that opportunities for employment and investment will be available in both the short and long-term.

SOCIAL WELL-BEING: safety and health as well as equitable access to housing, regional, community and neighbourhood services, and recreational and cultural activities. The ability to participate in the decision-making processes of the community is integral to building strong cohesive communities.

Environmental integrity, social well-being and economic vitality together portray a dynamic system of relationships. To plan and manage the metropolis, therefore, decision-making and resulting actions must address the interrelationships and focus on the question of balance. Further, to accommodate changing circumstances and emerging issues, systems for planning and managing the metropolis must allow for flexibility. If policies and decisions are to be effective they must also be attuned to future needs, taking into consideration the fragile nature of the environment and the finite supply of many resources.

An informed and integrated decision-making process is thus necessary to achieve a liveable metropolis. No one dimension should be consistently promoted at the expense of others."

Towards a Liveable Metropolis, p. 14

FIGURE 2

EXAMPLES OF HOW SECTORAL POLICIES AND PROGRAMS AFFECT LIVEABILITY

Components of Liveability

SECTORS	ENVIRONMENTAL INTEGRITY	SOCIAL WELL-BEING	ECONOMIC VITALITY
Housing	• design • density • location • energy source & consumption	• affordability • availability • options • sense of community	• labour force availability • employment opportunities • infrastructure investment • materials availability
Physical Infrastructure	• land use pattern • modal split • energy source & consumption • design • technology • efficiency	• affordability • comfort, safety & health • access to transit • availability of options • mobility	• capacity • alignment • goods mobility • infrastructure investment
Natural Environment	• productivity • diversity • viability of processes • conservation • preservation techniques	• health & safety • recreation/leisure • options • aesthetics • climate • resource availability	• resource availability • employment opportunities • product diversity • research & development • leisure/tourism industry • natural asset protection
Employment and Commerce	• design • density • efficiency • waste production • resource consumption • location	• income independence • options • work environment	• infrastructure investment • variety • competitiveness • activity level
Social Infrastructure	• design • location • environmental sensitivity	• availability • independence • opportunity for cultural expression • options	• labour force satisfaction • leisure/ tourism industry
Education	• information • awareness • behavioural change	• opportunity for personal development • health protection	• training • research & development

Towards a Liveable Metropolis, p. 51

SOCIAL EQUITY

Social equity is based on broad principles of justice and compassion, including:

EQUAL ACCESS to the basic resources and requirements for a decent quality of life in the GTA, regardless of age, disability, gender, race, ethnicity, religion, sexual orientation, or socio-economic background.

EQUAL OPPORTUNITY to acquire a high-quality education and needed skills, and to obtain employment.

AFFORDABLE HOUSING close to locations of employment and other community facilities.

ACCESSIBLE and **AFFORDABLE** facilities and services, including greenspaces and parks, community facilities, public transportation, communications, and support services.

Social equity will not be achieved unless the social environment is:

SAFE, inclusive public spaces for all, day and night, and safe homes or havens available to those in need.

PARTICIPATIVE, ensuring that people can and are encouraged to exercise their right to participate in decisions affecting their welfare knowing that there will be a fair and even-handed application of government regulations.

DIVERSE, celebrating the contribution of the individual to the vitality of the community.

SUPPORTIVE, fostering a tradition of caring for one another, and providing necessary support services.

TOLERANT and **INCLUSIVE** of established residents and newcomers, respecting their differences and capitalizing on their unique talents.

SUSTAINABLE in providing a solid basis for future generations.

COMMUNITY-ORIENTED, reflecting personal responsibilities to the wide variety of communities of which we are all members.

ENHANCED EMPLOYMENT AND ECONOMIC VITALITY

Employment and economic activity must be:

SUSTAINABLE, providing lasting prosperity by conserving resources and promoting enterprises which enhance, or do not harm, the environment. Short term economic gain at the long term expense of the environment is no longer acceptable, and cannot provide continuing, high-quality employment.

COMPETITIVE and **EFFICIENT**, not through cutting wages but through seeking high value-added jobs and knowledge-based inputs of a highly trained, skilled workforce, and through reducing unnecessarily high costs related to housing and traffic congestion, and in striving to reduce costs through the adoption of energy efficient design and procedures.

ADAPTABLE, employees and managers being able and willing to learn new skills, to take advantage of innovations, new products, and markets.

FAIR in sharing benefits and costs of economic change. Workers must get an adequate return for their labour, while investors get an acceptable return on their investment.

ACCESSIBLE, with jobs close to where people live or readily accessible through transit.

DIVERSE, providing a range of employment opportunities to meet varying needs.

INNOVATIVE, promoting a workplace culture that looks towards innovations as part of the continuous improvement needed to compete in a global economy.

MARKET SENSITIVE, in tune with the changing product and service mix required by a changing economy.

A HEALTHY ENVIRONMENT

The natural environment and the cultural environment must be viewed as interrelated and interdependent, not mutually exclusive. The basis for a sustainable relationship with a clean and uncontaminated environment must be based on stewardship and remediation to enable future generations to enjoy the same or better quality of life as exists now.

The natural environment must be:

SUSTAINABLE for human, animal and plant communities, through proactive protection, enhancement, and rehabilitation of natural features and systems.

INTEGRAL and **CONNECTED**, maintaining the complex interactions, processes, and connections between the ecosystem's various functional components. The natural environment must exist as a network of functioning interconnected spaces, not as isolated islands of green.

DIVERSE, with a good mix of interconnected natural areas and features providing essential species habitat and maintaining ecological processes.

The cultural environment must be:

HUMAN SCALE, in the design of new buildings, streets, and open spaces; in the conservation of significant heritage buildings and districts; fostering a sense of well-being and neighbourhood identity, and thereby contributing to human contact and social cohesion.

OPEN and **SAFE**, providing spaces that are conducive to public use, centrally located, easily reached, and surrounded by a mix of residential, commercial, and cultural facilities.

DIVERSE, providing a range of housing, jobs, shopping, and public and private services, etc., to meet a variety of needs.

BALANCED, through a proper mix of home, work and recreational places leading to community self-sufficiency and vitality.

ACCESSIBLE, providing for the movement of people and goods from one place to the next including accessibility to open space and natural areas.

INTEGRATED and **ATTRACTIVE**, with a good mix of agricultural land and built areas, including low impact transitions between natural and human dominated areas; with sensitive design of new buildings to provide visual links with existing buildings as well as enhancing the community.

CONTINUOUS and **DYNAMIC**, allowing for change in keeping with human needs and potential, while preserving features that provide a sense of personal and family belonging in the community over time and between generations.

LIVEABLE, through the recognition that a built area is a community, not a collection of buildings.

CHAPTER 3

THE NEED FOR A NEW APPROACH

This is not the first time that the GTA has faced the challenges of growth. In 1953, rapid suburban growth beyond the boundaries of the City of Toronto led the Province to create the Municipality of Metropolitan Toronto. Metro Toronto met the challenges of suburban growth and is hailed as one of the first and most successful integrated metropolitan governments in the world.

By the mid-1960s, growth pressures were apparent beyond the boundaries of Metro Toronto. The Province conducted studies to guide planning in the area, including the 1967 Metropolitan Toronto and Region Transportation Study (MTARTS), the 1970 Design for Development: the Toronto-Centred Region Plan (TCR), and the 1974 Central Ontario Lakeshore Urban Complex (COLUC). These studies raised awareness of the future needs of the area. By the late 1970s, having created four regional municipalities surrounding Metro (York, Durham, Peel, and Halton), the Province ceased efforts to plan for the GTA, leaving this responsibility with regional and local municipalities.

Given the success of Metro Toronto, the regions, and the existing mechanisms for growth management, why is a new strategy required? Prior to answering this question, the GTA's special achievements and challenges will be considered and the results of recent studies of urban development and environmental issues in the GTA will be reviewed.

Recently there has been much discussion centering around the challenges facing the Area. Many of these issues are listed in this chapter and need addressing. However, the GTA has many achievements and assets. If agreement can be reached on a shared vision, the people and governments of the GTA can build upon these achievements to ensure that the Area remains sustainable and prosperous.

3.1 ACHIEVEMENTS

Since 1953, three million people from all parts of Canada and the world have come to the GTA seeking a better life for themselves and their families. They have enriched the cultural diversity and contributed to the economic vitality of the Area with their talents, energies, traditions, and resources. Together, the people of the GTA have established a common civic culture based on shared values and a collective attachment to public institutions where cultural diversity thrives and social tolerance prevails. As a result, in 1990, the United Nations deemed the Toronto region to be the most cosmopolitan metropolis in the world.

The quality of urban life in the GTA is still the envy of many other areas where urban decay, crime, racial tension, and social problems have increased dramatically in recent decades. The region's world reputation is based on its economic vitality, cultural diversity, and social harmony, which are a result of a progressive adaptation to urban growth.

Several factors have contributed to this achievement. National social programs such as Medicare, the Canada Assistance Plan, Unemployment Insurance, and regional equalization payments have provided Canadians in all parts of the country with a basic income level and a basic standard of public services. As a result, Canada's metropolitan centres have not been overwhelmed, as those in the United States have been, by vast migrations of peoples from "have not" regions.

Other important factors include: substantial provincial and federal investment in the GTA's infrastructure; dispersal of public and low cost housing outside the City of Toronto, thereby strengthening the social integration of the Area; and local government provision of the highest standard of public services in North America.

The Area's economy has sustained a growing population and contributed significantly to the economic vitality of Ontario and Canada. The GTA is a national hub for manufacturing, finance, head office activities, education, transportation, communications, tourism, culture, and business services. It is also the primary centre for public administration in Ontario, providing many jobs in professional, technical, administrative, and support services. Wealth generated through public and private sector activities has in turn fuelled the retail and personal services sector.

The future social and economic well-being of the GTA and Ontario will be sustained and enhanced by the GTA's significant assets, which include:

- a well educated and skilled labour force;
- a concentration of intellectual capital and institutions dedicated to research, education, and career training;
- a variety of national and international headquarters, for example, the financial services and information technology sectors;
- a balance of old, new, large, and small industries;
- diverse support services and industries required for the specialization of industries;
- well defined and maintained transportation and communication links;
- responsive public institutions;
- a pleasant and attractive environment;
- a high quality, readily accessible urban life, rich in amenities; and
- a population of diverse global origins with ties to parts of the world which are now key business markets.

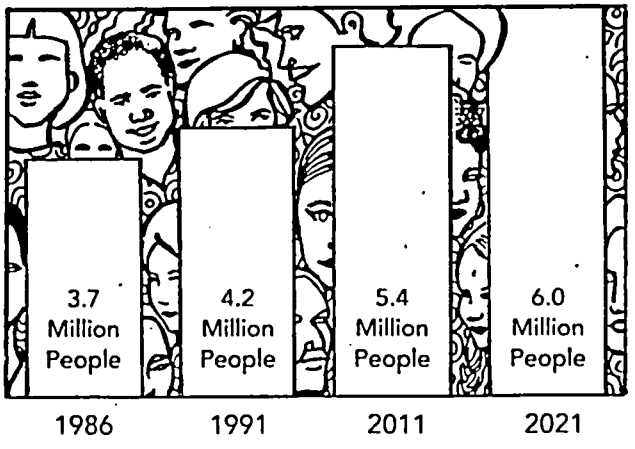
3.2 CHALLENGES

The primary challenge for the people and governments of the GTA, is to take advantage of the Area's assets to maintain and enhance the quality of life for present and future generations. This must be done while meeting special challenges: to accommodate a growing and more diverse population; to develop socially integrated communities; to create a sustainable, prosperous economy; and, to enhance the GTA's environment. In addition, the need for a more compact urban form and for infrastructure decisions which will support the directions of a new strategic action plan must be addressed.

Accommodating a Growing Population

The GTA's population has grown on average about 60,000 per year over the last decade, approximately half of which is the result of natural increase. Even with a slower future rate of growth projected, the present population of four million is expected to reach six million[5] by 2021, increasing the need for new infrastructure and expanded public services.

Population growth of the GTA



Accommodating an additional two million people by the year 2021, raises the question: Why not restrict or divert this growth to reduce adverse effects on the GTA, while enhancing economic growth elsewhere in the Province? Experience in other jurisdictions[6] shows that policies aimed at restricting population growth have not been successful and growth has continued to occur.

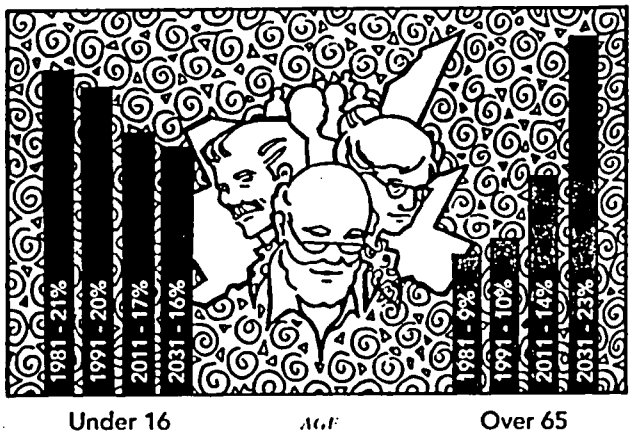
Furthermore, "economic growth diverted from the GTA may be more likely to be diverted south of the border than to other parts of southern Ontario."[7] Instead of diverting growth, population increase must be managed to ensure that it is complemented by sustainable economic growth. This can be an opportunity to improve the region's environment, to pursue new economic directions and to enhance community life.

Planning For a Diverse and Changing Population

Much of the increase in population is expected to come from immigration, which will further diversify the GTA's multi-cultural mix. In an era of increasing world trade, the GTA will enjoy a distinct advantage in having a culturally diverse population with significant global relationships. However, demands for special support services (e.g. language and career training) will increase just as we begin to need more social and health care services for the aging 'baby boom' generation.

Family and household structures are changing, with important impacts on housing and public service needs. Since the Second World War, community designs, forms of housing, and provision of public services have been guided by an image of the typical family type and residential environment. There is no longer a typical family structure with standardized needs. There is a

The aging population of the GTA



need to make a broader range of affordable, low and medium rise, high density housing available close to job opportunities, across the GTA.

The growing number of seniors, many of whom wish to continue living in their neighbourhoods and communities, require compact living environments which are close to social, cultural, and retail amenities and accessible by foot or by public transportation. For the increased number of single adult households, including single mothers, ownership of a 'single family dwelling' is not appropriate to income or space needs.

Dependence on public transportation services will increase for single-earner and two-earner families which are hard pressed to meet housing and living costs, and unable to afford a car.

Younger families with children face less assured economic prospects, and therefore require more affordable family housing accessible to lower cost public transportation. Even for traditional families, the pursuit of economic and social equality for women and men continues to lead to new roles and activities for all family members. This has resulted in changing needs for housing, transportation, and public services. As with seniors, increasing numbers of families with children will need support services in their immediate environments, or easily accessible by public transportation, including child care, parent resource centres, and crisis facilities.

Developing Socially Integrated Communities

As well as meeting the diverse needs of all segments of the population, the design and structure of communities should preserve and enhance the conditions of social harmony. They should also promote the development of inclusive communities where cultural origins and economic status are not barriers to membership and participation. The safety and security of residents is most assured when positive human relations are promoted and experienced in daily life. The evidence from other major cities makes it clear that there is a painful collective price to be paid when separation and exclusion are reflected in the design of communities and neighbourhoods.

Socially integrated communities are distinguished by the availability of a range of suitable, affordable housing, access to necessary support services, employment opportunities matching the diversity of human skills and employment needs, and access to forms of urban mobility less dependent on automobiles. These characteristics require communities which are more compact in their design.

Creating a Sustainable, Prosperous Economy

In the past, the GTA's economy has been stimulated by the expanded market provided by increased population. However, population growth does not assure economic growth, and recent economic changes show the need for effective strategies to ensure that the GTA's economy grows at least as much as its population.

The Ontario economy is undergoing significant stress as business adjusts to the pressures of globalization, North American free trade, and the loss of markets due to the recession. Concern has been expressed about the competitiveness of the GTA relative to other urban areas and about the ability of provincial and local governments to sustain public investment and services, given the effect of the economic downturn on their tax bases and fiscal capacities.

In the past, the growing economy provided jobs, an increased standard of living, and a secure base for public services. However, economic growth does not necessarily

result in equally improved living standards for all, nor does the modern global economy always strengthen the social stability of the urban environment. Rising prosperity during the 1980s was accompanied by expanding social disparities between the wealthy and the poor. Foodbanks and homelessness increased beside luxury consumption.

For most individuals and families, the GTA's economic health is measured by the availability of employment at wages sufficient to maintain a reasonable standard of living. To provide this employment, it is necessary to nurture high value-added and related support industries, and preserve economically competitive manufacturing within the GTA and in surrounding areas of Southern Ontario.

Demographic changes are resulting in a rapidly aging workforce and fewer new labour market entrants. New market entrants have traditionally brought new skills to the workplace. Those already in the labour market are finding that factors such as technological change are resulting in their existing skills no longer being in demand.

A competitive and adaptive economy depends on effective training and education to provide workers able to adjust to new challenges. A well-educated workforce is a valuable resource which will attract new investment and provide increased employment opportunities. However, labour force skills must match employment opportunities. This requires appropriate programs offered by formal educational institutions and continued efforts by employers.

Concerns that the GTA's competitiveness is impaired by high production costs need to be addressed. These costs cannot be reduced effectively or fairly by reducing wages. Rather, a strategy is required that attacks the root causes of high costs including: wage pressures caused by the limited availability of affordable housing; the costs and productivity losses associated with a congested transportation system (estimated at $2 billion per year in 1988); and, the need for infrastructure appropriate to business and individuals for the next century.

To create sustainable prosperity, cooperative partnerships between government and business must be strengthened. Through these partnerships, we can make the best use of existing assets, build on those assets, ensure a high quality of economic growth, and foster awareness of the true costs and benefits to business and the general population. Economic development costs should reflect the true costs of environmental protection, resource depletion, and clean-up. Specific tasks include:

- providing accommodation and amenities for a growing and changing population, including affordable housing close to employment locations across the GTA;
- providing better and more equitably distributed public services;
- establishing a priority setting mechanism for public investments in infrastructure;
- continued development and diversification of local economies;
- fostering local economic development ventures; and
- ensuring an equitable distribution of household incomes, which will support an active local retail sector.

Enhancing the GTA's Environment

The GTA's environment is rich in wildlife, unique physical features, and natural and cultural resources. But the environment is stressed due to increases in population and economic activity coupled with land extensive development patterns. These developments consume large amounts of land and encroach on natural and cultural heritage areas. As well, because densities are not great enough they cannot support effective public transit, with the result that dependence on the automobile for commuting has increased substantially.

There is increasing awareness that this settlement pattern contributes to the degradation of air, land, and water. This deterioration is the result of: ever-increasing levels of auto traffic and auto emissions; increased and inefficient

energy demands (for heating and cooling); inadequate management of stormwater and sewage; increased garbage production; industrial pollution and waste; and, groundwater withdrawal. Low density settlement also results in loss of greenlands, farmland, and heritage resources.

Society has become more conscious than ever of the negative effects of some forms of economic activity on the environment. The prospects of global warming, impacts of acid rain, and increased damage from pollution have led to the recognition that we must become a conserver society. People are aware of the importance of the environment to a sound economy, including the economy's dependence on natural and cultural resources, and they want economic development which is less harmful to the environment.

A consensus is emerging that the Area's physical, biological, and cultural assets are a form of heritage capital that can no longer be squandered, but must be preserved and enhanced for the benefit of both present and future generations. This new approach of living off the interest while protecting the capital, will ensure the region's continued liveability and provide for future economic activity.

Creating Compact Urban Form

Besides social inclusion and changing population needs, there are compelling economic and ecological imperatives supporting more compact living environments. The fiscal and tax resources of governments are more constrained than in previous decades. Thus, the GTA's future ability to provide high-quality essential urban services such as transit, water and sewer, education, and health care will depend on more cost effective, compact patterns of development. The collective responsibility to protect the biosphere also means the design of urban form must be more land and energy efficient.

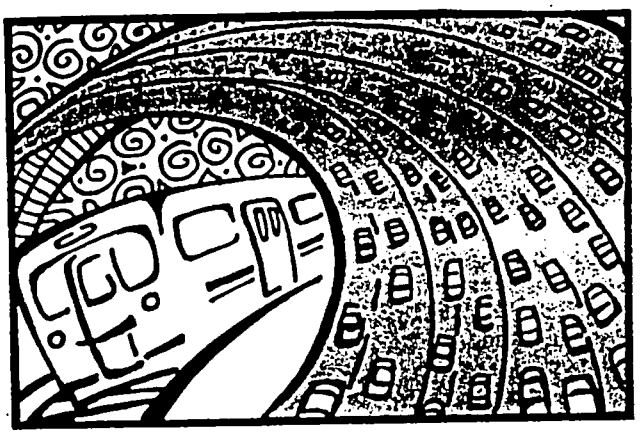
In previous decades, as the population grew, communities spread out at lower and lower densities in an attempt to achieve the 'North American dream' of a single-family home on a large lot, with several cars in the driveway. In the past decade, both employment opportunities and housing subdivisions featuring large single family homes have grown rapidly in the regional municipalities around Metro Toronto. Unfortunately, the availability of affordable housing has not kept pace with the growing employment opportunities in these communities. This has increased the need to commute to work, and often creates problems for employers and employees through lost time due to congestion on the few transportation links. There are also increased stresses on family life and limited ability to participate in community life.

This development pattern is now straining infrastructure and human services, and has prompted concern that standards of service are declining. It also has many negative environmental implications including the loss of irreplaceable agricultural land.

Providing Infrastructure

The GTA's successful evolution to a major North American metropolitan area can be attributed in part to the capacities that were built into road, sewer, water, and transit systems during the formative years of Metro and the four regions. These capacities provided for growth and allowed the Province and the municipalities to turn their attention to the provision of other vital services such as schools, colleges, and hospitals. There have been very few major infrastructure projects constructed since the early 1970s. Meanwhile, the population has continued to grow and these systems are now almost fully utilized, with important parts often operating beyond design capacity.

Because of residents' wishes that the area not be dominated by cars, the GTA now has fewer expressway miles per capita than any other major North American centre. Unfortunately, this laudable attempt to contain cars was not offset by the alternative: transit expansion. Over the last 15 years there has been virtually no expansion of the TTC, and suburban transit has been slow to develop because of the low densities.



One subway line carries 35,000 people per hour in each direction... equivalent to a 36 lane Don Valley Parkway.

The transit system in the GTA is highly regarded, but is unable to adequately serve the complex commuting patterns. Thus, automobile travel remains dominant, imposing unacceptable economic, environmental, and social burdens. Even if these burdens were acceptable, the area does not have the physical capacity to accommodate sufficient new roads to serve the commuting requirements of the next century. Therefore, a significantly expanded and enlarged transit system is essential.

Some new road construction may be required to meet specific needs, such as intercity and rural, travel and goods movement, but building new roads must not be the total solution. Instead, the focus should be on more efficient use of the existing road network. Building new roads will result in the paving of valuable land and further encourage driving rather than using transit.

The need for other types of infrastructure has also developed over this period. Several of the regions are currently without any excess sewage capacity, and the reliance on septic systems in unserviced areas has degrading effects on groundwater sources. Two of the regions are suffering water shortages. While these deficiencies must be resolved in order to accommodate current and anticipated population, it is necessary to minimize future needs for new water and sewage treatment capacity through conservation efforts.

About 50% more garbage per capita is being generated than was projected when the current solid waste sites in the GTA were established in the 1960s – 1970s. The municipalities of the GTA must establish an area-wide mechanism to manage solid waste, establish waste reduction programs, and increase the portion of the remaining waste which is recycled.

Investments by governments must be coordinated with other essential infrastructure developments, including energy distribution systems (hydro-electric, gas, oil) and local distribution (telephone and cable), inter-city and international communications networks.

Substantially increased investments in both physical and social infrastructure must be made. The 1991 *Budget Paper E, Ontario in the 1990s*, recognized the requirement for public investment in physical infrastructure. In the case of capital budgets for new or updated infrastructure, it is especially important that the right decisions are made and that priorities are established. No level of government today has the financial capacity that it had in the 1960s. But with careful planning, priority setting,and the conservation of existing assets, the necessary infrastructure can be provided.

A multi-billion dollar investment in the capital and social infrastructure of the Area, if combined with a vigorous growth management strategy will be repaid in economic benefits, in enhanced social and environmental conditions, and in reduced future costs for such things as environmental rehabilitation. Without these investments, the GTA's capacity to pursue social, economic, and environmental goals will be impaired, and standards of living will decline. These investments are fundamental in sustaining communities, in attracting and maintaining employment, in competing in the global market, and in the maintenance and enhancement of the environment and social programs which are the measure of society.

3.3 AN EMERGING CONSENSUS ON GROWTH MANAGEMENT

Three studies were commissioned to examine urban development and environmental issues. These reports and the comments received in response to them are discussed in greater detail in an earlier document, *Growing Together*. Despite the different focus of each study, they share much in common, especially an understanding of the new emphasis on environmental quality, the need for a regional perspective on both area-wide and local matters, and a concern with the human impacts of urban development.

The *Greater Toronto Area Urban Structure Concepts Study*, prepared for the Province and municipalities by a consortium of consultants led by the IBI Group, provides comparative information on infrastructure requirements, efficiency of services, costs, and other indicators of urban quality of life for three alternative patterns of future development in the GTA. These include:

- a Spread model, which continues historical development patterns;
- a Concentrated development model, which directs all new growth into the existing urban envelope; and
- a Nodal model, intermediate in urban density between the other two, which focuses development on existing communities, with some associated expansion of these urban areas.

The Federal-Provincial Royal Commission on the Future of the Toronto Waterfront has studied both local and area-wide issues related to development of the Lake Ontario waterfront between Newcastle and Burlington, including the ecological dependence of the waterfront on the Toronto watershed, extending north to the Oak Ridges Moraine and west to the Niagara Escarpment. Several papers have been published, including *Watershed*, which recommend an integrated ecosystem approach to planning.

Options for a Greater Toronto Area Greenlands Strategy, conducted for the Province by Ron Kanter, M.P.P., identifies a GTA greenlands system, and considers how to protect specific areas. This study complements the Royal Commission's focus on waterfront planning.

Comments received in response to these reports from stakeholders and the public indicated an emerging consensus on the basis and requirements for future development in the GTA, including:

- broad support for a new approach to managing growth, founded on an environmental framework;
- a new awareness and understanding of our ecosystem and the need for sustainable urban and natural environments;
- a desire to reflect the quality of life and equity goals in our communities;
- widespread acceptance that continued urban sprawl is untenable for environmental, equity, and economic reasons;
- considerable support for some form of concentrated, nodal development within the urban envelope;
- a better balance between housing and employment;
- increased use of public transit;
- support for a new growth management strategy that continues economic and employment growth; and
- a desire for strong provincial leadership within a partnership relationship with regional and area municipalities, including a rationalized funding process.

3.4 THE NEED FOR A NEW, INTEGRATED STRATEGY

The challenges facing the people and governments in the GTA are unlike those of the past. They demand more than fine-tuning of existing plans and old approaches. They demand a new strategy to guide the GTA into the 21st century. The structural solutions of the past are not a panacea for managing growth in the 1990s. The 1990s are different.

First, the GTA is faced with an increasingly diverse population living in an evolving, multicentred region. Traditional development patterns are straining infrastructure and human services, and are having significant negative social, economic, fiscal, and environmental impacts. Therefore, more compact living environments which are affordable, land and energy efficient, and accessible to services must be encouraged.

Second, it can no longer be assumed that economic growth will automatically follow population growth. Therefore, in addition to managing population growth, economic development of a form which will enhance the quality of life for residents of the GTA must be encouraged.

Third, society is now much more aware of the impact of human activity on the GTA's natural and cultural environment. Future increases in population and economic activity must be accommodated in accordance with environmental standards.

Fourth, the region is faced with a very different public finance environment. In the past, the Province and the municipalities were in a much better position to finance new infrastructure. Now resources are strained. New ways must be found for governments to work together to plan and finance required services and infrastructure.

Finally, even the concept of growth management itself is being redefined. It is no longer enough merely to manage the physical aspects of growth. A new approach is necessary.[5] (see Figure 3)

These challenges cross political boundaries, and existing planning mechanisms are not structured to deal with such issues. Since municipalities can only plan within their own boundaries, planning and control across regional and local municipal boundaries is compartmentalized. Also, provincial ministries are organized in such a way that they pursue their individual mandates, with the result that actions often seem to be at cross purposes, and efforts to coordinate development are frustrated.

The existing planning process itself compartmentalizes social, economic, and environmental values, addressing each in isolation. For example, developments are often planned with little consideration for cumulative effects on community and environmental values. These are often marginalized as external effects to be mitigated on a project by project basis. GTA-wide coordination of planning for services and facilities is required. There are some that think that this coordination should be achieved by simplifying or rationalizing existing local government structures and accountability mechanisms. Although structural changes might help to address the GTA's challenges, the time required to make such changes would be considerable. Using the existing institutional arrangements to reach a timely agreement on the priorities for future services and facilities will ensure that both the coordination and planning objectives can be met.

In Chapter 2 of this paper, a need to integrate values when planning for the future was identified. The ecosystem approach described by the Royal Commission on the Future of the Toronto Waterfront[6] (see Figure 4) provides a mechanism to integrate planning for an interacting, interdependent complex. The GTA is not an ecosystem in the traditional sense, but the approach nonetheless provides a useful tool to understand the relationships between the regions of the GTA, and the interactions within the planning process.

The communities of the GTA form an intertwined urban system spreading seamlessly across all five regions of the GTA, and linked by infrastructure systems (highways, transit, water and sewer pipes, etc.). Decisions regarding urban development and infrastructure have impacts that cross boundaries, influencing prosperity, ease of movement of people and goods, residential and business location, and the environment.

The ecosystem approach is not an 'environment or social equity first, development second' process, but an approach which rules out compromises which would undermine the integrity of the ecosystem. The ecosystem approach includes and integrates all values; it considers environmental, economic, and social factors equally in the decision making process. The philosophy is not based on a win-lose mentality, but on arriving at an appropriate course of action after giving full and equal consideration to all factors.

In consultation with affected regional and area municipalities, the Province has concluded that a new strategy for the GTA is necessary. This strategy must provide a common framework for specific policies and plans developed by the Province, regions and area municipalities. The ecosystem approach provides a mechanism to ensure that integrated, value-driven planning is kept alive and current.

This framework must encourage a process which anticipates change and reflects emerging social, economic, and environmental realities, while respecting and supporting shared values. Once agreement is reached on a common future, the people and governments in the GTA, acting cooperatively, can build upon its solid asset base to ensure that the Area remains viable, sustainable, and prosperous.

5 In addition to the reports listed under 1, also note:

Clayton Research Associates Limited, *Review of Population Projections for the GTA — One Year Later*, (prepared for the Office of the Greater Toronto Area, December, 1990).

Clayton Research Associates Limited, *Migration Trends in the Greater Toronto Area*, (prepared for the Office of the Greater Toronto Area, December, 1991).

In spite of the recent decline in economic activity in the GTA resulting from the recession (which has resulted in fewer migrants than predicted in the original Clayton Research Associates Report) the long term projections regarding population still appear realistic for planning purposes.

6 IBI Group in association with Stephan McLaughlin Consultants Inc., *Greater Toronto Area Urban Structure Concepts Study Background Report No. 3 Municipal Growth Options*, (prepared for the Greater Toronto Coordinating Committee, June, 1990) pp.7-9.

7 *Ibid*, p.15.

8 Paul Niebanck "Growth Controls and the Production of Inequality," *Understanding Growth Management — Critical Issues and a Research Agenda*, eds. David Brower, David Godschalk, and Douglas Porter (Washington, D.C., 1989), p.117.

9 Royal Commission on the Future of the Toronto Waterfront (Canada), *Watershed: Interim Report* (Ottawa, August, 1990).

FIGURE 3

"REVIEWING BASIC GOALS"

"... the following goal-related questions are offered as the basis for a full-scale re-evaluation of growth management:

1. Is growth management contributing to the health of our natural systems? Are local resources being wisely used, and is resource-use, in general, being restrained? Is there a bioregional consciousness, a commitment to regeneration, at work in local planning and management?

2. Is growth management providing a balanced set of housing and occupation opportunities? Is there an appreciation for the value of inclusiveness and diversity? Has an affirmative obligation been accepted by the locality?

3. Does growth management encourage citizens to confront directly the requirements of everyday living; efficient transportation, adequate schools, and public facilities? Can the growth management community be proud that it has worked to improve the quality of the built environment?

4. Is growth management leading towards a vital and unique identity for a locality, rather than a stereotype of blandness and sameness. In this regard, is attention being given to public art and symbolism, to an expressive community form, and to an appreciation for the landscape, the history and the human ecology of the area?

5. Is growth management opening channels for meaningful participation in public life, rather than privatizing and disguising more and more issues of importance? Do people feel a part of things, and are they satisfied that outcomes address their deepest yearnings? Can basic needs for self- discovery and creative expression be met locally?

6. Are the growth management community's functions functioning? Is the private sector vigorous and competitive? Are the structures of planning and management accessible, open, and flexible? Is there movement towards a mature network of ideas and opportunities?

These goals are not abstractions, any more than 'environmental impact' or 'carrying capacity' or 'quality of life' are abstractions. Elusive they are, but so is every vision of any worth. For a sophisticated society such as ours, they are appropriate goals against which to measure the accomplishments of growth management - 'the coming of age of planning.' We need to know whether growth management is responding to basic matters of worth, and whether it is having good effects."

[illegible] The Urban Landscape, pp. 117-118

FIGURE 4

AN ECOSYSTEM APPROACH TO PLANNING FROM "WATERSHED"

"Traditionally, human activities have been managed on a piece-meal basis, treating the economy separately from social issues or the environment. But the ecosystem concept holds that these are interrelated, that decisions made in one area affect all the others. To deal effectively with the environmental problems in any 'ecosystem' requires a holistic or ecosystem approach to managing human activities.

An ecosystem approach:

- includes the whole system, not just parts of it;
- focuses on interrelationships among the elements;
- understands that humans are part of nature, not separate from it;
- recognizes the dynamic nature of the ecosystem - a moving picture rather than a still photograph;
- incorporates the concepts of carrying capacity, resilience, and sustainability - suggesting that there are limits to human activity;
- uses a broad definition of the environment - natural, physical, economic, social and cultural;
- encompasses both urban and rural activities;
- is based on natural geographic units - such as watersheds - rather than on political boundaries;
- embraces all levels of activity - local, regional, national and international;
- emphasizes the importance of living species other than humans and of generations other than our own;
- is based on an ethic in which progress is measured by the quality, well-being, integrity, and dignity it accords natural, social, and economic systems."

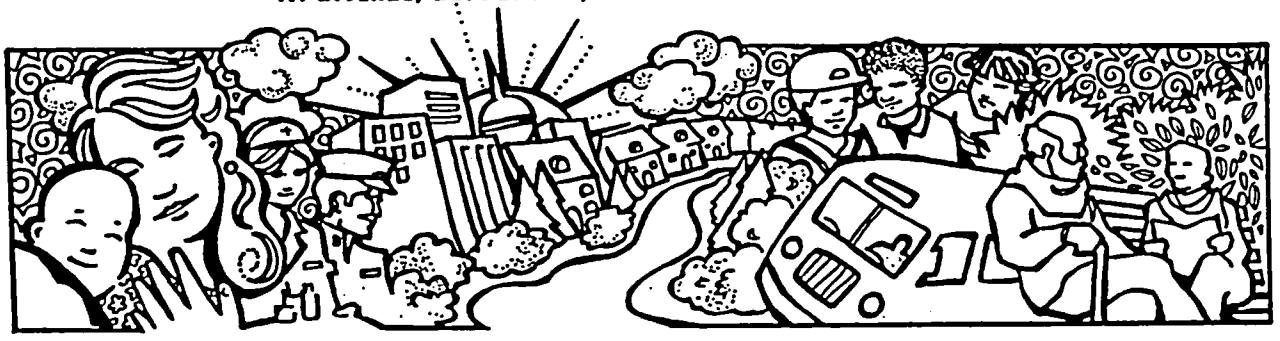
Royal Commission on the Future of the Toronto Waterfront. *Watershed*, pp.19-20

CHAPTER 4

A VISION FOR THE GTA IN 2021

Experience has shown that predictions about the future cannot be made with any great accuracy: but the future can be shaped through decisions made now. We expect the communities of the GTA to evolve in ways which are quite different from recent trends. Let's suppose that we have the power to look into the future. What would we hope to see in the year 2021, if we meet the challenges of the GTA in accordance with our values and primary goal?

4.1 DIVERSE, SUPPORTIVE, AND PARTICIPATIVE COMMUNITIES



In 2021, the GTA will be made up of diverse, supportive, and participative communities. These communities are composed of lively and compact neighbourhoods. Each community is distinctive and each is an example of harmony and vitality among people of diverse origins, traditions and ages. The essential resources for healthy living and civilized relations are broadly available.

The high quality of life in GTA communities derives from mutual support among residents, a rich array of public amenities, a stable living standard, and a clean and safe physical environment. Cultural stimulation is easily accessible: within the immediate neighbourhood; through transit to specialized cultural and social amenities dispersed throughout the GTA; and, through communication systems to communities of affinity anywhere in the world.

Increased public participation in the local planning process has produced public services, community facilities, infrastructure, and services that are more suited to local needs and better integrated with regional and inter-regional systems. Social support, community health, and other services are available either close to where people live or easily accessible by transit.

Transit has replaced the car as the preferred mode of travel in the urbanized areas, not only because it is more environmentally sound but also because it is safe, reliable, accessible, and less costly.

Decentralization of employment throughout the GTA has been encouraged by public policies and the balance between jobs and housing has improved. Most residents can now choose to live and work in the same community, if they wish.

The main streets of all communities provide housing in a compact form for a cross-section of ages, income groups, and cultures. The streets are alive with people. Diversity is celebrated and main street shops and stores prosper. Residents have a sense of safety, well-being, and belonging in the community as a result of frequent encounters and interactions with others throughout the day.

A wide variety of open spaces, from roof top gardens, interior courtyards, streetside cafés, and parks of all sizes, have been provided. The streets are lined with trees and shrubs and there are benches which encourage people to stop and rest. This allows people to enjoy the stimulus and social contact of urban areas or to escape to peaceful, tranquil surroundings.

4.2 STEWARDSHIP OF OUR ENVIRONMENT

In 2021, we have taken responsibility for the stewardship of our environment. Substantial progress toward a conserver society has been achieved, leading to significant reductions in per capita consumption of natural resources, such as energy, water, and land. The GTA no longer leads the world in the consumption of these resources. There have been significant reductions in pollution and waste generation. Industries have progressed towards zero discharge of toxic substances and have developed pollution prevention strategies to address the remaining emissions to air, land, and water.

Natural core areas such as wetlands, Areas of Natural and Scientific Interest (ANSIs), and Environmentally Sensitive Areas (ESAs), are now linked through clearly defined and protected Natural Heritage Systems. These areas have been connected by corridors such as river valleys and connecting links such as woodlands. The Natural Heritage Systems have enhanced biodiversity, ensured the unimpeded movement of plant and animal species and protected essential ecological processes and functions.

Natural filtration of storm runoff is generally provided, as well as stormwater detention ponds to cleanse and moderate flows. There has been substantial progress with the Metropolitan Toronto RAP (Remedial Action Plan) in cleaning up rivers, creeks, and the waterfront and in improving water quality. The Lake Ontario shoreline is free from serious river borne pollutants and its beaches are open all summer. Progress has been made in cleaning up contaminated soils and groundwater.

Air quality in the GTA has improved for many reasons. Industrial emissions have been reduced. Transit has become the preferred mode of travel in the urbanized areas. While the number of automobiles in the GTA has increased since 1992, they are used less frequently than had been projected in the 1980s. This along with tightened vehicular emission standards has meant that emissions from automobiles, which were the largest source of locally produced air pollution, have been cut drastically. In addition, the promotion of alternatives to the automobile such as transit, cycling, and walking have had a major impact on air quality and energy conservation.

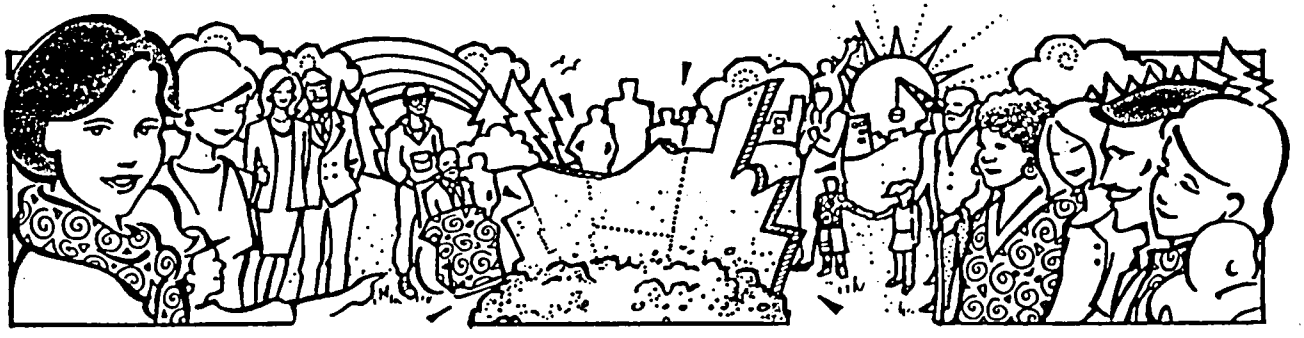
All new development is assessed for its potential to contribute to the rehabilitation of degraded areas, to restore damaged habitats, and to protect the environment. Site clearing, when it occurs, no longer takes place before this assessment has been made.

Urban design, lot layouts, and densities are now used to achieve environmental objectives such as reducing energy use and conserving water, avoiding major alterations to natural drainage systems, maximizing retention of natural vegetation, maintaining buffer zones along watercourses, continuous parkland dedication, and reserving from development all areas of environmental significance.

Buildings are well constructed and are designed to reduce pollution and promote energy efficiency in heating and cooling. They demonstrate a sensitivity to solar access, topography, and landscaping. In addition, new technology and procedures for the efficient use of energy have reduced the average household's consumption of energy, and decreased the pressure to develop non-renewable resources. Energy-related environmental problems such as smog and acid-rain are improving, making urban life more enjoyable and reducing impacts on the environment.

Development proceeds with minimal negative impact on significant cultural heritage resources. Sites highlighting Ontario's cultural diversity and proud community heritage have been developed for public education/recreation programs and for local economic development through tourism. Neighbourhood revitalization and a strengthened community identity are promoted through architectural conservation. Representative sites and landscapes are protected through voluntary stewardship programs and have been incorporated into greenlands and trail systems.

4.3 INTEGRATED GTA – WIDE STRATEGY

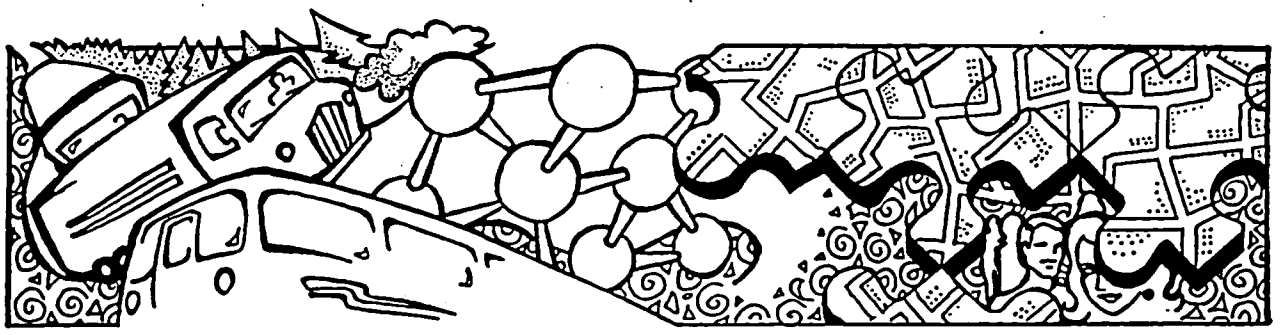


In 2021, there is an integrated strategy for the GTA. This strategy, using an ecosystem approach was developed and agreed to by local and regional municipalities, and provincial and federal governments. It has been in place since 1991 and has been updated with public input since then. This strategy resulted from wide participation by interest groups and the public. The shared vision for the GTA provides the basis for a commitment by regional and local municipal governments to the strategic action plan and to specific, desirable patterns of development such as urban nodes and protected rural areas.

This strategy permits inter-regional integration and the development of a variety of GTA-wide systems created through public and private sector efforts, including greenlands and trails, watercourses, and various types of infrastructure and services.

There is also a coordinated economic strategy which has resulted in less competition among the economic centres of the GTA and more effective alliances among GTA businesses. This has enhanced the ability of the GTA to compete in global markets.

4.4 URBAN NODES



In 2021, urban nodes are well established. These nodes are largely self-supporting in employment, housing, and social, educational, and health services. They have sufficient densities to support high-quality public transit within and between nodes. Each node has a downtown core which provides retail and community facilities, services, jobs, recreational opportunities, open space, and housing. Much of this housing is affordable. New downtown cores have formed at "gateways" where transit lines (for instance GO, subways) meet.

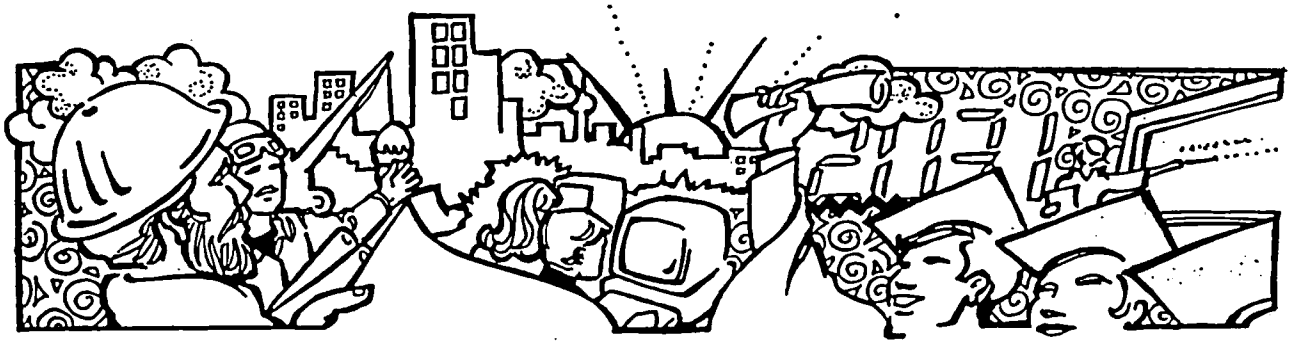
Examples of nodes include: historical centres such as Oshawa, Oakville, and Toronto; long established centres such as North York, Scarborough, Mississauga, and Etobicoke; and, recently established centres in the extreme south of the Region of York along the Highway 7 transportation corridor.

Six million people live and work in the GTA. The communities of the GTA have accommodated two million more people and provided one million more jobs. By concentrating most of the growth in these urban nodes, expansion of urban boundaries has been limited, and disruption to existing neighbourhoods minimized.

Most new houses and jobs have been created by redevelopment, revitalization, or reuse. Redevelopment of vacant or under-used urban lands including former industrial areas has resulted in high density communities. While some high-rise facilities have been built, most of the increased density has been achieved in low and medium rise communities with a mix of single and multiple housing types, clean industries, office, commercial facilities, industry, and public facilities. Despite these changes, more people now work in these redeveloped areas than during the 1990s. Main streets have been revitalized and now have an average of three storeys of residential space over one or two storeys of commercial space. Existing buildings have been reused to accommodate residential and employment purposes.

A number of smaller hamlets and towns throughout the GTA have not grown significantly from their 1992 borders, but are nonetheless, thriving communities. Some infill and intensification within certain hamlet and town limits has occurred. Concentrating development in the existing urban areas has significantly reduced encroachment and development pressure on open spaces in the GTA. Rural landscapes throughout the GTA have been preserved and protected. Restricted growth is most noticeable in the Niagara Escarpment and the Oak Ridges Moraine areas. Food production capacity for future generations has been protected by maintaining lands capable of supporting agriculture.

4.5 A PROSPEROUS SOCIETY



In 2021, effective investment in GTA-wide systems and a more efficient urban form has lowered the cost of doing business in the GTA and increased productivity. There is also a broader commitment of the public and private sectors to improved education, training, retraining, and research and development.

A stronger economy has provided a broader range of employment opportunities for the people of the GTA. A wider mix of housing and the availability of affordable and assisted housing, better designed urban environments, and an improved balance of housing and employment opportunities have improved living conditions for the people who live, work, and raise families in the GTA.

Because of strong connections to international markets, an effective urban organization, a highly trained and motivated workforce, and a diverse, but stable society, the GTA is secure as one of the foremost economic regions in North America.

CHAPTER 5

AN AGENDA FOR CONSENSUS AND ACTION

In order to realize this vision of the GTA in 2021 and to achieve the goal of creating and fostering a quality of individual and community life which is just and sustainable - socially, economically, and environmentally, current practices will have to be significantly changed. The Provincial government has been encouraged to provide the leadership which will be necessary to implement these changes.

The task ahead should not be underestimated. While many agree that urban sprawl must be stopped, policies exist which permit or encourage construction on the fringes of our urban areas. While transit is a more environmentally responsible mode of transportation, there is acceptance of continued, and even increased, use of cars. To make real gains, a process of change must be initiated which will increase understanding of these issues, seek consensus on specific actions, and build commitment on the part of governments and people in all communities.

The proposed process of change includes the following:

- building co-operation between the Province and the municipalities;
- establishing working groups to identify actions in specific areas of concern;
- stimulating widespread public discussion of the values and the vision as outlined in this document;
- preparing a strategic action plan to guide future decision making.

While the vision is being debated and the strategic action plan is being developed, the concepts in this paper will guide all provincial ministries in their activities in the GTA.

The Province believes that the only way we can be successful in achieving our goal is to adopt an ecosystem approach to planning and to concentrate growth in urban nodes. These nodes will primarily be city centres such as Toronto, Scarborough, North York, Etobicoke, Mississauga, Oshawa, Oakville, and emerging centres in the extreme south of the Region of York along the Highway 7 transportation corridor.

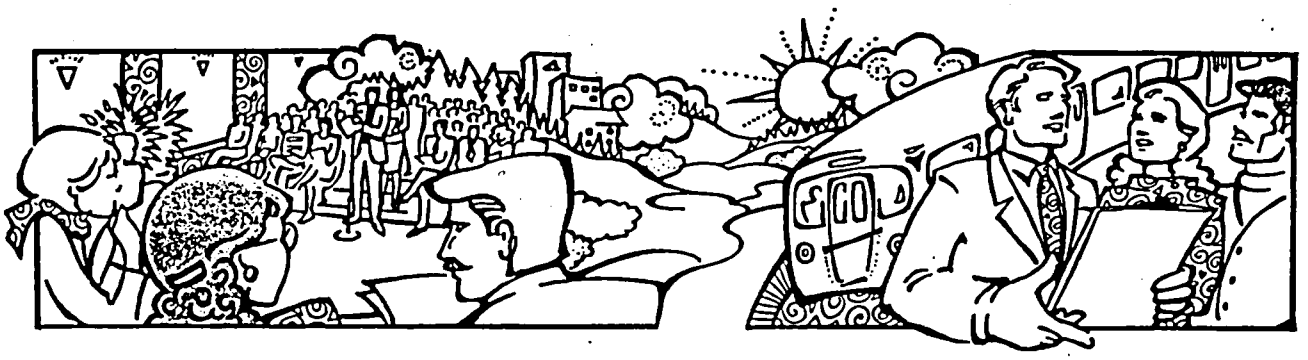
5.1 PROVINCIAL/MUNICIPAL COOPERATION

The Heads of Council Committee which includes the Chairmen of the 5 Regions and the 30 mayors of the area municipalities, will play a central role in assisting the Province in refining the vision and developing the strategy.

Discussions with the municipalities will help determine the most effective consultation process in light of the need to coordinate with those municipalities who are already undertaking official plan reviews. In addition, early in 1992, the Sewell Commission on Planning and Development Reform in Ontario will begin a series of public meetings about their draft goals. While the final Sewell report is not due to be published until June 1993, this does not preclude continuing discussions on the actions which will be required in the GTA. This is particularly the case as many of the draft goals established by the Sewell Commission are clearly supportive of the vision outlined in this document.

A means must be found so that the need for consultations on official plans, the planning process, and the future of the GTA is clearly understood. By working together with municipalities this can be done and the valuable input being received by all processes can be shared.

5.2 PROVINCIAL/MUNICIPAL WORKING GROUPS



Six Working Groups primarily composed of provincial and municipal staff have been established to consolidate work that has already been done independently in various ministries, agencies and municipalities, to give advice on the attainability of our vision, and to outline the next steps that must be taken in certain areas.

In some cases, working groups will be able to propose immediate steps to be taken. In other cases, they will provide a framework for future actions, show how decisions can be reached, and specify further needs for information and consultation.

The work of these groups will be published and circulated to provide the background for the informed public debate that will occur in the Spring of 1992. This debate must occur before a final strategic action plan can be drafted.

Each group, as a starting point, will summarize and consolidate background work which has been undertaken in their particular areas of investigation by Ministries, agencies, and municipalities. This will ensure that issues and opportunities are clearly identified. The groups will also each ensure that the terminology they are using is commonly understood. For example, "nodal" and "compact urban form" will be defined by the Urban Form working group.

A summary of the activities to be undertaken by these groups is provided below.

i. Urban Form

The vision outlined in this document requires that urban sprawl be stopped. This has been agreed to, in principle, by the five regions of the GTA. The province believes that a more compact nodal development pattern must be adopted.

Peoples' attitudes towards their living environments must also be understood so that the current quality of life will be maintained in a more compact urban form. It is necessary to respond to misunderstandings, fears, and genuine concerns about compact urban form.

This working group will identify various issues related to compact urban form including:

- regulatory difficulties;
- concerns of the building and development industry;
- non-residential aspects and implications.

The group will prepare case studies to illustrate the viability of compact urban forms of development and show how communities can better reflect the values of social equity, economic enhancement, and a healthy environment (e.g. greater diversity, improved urban design and better public transit potential). From the case studies, the group will develop criteria consistent with the values that enable the achievement of an attractive and acceptable urban form that is environmentally,

economically, and socially sustainable and that is applicable to the varying conditions within the GTA.

In liaison with other working groups, a preliminary identification of a complete system of urban nodes, consistent with the values and the criteria emerging from the case studies will be made.

ii. Countryside

Greenlands must be protected, maintained, and enhanced in order to protect the environment, quality of life, and economic health of the GTA. The Countryside Working Group, in conjunction with the Urban Form, Infrastructure, and Human Services Groups, will examine growth potential in the GTA in the context of good planning.

This group will:

- define and identify greenlands and cultural areas which require protection and formulate a strategy to protect, maintain, enhance, and where appropriate, link them;
- define and identify the range of uses which occur in the countryside (e.g. agriculture, recreation, aggregate extractions) and establish principles which will enhance the viability and compatibility of rural areas with urban areas;
- identify issues at the rural/urban interface and suggest appropriate mechanisms to address them;
- develop mechanisms for evaluating the health of the natural environment;
- formulate a strategy for defining and establishing a trail system.

iii. Human Services

In order to promote the development of healthy communities that enhance the quality of life for all people in the GTA, it is imperative that a variety of human services be available and accessible to this growing, diverse, and geographically dispersed population.

This group, which has members from various service sectors, will address ways in which accessibility, affordability, and availability of human services can contribute to social equity, enhanced employment and economic vitality, and the achievement and maintenance of a healthy environment.

Human Services include, but are not restricted to, health and social supports, recreation, learning, education, security, and protection.

The group will:

- identify the elements of healthy communities and suggest means by which healthy communities can be achieved;
- develop case studies that highlight ways to integrate human and social development planning into economic, land use, and environmental planning;
- seek ways to work with communities by suggesting processes that are inclusive and improve citizen participation and flow of information.

iv. Economic Vitality

The economy of the GTA is central to Ontario's economy and a crucial contributor to the Canadian economy. There is a serious challenge which must be faced as the result of changing economic times. The GTA has not been cushioned from the economic hardships that have faced the province and the country.

This group will consider how to:

- develop an area-wide strategy for sustainable prosperity in urban and rural areas that will encourage the retention and enhancement of existing and the creation of new, value-added jobs;
- forge new partnerships with all interested groups, including labour and business;
- coordinate government policy so that it is harmonized with other parts of Ontario.

This group will also identify the GTA's strengths and weaknesses. The strengths of the GTA will be publicized and negative impressions about our economy will be corrected.

v. Infrastructure

Improved and expanded infrastructure systems are needed to support the Province's vision for the GTA.

This group will prepare an inventory of existing and planned infrastructure. Based on the preliminary set of nodes prepared by the Urban Form Working Group, and on the inventory of environmental features prepared by the Countryside Working Group, advice will be provided on the best way to use existing and planned infrastructure and on the need for additional investment over the next 30 years.

This group is also charged with identifying how to:

- prioritize the delivery of infrastructure to help achieve the vision;
- identify and protect future corridors and land sites.

vi. Investment Planning and Mechanisms

All governments are facing unprecedented fiscal pressures. Preliminary estimates for various growth patterns for the GTA, prepared as part of the *Greater Toronto Area Urban Structure Concepts Study*, indicated that the level of required funding will be substantially in excess of current annual expenditures for all levels of government. Systems must be established to ensure integrated planning of the capital investments made over the next 30 years to support the vision. The working group set up to consider this issue will:

- recommend options for a system that integrates capital planning and sets priorities for future public capital investments in the GTA which work towards the achievement of the Vision.
- explore, assess, and recommend new mechanisms for financing public capital investment, ensuring that any mechanisms take into account the GTA's competitive position.

5.3 INFORMED PUBLIC DEBATE

A healthy and equitable society is one which encourages participation in the decision-making processes of the community. Success will depend on broad public understanding of, and commitment to, the vision and the strategy.

Consultation with and input from the public will be part of a continuing process. The first step will be widespread circulation of "GTA 2021: Meeting the Challenges: An Overview" which summarizes the values and vision from this document. Residents, community associations, interest groups, including business and labour representatives, politicians, and academic and professional institutions will be asked to suggest how this vision can be given life in the community based on their understanding of local problems and needs. Young people must also be involved as their future depends on the outcome of this process.

In addition to the circulation of the Overview document, there will be ongoing contact with the public. Newspaper articles and inserts, discussions, seminars, and community meetings will all be used in an attempt to reach and exchange ideas with, as many people as possible. As stated earlier, the vision will be tested with those whose lives and livelihoods will be affected by it. As also stated earlier, the conclusions reached by the Working Groups will be published to provide information to be used during the public debate. It is essential that these discussions and debate occur before a final strategic action plan, which incorporates individual opinions and actions, can be drafted.

The format and details of this process will be established and publicized after discussions with the municipalities.

In late 1992, after this debate, when there is a shared understanding of the vision, the Province and the municipalities will begin to prepare a Strategic Action Plan - for implementation in 1994.

5.4 A STRATEGIC ACTION PLAN

A strategic action plan for the GTA is necessary to co-ordinate activities across all municipalities and provincial ministries. It will ensure that once a shared vision is agreed to, all actions taken by municipal governments or the Provincial are mindful of this vision. The strategic action plan will provide long term stability and yet be sensitive to changing needs. It will be used as a framework to guide capital investment – ensuring that scarce resources are spent on the infrastructure needed to implement the plan. The strategic action plan will also be used as the basis for steps that can be taken by individuals, communities, municipalities, and the Province.

The details of the strategic action plan and the roles of each level of government in implementing the plan will be developed cooperatively and over time. The plan will be developed using the ecosystem approach: to incorporate a value-driven approach to planning, to consider cumulative effects, and to create a healthy ecosystem.

A framework for ecosystem based planning has already been provided by the Royal Commission on the Future of the Toronto Waterfront as noted in Chapter 3. We can use this framework as a starting point and adapt it as we develop our GTA-wide strategic action plan.

The ecosystem approach will require regular, proactive consultation and cooperation between all agencies. The strategic action plan must include procedures which will integrate actions across functions, across municipalities, and across levels of government. These procedures will ensure a broader focus for planning in Metro and in the regions of the GTA and allow for consideration of the various relationships among them. And, a new capacity to perform GTA-wide planning for those systems which are best provided co-operatively by Provincial and regional governments is necessary. For this integrated approach to planning to be successful, the Province will need to rationalize and prioritize its own policy interests.

CONCLUDING REMARKS

The Government of Ontario is encouraged by the interest in these issues and the emerging consensus about what must be done. We are confident that a cooperative approach will build commitment to our values and clarify a common vision and plan for the future. With decisive leadership, we can ensure that the future GTA is a great urban centre which respects the natural environment, contributes to a strong Provincial economy, and provides an unparalleled quality of life for its residents.

STOEL RIVES BOLEY
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August 11, 1993

Metropolitan Policy Advisory
Committee and Staff
Metro
600 NE Grand Avenue
Portland, OR 97232-2736

Re: Evaluation of Regional Growth Alternatives

Dear MPAC Members and Staff:

I am writing because I have some serious concerns regarding the approach Metro appears to be taking to evaluating the regional growth alternatives. These concerns are as follows:

1. To my knowledge, there has been no significant public and local official review and discussion, and no formal decision made, regarding the specific list of "descriptive indicators" (evaluation criteria) that apparently will be used--and apparently are already being used--by Metro to evaluate the regional growth alternatives.

In my view, how we evaluate the regional growth alternatives is just as important as the designation of the regional growth alternatives to be evaluated. A considerable amount of time and effort was exerted to obtain public and local official input and involvement in the formulation of the regional growth alternatives (via discussion work sessions of RPAC and MPAC, via meetings of Metro staff with local officials, via tabloid mailings to the general public, etc.), and there was a formal decision-making process for designating the regional growth alternatives. However, there has not been the same commitment of time and effort to obtain the same level of public and local official input and involvement in the formulation of the descriptive indicators for evaluating the regional growth alternatives, nor has there been the same formal decision-making process for designating the descriptive indicators.

This is a serious mistake, in my judgment, because unless we ask the right questions about the regional growth alternatives we likely will not make the right decisions about the regional growth alternatives. And unless we take a more rigorous, participatory, and formal approach to making sure we ask the right questions, we may end up with a set of ultimate decisions about the regional growth alternatives that are neither the correct ones nor ones that will be supported by the public.

In short, both the policy attributes and the political expediency of our regional growth alternative decisions depend on our deciding upon the evaluation criteria not by means of a technical process, but by means of a public policy process. Nonetheless, as I view the process to date, the decision on the list of the descriptive indicators to be used has been addressed primarily as if it were a technical decision requiring only initial public and local official input prior to a staff decision. As was the case with respect to designating the regional growth alternatives to be evaluated, I believe the list of evaluation criteria should be broadly distributed and publicized, discussed in detail, evaluated by MPAC, and ultimately formally designated by Metro.

2. I fear we will attempt to evaluate the regional growth alternatives at a regional, macro level without making sure that our assumptions about decision-making at the local, micro level are clear and well understood.

Whatever the list of regional growth alternative evaluation criteria we end up using, the outcomes to be considered surely will depend as much on the nature of specific land use, transportation, design, and other decisions at the local level as they will on the nature of the growth alternative decisions made at the regional level. As is commonly said these days about complex public policy decisions, "the devil is in the details". While I applaud the efforts being made by the staff to make our assumptions in this regard explicit, I think we could be setting this region up for a fall if we don't maintain our guard regarding this potential pitfall in our process.

If we make decisions regarding the regional growth alternatives based on certain assumptions about local decision-making that are not clear and well understood, then we may find out later that those assumptions were not technically or politically realistic. And at that point, the whole effort could be lost. I urge rigorous and careful attention to this aspect of the evaluation process--both as applied to the areas of the region proposed for higher density development and as applied the remaining areas of the region.

3. I have specific concerns about the list of descriptive indicators for evaluation of the regional growth alternatives that was distributed in advance of the last MPAC meeting (July 19, 1993 cover memo by John Fregonese).

Although I believe reactions to the current list of descriptive indicators should be sought from the public and local officials and carefully considered, as set out above, I do have my own personal reactions to the current list:

a. As a general comment, I find the indicators often to be overly technical in nature rather than the types of measures that citizens would understand and to which they would relate.

b. Regarding open space indicator 2c ("Comparison of acres of public open space per capita now and in 2040"), I am unclear as to the nature of "public open space". I am concerned that we measure "green relief" and access to recreation in higher density areas, as well as availability of public spaces such as public squares and promenades in our communities, in meaningful ways. I question whether we are adequately addressing these concerns in the present list of open space indicators.

c. Regarding sense of place/community indicator 4a ("Number of cities separated from all others by a district edge of nonurban land"), I don't think we are capturing all that we care about. The concern is more than separation of communities, although that is important. It also involves a distinctive sense of a public place within each community--such as a community-oriented downtown. I believe most people in the region would like to see their local downtown be viable and

vital--and want to see other downtowns in the region flourish as well, especially downtown Portland but also downtowns in Gresham, Oregon City, Lake Oswego, Beaverton, Hillsboro, etc. In my view, indicators should be added to measure this important aspect of regional sense of place and community.

d. There appears to be an inconsistency between transportation indicator 5d ("households within 1/2 mile of transit service") and land use indicator 6d ("households within a 5 minute walk or 1/4 mile of high quality transit").

e. Regarding the land use indicators, I think Metro should have a "livable community" indicator similar to those in the newest *Oregon Benchmarks* and in the City of Portland's draft benchmarks, such as:

> "Percentage of population living within one-quarter mile of all of the following: park/open space, transit service, elementary school, neighborhood commercial node, community meeting facility, bike path."

f. I don't understand why schools indicator 9a ("Estimated number of children of school age") is included. Won't this region have a given number of school age children regardless of the regional growth alternative selected?

g. I don't understand solid waste indicator 10a ("Estimated solid waste impact"). What does that mean? Isn't cost of solid waste collection and disposal the regional growth issue?

h. Regarding the water indicators, I was struck by two things. First, isn't the concern "water quality and quantity" rather than just "water quality"? And, second, shouldn't we be concerned about groundwater quality and quantity as a regional growth issue?

i. Regarding the housing indicators, I was surprised not to see affordability measures. This is a significant departure from *Oregon Benchmarks*, the draft City of Portland benchmarks, and virtually all other quality of life/community livability measures I have seen. I think the housing indicators should be revised accordingly.

j. Although there are costs of various types of services measured in the indicators, it seems to me that there are other important growth-related public service costs that should be measured, such as costs of police, fire, emergency medical, electricity, natural gas, telephone, and cable telephone. I believe such indicators should be added.

k. Finally, I am concerned that the indicators do not seem to measure the critical regional issue of the socio-economic well-being of the older parts of the region--especially the inner-city core. No one in this metropolitan area wants to have happen in this region what has happened in Detroit, Los Angeles, and other metropolitan areas in the United States. Everyone in this region will suffer, eventually, should inner-city decay occur here. I believe our regional growth planning must place an emphasis on this issue area--that this concern should be a major factor in our regional thinking. Indicators should be added accordingly.

I regret not mailing this in advance of the MPAC meeting today, but lack of time prevented me from doing so. Although I remain hopeful regarding the 2040 process, I am concerned--as I have been for nearly a year--about the specific measures the process will use to evaluate the regional growth alternatives we are considering.

Very truly yours,

James A. Zehren

JAZ:c-w

TEXTOR CONTACTS, AUG 3-16/93

Bill Boyer
Bill is an internationally known futures and political thinker and author, and Professor Emeritus, University of Hawaii. He is currently a prime mover behind efforts to add an Environmental Bill of Rights to the Oregon Constitution. Bill grew up in Portland and now lives in Sisters.

Elaine Friedman
Elaine is a Lake Oswego resident and author of the highly useful book, The Facts of Life in Portland (1993). This work is an abundant source of facts and ideas for the Commission.

Raul and Grace Guererro
The Guererros are Filipinos and prospective American citizens, and householders in Beaverton. Their skills are in business and film. They are deeply interested in Pacific Rim economic and cultural contacts.

Greg Hutchins
Greg is an engineer and former Oregonian staff writer, who has won an international reputation for his books on productivity and competitiveness. Greg has lived in Asia for a number of years.

Dave and Michiko Kornhauser
Dave is Professor of Geography, Emeritus, University of Hawaii. Michiko is a Japan-born financial planner. They are deeply involved in intercultural relations between the US and Japan. The Kornhausers live in Tigard.

Chet Orloff
Chet is Director of the Oregon Historical Society, and is planning a 2005 Lewis and Clark Bicentennial which will be characterized by unusual and highly creative combinations of historical and futures thinking.

Sumner Sharpe
Sumner is a prominent city planner and leader in national city planning professional circles. He has been involved in much futures thinking for Metronia. Sumner has a Thailand background; his firm is Pacific Rim Resources.

Kurt and Tracy Survance
Kurt is a former builder, computer services specialist, and author of a widely used software package on estimating construction costs. Tracy is developing new approaches to goal-oriented education for less privileged children.

Robert B. Textor/Aug 16,1993

Urban Streams Council
a program of
The**Wetlands**Conservancy

August 14, 1993

To: August 30th Environmental Summit Participants
From: Mike Houck
Re: Details, details, details

Thanks for agreeing to participate* in Urban Streams and Strawberry Fields Forever, Environmental Summit on Monday, August 30th. I met recently with Steve Reischman and Sally Custer of Showman, Inc., the promoters of the Rose Garden Concert Series, to iron out details for the evening. I hope this will answer all of your questions. If not, call myself (phone: 225-9916 fax: 797-1794) or Esther Lev (239-4065).

First of all, although we are co-sponsoring the event with the Portland Bureau of Parks and Recreation and Showman, Inc., the evening is really for you and your organization to get the word out to a public we might not usually reach. The primary reason we decided to work with Showman, Inc. to produce the summit is that many of us feel we preach to the already converted too often. Combining music with your conservation or agency's message is, we hope, one way to reach a different audience. In addition to having a booth space you are encouraged to sign up in advance for a 1-3 minute slot to be onstage to give your message to the audience. There will be at least two time periods (6:40 to 6:50 and 8:10 to 8:20) for an open mike. Please call me at 225-9916 to sign up.

Schedule:
Noon to 3 pm (Urban Streams Council sets up tables, chairs and awnings...volunteers are welcome to help out!)

3 pm to 4 pm Groups set up. There will be 1 parking space/group. See the attached map for the entrance. You will pick up your parking pass from the security person at the entrance to the road which winds behind the stage. The "booths" will be on the first level above the amphitheatre. Tables will be marked with your organization/agencies name. Sally asked me to remind everyone that you cannot move your table into the Rose Garden!

Tables, Chairs & Awnings: The Urban Streams Council will pick up the cost of tables and chairs. If you want an awning, however, you must reserve in advance. Cost: $40/awning. If you share with another group it will cost each group $20 (bring a check, made out to Showman, Inc., or cash and give it to Mike Houck). Showman, Inc. is providing awnings below the usual cost as a service to the organizations and agencies participating in the summit.

Post Office Box 1195
Tualatin, Oregon 97062
Phone: (503) 245-1880

Please confirm or re-confirm your need for an awning by calling Mike Houck at 225-9916.

6 pm Music Begins: Dub Squad; Quarterflash; New Moon Bluegrass; Linda Hornbuckle of the No Delay Band; Pete Droge and others.

Speakers: City Commissioners Earl Blumenauer, Charlie Hales and Mike Lindberg; Multnomah County Chair Bev Stein and Metro Councilor Ed Washington.

Open Mike: At least two time slots at 6:40 and 8:10 will be provided to local groups to address the audience (sign up in advance and keep it brief!) Call Mike Houck at 225-9916 to sign up in advance or take potluck at the event.

Sales: Your group may sell items at your booth

Refreshments: Beverages and food will be sold near the stage

Proceeds: Sale of T-Shirts and posters will go to the Urban Streams Council from Showman, Inc. and the Council will pass the proceeds on to local "friends" organizations and stream/watershed groups. We'd appreciate any assistance you can provide in selling T-shirts and posters. Last year "No On 9" raised $4,000. The art work was donated by Eva Slinker of Joseph, Oregon as her contribution to Greenspace protection.

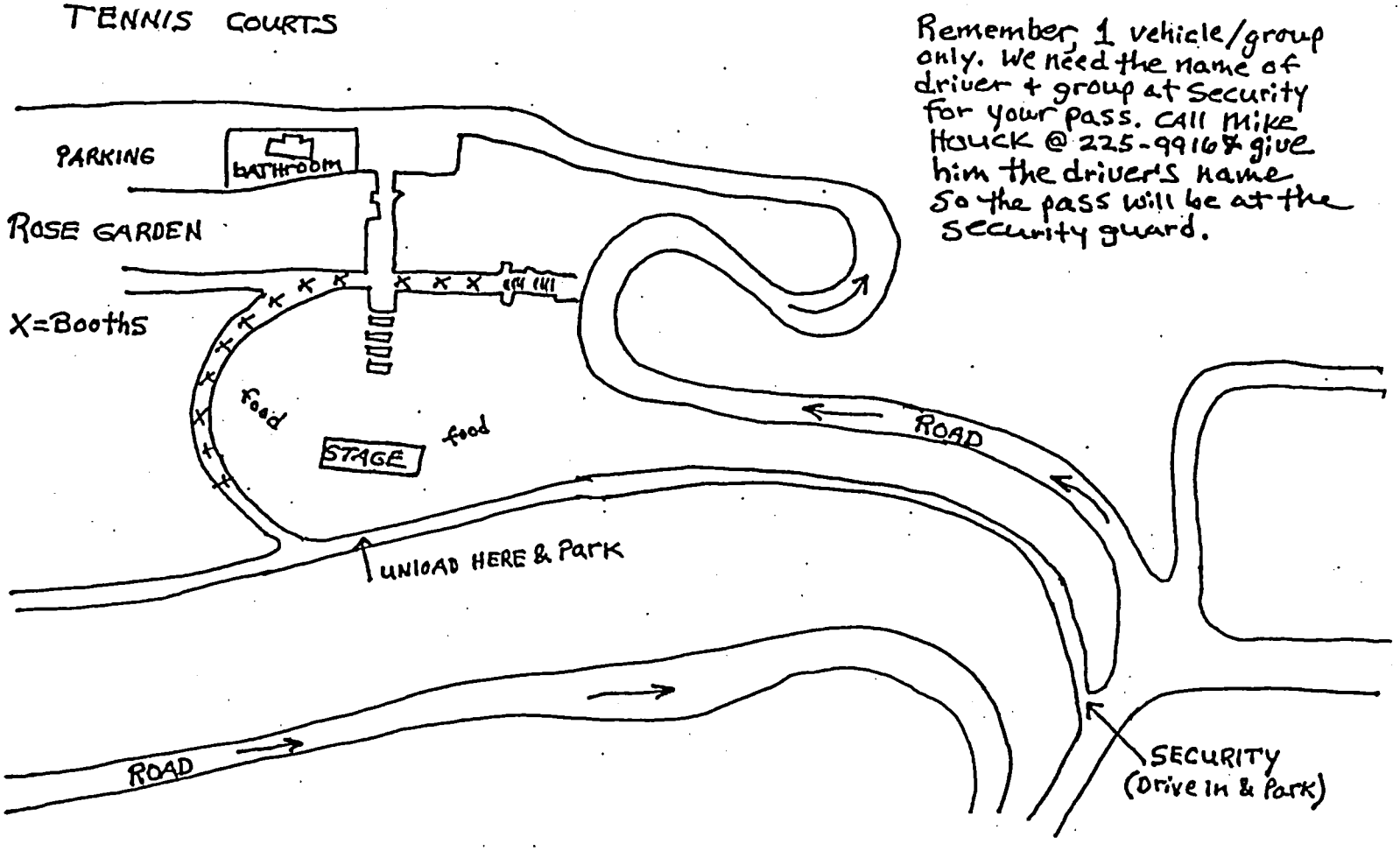
Parking: Remember, only 1 vehicle per group; we need---**in advance**---the name of the person who will be driving and they will need to show ID to the security guard. This will avoid hassles at the entrance. Call Mike to give name of driver.

Questions: Call Mike Houck, 225-9916 or Esther Lev, 239-4065.

*If you haven't signed up yet fill out the form below and mail or, better yet, **fax** it to: Mike Houck, c/o Metro 600 NE Grand, Portland, OR 97232 (fax: 797-1794)

Yes, we want to participate in the Environmental Summit. Our group/agency/ organization is _____. Our address is _____ Zip_____
Phone:_____ Fax:_____
Please reserve an awning (approximately 10' x 10') for us_____ we'd like to share with another group____ (if you've already arranged which group you'll share the awning with indicate who it is _____). The following person(s) will be at our booth _____, _____

Urban Streams Council
a program of
The**Wetlands**Conservancy



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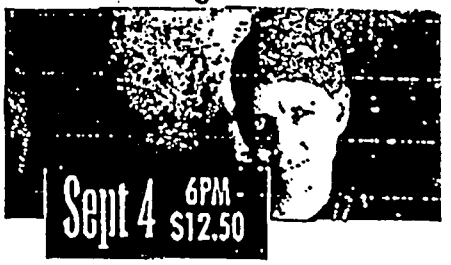
Phone: (503) 245-1880

Beausoleil & Buckwheat Zydeco

Violent Femmes

Michael Hedges & others tba



Los Lobos & Robben Ford

UB40 & The Gin Blossoms

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ROSE GARDEN AMPHITHEATRE
AUGUST 27 - SEPTEMBER 6
WASHINGTON PARK

The Oregonian

MONQUI PRESENTS A SHOWMAN EVENT

Henry's Private Reserve

GTE Mobilnet *Get Mobilized*

Latin Expression
Salsa Orchestra
August 27th FREE 6PM

Celebrate Hispanic arts & culture as the Oregon Council for Hispanic Advancement presents its 2nd annual concert featuring this 12-piece power salsa ensemble.

Marin Alsop
& the Festival of American Music
August 28th FREE 6PM

An historic retrospective concert with music from Joplin to Ellington, ragtime to early jazz of James P. Johnson's Harlem. Orchestra conducted by Marin Alsop with special guest pianists Dick Hyman and Leslie Stifelman.

4th Annual Homowa Festival
of Arts & Culture
August 29th FREE

Music, dance, food and crafts. Featuring Olu Addy, Les Tete Brulee, Okropong, Kukrudu and other special guests. Note special time 2-8 pm. Enjoy authentic African cuisine.

Environmental Summit
August 30th FREE 6PM

Strawberry Fields and Urban Streams forever. An evening to celebrate and help preserve our urban streams, rivers and grasslands. Visit various environmental booths and hear speakers from Oregon Trout, The Audubon Society, Northwest Steelheaders and local elected officials, as well as folk, rock, bluegrass & much, much more.

Woody Hite Big Band
August 31st FREE 6PM

This perennial Rose Garden favorite, Portland's premier dance ensemble returns the big band tradition to the Washington Park Amphitheater.

U.S. recording companies found whole, or in part the instrumental music for this performance as arranged by Local 99 American Federation of Musicians.

All seats are general admission. Gates open two hours before showtime. Beach blankets and sand chairs only. All shows are rain or shine. Free Parks Bureau concerts limited by park curfew. Specific parking arrangements have been made for your convenience. [illegible] NO PICNIC BASKETS, ICE CHESTS, FOOD OR BEVERAGE MAY BE BROUGHT ON PREMISES. NO CAMERAS, AUDIO OR VIDEO RECORDING. Tickets available at all Ticketmaster outlets. Charge by phone 224-4400. Tickets subject to availability.

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PORTLAND Marriott CAFE UBEDA NOODLE HEAD

Future Vision Commission
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Carrying Capacity Report

BD h:\fvc\tabcont

FUTURE VISION COMMISSION MEMBER REPORT
PUBLIC OUTREACH

Members: Please list any opportunity you have had to mention the Future Vision project to others. Also, please list TV or radio spots which you see relating to this project and enclose any news articles we can add to our files. Additionally, if there is information you wish to share with others, please either enclose or list.

DATE	EVENT	DISCUSSION	NO. OF PEOPLE

MEMBER NAME/DATE OF REPORT

FUTURE VISION COMMISSION
REGIONAL VALUES
Notes from 8/3/93 Retreat

- Pride of the region is justified
- Access to quality natural environment inside the city
- Nature needs to be within reach
- Relatively clean government
- Quality and diversity of arts
- Healthy economy
- Scale - relates to human ability to impact region
- Geography - mountains, rivers, hills
- Icons - the White Stag reindeer, Rose Gardens, Mt. Tabor, Oaks Park
- Neighborhood diversity - different lifestyle choices, but well blended
- Viable human activity centers balanced with quality natural environments
- Friendly people, spontaneous conversations

- Magnificent built environment
- Volunteerism / participation
- Old Town / Historic qualities
- Good community activities / festivals
- Time to enjoy and examine life
- Sense of civic responsibility
- Daily access to natural environment
- Natural beauty
- Modest size
- Economic / social ties to state - this is "downtown Oregon"
- Our sense of region needs to include Clackamas / Washington Counties, Vision should encompass that diversity

- Cultural diversity adds qualities to region
- Natural environment
- Quality public schools
- Sense of civic belonging
  fear: new developing areas are not part of a community
- People have a stake in their community
- Clean air, sweet water
- Neighborhoods, cities that are a place
- Clear distinction between urban and rural
- Access to many different places and activities, cultures and historic time periods
- Commitment to education
- Access to outdoor education

- Central City
- Access to U-Pick farms / Agriculture
- Pacific Rim connections
- Open space / Greenspaces
- Sense of small community / small town in a big region
- High level of citizen involvement
- Love downtown - Dislike dysfunctional suburbia
  Need to overhaul past mistakes
  Need to preserve critical resources

- Family
- Mobility of experience / go from city to rural and from mountains to beach
- Citizen voice counts
- Helping hand - citizens plus public agencies want to help each other
- Family has a broad interpretation - extended family - clusters of regional interest

BD h:\fvc\values

Remarks to the Conference on Renewable Strategies

Center for Resource Management

Santa Fe, New Mexico

Angus Duncan

Council Member

Northwest Power Planning Council

May 15, 1993

Introduction and Background

When we talk of electricity in the Pacific Northwest we still begin with the great works of civil engineering on the Columbia and Snake River systems, the Depression-era dams of the Corps of Engineers and the Bureau of Reclamation.

We are still a largely hydro-based system -- two-thirds of our energy and three-quarters of our capacity -- but the last dam of any size, Lower Granite on the Snake, was completed in 1975. In the last thirty years we have built 16 coal plants and pieces of six nuclear plants, of which only one, WPPSS #2, still fitfully operates.

Through most of the 1980's the region carried a power surplus that exceeded 3000 megawatts at times. The costs of nuclear misadventures and overbuilding in the 1970's were enormous; BPA's rate increases in the early years of the decade exceeded 450%.

In the 1990's we are romancing gas. Less than 2000 MW of current capacity is natural-gas fired today, but some 80% of planned new capacity is gas also. There is substantial industrial gas usage, and still very limited but growing direct use for residential space and hot water heating.

The 1980's have also been years of drought, which accelerated declines in Basin salmon runs. Both factors are stressing the electrical system, as river operations adjust to return flows back to the spring and summer when the fish need them, away from the winter when the needs of power users peak.

On top of this, the closure of the Trojan nuclear plant near Portland has forced the issue of capacity constraints in the Interstate 5 corridor from Seattle to Portland. Most existing -- and much of the new -- generation is found east of the Cascades, and much of it is east of the Rockies where, in both cases, access to the fast-growing loads in the west is limited by available transmission capacity.

The Power Planning Process

The historical evolution of the Northwest grid and the generation that supplied it was for decades the province of the Bonneville Power Administration and the public and private utilities and aluminum companies that comprised the market for its power. In 1980 this arrangement was dramatically changed. The Northwest Power Act of that year established the Northwest Conservation and Power Planning Council as a creature of the four States, charged with adopting an integrated resource plan for the region. The Council was accepted begrudgingly by the utility

community, which had only wanted Congressional authorization to use BPA as a financing tool for new large generation as was done for the first WPPSS projects. Congress agreed, but only on condition that the Council approve BPA's actions.

The Congress also stipulated that the region should not build conventional thermal plants until it had first acquired all the cost-effective conservation resource available, and then all the cost-effective renewable resources. In determining cost-effectiveness, the Council was to consider environmental as well as direct dollar costs; and was to quantify environmental costs wherever possible.

These rules of the road are reflected in the Council's third Power Plan, adopted in 1991. The Plan calls for meeting more than 50% of the decade's load growth with conservation, and the rest with a mix of new small hydro and gas-fired cogeneration. It also sets up an agenda for confirming three renewable resources -- wind, geothermal and solar photovoltaics -- and beginning to introduce them into the regional power pool. That agenda includes:

- o confirming the extent and quality of each of the three resources;
- o tracking the progress of technologies that harness the resources;
- o understanding how to integrate intermittent resources like wind into the existing system to capture the greatest added value;
- o building a 30 MW demonstration utility wind farm; and also a "cold weather" wind site;
- o developing three dispersed geothermal projects of at least 10 aMW@;
- o finding and developing cost-effective photovoltaic applications, mostly for electrical loads remote from the grid or where they displace long, expensive and difficult-to-maintain distribution lines.

Two years later it's clear that these goals were not ambitious enough. Instead of 30 MW of wind,. we have 180 MW under negotiation. Instead of 30 aMW of geothermal, we are pushing ahead with 90 aMW.

Where we estimated that wind would cost of 5.3¢ to 8.0¢/kWh, we now project costs of 3.5¢ to 6.1¢/kWh . . . almost 2¢ lower. With the federal tax credit and the effect of a BTU tax, on a strictly cost comparison the best sites should be competitive with gas or nearly so. And there is a technical potential for 4500 aMW of wind in and near the region.

Our estimates of the extent of geothermal potential still await better information on the resource in the Cascade Mountains, about which little is still known. But we think the costs will be closer to 3¢/kWh than the 5.4¢/kWh we estimated in 1991.

There has been some progress in deploying photovoltaic systems as the Council envisioned, mostly in Idaho Power's service territory. Cost still relegates this technology to the important but narrow niche of remote, dispersed loads such as stock watering and end-of-line farms and residences.

The region, with Bonneville and the Council leading, has established the Regional Supply Expansion Program (RSEP) as a tool for demonstrating and commercializing new technologies, including conservation as well as renewables.

A Prognostication

Given these activities, and reasonable assumptions about maturing renewable technologies and declining cost curves, where might we be at the end of the decade? Any number of places of course, but to make a point let me suggest two possible outcomes.

	"Business-as-Usual / Present technology and cost trends	Regional commitment plus major progress on barriers
Geothermal	+ 400 aMW	+1000 aMW
Wind	+ 75 aMW*	+ 250 aMW*
Solar		
Year 2000	+ 475 aMW	+ 1250 aMW
	= 20% of load growth	= >50% of load growth

(* = 300 MW and 1000 MW of installed capacity x 25% capacity factor)

Some, especially in the utility industry, would say the first outcome is impossibly ambitious. Others will argue that the second is far too timid when considered in light of global environmental stresses. Without trying to resolve these arguments, I want to focus on the space in between. What would have to be different,

in practical terms, to reach or exceed the higher target? What are the barriers, other than pace of technology and cost of installed equipment, that condemn us to *positioning* on renewables while we are *building* combustion turbines?

Inconsistent public policy, especially at the Federal level, is certainly one constraint. Federal subsidies and other forms of support have consistently favored conventional thermal technologies, while support for renewables (and efficiency) has been tepid and erratic. This has elevated the risk profile for these technologies, investors never knowing what next year's tax and depreciation schedules will bring.

But there are other barriers, closer to home, that we need to address.

Fear of Flying: Utilities and their regulators have a very low comfort level with these technologies and the apparently erratic quality of the wind and sun that fuels them. The pace of technology change is too fast, too unpredictable. After the expensive misadventures with nuclear plants, decisionmakers are wary of uncertainty, of 'stranded investment" (when better equipment appears); they are drawn to the safe harbors of burning a fossil fuel, especially when a relatively clean one is available. (We can speculate on how, say, run-of-the-river hydro might have fared as a new technology today, without the comfort of our hydroelectric history.)

Existing regulatory practices: Practices that seemed to work well for thermal and large hydro plants can handicap renewable technologies with very different characteristics.

Utilities can only earn a return on their own investments, not on purchased power (which is expensed), so contracts are discouraged that shift the renewable fuel risk to developers who know wind and geothermal well.

Regulatory discount rates tend to favor fossil fuel technologies with lower front-end capital costs, and to disadvantage capital-intensive technologies with front-end loaded costs, principally renewable and conservation investments.

We have made some progress as a region in figuring out how to properly value risk factors like short resource lead times and small/modular resource size; but precious little in fairly valuing system diversity (of technologies and fuels) and environmental costs that are not now reflected in market prices.

Competition: There are new forces at work in the energy industry, competing for traditional utility markets and putting financial stress on traditional utilities. Natural gas is competing for residential space and water heating loads; non-

utility generators (NUG's) are competing for industrial loads; and customers themselves are reaching out to efficiency and smaller-scale supply technologies that are suddenly accessible directly rather than only through the utility. These competitors often offer newer technology, more flexible ownership and capital structures, and lower front-end rates. The utility fights back by trying to hold its rates down, a strategy that discourages investments with long payback profiles. Under these influences we would be unlikely, for example, to build the capital-intensive Columbia-Snake hydroelectric system on which we rely today for our least-expensive power.

The Environmental Disconnect: The difficulties of siting new power plants (or airports; or landfills) on environmental grounds are well known. And no one should argue for lax environmental review of wind and geothermal projects; that would only lead to bad projects and a delayed reaction that over-regulates these technologies. But there's a badly tilted playing field now. Renewables tend to be located in remote locations that often have rural and scenic qualities. They also have high site-centered impacts (visual; noise) as opposed to the less visible but often more significant emissions effects of thermal plants. The resources themselves -- wind, sun, hot water -- are usually in remote sites that require transmission facilities. also with largely visual environmental effects. A combined opposition of some environmental groups with local inhabitants is potent and discouraging to developers. The result is that today it is far easier to place a 248 MW gas-fired combustion turbine in a suburban Tacoma industrial park than to site 50 MW of wind turbines on a rural ridge in eastern Washington.

System Integration Issues: There are some issues peculiar to the Northwest power system. Most of our load growth is in the I-5 corridor west of the Cascades; most new generation, including renewables, is east of the mountains. Most good wind resource is even further away, east of the Rockies in Montana and Wyoming. New transmission, or creative expansion of the capacity on existing lines, will have to accompany significant renewables development. So will getting smarter about how the new resources interact with the existing system, since the ability of the reservoirs to store new power is increasingly limited by fish needs, flood control, recreation constraints and so on. So will better understanding of the capacity value of these new resources, and training of dispatchers to fully exploit that value.

Cheap Gas: It would be churlish to complain about the price of gas being too low, but it is appropriate to measure the long-term effects of a regional rush to gas combustion turbines. Gas that is low-cost, available on relatively long-term contracts, easy to use in readily-sited, short-lead time combustion turbines, is pretty seductive. Right now it is crowding not only renewables but energy efficiency investments and even gas-fired cogeneration (which is often more efficient but more complicated to develop). Renewables have to be closer than shouting distance to gas on price and reliability in order to benefit from risk-management considerations (risk of fuel escalation; of new environmental regulation; etc.). If they are -- and some are, in good sites -- utilities and regulators have to give full weight to system diversity values. The choice shouldn't be gas *or* renewables, which now it is to the disadvantage of the latter, but building a balanced resource portfolio of gas *and* renewables.

There's a lot of detail to be managed here, and the devil's in the details as we know, but there also needs to be something to pull all those particles together, to impose a coherence and a correspondence on them; something which, for want of a less elevated term, we call a vision.

I believe most people in the Northwest would subscribe to a sustainable energy future that relies on efficiency and renewable resources. While they would not do so at all costs, neither would they want such a future to be frustrated by a pinched and foreshortened view of costs and benefits. Cost-effectiveness and reliability are prior conditions, to be construed rigorously but broadly, in a way that reflects the long-term environmental and societal values that a short-term market can miss.

We are tantalizingly close to realizing such a vision today. Geothermal and wind costs and reliability values are nearly competitive with conventional thermal generation: yes, even with gas. Wind and solar costs are still sloping downward as the technologies mature. So are costs of efficiency technologies such as HVAC control systems, lighting, motors, glazing, etc.

Utilities are "positioning" (their term) themselves to exploit these technologies, but are unwilling still to take the risks of substantial commitment. At the same time, their purchases of gas combustion turbines could smother the baby in the crib.

We're close to the top of the hill, with a lot of baggage that could keep us from

clearing the top and accelerating down the other side.

Utilities and regulators will have to be persuaded that the vision is a plausible investment scenario, and to agree on a risk/reward formula that properly values prudent, long-term risk-taking.

We need capital and ownership structures that better distribute risk, by mixing utility strengths with those of technology companies and third-party financing entities.

We need utilities and consortiums that adopt a portfolio approach to new technologies, just as a bank loan officer will have a loan portfolio with higher and lower risk instruments. He knows if all of his loans pay off, if none of them goes south on him, he's probably being too conservative. Equally, if utilities only bet on sure things they're not getting the returns they should.

Siting authorities and environmental interests need to approach siting decisions in the larger context of regional and global environmental consequences, not just those associated with the site. Both need to understand the opportunity cost of failing to untie the knot of local impact. Both need to become familiar with the particular qualities of renewable projects, and not treat them for siting purposes as odd-shaped thermal plants.

What else? Federal intervention at the margin, setting equipment standards and favorable depreciation schedules. Sharing the costs of demonstrating near-ready technologies, and sustaining RD&D support for advancing those further away. Volume purchases of small-scale technologies such as photovoltaic cells and fuel cells.

Most of the heavy lifting, however, is ours; regionally, and utility by utility, State by State, interest group by interest group. None of it is easy, but on the other hand it's a pretty short "have-to-do" list. And a pretty narrow gap to close. Some better tools, such as those I've touched on, a few successes, and a commitment to go forward with our feet firmly on the ground but our eyes on the horizon, can carry us to a future we've deliberately chosen, one we will not regret.

THE TRAVEL AND URBAN FORM IMPLICATIONS OF TELECOMMUNICATIONS TECHNOLOGY

by

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Discussion Paper for FHWA/LILP Workshop
METROPOLITAN AMERICA IN TRANSITION:
Implications for Land Use and Transportation Planning
September 9-10, 1993
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ABSTRACT

Telecommunications technology could affect travel in three ways: by substituting for travel, by stimulating new travel, and by making more efficient or in some way rearranging travel that would have occurred anyway. Collectively, these three types of effects have implications for urban form. Due to the complex interactions among those effects, however, the implications are not straightforward. Conventional wisdom holds, with reason, that telecommunications will lead to increased decentralization -- greater urban sprawl. Several points are discussed regarding that view, partly supporting and partly moderating it.

Specifically: the direct travel impacts of telecommuting are likely to be small, as are the relocation impacts of telecommuting. The impact of IVHS technology on decentralization is likely to be much greater, as more people will use IVHS, more often, than will telecommute. It is important to distinguish micro-scale decentralization (relocation to the urban fringe) from macro-scale decentralization (relocation to a different region or country); telecommunications can lead to both, but the impacts and issues can be quite different. Finally, telecommunications is only a facilitator, that permits centralization as well as decentralization; other factors actually drive and determine location decisions.

A number of research studies are suggested, involving the impacts of telecommunications in urban areas, exurban areas, as a tool for rural/small town economic development, and internationally. Several policy issues are implicit in these studies, such as the continued sociodemographic fragmentation of American society, the provision of infrastructure to support large shifts in population, and the commitment to economically viable CBDs.

THE TRAVEL AND URBAN FORM IMPLICATIONS OF TELECOMMUNICATIONS TECHNOLOGY

1. Introduction

The potential impacts of telecommunications technology on travel can be classified into three different types (Salomon, 1986). *First, telecommunications may substitute for travel.* Since much travel derives from the need to communicate information, the increased ability to communicate that information electronically rather than physically may reduce some kinds of trips. Telecommuting, teleconferencing, teleshopping, and telebanking are often-cited examples. These and other applications of telecommunications technology are even sometimes referred to as "tele-substitutions" (see, e.g., USDOT, 1993). That designation can be misleading, however, in that such applications by no means always substitute for a trip. In many cases they represent new communication that would not have occurred otherwise.

Second, then, telecommunications may generate additional travel. This stimulation may be direct or indirect. Directly, increased access to information and ease of communication is likely to increase all forms of communication -- face-to-face (requiring passenger travel), hard copy (involving goods movement), and telecommunications (Mokhtarian, 1990). For example, on-line information services may make it easier to learn about, and buy tickets for, cultural events that are then attended in person. They may also make it easier to discover people of like interests, generating travel to meet face-to-face.

Indirectly, telecommunications may increase travel in the short term by freeing up time (due to trip substitution) that may be partly used for more passenger travel. In the goods

movement area, the telecommunications-supported just-in-time inventory management system has led to more numerous and inefficient deliveries of less-than-truckload shipments (see, e.g., Gordon, 1993b). Over the long term, telecommunications may facilitate more dispersed land use patterns, that will in turn lead to longer trips. This point is addressed in more detail below.

Finally, telecommunications may modify travel that would have occurred anyway. Such modifications include making trips faster because of increased efficiencies made possible by telecommunications. Other modifications include changes in departure time, destination, mode, and route induced by telecommunications technology. Potential Intelligent Vehicle/Highway System (IVHS) applications can have these types of effects; various applications available today can have similar impacts. These trip modifications have implications for total vehicle miles traveled (VMT) as well as other trip characteristics.

Of course, the same application may have multiple effects on travel. Telecommuting may substitute for the commute trip but stimulate other travel in the time saved. Teleshopping may save the consumer a trip to the store, but generates or modifies travel for the commercial package delivery firm. Making trips faster due to IVHS may induce more or longer trips. Thus, a rigorous study of the travel impacts of telecommunications is likely to require a broad, systemwide analysis.

Collectively, these three types of effects have implications for urban form. Due to the complex interactions among those effects, however, the implications are not straightforward.

2. Telecommunications and Decentralization

Conventional wisdom holds that telecommunications will lead to increased decentralization - greater urban sprawl - with all the negatives that implies (see, e.g., Goddard and Pye, 1977; Kutay, 1986). There is sound historical reason for this belief: past transportation improvements that have increased the speed of travel have generally contributed to dispersion to lower-cost land and lower-density development on the urban fringe (see, e.g., Muller, 1986). To the extent that telecommunications is "traveling at the speed of light", it is logical to expect decentralization to result.

However, several points regarding that view deserve further discussion. These points partly support the decentralization assumption and partly moderate it.

First, the direct travel impacts of telecommuting are likely to be small in the aggregate. Individual travel impacts are substantial for those who telecommute: an average of 38 person-miles (27 vehicle-miles) per day, or 75% of total daily person-miles, according to the major empirical studies to date (Handy and Mokhtarian, 1993b). However, telecommuting occasions are likely to remain a relatively small proportion of total work occasions, even after considerable growth beyond current levels. Examining a variety of data sources, Handy and Mokhtarian (1993a) estimate that currently, 1.4% of workers telecommute on any given weekday in California. Since average telecommuting frequency is only about 1.2 days per week, this means that about 5.8% of the California workforce telecommutes at some time today. In a companion study (Handy and Mokhtarian, 1993c), they project an equilibrium level of 9.6% of the workforce telecommuting on a given weekday -- to be achieved some-

time around 2015. This translates into relative reductions in person-miles of about 7%. A reduction of this amount will be more than swamped out by overall increases in travel over the next 22 years.

Second, any negative relocation impacts of telecommuting may also be small. Empirical evidence to date is limited, since project evaluations have been short-term (one or two years). What evidence there is (Nilles, 1991; Mokhtarian, 1993) suggests that telecommuting may have helped to prompt long-distance residential moves for a minority of participants, but that based on comparison to a control group, most of those moves would likely have occurred anyway. In any case, the aggregate impact on VMT for telecommuters is still a large reduction. Lund and Mokhtarian (1993) present a simple theoretical model of the residential relocation impacts of telecommuting. They show that individual commute VMT is generally still reduced after a new (more distant) optimum residential location is found, although the reduction is of course smaller than would be the case without taking relocation effects into account.

Third, the contribution of IVHS technology to decentralization is likely to be much greater than that of telecommuting. On the one hand, there is an important discontinuity to consider: transportation improvements (even telecom-supported improvements such as IVHS) merely speed up travel, while telecommunications technology may obviate the need to travel altogether -- breaking the barrier requiring physical presence in order to communicate. This suggests that, *ceteris paribus*, a trip-substituting telecommunications application such as telecommuting will have a greater decentralizing effect on location decisions than IVHS. This may be true for those who telecommute frequently. But as indicated above, that will

probably apply to only a minority of the workforce. IVHS, on the other hand, will presumably ultimately be available to everyone (at least in metropolitan areas), for all trips, all the time. Thus, to the extent that it does succeed in speeding up travel, the effects of IVHS on urban form could be profound.

Fourth, it is important to distinguish micro-scale decentralization (relocation to the urban fringe) *from macro-scale decentralization* (relocation to a different region or country; Nijkamp and Salomon, 1989; Salomon and Schofer, 1991). Telecommunications can support both, but the impacts and issues can be quite different. For micro-scale dispersion, a major concern is increasing urban sprawl. Macro-scale dispersion, on the other hand, can be a positive force for economic development in currently under-developed areas (Parker, *et al.*, 1992). Over time, it may even serve to mitigate the growth of urban sprawl by reducing the necessity of migrating to (or remaining in) urban areas to find suitable work.

However, macro-scale decentralization raises some issues of its own. An important question is the extent to which new jobs in under-developed areas are truly new, home-grown positions (the "gardening" concept described by Niles, 1991) rather than existing jobs being shifted from elsewhere. Telecottages throughout Europe, and the rural telecommuting centers being planned in Kentucky and elsewhere (Bagley, *et al.*, 1993), attempt to emphasize new job creation, with varying degrees of success.

Job shifting can be the outcome of a process of destructive competition among regions for firm location (Niles' "hunting" concept; see, e.g., Schwartz, *et al.*, 1992). It can mean affluent professional workers moving to small resort communities in large enough numbers to drive

up land values and affect local culture (Clifford, 1989). And it can mean a loss to the U.S. economy of offshore data entry and professional jobs (see, e.g., Howland, 1993). However, even job shifting can also mean a welcome economic infusion to the receiving community, at little cost or even positive net benefit (of decreased congestion) to the donating community (see Gordon, 1993a; Spinks, 1991; and Ohnishi, 1992 for descriptions of an interesting small-scale approach in Kansas and large-scale strategies in Japan).

Finally and most importantly, telecommunications is only a facilitator; other factors actually drive and determine location decisions (Mandeville, 1983; Nijkamp and Salomon, 1989). People and firms do not move to the urban fringe, or out of the region entirely, just because telecommunications makes it possible to do so. They move because land is cheaper or labor is more plentiful or the area is scenically attractive or because of local financial incentives, or for a host of other reasons. It has been pointed out that telecommunications supports centralization as well as decentralization: modern skyscrapers would not be possible without the telephone (de Sola Pool, 1980). Pressman (1985) notes a number of forces supporting increased deconcentration, and a number of other forces supporting continued concentration. Gottman (1983) reminds us that:

> "The organization of space is man-made; it is a product of the collective will of the participants... Living and working together in compact settlements may seem unnecessary once the technology to overcome distance is well-developed. However, it does not necessarily follow that the compact city has been made obsolete and that settlements will disperse through-out the countryside. It all depends on what people decide to do."

Whyte (1976), in arguing for the continued viability of metropolitan downtowns, observes, "geometry is tough to repeal". That is, the center retains an intrinsic attraction simply because it *is* central -- closer, by definition, to more places than anywhere else. Telecom-

munications will never completely eliminate the need for face-to-face interaction or for goods movement; the agglomeration economies of urban centers will diminish but not disappear.

Thus, telecommunications will not eliminate locational advantage and completely homogenize settlement patterns. The massive already-built environment (Mandeville, 1983); the tendency of like or inter-related industries (or groups of people) to cluster together (Muth, 1985); distinctive geography, climate, and other amenities; differences in infrastructure capacity and topology; and the role of cities as cultural, political, and economic centers (Meier, 1962; Gottman, 1983) are only some of the reasons why not all locations are created equal.

Depending on how the decision variables are weighted in each instance, the optimal location for a particular individual or firm may be the urban center, the urban periphery, or an exurban or rural area. But *most* location choices are likely to be incremental accretions to where *most* activities are currently located. Thus, we are likely to see simultaneously, continued growth in metropolitan areas (though not necessarily in their centers), emergence of multiple nuclei in expanding metropolitan areas, growth of smaller cities into regional hubs and specialized centers, *and* some movement into currently rural areas. An important question for policymakers is whether these incremental accretions will propagate sprawl even more widely, or whether they will be channeled into more efficient higher-density, balanced land use, and infill development patterns.

Public policy decisions have historically had an important impact on the viability of central business districts (CBDs) in particular, and on urban form in general. Governments have wielded their zoning authority to block or downsize development in the face of favorable market forces. Conversely, they have also attracted development through tax breaks, provision of infrastructure, and other incentives (Giuliano, 1989). Today, policy choices can help determine the extent to which telecommunications technology will support increasiing decentralization, and decreasing density of development.

3. Research and Policy Issues

A number of research studies would be of value in increasing our understanding of the impacts of telecommunications technology on urban form. Space permits only a brief mention of the possibilities; each suggestion below carries within it numerous specific questions of interest.

In *urban areas,* we could

- track telecommuters longitudinally to assess long-term impacts on residential location, job choice, and travel;

- continue to study the role of telecommunications in business location and relocation decisions;

- analyze the short- and long-term transportation impacts of those business decisions; and

- explore ways to strengthen the role of telecommunications infrastructure in supporting the urban core.

In *exurban areas,* we could

- monitor telecommunications-facilitated residential and business relocation to high-amenity areas such as resort towns.

Regarding the use of telecommunications for *rural and small town economic development,* we could

- learn more about successful "gardening" (local job creation) projects;

- demonstrate and evaluate rural telecommuting centers as in Kentucky and elsewhere; and

- analyze the success of job shifting strategies such as those being followed in Kansas and Japan.

Internationally, we could

- monitor the location of firms and employees offshore, with distinctions between the situations for data entry workers and skilled professionals likely to be of interest.

Any number of policy issues are implicit in these studies. One such issue is the ability (and desirability) to provide infrastructure to support large shifts in population to the urban fringe or to exurban areas. There is also an equity issue: the greater ability of middle and upper class workers to live anywhere they choose will contribute to the ongoing sociodemographic fragmentation of American society. And, how to achieve or maintain economically viable CBDs will continue to be a concern.

Once again, telecommunications is only a supporting player in these policy discussions. The ability of the affluent to segregate themselves is not new to advanced technology, for example, but has been around since the first zoning laws and before. We need to address the deep-rooted causes of moribund central cities, not the symptoms. Our challenge, then, is to use technology as a tool to help achieve positive public goals. Unchecked urban sprawl is not the inevitable consequence of telecommunications technology. But it may well be the inevitable consequence of poor planning.

ACKNOWLEDGEMENTS

Helpful comments on a draft of this paper were provided by Jill Mannering, Ilan Salomon, and Ben Chinitz.

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