

Making a Difference with Metropolitan Strategy: Overseas Evidence

Neil Sipe and Brendan Gleeson



Urban Policy Program

**Research Monograph 2
July 2004**

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Table of Contents

List of Boxes, Figures & Tables.....	vi
Executive Summary	1
1. Introduction and Methodology	4
1.1 Aim and Structure of the Paper.....	4
1.2 Methodology	4
1.3 Study Team	4
2. United States & Canadian Views	5
2.1 Differences between Australia and U.S. Planning	5
Land use controls	5
Infrastructure Provision.....	6
Transportation Funding	6
Retail Centres.....	6
Race	7
Location of state capitals and universities	7
Summary	7
2.2 Public and Community Sector Views	7
Metropolitan Planning Organisations (MPOs)	7
Growth Visioning	8
Metropolitan Planning Initiatives.....	11
Atlanta	14
Chicago	14
Houston.....	15
New York.....	16
Greensward Campaign.....	17
Centres Campaign.....	17
Mobility Campaign	17
Portland.....	18
Salt Lake City	19
Vancouver	21
Smart Growth	22
Summary	23
2.3 Specialist Analysis	24
Costs of Sprawl	24
Costs of Sprawl – Revisited.....	24
Costs of Sprawl – 2000	26
Positive Impacts	26
Fiscal/financial impacts.....	26
Transportation impacts	26
Land/resource production impacts.....	26
Environmental pollution impacts.....	26
Social/Quality of Life impacts	26
Total Cost / Impact	28
Savings.....	28
Summary	28

3. European Views	29
3.1 Scholarly Views.....	29
Williams (1999) Metropolitan Governance and Strategic Planning.....	34
D.R. Diamond (2002) Managing the Metropolis in the Global Village.....	34
Salet, et al. (2003) Metropolitan Governance and Spatial Planning	34
Summary	36
3.2 Public Sector Analyses	37
Propolis	347
METREX	347
European Spatial Development Perspective	38
London	38
Summary	39
References.....	40
Appendices	49
Appendix A: Livable Region Strategic Plan Program Monitoring Summary .	49
Appendix B. The PROPOLIS Approach, Process and System	50
Appendix C. PROPOLIS Project Components.....	481
Appendix D. Indicative List of Urban Sustainability Indicators for Propolis Project.....	492

List of Boxes, Figures & Tables

- Table 2.11 Australian and United States Planning Differences
- Table 2.21 Visioning Efforts in the United States
- Table 2.22 North American Regional/Metropolitan Planning Initiatives
- Table 2.23 Comparison of Scenarios in the Chicago Metropolis 2030 Plan
- Table 2.24 Cost Estimates for Selecting Portions of the New York Plan
- Table 2.25 Revenue Estimates to Finance the New York Plan
- Table 2.31 Negative and Positive Impacts of Sprawl
- Table 2.32 Cost / Impact Savings of Controlled Growth 2000-2025
- Table 3.11 Critical Dates in Metropolitan Planning for London

EXECUTIVE SUMMARY

This paper reviews North American and European metropolitan planning. It presents for Australian consideration the major forms and effects of such policy.

Differences between Australia and U.S. Planning

- While there are many similarities between U.S. and Australia metropolitan regions, there are some fundamental differences in planning context. These include: strength of land use controls; the level of government providing basic infrastructure; transport funding; planning for retail centres; the impact of race on metropolitan form; and the location of state capitals and universities.

Public and Community Sector Views in the U.S. and Canada

- Early metropolitan planning was, for the most part, a response to inefficient transport flows. By the 1970s a number of Metropolitan Planning Organisations (MPOs) had formed to address (mainly) the rising physical and time separation between work and home.
- Subsequently, *growth visioning* emerged as a popular means for thinking about metropolitan planning. Visioning establishes a (consensus) view of a desirable future and then plans to make it a reality. In the majority of cases population growth has been the primary motive for visioning.
- The common themes of effective U.S. visioning include: the importance of early leadership; developing a clear process; getting elected officials on-board early; and using good quality data.
- Metropolitan planning in the U.S. and Canada has been driven by both (i) government bodies and (ii) community organisations and coalitions.
- Metropolitan planning in Portland, Vancouver and Atlanta is structured around formal regional governance and has matured to the point that meaningful plan evaluation is being done – in some cases on an annual basis.
- Recently, “smart growth” has been advocated as *the* solution to urban sprawl. “Smart growth” is a bundling and re-packaging of time honoured urban planning principles.

The Costs of Urban Sprawl the U.S.

- Urban expansion is the primary dynamic of most North American metropolitan regions. For the last 30 years the consequences of over-expansion, of urban sprawl, have been of keen interest. A recent review of the U.S. literature counted 475 studies of urban sprawl. Most, however, lacked either a comprehensive approach or an empirical base.
- In the U.S. the potential costs of sprawl for the 2000-2025 period have recently been evaluated (*Costs of Sprawl – 2000*). A controlled growth scenario and an uncontrolled growth scenario were projected. The controlled growth scenario resulted in: (i) 4 million fewer acres being developed, (ii) savings of \$US 126.2 billion in infrastructure and service costs, (iii) savings of \$US 420 billion in real estate development costs, (iv) 50 million fewer miles driven, and (v) savings of \$US 24 billion in personal travel costs.
- The overall conclusion of the *Costs of Sprawl – 2000* was, sprawl generates more costs than benefits and while the impacts of sprawl are not as bad as generally portrayed in the popular press, they are an unnecessary and increasing drain on financial and natural resources.

Scholarly Views of European Metropolitan Planning

- In the developed world the demands of the global economy have renewed interest in urban planning. Cities use urban plans as competitive bids to attract international business.
- Typically, metropolitan planning in London, Singapore and Sydney has focused on economic issues to the exclusion of social and environmental concerns.
- The limited social dimension of much European metropolitan planning is matched by a limited spatial scale. In the case of London, metropolitan planning is confined to the area inside the greenbelt and excludes the much larger journey-to-work catchment.
- Metropolitan planning straddles a political and ideological paradox. Many governments stress the general merits of deregulation and local control. At the same time central planning is advocated as a critical element in metropolitan planning and the search for (global) competitive advantage.
- While the form of government is often reorganised to plan for a changed spatial configuration, Salet *et al.* (2003) argue the alternative merits of a stable government structure providing flexible policy.
- A 19-city review of metropolitan governance and spatial planning suggest good practices can be very different – one size does not necessarily fit all. Such complexity needs teamwork. "The institutional problem is not so

much the fragmentation of policy actors as the disconnectedness of learning practices and policies". (Salet et al., 2003:377)

Public Sector Analyses of European Metropolitan Planning

- PROPOLIS is a multi-year project of the European Union. It models land-use and transport to test policy options in a range of seven (small, medium and large) European cities.
- METREX is a network focussed on spatial planning and metropolitan development. The network is currently involved in projects to: extend the understanding and use of best practice in metropolitan planning; help metropolitan regions realise their potential for cooperation; and examine issues related to social inclusion.
- The European Spatial Development Perspective (ESDP) aims to retain metropolitan cultural variety in spatial development policy while at the same time achieving balanced and sustainable development.
- Recent Metropolitan planning in London projects population and economic growth. This planning began with *Towards the London Plan* in 2001 and will be concluded with the *Final London Plan* (hopefully in late 2003).

1. Introduction and Methodology

1.1 Aim and Structure of the Paper

This paper reviews the major forms and effects of metropolitan planning in North America and Europe. Its aim is to critically inform an Australian audience of metropolitan policy options.

The overseas evidence is described in two sections.

1. **Evidence from the United States (U.S.) and Canada.** The fundamental differences between planning in North America and Australia are discussed. Metropolitan planning, from both a public sector and community perspective, is examined under the topics: Metropolitan Planning Organisations (MPOs); growth visioning; metropolitan planning initiatives; and the smart growth movement. A review of specialist analysis, the most significant being the costs of urban sprawl, concludes the section.
2. **Evidence from the United Kingdom (U.K) and Europe.** Public sector initiatives, namely Propolis, Metrex, the European Spatial Development Perspective and the London spatial plan, are examined. An account of academic views on metropolitan spatial planning concludes the evidence.

1.2 Methodology

The research is based upon reviews of secondary material – primarily metropolitan planning documents. These sources are supplemented with scholarly publications in the form of journal articles and book reviews.

The literature reviewed in this report is not statistically selected. The evidence is, therefore, not representative of contemporary practice. Evidence is selected to represent the greatest social *range* of interest(s) in metropolitan planning.

1.3 Study Team

This research paper was prepared by Neil Sipe of the School of Environmental Planning and Brendan Gleeson of the Urban Policy Program.

2. United States & Canadian Views

2.1 Differences between Australia and U.S. Planning

Among many planning professionals and academics there is a belief that trends of growth and development in U.S. metropolitan regions will eventually show up in Australian cities. This assumption should be treated with caution. While there are obvious similarities between the countries and their metropolitan areas, a deeper examination suggests there are at least as many differences as similarities. In many cases where there are similarities the trend in Australia tends to be muted. For example, the steady decline in public transport use due to the introduction of the motor car is common to both Australia and the U.S. The erosion, however, is less pronounced in Australia.

Table 2.11 summarises some of the fundamental planning differences between the two countries.

Table 2.11 Australian and United States Planning Differences

Element	Australia	United States
Land use controls	Strong	Weak
Infrastructure provider	State government	Local government
Local government competition for development	Generally not a concern	Very important
Transport funding	Compete with other needs	Dedicated revenue source (highway trust fund)
Retail centres	Planning	Unplanned
Racial tensions	Not present	Present
Location of Major universities	Major cities	Small college towns
Location of state capitals	Major cities	Smaller cities

Source: Derived from Gleeson & Low (2000), Freestone & Murphy (1998) and Mees (1998)

Land use controls

In Australia, State and Local Government control of land use development is significantly stronger than the U.S. This critical difference is noted by Gleeson and Low (2000), Freestone and Murphy (1998) and Mees (1998). While there is no shortage of plans in the U.S., not only is the desire to implement them generally weak but the system of infrastructure provision works against land use control.

Infrastructure Provision

In Australia the State Government provides most physical and social infrastructure. Its responsibilities include roads, water and sewer, police, emergency medical, hospitals, etc. In the U.S these provisions are, for the most part, the province of local government. The State Government's major infrastructural task is the development of higher-level transport networks. The lack of State fiscal support of infrastructure obliges local governments in the U.S to compete for new development, to increase property taxes and provide funds for development needs. Such competition makes the regulation of land-use development, as it is practiced in Australia, very difficult, if not impossible.

Transportation Funding

U.S. petrol taxes are paid into trust funds dedicated to highway construction. This establishes a growth feedback loop. The more roads that are built, the more people are encouraged to drive, the more petrol is bought, the more tax is paid, into trust funds – used for highway construction. Unsurprisingly, in the last century there was a great deal of road building in the U.S. Infrastructural provision allowed development to sprawl along the many freeways and beltways that encircle most metropolitan areas. The ISTEA (Intermodal Surface Transportation Efficiency Act) and TEA-21 legislation have, in the last decade, attempted to dampen the development dynamic. A portion of trust funds must now be spent on public transport and slow transport modes (cycling and walking).

In Australia fuel tax is part of the general Commonwealth fiscus. Transport agencies must compete for these funds along with all other government departments. In comparison with the U.S., the portion of fuel tax available for road construction and, consequently, urban sprawl is significantly reduced.

Retail Centres

The locations of most major U.S. retail centres are socially unplanned. Centre sites are determined in the market, where private developers must assemble sufficient land at an economic price. In contrast most retail centre sites in Australia are provided for around transport infrastructure developed by State Governments (see Mees 1998). Consequently, as Freestone and Murphy (1998) argue, the U.S. edge city phenomenon (see Garreau 1988), found on peripheral land, is not really present in Australia.

Race

One of the primary factors responsible for the sprawling U.S. city is the desire of white households to move out of the city and away from the low income and predominately black/latino inner city. Australian cities couldn't be more different. The inner city is generally a high income, highly desirable area, while low income areas are usually located in the suburbs. (See more discussion of this issue in the *Costs of Sprawl –2000* section).

Location of state capitals and universities

In the U.S. many state capitals, determined before the maturation of the industrial space economy, are located in secondary cities. The same is true of many large public universities. In Australia, with its much narrower urban hierarchy, regional government and major universities are located in the largest cities of each state (see Mees1998).

Summary

In terms of planning there are significant differences between Australia and the U.S in: the strength of land use controls; the level of government providing basic infrastructure; the funding of transportation and the degree of planning for retail centres. While the space economy of the two nations have many similarities there are major differences in the impact of race on metropolitan form, and the location of state capitals and universities.

2.2 Public and Community Sector Views

Metropolitan Planning Organisations (MPOs)

In the early 1970s the U.S Federal government required urbanised areas with a population of more than 50,000 to establish Metropolitan Planning Organisations (MPOs) – if they were to receive Federal transportation grants. The MPOs were largely comprised of local elected officials. Solof (1997) explains: “Congress hoped MPOs would help build regional agreement on transportation investments that would better balance highway, mass transit and other needs and lead to more cost-effective solutions to transportation problems”. Initially most of these MPOs were positioned in regional administrations. Today more than half are either free-standing or located in a local government agency.

During the Reagan years (the 1980s) the roll-back of Federal Government reduced the effectiveness of MPOs. The enactment of ISTEA in 1991, however,

gave MPOs new life. The goal of ISTEA was to improve “transportation not as an end in itself but as the means to achieve important national goals including economic progress, cleaner air, energy conservation and social equity. ISTEA gave MPOs increased funding, greater authority to select projects and mandates for new planning initiatives within their regions.” (Solof 1997)

Growth Visioning

In the last decade visioning has become a popular means of thinking about regional and metropolitan planning. Traditional planning predicts future conditions based on past trends. It works from grounded conditions to strategy. Visioning proceeds in the opposite direction. It establishes a preferred future image(s) for a region and then works up a strategy to realise the vision.

Table 2.21 below summarises a number of recent high profile visioning exercises in the US. The research was conducted by the Southern California Association of Governments (SCAG 2001) to assist their multi-year growth visioning program. The table records:

1. A brief description of the region in terms of population, area and number of local governments.
2. What group/organisation initiated the process.
3. What group/organisation led the process.
4. Some indication of how successful the process was – any positive results attributable to the visioning process.
5. What lessons can be learnt.

Table 2.21 Visioning Efforts in the United States

Name	Region Description			Motivation/s for Vision process	Who Initiated/ led the process?
	Population (millions) Size (sq km)	Funding	Local Govts		
Atlanta (Georgia) – Vision 2020	3.2 7,770	\$1.1 million + \$800,00 in-kind donations	10 counties; 64 cities; 48 superdistricts	Needed broader inputs into the Regional Development Plan for Atlanta Region	Executive Director of the MPO 15 regional leaders with Governor as chair (no elected officials)
Baltimore (Maryland) – Vision 2030	2.5 N/A	\$500,000 over 18-month period	5 counties; 2 cities	Lack of public involvement in MPO planning efforts for the region. Federal Govt threatened to withhold funds this issue was not resolved	Baltimore Metropolitan Council 35 people from public & private sectors (no elected officials)
Bay Area (San Francisco, California) – Regional Livability Footprint	6+ 18,129	\$1.4 million	9 counties; 100 cities	Desire to development a more sustainable land use model for future growth in the Bay Area	Bay Area Alliance for Sustainable Development (NGO) Broad-based steering committee made up of business and NGO leaders
Denver (Colorado) – MetroVision 2020	2 13,146	\$200,000/yr over 4 years	8 counties; 49 cities	Rapid population growth combined with concerns that the region could lose Federal funds for transport due to air quality problems	Denver Regional Council of Governments Began with 45 and ended with 20 people from public and private sectors
Salt Lake City (Utah) – Envision Utah	1.6 829	\$ 7 million over the 1996-2001 period	10 counties; 89 cities	Concerns about the impacts of unconstrained growth combined with the Bank of American report “Beyond Sprawl”	Coalition for Utah’s Future (public/private org) 140 regional leaders from public & private sectors

Table 2.21 Visioning Efforts in the United States (continued)

Name	Region Description			Motivation/s for Vision process	Who Initiated/ led the process?
	Population (millions) Size (sq km)	Funding	Local Govts		
Phoenix (Arizona) – Valley Vision 2025	2.7 8,417	\$600,000 per yr for 2 years	1 county; 24 cities; 2 Maricopa Indian Communities	Concern about the Impacts of rapid growth	Maricopa Association of Governments 80 regional leaders from public & private sectors (appointed by the MPO Regional Council)
Portland (Oregon) – Metro2040	1.3 954	N/A – Use combination of excises taxes, special taxes, grants and federal (ISTEA) funds	3 counties; 24 cities	Concerns about the impacts of growth on traffic congestion, open space and housing costs	Metro (regional govt)
Puget Sound (Seattle, Washington) – Vision 2020	3 3,030	N/A/ - Integrated with MPO budget	4 counties; 82 cities	Need for long term integrated planning for transportation	Puget Sound Regional Council MPO
San Diego, California – Region 2020	2.8 10,877	MPO budget for Region 2020 effort was \$400,000/yr over a period of several years	1 counties; 18 cities; 92 unincorporated communities	Concern that the projected growth for the region could not be accommodated	SANDAG (San Diego Association of Governments) MPO

Source: Based on data contained in SCAG (2001)

Summary

The primary motivation behind the large majority of the visioning initiatives (6 of 9) is rapid population growth. In the remaining cases the impulse is more abstract and relates to broadening the planning range of MPOs. The expansion of MPOs beyond their traditional realm of transportation is reflected in their lead role in many of the visioning projects (e.g., Atlanta, Phoenix, Portland, Seattle, San Diego).

A number of common themes emerge as pivotal to the success of visioning.

- **Leadership:** early leadership is important (Baltimore); leadership can move mountains (Denver); leadership is critical (Salt Lake City); top-down vision needs strong leadership (San Diego).
- **Process:** need to set up a sustaining structure (Atlanta); persistence is important (Denver); process problems should be addressed early in the effort (Phoenix); problems and concerns should be addressed early in the process (Portland); develop a clear process and communicate it (San Diego); don't be afraid to stop and change the process (San Diego).
- **Local elected officials:** identify key players and get them on-board early (Baltimore); get local elected officials on-board early (San Francisco); one-to-one discussions with elected officials was critical to get buy-in (Portland); involve key Local Governments (Phoenix).
- **Data:** use good quality data (Atlanta); substance matters – MetroVision included enough detail to be meaningful (Denver); get the right data – don't try to cobble something together (Salt Lake City).

Metropolitan Planning Initiatives

The metropolitan planning initiatives reported in Table 2.22 below have been selected for their diversity. Institutional/legal status constitutes a first divide. The Chicago, Houston, New York and Salt Lake City plans are led by community/non-governmental organisations. Planning for Atlanta, Portland and Vancouver is vested in regional/metropolitan administration.

Table 2.22 North American Regional/Metropolitan Planning Initiatives

Region	Initiative Name / (Reference)	Population (millions)	What is noteworthy about this initiative?
Atlanta (Georgia)	Georgia Regional Transportation Authority (Georgia Regional Transportation Authority 2001)	3.2	<ul style="list-style-type: none"> • Unique because the establishment of this authority was prompted by the withholding of Federal transport funds because the region was consistently exceeding air quality standards (due primarily to auto emissions) • Recommended by the Metro Atlanta Chamber of Commerce • Authority established in 1999 and given broad land use and transportation planning powers
Chicago (Illinois)	The Metropolis Plan (Chicago Metropolis 2020 2001)	7.2	<ul style="list-style-type: none"> • Unusual because it was not subject to intensive public participation – written by one individual • Sponsored by the Commercial Club of Chicago – an elite downtown business group. This group also sponsored Daniel Burnham’s 1909 Chicago Plan • Plan is noted for its coherence, clarity and compassion by Yaro (2002)
Houston (Texas)	The Houston General Plan/BluePrint Houston (Houston 2025 Committee 2002)	4.9	<ul style="list-style-type: none"> • Initiative is to develop a general plan for the region in which the primary city, Houston, does not have a plan or zoning • Focuses on the City of Houston, not the entire metropolitan region

Table 2.22 North American Regional/Metropolitan Planning Initiatives (continued)

Region	Initiative Name / (Reference)	Population (millions)	What is noteworthy about this initiative?
New York (New York)	A Region at Risk (Yaro 1996)	20+	<ul style="list-style-type: none"> • The largest region examined comprising 3 states, 31 counties, 800 cities across more than 33,500 sq km. • Long history of successful regional planning dating back to the first 1929 plan • A regional plan that is treated like a book
Portland (Oregon)	The Nature of 2040 (Metro 2000)	1.3	<ul style="list-style-type: none"> • The only elected regional council in the U.S. • One of the most successful metropolitan planning efforts in the U.S. • Urban growth boundary established in 1979 • Monitoring report provides clear evidence of the difference that planning can make
Salt Lake City (Utah)	Envision Utah (Envision Utah 2000)	1.6	<ul style="list-style-type: none"> • Changed organisational focus from stimulating economic growth to regional growth management • Changed attitudes and perceptions about regional planning in a short time (5 years) • Envision Utah is both a process and an organisation
Vancouver (BC)	Livable Region Strategic Plan (Greater Vancouver Regional District 2001 & Sustainable Development Research Institute)	2+	<ul style="list-style-type: none"> • Plan is now 5 years old • Serves as a model for other strategic planning efforts • Innovative techniques (in the form of the QUEST computer model) to promote public dialogue on alternative regional futures

Atlanta

In the late 1990s the Federal Clean Air Act allowed the Federal Government to withhold transportation funds from metropolitan regions that did not meet air quality standards. The Atlanta metropolitan region was a “non-attainment” area, with much of the problem attributed to auto emissions. Atlanta, where per capita driving is estimated to be 35 miles per day, has the highest auto use of any major city in the U.S.

The loss of funds for new highway projects and the negative publicity associated with poor air and traffic congestion, prompted the State of Georgia, in 1991, to establish the Georgia Regional Transportation Authority. The GRTA was given broad powers over land use planning and transportation matters, including:

- approval authority for Georgia Department of Transportation projects in the 13-county region.
- approval authority for major development project with regional impacts.
- oversight of Local Government compliance with State land use planning requirements.
- authority to issue up to \$1 billion in revenue bonds and \$1 billion in general obligation bonds to finance projects to alleviate air pollution

The combination of transport and land-use planning in the GTRA is a significant departure. It is the traditional U.S. norm, at both state and local level, to keep them separate - thus compounding the traffic problems that plague metropolitan areas.

The GRTA claims air quality, particularly ozone levels, have improved steadily over the past three. The improvement is attributed to:

- reduction in per capita vehicle miles travelled.
- favourable weather conditions.
- less older (more polluting) cars.

Chicago

In 1909 the Commercial Club of Chicago commissioned Daniel Burnham to write a Plan for Chicago¹. The present Chicago Metropolis Plan was also

¹ That plan received the Urban Land Institute’s Award of Excellence in 2000. The official statement on the award is provided below.

“Since its adoption in 1909, the Burnham Plan has been the bible of urban development in Chicago. It celebrates both open spaces and edges and dignifies form and function alike. It also reinforces important principles of planning—such as the idea that cities need taming and nurturing—as well today as it did at the turn of the previous century. That the Commercial Club civic organization proposed and championed the plan over the years symbolizes the private sector effort that is inherent in city planning.” (Takesuye 2001)

funded by the Commercial Club of Chicago and written by one individual, Elmer Johnson². Against the modern trend there was no intensive public consultation. Instead town meetings were held around the region and a public opinion survey was conducted of 1,450 residents. The Chicago Metropolis Plan has, in short, been developed against the grain of much of the received wisdom about the necessity for broad-based, democratic planning. Yet, Yaro (2002), a co-author of *The Region at Risk*, the third plan for the New York region, finds the plan clear, coherent and compassionate.

For a regional plan to be effective it must: “first [] raise sights and change values, and second [] create a broad framework for ongoing regional development” (Yaro 2002). It is too soon to tell whether the Metropolis plan will be effective. Yet, already it has gained sufficient respect to be used as a model in other metropolitan regions of the U.S. and overseas. The Metropolis Plan is available in book-form and is sold by major booksellers (including Amazon.com).

The Metropolis Plan uses a suite of three computer models to compare a broad range of scenarios including a “business as usual” scenario and “the Metropolis Plan” scenario. An econometric model estimates total growth in population and jobs. The population and job increments are distributed by a land use model on quarter-acre grid cells. Finally, a transportation model estimates trips by transport mode. The two base scenarios are compared below.

Table 2.23 Comparison of Scenarios in the Chicago Metropolis 2030 Plan

Criteria	Baseline	Business as Usual	Metropolis Plan
Open space developed (sq miles)		489	188
Hours spent in cars per year	319	399	244
Congestion delay (minutes/person/day)	15.4	27.2	8.7
Local infrastructure costs (water, sewer, streets)		\$8.2 billion	\$4.5 billion

Source: Chicago Metropolis Plan 2002

Houston

Houston is included in this report because traditionally it has had no formal planning. The fourth largest city in the U.S. functions without a metropolitan plan or any land-use zoning. Repeated attempts have been made to introduce zoning. All have been defeated by either the City Council or at the city ballot

² Former president and CEO of the Aspen Institute, Aspen Colorado.

box. Houston sees itself, and is seen by many others, as an embodiment of the Texan virtues of individual freedom and minimum government. Vojnovic (2003) in a recent review of governance in Houston, however, found extensive involvement of national, state and local government in economic development. Government assisted economic development is the exception to neo-liberal rule and, as Houston shows, lies behind much of the contemporary interest in metropolitan and regional planning.

Currently, a coalition of forces, The Houston 2025 Committee, is attempting to facilitate a metropolitan plan for the city. The Committee comprises both business and community groups. It sees planning as essential for:

- developing broad community support for future growth.
- coordination of capital investments.
- intergovernmental coordination within the region.
- improved mobility and air quality.
- effective institutional mechanisms for addressing critical issues.
- conservation of historical, cultural and natural resources.
- a more stable tax base and efficient use of taxpayer dollars.
- greater competitiveness for the region in the global economy (Houston 2025:6).

New York

New York's Regional Plan Association (RPA), a private not-for-profit organisation, is the oldest regional planning organization in the U.S. It was established in the 1920s and produced the first regional plan for the New York metropolitan region in 1929. The second regional plan appeared in 1968. Agnotti (1997) argues these first two plans were largely ignored by policy makers. The third and most recent plan, *A Region at Risk: The Third Regional Plan for the New York-New Jersey-Connecticut Metropolitan Region* was published in 1996. The region covers three states, 31 counties and 800 cities across an area of 33,500 square kilometres. Of the regional plans reviewed, it is by far the largest in population and economic activity – 20 million people and 500 billion dollars in annual economic activity.

A Region at Risk is recognised as a model for other industrialised regions in the U.S. and overseas. It has been produced in book form and has been reviewed by Agnotti (1997) and Martin (1997).

Unusually, *A Region at Risk* focuses, not on managing growth, but on the prevention of regional decline. The plan lays out five major campaigns:

- Greensward – preservation of open space at the urban fringe.
- Centre(s) – recentering and developing regional business centres.
- Mobility – creating a regional express rail network.
- Workforce – linking education and employment.
- Governance – coordinating regional decision-making across 2000 local governments and authorities.

Significantly the plan is silent on racial issues.

The primary objective of the plan is to make the New York region more competitive in the global economy. While the plan acknowledges social and environmental concerns, the economic imperative predominates.

The plan departs from its predecessors to include cost estimates and funding/financing options for its projects. A summary of the capital costs for three of five campaigns is provided below in Table 2.24. Cost estimates for the workforce and governance were not provided -- the plan indicated that they were too difficult to estimate. Revenue estimates are provided in Table 2.25. Since major infrastructure investments can be spread over a 15-20 year period the revenue estimates of \$22.4 billion per year would be more than adequate to finance the \$75 billion infrastructure requirement.

Table 2.24 Cost Estimates for Selected Portions of the New York Plan

Proposal	Estimated Capital Cost (\$ billions)
Greensward Campaign	
Regional reserves	6
Greenways	1
Urban parks, natural resources and waterfront redevelopment	4
Subtotal	11
Centres Campaign	
Housing	10
Downtown revitalization	4
Arts and historic preservation	2
Brownfields	1
Subtotal	17
Mobility Campaign	
Regional Express Rail	21
Public transit upgrade	15
Highways	4
Freight and airports	7
Subtotal	47
Total	75

Source: Yaro (1996)

Table 2.25 Revenue Estimates to Finance the New York Plan

Revenue source	Estimated annual funds (\$ billions)
Reduced costs of providing services due to compact centres	Several billion
Reduction by half of tax incentives used to attract business	0.5
Incentive based tolls + 1 cent charge per vehicle mile traveled+10 cent per gallon gasoline tax	1.6
.001 cent charge per gallon of water	0.3
Stronger regional economic growth resulting in higher state & local tax collections	20
Total annual revenue	22.4

Source: Derived from Yaro (1996)

Portland

Portland has a substantial history of metropolitan planning. It is widely recognised as one of the best planned cities in the U.S. In 1973 Oregon became the first U.S. State to adopt state-wide land use planning. Local Government(s) was required to protect natural resources, use urban land wisely and define urban growth boundaries (Metro 2000). In 1978 Metro was established. It was, and remains, the only elected regional government in the U.S. Metro is responsible for coordinating land use planning for 27 local councils, plus urbanised portions of 3 counties, in the greater Portland metropolitan region.

The most noteworthy feature of the region is the 'urban growth boundary' (UGB). State law requires the area inside the boundary accommodate anticipated growth for a 20-year period. In 1979 Metro established an UGB for the Portland region. Periodically it is assessed to see if there is a need to increase the bounded area. In 1998 the UGB was expanded by about 4,000 acres (1620 hectares). The primary aim of the UGB is to protect rural lands from urban sprawl. The most important benefit of preventing urban sprawl and concentrating development is the containment of infrastructure costs (e.g., road, public transport, water, sewer, emergency medical, etc.)

The current plan, the 2040 Growth Concept, was adopted after several years of public participation and technical analysis. In the plan, "growth is encouraged in centres and corridors with increased emphasis on

redevelopment within the urban growth boundary” (Metro 2000:6). Plan alternatives were evaluated using the following criteria: land consumption; travel times and distances; amount of open space; and air quality.

Plan monitoring is required. Evaluation examines the extent to which the plan:

- encourages a strong local economy.
- encourages efficient land use.
- protects and restores the natural environment.
- provides transportation choices.
- ensures diverse housing options.
- creates vibrant places to live and work.
- maintains separation between the urban growth boundary and neighbouring cities.

To date the implementation of the UGB has not significantly increased densities in established neighbourhoods. Goals for open space acquisition have been exceeded; growth in per capita travel has stabilised; and growth in public transport use (49%) is greater than the rate of increase in population (24%) and vehicle miles travelled (35%).

One of the most controversial aspects of Portland planning is the impact of the UGB on housing costs. Research suggests:

- the cost of residential lots is comparable to that in similar cities.
- housing prices are still below most other west coast cities.
- the UGB may actually be keeping costs down due to the reduced infrastructure costs of small lots, infill, etc.
- rental market below US average due to rental unit construction.
- equity has been maintained in working class neighbourhoods.

A recent study by Downs (2002:7) concluded: “between 1980 and 2000, housing prices in the Portland region increased faster than those in comparable area elsewhere only from 1990 to 1994”.

The other major issue for Metro is the potential loss of low-density neighbourhoods. Even though monitoring results, discussed above, suggest densities in established neighbourhoods have been protected, citizens placed a measure on the May 2002 ballot to withdraw Metro’s planning function. While the initiative failed (supported by 42% of the voters), it shows a “good measure of dissatisfaction with the current growth management regime (Gibson and Abbott 2002:432).

Salt Lake City

Metropolitan planning is new to Salt Lake City. It is the main city of Utah, a western U.S. state, with a 'homestead' tradition and a pervasive Mormon religious influence. While Utah is mostly a rural state the Salt Lake City

metropolitan region contains 1.6m people or 80 percent of the state population.

Regional planning in Salt Lake City is included in this review for its marked success. A success particularly noteworthy in so far as five years ago advocates of regional planning were seen as communists and to mention “growth management” was political suicide (SCAG 2001:34).

Salt Lake City metropolitan planning was initiated in 1997 by *Envision Utah*, a non-governmental organisation funded primarily by private donation. *Envision* grew out of the Coalition for Utah’s Future. The aim of the coalition was, yet again, to stimulate economic development in the region. By the mid-1990s rapid population growth was also of growing concern.

A Quality Growth Strategy took two years of public consultation and analysis. It follows the conventional planning model. The seven step are:

- launching the process.
- researching what residents value about the region.
- creating a baseline model for future growth.
- creating four alternative scenarios.
- analysing scenarios.
- public awareness and input.
- selecting preferred scenario.

This process is similar to many of the other planning initiatives reviewed for the study (see Portland, Chicago and Atlanta).

The goals of the *Envision* Quality Growth Strategy are also familiar:

- enhance air quality.
- increase mobility and transportation choices.
- preserve critical lands.
- conserve and maintain water resources.
- provide a range of housing opportunities.
- maximise efficiency in public infrastructure investments (*Envision Utah* 2000).

In addition to producing the overall plan, *Envision* sponsored three demonstration projects. One of projects, the Davis Shorelands Plan, won the 2002 Daniel Burnham Award³ awarded by the American Planning Association.

Envision also helped pass a sale tax referendum to fund improvements in the public transport system.

³ The award recognises “an individual or organization whose efforts have contributed to the elevation of planning principles, the greater awareness of the value of planning, and an improved quality of life in one or more communities” (Osborne 2002:14).

It is too soon to gauge the success of the Quality Growth Strategy. Metropolitan planning momentum in Salt Lake City is, however, discernable. In the last five years *Envision Utah* has raised \$7 million to support the planning of the urban region.

Vancouver

Vancouver has long been recognised as a region doing things “right”. In the latest quality of life survey by the Mercer consultancy (see <http://www.imercer.com/>), Vancouver ranks # 2. The regional planning efforts of Vancouver and the Greater Vancouver Regional District (GVRD), have served as a model for many regions including Brisbane/Southeast Queensland.

The GVRD was established in 1967 as a British Columbia regional district. In the mid 1960s British Columbia “grouped local authorities into 29 federations to provide essential services for water, waste disposal, housing and hospitals” (Heywood 1997:167). The GVRD serves 2 million people living in 21 local councils. It is run by a 35 member board of directors. The board is made up of mayors and councillors from the local councils in the region. Local authorities may decide to opt out of any particular service and provide it for themselves. Thus, as Rosenblatt (1994:505) suggests, the regional district has a marked voluntary dimension.

The relationship between the GVRD and Provincial Government has not always been harmonious. Initially, in addition to service provision the District had a planning function. In 1983 on-going conflict, along with a more conservative provincial administration, led to the removal of the district’s regional planning function. Though the GVRD does not have a formal planning function it continues to “informally influence regional development because of its past work, prestige and ongoing leadership in such important planning activities as the 1990 update of the Liveable Regional Plan, *Creating Our Future*” (Rothblatt 1994:505). *Creating Our Future* was a one-year visioning exercise culminating in the 1993 Liveable Region Strategic Plan (officially adopted in 1995) as well as the Long Range Transport Plan. Oberlander and Smith (1992:47) argue: “that the GVRD achieved such policy consensus without formal planning authority, attests to the thesis that planning regionally has been established as a staple of governance in the metropolitan Vancouver region.”

The four main objectives of the Liveable Region Strategic Plan LRSP are:

- protecting the green zone.
- building complete communities.
- a compact metropolitan region.
- increased transportation choices (GVRD 2002:4).

The GVRD is required to report annually on progress. It provides a one-page summary of the indicators and progress made over the past year. (A copy of this summary page - from the 2002 Annual Report - is provided in Appendix A.) Results to date:

- protecting the green zone - of the 7 indicators, 4 were positive and 1 negative;
- building complete communities - of the 6 indicators, 3 were positive and 3 negative;
- a compact metropolitan region - of the 6 indicators, 3 were positive and 1 unchanged.
- increased transportation choice - of the 10 indicators, 4 were positive, 2 negative and 1 unchanged⁴.

While technically not part of GVRD planning, the computer simulation model, QUEST, has been used to engage the public in regional planning issues. The model was developed by the Sustainable Development Research Institute of the University of British Columbia and attempts to simulate various planning futures for the region. The model is being adapted for other regions around the world including Mexico City, Kuala Lumpur and Bali. A version of the model for Southeast Queensland is currently in preparation.

Smart Growth

In the U.S., smart growth has been put forward as **the** solution to urban sprawl. Smart growth allows development to occur, but directs it to locations where services can be more efficiently provided. The amount of growth is not altered – only its location.

Smart Growth America⁵ defines smart growth by outcomes of: neighbourhood liveability; better access with less traffic; thriving cities and suburbs; shared benefits for both rich and poor; lower taxes and lower costs; and the preservation of open space. Smart growth is essentially a repackaging of sound urban planning principles. Initiatives include:

- **Regional governance** - as implemented by Metro in Portland or by the Georgia Regional Transportation Authority in Atlanta.
- **Land use reform** - transfer of development rights (TDR). Used by Montgomery County (Maryland) with marked success.
- **Compact development** - illustrated by Maryland's Smart Growth and Neighbourhood Conservation Act of 1997 and by Arlington County's (Virginia) transit oriented development (TOD) strategy.
- **Taxation** – for an example see the Minnesota fiscal disparities act.

⁴ In some cases the indicators do not add up to the total -- this is due to the fact that some indicators were either undetermined or were not available.

⁵ This is a national coalition of more than 100 advocacy organisations that are interested in promoting smart growth.

- **Access to opportunity** - the California tax credit allocation scheme or Montgomery County's (Maryland) inclusionary zoning ordinance.

Labour unions have, at best, been ambiguous supporters of planning. Included in Smart Growth's growing number of supporters, however, are labour unions. Traditional union membership was concentrated in cities, but over the past several decades has been shifting to the suburbs. The unions now realise labour is essentially an urban institution; and that one reason they never gained strength in the suburbs is because people were more dispersed. While there is not universal labour union support for smart growth - construction unions are particularly hostile - the topic is now on the agenda and is gaining support at both the local and national levels.

Summary

- Metropolitan planning with a focus on transportation, has been undertaken in the U.S. since the early 1970s by Metropolitan Planning Organisations (MPOs).
- Growth visioning has gained popularity as a means of thinking about metropolitan planning. Visioning involves establishing a consensus view of a desirable future and then planning to make it a reality. In the majority of cases reviewed, population growth and its impacts have been the primary motive for visioning.
- A number of common themes emerged from an analysis of U.S. visioning efforts, these include: the importance of early leadership in the process; developing a clear process; getting elected officials on-board early; and using good quality data.
- There are a number of high profile metropolitan planning efforts in the U.S. and Canada. These efforts differ in terms of their institutional/legal status with some being driven by community coalitions and others by governmental bodies.
- Metropolitan planning in Portland, Vancouver and Atlanta is structured around formal regional governance. The efforts in all of these regions have matured to the point that meaningful plan evaluation is being done – in some cases on an annual basis.
- The “smart growth” movement in the U.S. is being put forward as the solution to urban sprawl and its impacts. However “smart growth” is just a repackaging of sound urban planning principles.

2.3 Specialist Analysis

Costs of Sprawl

The costs and benefits of sprawl have been hotly debated in the U.S. since the publication of *The Costs of Sprawl* in 1974. Whilst it represented the first systematic examination of the topic, *Costs* suffered from a flawed methodology. Over the next 25 years more than 475 studies were done on the issue (Burchell et al. 1998), culminating in a five-year study by Burchell, et al. The first phase, *Costs of Sprawl – Revisited*, reviews the previous studies, while the second phase, *Costs of Sprawl – 2000*, estimates the costs of sprawl for the U.S.

Costs of Sprawl – Revisited

Burchell et al. (1998) group the limitations of previous urban sprawl studies under the following categories:

- no adequate definition of sprawl.⁶
- other definitional and measurement questions remained unanswered. focus is only on a few key aspects of sprawl.
- analysis tends to be one-sided – critics do not recognise benefits of sprawl.
- limited number of comprehensive, empirical analyses.
- little attention paid to social aspects – most attention on physical aspects.
- most studies examined new growth areas – not infill or redevelopment sites.
- no long term analysis – most studies only cover a few years.
- fragmented governance not recognised as a cause of sprawl.
- critics of sprawl do not provide feasible alternate development forms.
- modelling is overly simplistic.

The positive and negative impacts of sprawl are summarised in Table 2.31 below.⁷ Twenty seven negative and 14 positive aspects are recorded. The

⁶ Burchell et al. did try to piece together a definition. They suggest that sprawl is defined as urban development that contains most of the following characteristics: “low residential density; unlimited outward extension of new development; spatial segregation of different land uses through zoning; leapfrog development; no centralized ownership of land or planning of development; all transportation dominated by privately owned motor vehicles; fragmentation of governance authority over land uses between many local governments; great variances in the fiscal capacity of local governments...;widespread commercial strip development along major roadways; and major reliance upon the filtering or ‘trickle-down’ process to provide housing for low-income households” (Burchell et al. 1998:124).

⁷ Shaded areas of the table indicate areas where factors are considered both to be both positive and negative.

complexity of sprawl is reflected in factors that have both a positive and a negative impact. In the tabulation these contradictory factors appear shaded.

Table 2.31 Negative and Positive Impacts of Sprawl

Negative Impacts	Positive Impacts
Fiscal/financial impacts	
• Higher infrastructure costs	
• Higher public operating costs	• Lower public operating costs
• More expensive private development costs	• Less expensive private development costs
• More adverse public fiscal impacts	
• Higher aggregate land costs	
• Worsens city fiscal stress	
Transportation impacts	
• More vehicle miles travelled	• Shorter commuting time
• Longer travel times	• Less congestion
• More auto trips	• Lower govt costs for transportation
• Higher household transport spending	• Auto most efficient mode of transport
• Less cost-efficient/effective public transport	
• Higher social costs of travel	
Land/resource production impacts	
• Loss of fragile environmental lands	• Fosters efficient development of leapfrogged areas
• Reduced regional open space	• Enhanced personal & public open space
• Reduced farmland productivity	
• Reduced farmland viability	
• Loss of agricultural land	
Environmental pollution impacts	
• Higher energy consumption	
• More air pollution	
Social/Quality of Life impacts	
• Aesthetically displeasing	• Preference for low density living
• Weakened sense of community	• Lower crime rates
• Greater stress	• Reduced costs of public/private goods
• Less historic preservation	• Fosters greater economic well-being
• Fosters suburban exclusion	• Fosters localised land use decisions
• Fosters spatial mismatch	• Enhances municipal diversity & choice
• Fosters residential segregation	
• Worsens inner-city deterioration	

Source: Adapted from Burchell, et al. 2001, pgs 126, 127

Costs of Sprawl – 2000

The second phase of the Cost of Sprawl had three goals:

- define and determine the incidence of sprawl in the U.S.
- determine the personal and resource impacts of sprawl.
- determine the benefits of sprawl.

The county is the empirical unit of study. Counties are grouped by the rate and location of population and employment growth. Rapid growth taking place in a nonurban county is deemed to be sprawl growth⁸. Analysis produced three groupings: (i) little or no growth (2100); (ii) urban centres (250); (iii) sprawl growth (750). The controlled growth scenario assumes most new development to be allocated to already developed counties and not to the emerging sprawl in nonurban counties.

The study projects resource impacts; personal costs; and benefits. The resulting resource impacts and personal costs savings of controlled development are summarised in Table 2.32 below. The savings for water and sewer infrastructure total \$12 billion over the 2000-2025 period – a saving of only \$480 million per year for 750 counties. Local public service cost savings amount to \$4.2 billion or \$168 million per year over 750 counties. The saving for local road infrastructure is \$110 billion and for real estate development is \$420 billion. The latter equates to a significant \$13,000 per residential unit.

Personal savings of \$24 billion and 50 million miles in travel costs were estimated. No judgement was possible as to impact controlled growth might have on the quality of life. It was determined there is no statistically significant relationship between traditional sprawl factors and urban decline. The study, however, did find the concentration of low income households to be the most important factor in the withdrawal of households and firms from the inner city; and that the racial attitudes of whites towards minorities was the single most important factor in the concentration of poverty.

⁸ The criteria for determining where sprawl is taking place is if either of the following two conditions are met: "1.(a) The county's growth rate is in the upper quartile of the EA's (Economic Area) annual county household and employment growth rates; (b) the county's growth rate exceeds the average annual national county growth rate; and (c) the county's absolute level of growth exceeds 40 percent of the average annual absolute county growth or 2. The county's absolute level of growth exceeds 160 percent of the average annual absolute county growth" (Burchell, et al. 2002:3).

Table 2.32 Cost / Impact Savings of Controlled Growth 2000-2025

Type of impact	Total Cost / Impact Savings
Resource Impacts	
• Land conversion	4 million acres
• Infrastructure	
• Water & sewer	\$12 billion
• Local roads	\$110 billion
• Local public service costs	\$4.2 billion
• Real estate development costs	\$420 billion
Personal costs	
• Travel miles	50 million miles
• Travel costs	\$24 billion
• Quality of Life	Could not be determined
• Urban decline	No impact due to typical sprawl factors

Source: Burchell, et al. (2002)

Benefits of Sprawl – 2000

The benefits of sprawl are:

- larger average lot sizes at a distance from the CBD.
- reflects the consumer preference for low-density living.
- provides households with more combinations of tax levels and social services than under the controlled growth scenario.
- lower land and housing costs when moving from the CBD.
- stronger citizen participation due to the large number of small fragmented local governments.

These benefits are more a result of lower densities than an absence of planning.

Summary - Sprawl Conclusions

The final conclusions of the study are:

1. Sprawl generates more costs than benefits.
2. The magnitude of those costs is not as great as suggested in the popular press and in many of the studies.
3. Sprawl results in increased resource consumption – an increase not related to need.

4. There is no good reason for two or more underutilised systems of infrastructure when one is sufficient. The research argues: “growth need not skip to the farthest and least-expensive location in the metropolitan area, with the expectation that infrastructure will be put in place, if adequate undeveloped space exists closer in” (Burchell, et al. 2002:xiii).
5. Although sprawl is not as detrimental as it is often portrayed, it is unnecessary and an increasing drain on financial and natural resources.

3. European Views

3.1 Academic Views

A number of useful books and articles advancing both the factual and theoretical understanding European metropolitan planning have appeared recently. A representative sample of this research is reviewed below.

Thornley (1999) Urban Planning and Competitive Advantage

Thornley (1999) examines metropolitan planning in London, Singapore and Sydney. He argues the global economy has brought metropolitan areas into general competition with each other and, as a consequence, stimulated renewed interest in urban planning in the developed world. The planning focus of cities has shifted from a managerial to a more entrepreneurial mode. Thornley finds the three metropolitan plans to be focused on economic issues, with only limited consideration of environmental and social dimensions. He concludes “cities increasingly view themselves as being in a competitive environment in which they have to take a proactive stance to capture economic activity and maintain their position in the world hierarchy” (Thornley 1999:4). In this environment contemporary metropolitan planning appears as part of a marketing campaign, where the customers are decision-makers in international institutions and the products are land, buildings, infrastructure and linked activities. Cities focus on mega-events and projects in the hope they will generate widespread media publicity. Such an approach, neglectful of existing residents and more quotidian problems, may generate a number of negative externalities such as higher housing costs, increased airport noise, higher public debt, increased rates etc.

Table 3.11 below sketches a timeline for metropolitan planning in London. It begins with the 1986 abolition of the Greater London Council (GLC) and concludes with the Final London Plan of 2003. Of particular interest are all the quasi-planning activities that emerged in the comparative vacuum between the abolition of the GLC and the 1999 formation of the Greater London Authority (GLA). Most of these initiatives were public-private partnerships marketing London as a ‘world city’. The social and environmental dimensions of the city were not of immediate concern. It was left to the London Plan (2002-03) to redress the imbalance.

Table 3.11 Critical Dates in Metropolitan Planning for London

Date	Action	Comment
1986	Abolition of the Greater London Council	
1989	London Planning Advisory Committee (LPAC) Strategic Planning Guidance	Advisory body made up of representatives from 33 local planning authorities in the London area.
1991	Coopers & Lybrand Deloitte study <i>London: World City Moving into the 21st century</i>	<ul style="list-style-type: none"> • Commissioned by LPAC • Posed the question “How could London retain its competitive position?”
1992	<ul style="list-style-type: none"> • London Forum established by central government • London First established by private sector • London First Centre established 	<ul style="list-style-type: none"> • Goal was to promote London --merged into London First • Inward investment agency to compete with other European cities
1993	City Pride established	Central government initiative to provide money to major cities if they produced visions / strategies
1994	London Pride prospectus published	Set out frame for strategic priorities – focused on business growth
1995	Joint London Advisory Panel established	
1996	Strategic Guidance for London published	Promotion of London as “world city” fundamental to government policy
1999	<ul style="list-style-type: none"> • Greater London Authority established • The London Study published 	<ul style="list-style-type: none"> • Elected Mayor for the London metropolitan area • Future vision and action plan for sustainable London funded by European Union
2001	Towards the London Plan published	Set out broad policy guidelines for preparation of the London Plan
2002	Draft London Plan published	Lays out future development strategy for 15-20 years
2003	Final London Plan	To be completed in late 2003

Source: Derived from Thornley (1999) and Greater London Authority (2002)

In London private interests have been very influential in visioning the future. The emergent scenario has an overall global orientation with a local emphasis on new sites for commercial activity, conventions and leisure.

Williams (1999) Metropolitan Governance and Strategic Planning

The Williams article investigates plan implementation in Manchester, Melbourne and Toronto. In all three cases Williams finds it has been difficult to translate metro visions into “implementation frameworks” and there appears to be a widening gap between ever bolder metropolitan planning proposals and narrowing possibilities for implementation. The more metropolitan planning is seen as a marketing tool the less the import of this contradiction.

D.R. Diamond (2002) Managing the Metropolis in the Global Village

Diamond takes up the question of the conditions for successful metropolitan planning. He suggests globalisation (defined by free trade, new technology and deregulation) and decentralisation are altering the metropolitan context for planning and urban management. On the one hand the metropolitan economy is integrated into a common market. On the other hand political-administrative structure is increasingly fragmented. In this contradictory context Diamond argues not all aspects of metropolitan economic life should be the concern of metropolitan planning - only those seen as essential to the future vitality of the region. He suggests for regional infrastructure strategy to be successful it must be convincing to the central government as well as to private sector entrepreneurs. Hence the recent upsurge in research into the metropolitan economy and attempts to involve the private sector in metropolitan planning and economic development (Diamond 2002)

In summary Diamond (2002) sees public-private co-operation as vital in a context of increasing global complexity. This is, in essence, to argue for a formal role for private interest in the planning of metropolitan regions.

Salet, et al. (2003) Metropolitan Governance and Spatial Planning

The authors examines spatial planning across 19 European metropolitan areas.⁹

The first concern is for spatial scale. The London journey-to-work catchment radiates over 100 kms. and includes more than 18 million people. The Greater London Authority covers a much smaller area with a population of only 7.5 million. It is argued, in typical example, the London region lacks effective oversight, the planning focus being for the metropolitan area with little or no attention being paid to coordinating the metropolis of the broader region.

The review finds structural urban shifts underpinned by (i) the information-led economy and liberalised economic markets, and (ii) the reduction in

⁹ These include: London, Birmingham, Cardiff, Stockholm, Berlin, Frankfurt, Hanover, Stuttgart, Amsterdam, Rotterdam, Prague, Vienna, Venice, Milan, Paris, Brussels, Marseilles-Aix, Barcelona and Madrid.

government and the move to privatisation, ad hoc bodies and quangos¹⁰. Salet, et al. (2003) label the second factor as a move from government to governance.

The implications of these dynamics are:

1. There is increasing concern about competitive position relative to other European metropolitan areas.
2. There is an increasing sense of entrepreneurialism in both the public and private sectors.
3. Metropolitan governments are becoming less dependent on decisions made by the national government.

These trends have reversed the erosion of metropolitan government. In the mid-1980s London, Copenhagen, Rotterdam and Barcelona disbanded their metropolitan governments. Now there is renewed interest in metropolitan and regional government throughout Europe. The formation of the Greater London Authority in 1999 typifies the trend.

The nineteen metro regions reviewed face a number of similar challenges with respect to planning. These include:

- how to organise regional economies? How should infrastructure be managed and how are amenities provided?
- how to balance environmental quality in the context of governmental fragmentation? Can multiple use strategies be applied to land and water?
- how can spatial inequality be prevented?
- how can cultural identity be maintained, particularly at the metropolitan/regional level?

In order to develop a comprehensive strategic policy, coordination of the following dimensions is required:

- **Spatial** – ensure that policies between national, state, regional and local authorities are consistent.
- **Functional** – land uses and activities need to be linked, such as housing and transport or economic development and environmental quality.
- **Sectorial** – views of public, private and non-governmental organisations need to be brought together (Salet, et al. 2003).

Salet, *et al.*, argue government reorganisation typically lags behind spatial development. The authors question the reorganisation of government in parallel with the latest spatial configuration, suggesting it is preferable to maintain a sound governmental structure and to look for flexible policy response. Similarly, on the relationship between fragmentation and

¹⁰ Quasi-autonomous non-governmental organisations

governmental structure, they suggest it may not be necessary to bring everything into a uniform network but to “acknowledge the existence and the significance of diversity, establish limits where they threaten to become dysfunctional, and focus attention on options for cooperation” (Salet, et al. 2003:17). Continuing the theme of flexibility in face of uncertainty, it is suggested problems of coordination of spatial policy may not be best addressed by establishing new regional or metropolitan administrative structures. Rather, it may involve new methods of organising connectivity: “the institutional problem is not so much the fragmentation of policy actors as the disconnectedness of learning practices and policies” (Salet, et al. 2003:377).

The work raises the image of multiple forms of good practice. In this vision, there are many and varied paths to success.

Summary

- There has been a renewed interest in urban planning in the developed world due to changes in the global economy. These changes have increased economic competition between cities. In this environment urban planning has been used to communicate metropolitan ‘bids’ to the international business community.
- Metropolitan planning in the cases of London, Singapore and Sydney has focused on economic issues to the relative exclusion of social and environmental concerns.
- While many European cities are embarking on metropolitan spatial planning, the extent of these plans may not be sufficient. In the case of London, metropolitan planning is confined to the area inside the greenbelt and does not include the much larger journey-to-work catchment. Experts suggest metropolitan plans be truly regional plans.
- While government is often reorganised in response to a changed spatial configuration, Salet, et al. (2003) argue that it may be better to have a sound governmental structure which can provide flexible policy responses instead.
- The overall findings of a 19-city review of metropolitan governance and spatial planning suggest that good practices can be very different – one size does not necessarily fit all. Salet et al. (2003:377) conclude that “the institutional problem is not so much the fragmentation of policy actors as the disconnectedness of learning practices and policies”.
- Diamond (2002) argues that a new approach to policy-making is needed because of the impacts of globalisation on metropolitan planning. Deregulation and decentralisation require the involvement of public sector **and** private interest in planning future development.

3.2 Public Sector Analysis

Propolis

Propolis (Planning and Research of Policies for Land Use and Transport for Increasing Urban Sustainability) is a multiple year project within the Fifth Framework Program of the European Commission. Its objective is to “research, develop and test integrated land use and transport policies, tools and comprehensive assessment methodologies in order to define sustainable long term urban strategies and to demonstrate their effect in European cities” (Propolis 2002). (The Propolis process is provided in *Appendix B* and the individual project component diagram in *Appendix C.*)

In essence Propolis involves modelling land use and transport to test a range of policy options geared to reduce greenhouse gases, energy use, traffic accidents, and traffic congestion while ensuring accessibility and mobility. Models are being developed and tested on seven cities of varying sizes - Inverness (Scotland); Vicenza and Naples (Italy); Dortmund (Germany); Brussels (Belgium); Bilboa (Spain); and Helsinki (Finland).

The models will be tested against a set of indicators that:

- measure relevant aspects of social, environmental and economic sustainability.
- can be forecast for a period of 20 years.
- are policy sensitive.

An indicative set of indicators for Propolis are provided in *Appendix D*. This project was scheduled for completion late last year. Results are, however, not yet available.

METREX

Metrex is a network of European metropolitan regions and areas founded in 1996. The network is comprised of individual politicians, officials, advisors, etc. Metrex aims to (i) exchange information between practitioners with an interest in spatial development, and (ii) to promote metropolitan governance at a European level.

In the last decades sustained urbanization (joining core city to hinterland) has resulted in the metropolitan region emerging as the most common European urban form. In this context Metrex believes many issues facing urban areas such as economic change, social inclusion, traffic congestion, urban sprawl, centre city vitality can only be effectively dealt with at the metropolitan level. As of 2000, 33 of the 120 European metropolitan regions are currently members of Metrex. Metrex is funded by subscription fees paid by member organisations. The Metrex budget averages around 200,000 Euros (\$345,000 AUD).

Metrex is currently involved in three initiatives:

- InterMetrex – a project to extend the understanding and use of best practice.
- PolyMetrex – to help metropolitan regions/areas realise their potential for cooperation.
- SocioMetrex – to examine issues related to social inclusion and education, transport, in-migration and urban deprivation.

European Spatial Development Perspective

With the 1999 publication of the *European Spatial Development Perspective* (ESDP) planning spatial development was established on the European Commission agenda. The ESDP notes a unique feature of the European Union is the concentration of cultural variety in a small area. One of the key aims of the ESDP is to ensure spatial development policies retain this cultural variety, whilst achieving balanced and sustainable development by strengthening economic and social cohesion (Committee on Spatial Development 1999:19).

In the view of the Consultative Forum on Environment and Sustainable Development:

The ESDP breaks new ground as its approach is trans-sectorial and integrating, but also proactive. This should be contrasted to the traditional planning approach – still prevalent in many parts of Europe – which tends to be reactive and regulatory and looks at the spatial dimension mainly in physical and technical terms. (European Consultative Forum 1999)

However it is recognised there are a number of problems / shortcomings. The most pressing include the need:

- to resolve the conflicts between the goals of competitiveness due to demands of free markets and globalisation and cohesion / social balance.
- for greater emphasis on social aspects and their spatial impacts.
- to clear up the confusion that exists around sustainable development, particularly relating to natural and cultural heritage.
- for planning to contribute more to the mitigation of global climate change through a focus on reducing auto emissions.

London Metropolitan Planning

In an echo of the North American experience, a prime factor motivating planning in London is the expected growth in population and employment. Some of the challenges facing the London metropolitan region over the next 15 years include: constructing 23,000 new homes each year; constructing 700,000 square metres of new office space each year; and increasing the capacity of public transport by 50 percent.

Strategic metropolitan planning for Greater London began in May 2001 with the launch of *Towards the London Plan* – the first of a three-phase process. This was the first strategic planning for the London metropolitan region in more than 20 years. *Towards the London Plan* sets out broad policy directions to guide the preparation of the (final) plan. A *draft London Plan* followed in June 2002. It suggests a future development strategy for the next 15-20 years, and lays out six objectives to:

- make the most of space including the encouragement of intensification;
- make London a better city for people to live;
- make London more prosperous with strong and diverse economic growth;
- promote social inclusion – tackling deprivation and discrimination;
- improve the city's transport; and
- make London more attractive well-designed and green (Greater London Authority 2002).

The final *London Plan* is expected to be completed in late 2003.

Summary

- PROPOLIS models land use and transport to test a range of policy options in seven small, medium and large European cities.
- METREX is a network of European metropolitan regions. The network supports projects to: extend the understanding and use of best practice in metropolitan planning; assist inter-metropolitan cooperation; and examine issues related to social inclusion.
- The European Spatial Development Perspective (ESDP) aims to protect metropolitan cultural variety while at the same time achieving balanced and sustainable development.
- Metropolitan planning efforts in London have been prompted by projected population and economic growth. London's planning efforts began with *Towards the London Plan* in 2001 and will be concluding with the *Final London Plan* in late 2003.

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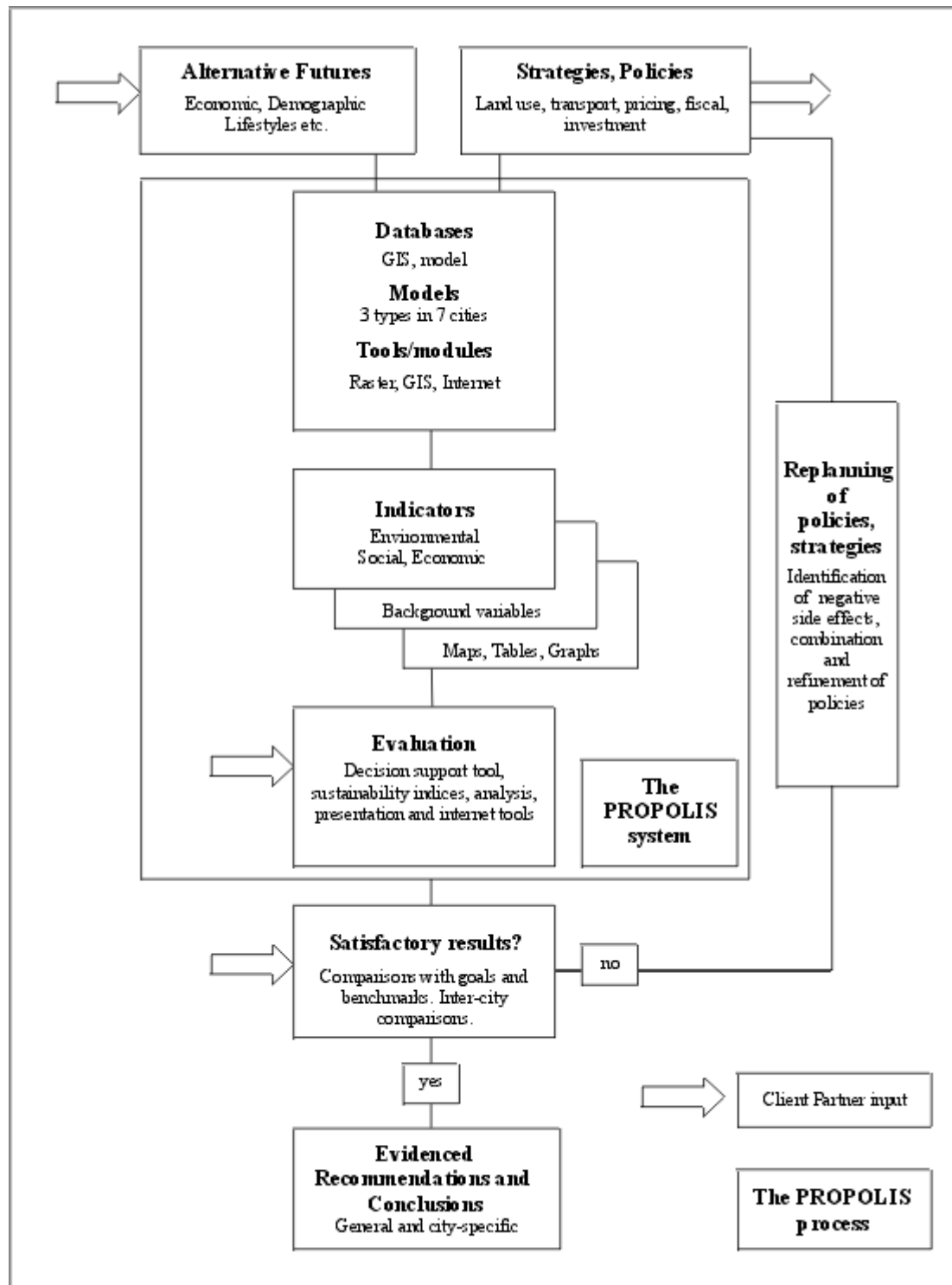
Appendices

Appendix A: Livable Region Strategic Plan Program Monitoring Summary

APPENDIX A	
Livable Region Strategic Plan: Monitoring Program Indicators	
PROTECT THE GREEN ZONE	INCREASE TRANSPORTATION CHOICE
<ul style="list-style-type: none"> G1 Area of Green Zone G2 Area of Agricultural Land Reserve G3 Total value of farm-gate sales G4 Number of new non-farm dwelling units in the Green Zone G5 Number of endangered or threatened species (provincial red list) G6 Length of Regional Greenway Vision completed G7 Size of protected conservation areas 	<ul style="list-style-type: none"> T1 Total and per capita number of vehicle kilometers driven T2 Vehicle ownership per household T3 Participation in regional ride-share program T4 Lane-kilometres of major road network T5 Kilometres of streets with sidewalks and kilometres of bike lanes T6 Commuter trip length and time T7 Total and per capita transit ridership T8 Growth in total and per capita transit capacity T9 Mode Split T10 Proportion of children walking to school versus using other transportation modes
BUILD COMPLETE COMMUNITIES	
<ul style="list-style-type: none"> B1 Number and proportion of new dwellings by structure type, within and outside the GCA B2 Number and proportion of total and new dwellings in municipal and regional centres and corridors B3 Benchmark price for housing for the region B4 Proportion of office floor space in municipal and regional centres B5 Proportion of labour force working in home subregion B6 Proportion of rental housing in region's housing stock 	
ACHIEVE A COMPACT METROPOLITAN REGION	
<ul style="list-style-type: none"> C1 Population growth and share of annual population growth, for the GCA and GVRD C2 Number and proportion of ground-oriented housing inside and outside the GCA C3 Non-residential building permit values, by sub-region C4 Number of vehicles crossing the GVRD eastern boundary, in-bound C5 Total employment and share of employment growth, for the GCA and GVRD C6 Growth in regional sewerage trunk lines, for the GCA and GVRD 	

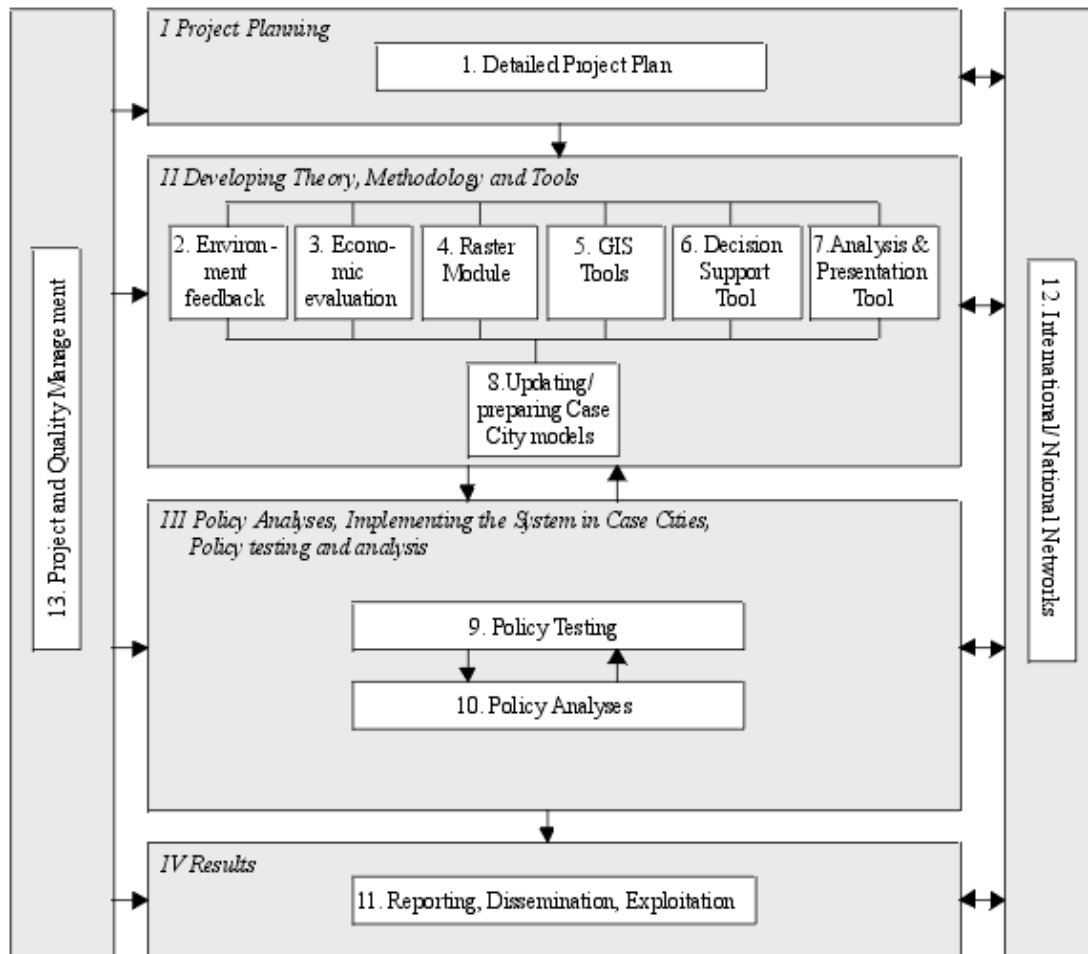
positive	undetermined
negative	not available
unchanged	

Appendix B. The PROPOLIS Approach, Process and System



Source: Propolis 2002

Appendix C. PROPOLIS Project Components



Source: Propolis 2002

Appendix D. Indicative List of Urban Sustainability Indicators for Propolis Project

COMPONENT	THEME	INDICATOR
Environmental		
	Air pollution	greenhouse gases from transport and land use acidifying gases from transport and land use Organic compounds from transport
	Consumption of natural resources	consumption of mineral oil products, land use and transport land coverage consumption of construction materials
	Environmental quality	indicator addressing microclimate potential for biodiversity quality of open space
Social		
	Health	exposure to particulate matter from transport in the living environment exposure to nitrogen dioxide from transport in the living environment exposure to traffic noise traffic deaths traffic injuries
	Equity	justice of distribution of economic benefits justice to exposure to particulates justice of exposure to nitrogen dioxides justice of exposure to noise segregation
	Opportunities	total time spent in traffic level of service of PT and slow modes vitality of city centre vitality of surrounding region accessibility to city centre accessibility to services accessibility to open space employment effects
Economic indicators		
	Total net benefit from transport	transport user benefits transport operator benefits resource costs external costs investment costs
	Total net benefit from land use	user benefits operator benefits resource costs external costs investment costs
	Regional economy and competitiveness	

Source: Propolis 2002